#### **Solicitation 12029-683**

## Fort Lauderdale Executive Airport South Perimeter Loop Road (P12260)

**Bid Designation: Public** 



**City of Fort Lauderdale** 

#### Bid 12029-683

#### Fort Lauderdale Executive Airport South Perimeter Loop Road (P12260)

Bid Number 12029-683

Bid Title Fort Lauderdale Executive Airport South Perimeter Loop Road (P12260)

Bid Start Date Dec 19, 2017 3:52:26 PM EST
Bid End Date Jan 30, 2018 2:00:00 PM EST

Question & Answer

**End Date** 

Jan 18, 2018 5:00:00 PM EST

Bid Contact Maureen Lewis, MBA

Procurement Specialist II

Finance

954-828-5239

maureenl@fortlauderdale.gov

Contract Duration One Time Purchase

Contract Renewal Not Applicable

Prices Good for 120 days

Pre-Bid Conference Jan 11, 2018 10:00:00 AM EST

Attendance is optional

Location: Fort Lauderdale Executive Airport Admn. Bldg.

6000 NW 21st Avenue

Fort Lauderdale, Florida 33309

**Bid Comments** 

Sealed bids will be received electronically until 2:00 P.M., local time, on THURSDAY, JANUARY 25, 2018, and opened immediately thereafter in the 5th Floor Conference Room, City Hall, 100 North Andrews Avenue, Fort Lauderdale, Florida, 33301, for BID NO., 12029-673, PROJECT NO., 12260, FORT LAUDERDALE EXECUTIVE AIRPORT SOUTH PERIMETER LOOP ROAD.

This Project consists of Drawing File No., 4-140-39, sixteen (15) sheets.

This project is located at Fort Lauderdale Executive Airport in the City of Fort Lauderdale. It is for the construction of an approximately 1,400 linear foot long asphalt perimeter road along the southeastern end of Runway 31. The work includes, but is not limited to, clearing and grubbing, unclassified excavation, grading, removal of existing milled asphalt road, limerock, asphalt paving, pavement striping, sodding, watering period, lighting and electrical works.

NOTE: Payment on this contract will be made by Visa or MasterCard.

<u>Licensing Requirements:</u> – Possession of a Broward County (Florida) General Engineered Construction Builder Contractor (GITS) License and/or one that is appropriately issued by the State of Florida is required for this Project.

<u>Pre-Bid Meeting & Site visit:</u> - A pre-bid meeting and site visit will be held on THURSDAY, JANUARY 11, 2018, at 10:00 a.m., local time, at Fort Lauderdale Executive Airport Administration Building, 6000 NW 21<sup>st</sup> Avenue, Fort Lauderdale, Florida 33309.

The successful contractor shall comply with the requirements of FAA Advisory Circular A/C 150/5370-2F, Operational Safety on Airports during Construction, by preparing and submitting a Safety Plan Compliance Document (SPCD) for review and approval prior to issuance of a Notice-to-Proceed. A copy of the Airport's Construction Safety and Phasing Plan (CSPP) is included with these bid documents to assist the contractor

with preparing the SPCD.

While attendance is not mandatory, it is strongly suggested that all Contractors attend the pre-proposal conference and site visit since tours at other times might not be available. It will be the sole responsibility of the bidder to inspect the City's facilities and become familiar with the scope of the City's requirements and systems prior to submitting a proposal. No variation in price or conditions shall be permitted based upon a claim of ignorance. Submission of a proposal will be considered evidence that the proposer has familiarized himself with the nature and extent of the work, equipment, materials, and labor required.

Bidding blanks may be obtained free of charge at BIDSYNC.COM. Drawing Plans are on file in the Public Works Department, City of Fort Lauderdale, at 100 North Andrews Avenue, 4<sup>th</sup> floor, (Monday through Friday, 8:00 am to 4:30 pm) at a NON-REFUNDABLE cost of \$25.00 (including sales tax per set). Only cash or cashier's check made payable to the City of Fort Lauderdale is accepted.

It will be the sole responsibility of the bidder to ensure that his bid is submitted prior to the bid opening date and time listed. PAPER BID SUBMITTALS WILL NOT BE ACCEPTED. BIDS MUST BE SUBMITTED ELECTRONICALLY VIA BIDSYNC.COM

<u>Bid Security</u>: A certified check, cashier's check, bank officer's check or bid bond for <u>FIVE</u> percent (5%) of the bid amount, made payable to the City of Fort Lauderdale, Florida, shall accompany each proposal.

#### **Bid Bonds:**

indicated.

Bidders can submit bid bonds for projects four different ways.

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   For more information on this feature and to access it, contact BIDSYNC customer care department.
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These <u>cannot</u> be submitted via BIDSYNC, nor are their images allowed to be uploaded and submitted with your electronic bid. These forms of securities, as well as hard copy bid bonds, must be received on or before the Invitation to Bid (ITB) opening date and time, at the Finance Department, Procurement Services Division, 100 North Andrews Avenue, Room 619, Fort Lauderdale, FL 33301-1016, with the bid number and title clearly indicated on the envelope.

It is the bidder's sole responsibility to ensure that his bid bond or other bid security is received by the Procurement Services Division before time of bid opening. Failure to adhere to this requirement may be grounds to consider the bid as non-responsive.

The City of Fort Lauderdale reserves the right to waive any informality in any or all bids and to reject any or all bids.

For information concerning technical specifications, please utilize the question/answer feature provided by BIDSYNC at www.bidsync.com . Questions of a material nature must be received prior to the cut-off date specified in the solicitation. Material changes, if any, to the scope of services or bidding procedures, will only be transmitted by written addendum. (See addendum section of BIDSYNC Site). Contractors please note: No part of your bid can be submitted via FAX. No variation in price or conditions shall be permitted based upon a claim of ignorance. Submission of a bid will be considered evidence that the Contractor has familiarized himself with the nature and extent of the work, equipment, materials, and labor required. The entire bid response must be submitted in accordance with all specifications contained in this solicitation.

Information on bid results and projects currently out to bid can be obtained on the City's website – http://www.fortlauderdale.gov/departments/finance/procurement-services . For general inquiries, please call (954) 828-5933.

Added on Jan 10, 2018:

Bid allowances have been added. See Special Conditions.

Added on Jan 11, 2018:

Pre-Bid Meeting Attendance Record added.

Added on Jan 19, 2018:

Addendum 3) Information Added:

a)To answer question 4, we had to make a revision to sheet C01 to include an additional bid item (24) for "Embankment in Place".

b) Staging area for <u>tracked equipment</u> has been provided. Contractor shall be responsible for grading and restoration of storage area. Contractor to take appropriate measures to barricade this area to prevent any damage to aircraft.

Added on Jan 25, 2018:

Bid Opening Date extended.

The Quantities in Line Items, 7 (Unclassified Excavation) and 23 (Concrete Easement) revised.

#### Addendum # 1

New Documents P12260.ADDENDUM 1.pdf

Previous Bid Allowance Amount \$20,000.00

#### Addendum # 2

New Documents P12260.Pre-Bid Mtg.Attendance Sheet.pdf

#### Addendum # 3

New Documents 12260-BID-BINDER-20170828.pdf

ADDENDUM 3 - P12260 Tracked Equipment - Staging Area.pdf

P12260.FINAL SPECS.12-18-17.pdf Addendum 3 Project 12188.pdf

Removed Documents P12260.DRAWINGS.20170828.pdf

P12260.FINAL SPECS.12-18-17.pdf

Changes were made to the following items:

Embankment in Place

#### Addendum # 4

New Documents P12260.ADDENDUM 4.pdf

Changes were made to the following items:

Unclassified Excavation Concrete Encasement

#### Addendum # 5

**New Documents** 

P12260.ADDENDUM 5.pdf

#### Item Response Form

Item 12029-683--01-01 - BASE BID TOTAL: Mobilization

Lot Description BASE BID TOTAL

Quantity 1 lump sum

Unit Price

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

Qty 1

#### Description

Mobilization, demobilization, including, but not limited to: site clean-up, contractor staging/storage area, maintenance of traffic, sanitary facilities, project coordination, as-built services, restoration of any disturbed sodded areas, and any and all other necessary appurtances. Cost for this Item may not exceed 10% of contract value.

Item 12029-683--01-02 - BASE BID TOTAL: Maintenance of Air Operations Area Traffic

Lot Description BASE BID TOTAL

Quantity 1 lump sum

Unit Price

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

Qty 1

#### Description

Furnishing any and all equipment, including, but not limited to: low level barricades, Type II barricades, light towers, flagmen, and gate guards.

Item 12029-683--01-03 - BASE BID TOTAL: Temporary Fence for Owl/Tortoise Nests

Lot Description BASE BID TOTAL

Quantity 5 each

Unit Price

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

Qty 5

#### Description

Furnish all materials, labor and equipment to install and remove temporary fence to protect Gopher Tortoise/Burrowing Owl nests. Locations to be determined by City.

Item	12029-68301-04 - BASE BID TOTAL: Temporary Air and Water Pollution, Soil Erosion, and Siltation Control
Lot Description	BASE BID TOTAL
Quantity	1 lump sum
Unit Price	Tump sum
Delivery Location	City of Fort Lauderdale
Donvery Location	See ITB Specifications
	See ITB Specifications
	Fort Lauderdale FL 33301
Description	Qty 1
	s, labor and equipment to install, maintain, and remove temporary silt fencing along project area.
Item	12029-68301-05 - BASE BID TOTAL: Asphalt Milling/Removal
Lot Description	BASE BID TOTAL
Quantity	6900 square yard
Unit Price	
Delivery Location	City of Fort Lauderdale
	See ITB Specifications See ITB Specifications
	Fort Lauderdale FL 33301
	<b>Qty</b> 6900
Contractor has the	s, labor and equipment to remove and properly dispose existing asphalt millings, including pavement saw cutting. option of using the ashpalt millings as stabilization material. Payment for this item will be based on remaining aterial removed from site.
Item	12029-68301-06 - BASE BID TOTAL: Clearing and Grubbing
Lot Description	BASE BID TOTAL
Quantity	1.5 acre
Unit Price	
Delivery Location	City of Fort Lauderdale
	See ITB Specifications
	See ITB Specifications Fort Lauderdale FL 33301
	Qty 1.5
	s, labor and equipment to clear and grub the areas within limits of the plan. Includes, but not limited to, clearing and of snags, brush, undergrowth, grass or weeds structures and natural obstructions, but does not include pavement
Item	12029-68301-07 - BASE BID TOTAL: Unclassified Excavation
Lot Description	BASE BID TOTAL
Quantity	510 cubic yard
Unit Price	

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

**Qty** 510

#### Description

Excavate unclassified material within the limits of work and dispose off-site. No separate payment will be made for compacted embankment. All costs incidental to placing in layers, compacting, disking, watering, mixing, sloping, and other necessary operations for construction of embankments will be included in the contract price for excavation.

#### Added on Jan 25, 2018:

Quantity changed from 1800 to 510 cy.

#### Addendum # 4

Previous Delivery Location/Quantity

See ITB Specifications

Fort Lauderdale, FL

33301 Qty 1800 New Delivery Location/Quantity See ITB

Specifications

Fort Lauderdale, FL

33301

Qty 510

Item 12029-683--01-08 - BASE BID TOTAL: 12-inch Thick Stabilized Subgrade

Lot Description BASE BID TOTAL

Quantity 3300 square yard

**Unit Price** 

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

**Qty** 3300

#### Description

Furnish all materials, labor and equipment to construct 12-inch thick stabilized sub-grade compacted to 100% maximum dry density. Asphalt millings may be used to attain the required compaction percentage.

Item 12029-683--01-09 - BASE BID TOTAL: 8-inch Thick Lime Rock Base Course

Lot Description BASE BID TOTAL

Quantity 3000 square yard

Unit Price

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

**Qty** 3000

#### Description

Furnish all materials, labor and equipment to construct 8-inch thick limerock base compacted to 98% maximum dry density per AASHTO T-180. Limerock shall have a California Bearing Ratio of not less than 80 and from an approved FDOT source.

Item 12029-683--01-10 - BASE BID TOTAL: Bituminous Prime Coat

Lot Description BASE BID TOTAL

Quantity 920 gallon

Unit Price

Delivery Location

City of Fort Lauderdale

See ITB Specifications

See ITB Specifications
Fort Lauderdale FL 33301

**Qty** 920

#### Description

Furnish all materials, labor and equipment to apply bituminous prime coat over a prepared limerock base course.

Item 12029-683--01-11 - BASE BID TOTAL: 1-1/2-inch Thick SP-9.5 Asphalt Course

Lot Description BASE BID TOTAL

Quantity 240 ton

Unit Price

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

**Qty** 240

#### Description

Furnish all materials, labor and equipment to construct a 1·1/2-inch thick asphaltic surface course, FDOT SP-9.5 over a compacted limerock base course.

Item 12029-683--01-12 - BASE BID TOTAL: Argentine Bahia Sod

Lot Description BASE BID TOTAL

Quantity 6500 square yard

Delivery Location

**Unit Price** 

City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

**Qty** 6500

#### Description

Furnish all materials, labor and equipment to lay Argentine Bahia Sod, removal and disposal of debris and all or other necessary appurtenances.

Item 12029-683--01-13 - BASE BID TOTAL: Permanent Airfield Painting with Type III Glass Beads

(Yellow Paint)

Lot Description BASE BID TOTAL

Quantity 330 square foot

Unit Price

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

**Qty** 330

#### Description

Furnish all materials, labor and equipment to apply permanent airfield markings with Type III glass beads.

12029-683--01-14 - BASE BID TOTAL: Permanent Airfield Painting with No Glass Beads

(Black Paint)

Lot Description BASE BID TOTAL

Quantity 210 square foot

Unit Price

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

**Qty** 210

#### Description

Furnish all materials, labor and equipment to apply permanent airfield markings with no glass beads.

Item 12029-683--01-15 - BASE BID TOTAL: Six-inch (6) White Thermoplastic Striping, Permanent

Lot Description BASE BID TOTAL

Quantity 2900 linear foot

Unit Price

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

**Qty** 2900

#### Description

Furnish all materials, labor and equipment to apply permanent 6-inch wide thermoplastic striping, yellow.

Item 12029-683--01-16 - BASE BID TOTAL: Raised Reflective Pavement Markings

Lot Description BASE BID TOTAL

Quantity 60 each

Unit Price
Delivery Location

City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

**Qty** 60

#### Description

Furnish all materials, labor and equipment to install reflective pavement markers, white/white.

Item 12029-683--01-17 - BASE BID TOTAL: Post Mounted Signs

Lot Description BASE BID TOTAL

Quantity 6 each

Unit Price

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

Qty 6

#### Description

Furnish all materials, labor and equipment to install post mounted sign attached to frangible posts.

Item 12029-683--01-18 - BASE BID TOTAL: Intercept existing circuit conductors

Lot Description BASE BID TOTAL

Quantity 1 lump sum

Quality I lump sum

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

Qty 1

#### Description

**Unit Price** 

Furnish all materials, labor and equipment to intercept existing circuit conductors in existing base can and extend circuits accordingly. Includes identification, transformer, connector kits, labor, testing, and drilling.

Item 12029-683--01-19 - BASE BID TOTAL: Remove existing base can

Lot Description BASE BID TOTAL

Quantity 2 each

Unit Price

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

Qty 2

#### Description

Furnish all materials, labor and equipment to remove and properly dispose existing light base can in earth. Includes backfill, labor, disposal, connections, splice kits, disconnection of existing circuit, removal of circuit conductors, reconnection of existing circuit, cappign of conduits, complete and in place.

Item 12029-683--01-20 - BASE BID TOTAL: Temporary wiring

Lot Description BASE BID TOTAL

Quantity 1 lump sum

Unit Price

Delivery Location City of Fort Lauderdale

See ITB Specifications
See ITB Specifications
Fort Lauderdale FL 33301

Qty 1

#### Description

Furnish all materials, labor and equipment to install temporary wiring to maintain existing systems in operation or to by-pass segments of existing systems. Includes connector kits, cables, maintenance, rigid conduit and testing, complete in place.

Item 12029-683--01-21 - BASE BID TOTAL: L-852T LED flush mounted taxiway edgelight

Lot Description BASE BID TOTAL

Quantity 2 each

**Unit Price** 

**Delivery Location** 

See ITB Specifications See ITB Specifications Fort Lauderdale FL 33301

City of Fort Lauderdale

Qty 2

#### Description

Furnish all materials, labor and equipment to install L-852T LED, aluminum flush mounted taxiway edge light and base can installed in pavement. Includes two (2) piece base can, coring of pavement, fixture, extension rings, spacers, carbon steel coated bolts, dam rings, steel cover, P-606, P-605, circuit identification, connector kits, rebar, grounding, ground rods, safety ground, transformers, concrete, excavation, rock, and testing, complete in place.

12029-683--01-22 - BASE BID TOTAL: Portable Runway Lighted Closure Markers, X Item

Lot Description BASE BID TOTAL Quantity 1 lump sum

**Unit Price** 

**Delivery Location** City of Fort Lauderdale

> See ITB Specifications See ITB Specifications Fort Lauderdale FL 33301

Qty 1

#### Description

Rental of Portable Runway Lighted Closure Markers X.

12029-683--01-23 - BASE BID TOTAL: Concrete Encasement Item

BASE BID TOTAL Lot Description Quantity 120 linear foot

**Unit Price** 

**Delivery Location** City of Fort Lauderdale

> See ITB Specifications See ITB Specifications Fort Lauderdale FL 33301

**Qty** 120

#### Description

Furnish all materials, labor and equipment to construct the concrete encasement for the existing fiber optic lines.

#### Added on Jan 25, 2018:

Quantity has been changed from 100 to 120 lf.

#### Addendum # 4

Previous Delivery Location/Quantity See ITB Specifications

Fort Lauderdale, FL

33301 **Qty 100**  New Delivery Location/Quantity

See ITB

**Specifications** Fort Lauderdale, FL

33301

Qty 120

12029-683--01-24 - BASE BID TOTAL: Embankment in Place Item

BASE BID TOTAL Lot Description

Quantity	1800 cubic yard
Unit Price	
Delivery Location	City of Fort Lauderdale
	See ITB Specifications
	See ITB Specifications
	Fort Lauderdale FL 33301
	<b>Qty</b> 1800

#### Description

Furnish all materials, labor and equipment for embankment in place. All costs for borrow excavation, and incidental to placing in layers, compacting, disking, watering, mixing, sloping, and other necessary operations for construction of embankments shall be included in this item. Furnish all materials, labor and equipment for embankment in place. All costs for borrow excavation, and incidental to placing in layers, compacting, disking, watering, mixing, sloping, and other necessary operations for construction of embankments shall be included in this item.

5 ·	
Previous Title New Title Embankme	nt in Place
Added Item	

## CITY OF FORT LAUDERDALE CONTRACT AND SPECIFICATIONS PACKAGE

BID NO. 12029-683

PROJECT NO. 12260

# FORT LAUDERDALE EXECUTIVE AIRPORT SOUTH PERIMETER



Issued on Behalf of: The Public Works Department 100 North Andrews Avenue Fort Lauderdale, Florida 33301

JOSE CUSTODIO, P.E. PROJECT MANAGER II

FERNANDO BLANCO
AIRPORT ENGINEER/PROJECT MANAGER II

MAUREEN LEWIS, MBA
PROCUREMENT SPECIALIST II

Telephone: (954) 828-5239; E-mail: maureenl@fortlauderdale.gov

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#### The following FAA Advisory Circulars are available on-line at the FAA web-site

A/C No: 150/5200-18C "Airport Safety Self Inspection"

A/C No: 150/5210-5D "Painting, Lighting, and Marking of Vehicles Used on an Airport"

A/C No: 150/5370-2F "Operational Safety on Airports during Construction"

Note: The following documents are available electronically for completion and must be returned with your bid along with your bid security, proof of insurance, and proof of required licenses/certifications.

CITB Prime Contractor ID Form

**CITB Questionnaire Sheets** 

**CITB Local Price Preference Certification** 

**CITB Non-Collusion Statement** 

Non-Discrimination Certification

**CITB Contract Payment Method** 

CITB Construction Bid Certification

#### **INVITATION TO BID**

Sealed bids will be received electronically until 2:00 P.M., local time, on **THURSDAY**, **JANUARY 25**, **2018**, and opened immediately thereafter in the 5th Floor Conference Room, City Hall, 100 North Andrews Avenue, Fort Lauderdale, Florida, 33301, for **BID NO.**, **12029-673**, **PROJECT NO.**, **12260**, **FORT LAUDERDALE EXECUTIVE AIRPORT SOUTH PERIMETER LOOP ROAD**.

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<u>Licensing Requirements:</u> – Possession of a Broward County (Florida) General Engineered Construction Builder Contractor (GITS) License and/or one that is appropriately issued by the State of Florida is required for this Project.

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INVITATION TO BID (continued)

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These <u>cannot</u> be submitted via BIDSYNC, nor are their images allowed to be uploaded and submitted with your electronic bid. These forms of securities, as well as hard copy bid bonds, must be received on or before the Invitation to Bid (ITB) opening date and time, at the Finance Department, Procurement Services Division, 100 North Andrews Avenue, Room 619, Fort Lauderdale, FL 33301-1016, with the bid number and title clearly indicated on the envelope.

It is the bidder's sole responsibility to ensure that his bid bond or other bid security is received by the Procurement Services Division before time of bid opening. Failure to adhere to this requirement may be grounds to consider the bid as non-responsive.

The City of Fort Lauderdale reserves the right to waive any informality in any or all bids and to reject any or all bids.

For information concerning technical specifications, please utilize the question/answer feature provided by BIDSYNC at <a href="www.bidsync.com">www.bidsync.com</a>. Questions of a material nature must be received prior to the cut-off date specified in the solicitation. Material changes, if any, to the scope of services or bidding procedures, will only be transmitted by written addendum. (See addendum section of BIDSYNC Site). <a href="Contractors please note:">Contractors please note:</a> No part of your bid can be submitted via FAX. No variation in price or conditions shall be permitted based upon a claim of ignorance. Submission of a bid will be considered evidence that the Contractor has familiarized himself with

#### INVITATION TO BID (continued)

the nature and extent of the work, equipment, materials, and labor required. The entire bid response must be submitted in accordance with all specifications contained in this solicitation.

Information on bid results and projects currently out to bid can be obtained on the City's website – <a href="http://www.fortlauderdale.gov/departments/finance/procurement-services">http://www.fortlauderdale.gov/departments/finance/procurement-services</a>. For general inquiries, please call (954) 828-5933.

#### **INSTRUCTIONS TO BIDDERS**

The following instructions are given for the purpose of guiding bidders in properly preparing their bids or proposals. These directions have equal force and weight with the specifications and strict compliance is required with all of these provisions.

<u>QUALIFICATIONS OF BIDDERS</u> – No proposal will be accepted from, nor will any contract be awarded to, any person who is in arrears to the CITY OF FORT LAUDERDALE, upon any debt or contract, or who has defaulted, as surety or otherwise, upon any obligation to the City, or who is deemed irresponsible or unreliable by the City Commission of Fort Lauderdale.

<u>PERSONAL INVESTIGATION</u> - Bidders shall satisfy themselves by personal investigation, and by such other means as they may think necessary or desirable, as to the conditions affecting the proposed work and the cost. No information derived from maps, plans, specifications, or from the Engineer, City Manager, or their assistants shall relieve the Contractor from any risk or from fulfilling all terms of the contract.

<u>INCONSISTENCIES</u> – Any seeming inconsistency between different provisions of the plans, specifications, proposal or contract, or any point requiring explanation must be inquired into by the bidder, in writing, at least ten (10) days prior to the time set for opening proposals. After proposals are opened, the bidders shall abide by the decision of the Engineer as to such interpretation.

ADDENDA AND INTERPRETATIONS - No interpretations of the meaning of the plans, specifications or other contract documents will be made orally to any bidder. Prospective bidders must request such interpretation in writing as instructed in the bid package. To be considered, such request must be received by the Questions and Answers deadline as indicated in BIDSYNC.COM. Material changes, if any, to the scope of services or bidding procedures will only be transmitted by written addendum. <a href="It">It</a> is the bidder's responsibility to verify if addendums have been issued in BIDSYNC.COM. Failure of any bidder to receive any such addenda or interpretation shall not relieve any bidder from any obligation under his bid as submitted. All addenda so issued shall become a part of the contract document. <a href="Bidder">Bidder</a> shall verify in BIDSYNC.COM that he has all addenda before submitting a bid.

<u>LEGAL CONDITIONS</u> - Bidders are notified to familiarize themselves with the provisions of the laws of the State of Florida relating to hours of labor on municipal work, and with the provisions of the laws of the State of Florida and the Charter and the ordinances of the City of Fort Lauderdale.

<u>PUBLIC ENTITY CRIMES</u> - 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 thirty-six (36) months from the date of being placed on the convicted vendor list.

<u>FORMS OF PROPOSALS</u> - Each proposal and its accompanying statements must be made on the blanks provided. <u>THE FORMS MUST BE SUBMITTED ELECTRONICALLY</u>, <u>IN GOOD ORDER WITH ALL BLANKS COMPLETED</u>, and must show the name of the bidder and a statement as to its contents. The proposal must be signed by one duly authorized to do so, and in case signed by a deputy or subordinate, the principal's properly written authority to such deputy or subordinate must accompany the proposal. No proposal will be accepted, for any reason whatsoever, which is not submitted to the City as stated above, within the specified time.

<u>INSURANCE</u> - Contractor shall provide and shall require all of its sub-contractors to provide, pay for, and maintain in force at all times during the term of the Agreement, such insurance, including Property Insurance (Builder's Risk), Commercial General Liability Insurance, Business Automobile Liability Insurance, Workers' Compensation Insurance, Employer's Liability Insurance, and Umbrella/Excess Liability, as stated below. Such policy or policies shall be issued by companies authorized to do business in the State of Florida and having agents upon whom service of process may be made in the State of Florida.

<u>BID BOND</u> - A certified check, cashier's check or bank officer's check, for the sum set forth in the advertisement, made payable to the City of Fort Lauderdale, Florida, or bid bond in such amount, shall accompany each proposal as evidence of the good faith and responsibility of the bidder. The check or bond shall be retained by the City as liquidated damages should the bidder refuse to or fail to enter into a contract for the execution of the work embraced in this proposal, in the event the proposal of the bidder is accepted. Retention of such amount shall not be construed as a penalty or forfeiture.

The above bond or check shall be a guarantee that the bidder will, if necessary, promptly execute a satisfactory contract and furnish good and sufficient bonds. As soon as a satisfactory contract has been executed and the bonds furnished and accepted, the check or bond accompanying the proposal of the successful bidder will be returned to him. The certified or other checks or bid bonds of the unsuccessful bidders will be returned to them upon the acceptance of the bid of the successful bidder. If the successful bidder shall not enter into, execute, and deliver such a contract and furnish the required bonds within ten (10) days after receiving notice to do so, the certified or other check or bid bond shall immediately become the property of the City of Fort Lauderdale as liquidated damages. Retention of such amount shall not be construed as a penalty or forfeiture.

<u>FILLING IN BIDS</u> - All prices must be electronically submitted in the proposal pages, and all proposals must fully cover all items for which proposals are asked and no other. Bidders are required to state the names and places of residence of all persons interested, and if no other person is interested, the bidder shall distinctly state such fact and shall state that the proposal is, in all respects, fair and without collusion or fraud. Where more than one person is interested, it is required that all persons interested or their legal representative make all verification and subscribe to the proposal.

<u>PRICES QUOTED</u>: Deduct any discount offered and quote firm net unit prices. In the case of a discrepancy in computing the amount of the bid, the unit price quoted will govern. All prices quoted shall be F.O.B. destination, freight prepaid (Bidder pays and bears freight charges, Bidder owns goods in transit and files any claims), unless otherwise stated in Special Conditions. Each item must be bid separately. No attempt shall be made to tie any item or items contained in the ITB with any other business with the City.

<u>BIDS FIRM FOR ACCEPTANCE</u>: Bidder warrants, by virtue of bidding, that his bid and the prices quoted in his bid will be firm for acceptance by the City for a period of one hundred and twenty (120) days from the date of bid opening unless otherwise stated in the ITB. The City shall award contract within this time period or shall request to the recommended awarded vendor an extension to hold pricing, until products/services have been awarded.

<u>ADDITIONAL ITEMS OR SERVICES</u>: The City may require additional items or services of a similar nature, but not specifically listed in the contract. The Contractor agrees to provide such items or services, and shall provide the City prices on such additional items or services. If the price(s) offered are not acceptable to the City, and the situation cannot be resolved to the satisfaction of the City, the City reserves the right to procure those items or services from other vendors, or to cancel the contract upon giving the Contractor thirty (30) days written notice.

<u>DELETION OR MODIFICATION OF SERVICES</u>: The City reserves the right to delete any portion of the Contract at any time without cause, and if such right is exercised by the City, the total fee shall be reduced in the same ratio as the estimated cost of the work deleted bears to the estimated cost of the work originally planned. If work has already been accomplished on the portion of the Contract to be deleted, the Contractor shall be paid for the deleted portion on the basis of the estimated percentage of completion of such portion.

If the Contractor and the City agree on modifications or revisions to the task elements, after the City has approved work to begin on a particular task or project, and a budget has been established for that task or project, the Contractor will submit a revised budget to the City for approval prior to proceeding with the work.

<u>CAUSES FOR REJECTION</u> - No proposal will be canvassed, considered or accepted which, in the opinion of the City Commission, is informal or unbalanced, or contains inadequate or unreasonable prices for any items; each item must carry its own proportion of the cost as nearly as is practicable. Any alteration, erasure, interlineation, or failure to specify bids for all items called for in the schedule shall render the proposal informal.

<u>REJECTION OF BIDS</u> - The City reserves the right to reject any bid if the evidence submitted by the bidder, or if the investigation of such bidder, fails to satisfy the City that such bidder is properly qualified to carry out the obligations and to complete the work contemplated. Any or all proposals will be rejected, if there is reason to believe that collusion exists among bidders. A proposal will be considered irregular and may be rejected, if it shows serious omissions, alterations in form, additions not called for, conditions or unauthorized alternates, or irregularities of any kind. The City reserves the right to reject any or all proposals and to waive such technical errors as may be deemed best for the interests of the City.

BID PROTEST PROCEDURE: Any proposer or bidder who is not recommended for award of a contract and who alleges a failure by the City to follow the City's procurement ordinance or any applicable law may protest to the Procurement Division - Deputy Director of Finance, by delivering a letter of protest within five (5) days after a Notice of Intent to award is posted on the City's website at the following link: http://www.fortlauderdale.gov/purchasing/notices of intent.htm. The complete protest ordinance may be found City's website the following link: http://www.fortlauderdale.gov/purchasing/protestordinance.pdf

<u>WITHDRAWALS</u> - Any bidder may, without prejudice to himself, withdraw his proposal at any time prior to the expiration of the time during which proposals may be submitted. Such request for withdrawal must be in writing and signed in the same manner and by the same person who signed the proposal. After expiration of the period for receiving proposals, no proposal can be withdrawn, modified, or explained.

<u>CONTRACT</u> - The bidder to whom award is made shall execute a written contract to do the work and maintain the same in good repair until final acceptance by the proper authorities, and shall furnish good and sufficient bonds as specified within ten (10) days after receiving such contract for execution. If the bidder to whom the first award is made fails to enter into a contract as provided, the award may be annulled and the contract let to the next lowest bidder who is reliable, responsible, and responsive in the opinion of the City Commission, and that bidder shall fulfill every stipulation and obligation as if such bidder were the original party to whom award was made.

The contract shall provide that the Contractor agrees to correct any defective or faulty work or material, which may appear within one (1) year after completion of the work and receipt of final payment.

<u>ENFORCEMENT OF SPECIFICATIONS</u> - Copies of the specifications will be placed in the hands of all the assistants to the Engineer and Inspectors employed on the work, who shall enforce each and every requirement of the contract. Such assistants shall have no authority to vary from such requirements.

<u>COPIES OF DRAWING PLANS</u> - Copies of the drawing plans are on file in the Public Works Department, City Hall, 4<sup>th</sup> Floor, 100 N. Andrews Avenue, Fort Lauderdale, Florida 33301.

<u>SURETY BOND</u> – The Contractor shall execute and record in the public records of Broward County, Florida, a payment and performance bond in an amount at least equal to the Contract Price with a surety insurer authorized to do business in the State of Florida as surety, ("Bond"), in accordance with Section 255.05, Florida Statutes (2014), as may be amended or revised, as security for the faithful performance and payment of all of the Contractor's obligations under the Contract Documents.

The successful bidder shall furnish a performance and payment bond in compliance with Section 255.05, Florida Statutes, written by a Corporate Surety company, holding a Certificate of Authority from the Secretary of the Treasury of the United States as acceptable sureties on federal bonds, in an amount equal to the total amount payable by the terms of the contract, executed and issued by a Resident Agent licensed by and having an office in the State of Florida, representing such Corporate Surety, conditioned for the due and faithful performance of the work, and providing in addition to all other conditions, that if the Contractor, or his or its subcontractors, fail to duly pay for any labor, materials, or other supplies used or consumed by such Contractor, or his or its subcontractor or subcontractors, in performance of the work contracted to be done, the Surety will pay the same in the amount not exceeding the sum provided in such bonds, together with interest at the rate of fifteen percent (15%) per annum, and that they shall indemnify and save harmless the City of Fort Lauderdale to the extent of any and all payments in connection with carrying out of the contract, which the City may be required to make under the law.

The Contractor is required at all times to have a valid surety bond in force covering the work being performed. A failure to have such bond in force at any time shall constitute a default on the part of the Contractor. A bond written by a surety, which becomes disqualified to do business in the State of Florida, shall automatically constitute a failure on the part of the Contractor to meet the above requirements.

Such bond shall continue in effect for one (1) year after completion and acceptance of the work with liability equal to at least twenty-five percent (25%) of contract price, or an additional bond shall be conditioned that the Contractor will correct any defective or faulty work or material which appear within one (1) year after completion of the contract, upon notification by the City, except in contracts which are concerned solely with demolition work, in which cases twenty-five percent (25%) liability will not be applicable.

<u>AUDIT OF CONTRACTOR'S RECORDS</u> - Upon execution of the Contract, the City reserves the right to conduct any necessary audit of the Contractor's records. Such an audit, or audits, may be conducted by the City or its representatives at any time prior to final payment, or thereafter, for a period up to three (3) years. The City may also require submittal of the records from either the Contractor, the Subcontractor, or both. For the purpose of this Section, records shall include all books of account, supporting documents and papers deemed necessary by the City to assure compliance with the contract provisions.

Failure of the Contractor or Subcontractor to comply with these requirements may result in disqualification or suspension from bidding for future contracts or disapproval as a Subcontractor at the option of the City.

The Contractor shall assure that each of its Subcontractors will provide access to its records pertaining to the project upon request by the City.

<u>PERIODIC ESTIMATE FOR PARTIAL PAYMENT</u> - After the Contractor has submitted a periodic estimate for partial payment, approved and certified by the Public Works Department, the City shall make payment in the manner provided in the Contract Documents and in accordance with Florida's Prompt Payment Act, Section 218, Florida Statutes.

RESERVATION FOR AWARD AND REJECTION OF BIDS - The City reserves the right to accept or reject any or all bids, part of bids, and to waive minor irregularities or variations to specifications contained in bids, and minor irregularities in the bidding process. The City also reserves the right to award the contract on a split order basis, lump sum basis, individual item basis, or such combination as shall best serve the interest of the City. The City reserves the right to make an award to the responsive and responsible bidder whose product or service meets the terms, conditions, and specifications of the ITB and whose bid is considered to best serve the City's interest. In determining the responsiveness of the offer and the responsibility of the Bidder, the following shall be considered when applicable: the ability, capacity and skill of the Bidder to perform as required; whether the Bidder can perform promptly, or within the time specified, without delay or interference; the character, integrity, reputation, judgment, experience and efficiency of the Bidder; the quality of past performance by the Bidder; the previous and existing compliance by the Bidder with related laws and ordinances; the sufficiency of the Bidder's financial resources; the availability, quality and adaptability of the Bidder's supplies or services to the required use; the ability of the Bidder to provide future maintenance, service or parts; the number and scope of conditions attached to the bid.

MINORITY AND WOMEN BUSINESS ENTERPRISE PARTICIPATION AND BUSINESS - It is the desire of the City of Fort Lauderdale to increase the participation of minority (MBE) and womenowned (WBE) businesses in its contracting and procurement programs. While the City does not have any preference or set aside programs in place, it is committed to a policy of equitable participation for these firms. The City of Fort Lauderdale wants to increase the participation of Minority Business Enterprises (MBE), Women Business Enterprises (WBE), and Small Business Enterprises (SBE) in its procurement activities. If your firm qualifies in accordance with the below definitions please indicate in the space provided in this ITB.

Minority Business Enterprise (MBE) "A Minority Business" is a business enterprise that is owned or controlled by one or more socially or economically disadvantaged persons. Such disadvantage may arise from cultural, racial, chronic economic circumstances or background or other similar cause. Such persons include, but are not limited to: Blacks, Hispanics, Asian Americans, and Native Americans.

The term "Minority Business Enterprise" means a business at least 51 percent of which is owned by minority group members or, in the case of a publicly owned business, at least 51 percent of the stock of which is owned by minority group members. For the purpose of the preceding sentence, minority group members are citizens of the United States who include, but are not limited to: Blacks, Hispanics, Asian Americans, and Native Americans.

Women Business Enterprise (WBE) a "Women Owned or Controlled Business" is a business enterprise at least fifty-one percent (51%) of which is owned by females or, in the case of a publicly owned business, at least fifty-one percent (51%) of the stock of which is owned by females.

Small Business Enterprise (SBE) "Small Business" means a corporation, partnership, sole proprietorship, or other legal entity formed for the purpose of making a profit, which is independently owned and operated, has either fewer than 100 employees or less than \$1,000,000 in annual gross receipts.

- BLACK includes persons having origins in any of the Black racial groups of Africa.
- WHITE includes persons whose origins are Anglo-Saxon and Europeans and persons of Indo-European decent including Pakistani and East Indian.
- HISPANIC includes persons of Mexican, Puerto Rican, Cuban, Central and South American, or other Spanish culture or origin, regardless of race.
- NATIVE AMERICAN includes persons whose origins are American Indians, Eskimos, Aleuts, or Native Hawaiians.
- ASIAN AMERICAN includes persons having origin in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.

<u>DEBARRED OR SUSPENDED BIDDERS OR PROPOSERS</u> - The bidder or proposer certifies, by submission of a response to this solicitation, that neither it nor its principals and subcontractors are presently debarred or suspended by any Federal department or agency.

LOBBYING ACTIVITIES - ALL CONTRACTORS PLEASE NOTE: Any contractor submitting a response to this solicitation must comply, if applicable, with City of Fort Lauderdale Ordinance No. C-00-27 & Resolution No. 07-101, Lobbying Activities. Copies of Ordinance No., C-00-27, and Resolution No. 07-101, may be obtained from the City Clerk's Office on the 7th Floor of City Hall, 100 N. Andrews Avenue, Fort Lauderdale, Florida 33301. The ordinance may also be viewed on the City's website at <a href="http://www.fortlauderdale.gov/clerk/LobbyistDocs/lobbyist\_ordinance.pdf">http://www.fortlauderdale.gov/clerk/LobbyistDocs/lobbyist\_ordinance.pdf</a>.

<u>TITLE VI SOLICITATION NOTICE</u> - City, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

<u>FEDERAL FAIR LABOR STANDARDS ACT (FLSA)</u> - All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR Part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part time workers.

Contractor has full responsibility to monitor compliance to the referenced statute or regulation. The Contractor must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 - All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. Contractor must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. Contractor retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). Contractor must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

#### **SPECIAL CONDITIONS**

#### 01. PURPOSE

The City of Fort Lauderdale, Florida (City) is seeking bids from qualified bidders, hereinafter referred to as the Contractor, to provide construction services for the City's Public Works Department, in accordance with the terms, conditions, and specifications contained in this Invitation To Bid (ITB).

#### 02. TRANSACTION FEES

The City of Fort Lauderdale uses BidSync (<a href="www.bidsync.com">www.bidsync.com</a>) to distribute and receive bids and proposals. There is no charge to vendors/contractors to register and participate in the solicitation process, nor will any fees be charged to the awarded contractor.

#### 03. SUBMISSION OF BIDS

It is the sole responsibility of the Contractor to ensure that their bid is submitted electronically through BidSync at <a href="www.bidsync.com">www.bidsync.com</a> and that any bid security not submitted via BidSync reaches the City of Fort Lauderdale City Hall, Procurement Services Division, 6<sup>th</sup> floor, Room 619, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301 in a sealed envelope marked on the outside with the ITB solicitation number and Contractor's name, no later than the time and date specified in this solicitation. PAPER BID SUBMITALS WILL NOT BE ACCEPTED. PLEASE SUBMIT YOUR BID RESPONSE ELECTRONICALLY.

#### 04. INFORMATION OR CLARIFICATION

For information concerning procedures for responding to this solicitation, contact **Maureen Lewis**, **Procurement Specialist II**, at (954) 828-5239 or email at <a href="maureenl@fortlauderdale.gov">maureenl@fortlauderdale.gov</a>. Such contact shall be for clarification purposes only.

For information concerning technical specifications please utilize the question/answer feature provided by BidSync at <a href="www.bidsync.com">www.bidsync.com</a>. Questions of a material nature must be received prior to the cut-off date specified in the solicitation. Material changes, if any, to the scope of services or bidding procedures will only be transmitted by written addendum. (See addendum section of BidSync Site). <a href="Contractors please note">Contractors please note</a>: No part of your bid can be submitted via FAX. No variation in price or conditions shall be permitted based upon a claim of ignorance. Submission of a bid will be considered evidence that the Contractor has familiarized himself with the nature and extent of the work, and the equipment, materials, and labor required. The entire bid response must be submitted in accordance with all specifications contained in this solicitation. The questions and answers submitted in BidSync shall become part of any contract that is created from this ITB.

#### 05. CONTRACT PERIOD

- 5.1 The Contractor recognizes that TIME IS OF THE ESSENCE. The Work shall commence within <u>30</u> calendar days (20 working days) of the date of the Notice to Proceed. During this period contractor shall submit shop drawings, procure materials, establish staging area, coordinate and attend airfield security/badging classes, and begin mobilization.
- 5.2 The Work shall be Substantially Completed within <u>65</u> calendar days (43 working days) after the date when the Contract Time commences to run as provided in the Notice to Proceed.
- 5.3 The Work shall be finally completed on the Final Completion Date and ready for final payment in accordance with this Agreement within <u>95</u> calendar days (63 working days) after the date when the Contract Time commences to run as provided in the Notice to Proceed.

The City of Fort Lauderdale reserves the right to waive any informality in any bid and to reject any or all bids. The City of Fort Lauderdale reserves the right to reduce or delete any of the bid items.

At time of award of contract, the City reserves the right to set a maximum dollar limit that may be expended on this project. Contract quantities of any or all items may be increased, reduced, or eliminated to adjust the contract amount to coincide with the amount of work necessary or to bring the contract value to within the established limit. All quantities are estimated and the City reserves the right to increase, reduce, or eliminate the contract quantities in any amount.

The undersigned bidder affirms that he has or will obtain all equipment necessary to complete the work described, that he has or will obtain all required permits and licenses from the appropriate agencies, and that his firm is authorized to do business in the State of Florida.

#### 06. BID SECURITY

A certified check, cashier's check, bank officer's check or bid bond for <u>FIVE</u> percent (5%) of the bid amount, made payable to the City of Fort Lauderdale, Florida, shall accompany each proposal.

#### 07. REQUIRED LICENSES/CERTIFICATIONS

Contractor must possess the following licenses/certifications to be considered for award.

Broward County (Florida) General Engineered Construction Builder Contractor (GITS) License and/or one that is appropriately issued by the State of Florida is required for this project.

Note: Contractor <u>must</u> have proper licensing and be able to provide evidence of same, if requested, at time of award.

#### 08. SPECIFIC EXPERIENCE REQUIRED

The following expertise is required to be considered for this contract. Specific references attesting to this expertise must be submitted with bid.

The contractor shall have at least five (5) years previous construction experience in the State of Florida. Bidder shall submit proof of construction experience for a minimum of three (3) projects of similar scope and scale (or larger) and shall, for each project listed, identify location; dates of construction; project name and overall scope; scope of work that was self-performed by Contractor; and client's name, address,

NOTE: REFERENCES SHOULD NOT INCLUDE CITY OF FORT LAUDERDALE EMPLOYEES OR WORK PERFORMED FOR THE CITY. THE CITY IS INTERESTED IN WORK EXPERIENCE AND REFERENCES OTHER THAN THE CITY OF FORT LAUDERDALE.

By signing this bid solicitation, contractor is affirming that this expertise will be provided for this contract at no additional charge.

- 09. BID ALLOWANCE: N/A
- **10. INSURANCE REQUIREMENTS** (See Article 10, Bonds and Insurance, of the Contract for details)

#### 10.1 General Information

Contractor shall provide and shall require all of its sub-contractors to provide, pay for, and maintain in force at all times during the term of the Agreement, such insurance, including Property Insurance (Builder's Risk), Commercial General Liability Insurance, Business Automobile Liability Insurance, Workers' Compensation Insurance, Employer's Liability Insurance, and Umbrella/Excess Liability, as stated below, as well as Professional Liability insurance in the amount of \$1,000,000 for any Architectural and/or Engineering requirements associated with the fulfillment of the contract if required. Such policy or policies shall be issued by companies authorized to do business in the State of Florida and having agents upon whom service of process may be made in the State of Florida. A Sample Insurance Certificate shall be included with the proposal to demonstrate the firm's ability to comply with insurance requirements. Provide a previous certificate or other evidence listing the insurance companies' names for all required coverage, and the dollar amounts of the coverage.

- a) The City is required to be named as additional insured on the Commercial General Liability insurance policy. <u>BINDERS ARE UNACCEPTABLE</u>. The insurance coverage required shall include those classifications, as listed in standard liability insurance manuals, which most nearly reflect the operations of the Contractor. Any exclusions or provisions in the insurance maintained by the Contractor that precludes coverage for the work contemplated in this Agreement shall be deemed unacceptable, and shall be considered a breach of contract.
- b) The Contractor shall provide the City an original Certificate of Insurance for policies required by Article 10. All certificates shall state that the City shall be given ten (10) days' notice prior to expiration or cancellation of the policy. The insurance provided shall be endorsed or amended to comply with this notice requirement. In the event that the insurer is unable to accommodate, it shall be the responsibility of the Contractor to provide the proper notice. Such notification will be in writing by registered mail, return receipt requested and addressed to the Finance Department. Such policies shall: (1) name the insurance company or companies affording coverage acceptable to the City, (2) state the effective and expiration dates of the policies, (3) include special endorsements where necessary. Such policies provided under Article 10 shall not be affected by any other policy of insurance, which the City may carry in its own name.
- c) Contractor shall, as a condition precedent of this Agreement, furnish to the City of Fort Lauderdale, c/o Project Manager, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301, Certificate(s) of Insurance upon execution of this Agreement, which indicate that insurance coverage has been obtained which meets the requirements as outlined below:
- Property Insurance (Builder's Risk): The Contractor shall purchase and maintain property insurance upon the Work at or off the site of 100% of the contract completed value. These policies shall insure the interest of the owner, contractor and subcontractors in the Work, and shall insure against "all risks" of physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage. All such insurance required by this paragraph shall remain in effect until the Work is completed and accepted by the City.

#### 10.3 Commercial General Liability:

#### a) Limits of Liability:

Bodily Injury and Property Damage - Combined Single Li	HILL
Each Occurrence \$1,000,000	
Project Aggregate \$1,000,000	
General Aggregate \$2,000,000	
Personal Injury \$1,000,000	
Products/Completed Operations \$1,000,000	

#### b) <u>Endorsements Required</u>:

City of Fort Lauderdale included as an Additional Insured Broad Form Contractual Liability
Waiver of Subrogation
Premises/Operations
Products/Completed Operations
Independent Contractors
Owners and Contractors Protective Liability
Contractor's Pollution Liability – N/A

#### 10.4 Business Automobile Liability

#### a) Limits of Liability:

Bodily Injury and Property Damage - Combined Single Limit
All Autos used in completing the contract
Including Hired, Borrowed or Non-Owned Autos
Any One Accident
\$1,000,000

#### b) Endorsements Required:

Waiver of Subrogation

#### 10.5 Workers' Compensation and Employer's Liability Insurance

Limits:

Workers' Compensation – Per Florida Statute 440 Employers' Liability - \$500,000

Any firm performing work on behalf of the City of Fort Lauderdale must provide Workers' Compensation insurance. Exceptions and exemptions can only be made if they are in accordance with Florida Law.

Contractor must be in compliance with all applicable State and Federal workers' compensation laws, including the U.S. Longshore Harbor Workers' Act or Jones Act.

- 10.6 <u>Umbrella/Excess Liability:</u> The Contractor shall provide umbrella/excess coverage with limits of no less than \$2,000,000 excess of Commercial General Liability, Automobile Liability and Employer's Liability.
- 10.7 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 Contractor's insurance must be provided by an A.M. Best's "A-" rated or better insurance company authorized to issue insurance policies in the State of Florida, subject to approval by the City's Risk Manager. Any exclusions or provisions in the insurance maintained by the Contractor that precludes

coverage for work contemplated in this project shall be deemed unacceptable, and shall be considered breach of contract.

NOTE: CITY PROJECT NUMBER AND NAME MUST APPEAR ON EACH CERTIFICATE, AND THE CITY OF FORTLAUDERDALE MUST BE NAMED ON THE CERTIFICATE AS AN "ADDITIONAL INSURED".

A <u>Sample Insurance Certificate</u> shall be included with the proposal to demonstrate the firm's ability to comply with insurance requirements. Provide a previous certificate or other evidence listing the insurance companies' names for all required coverage, and the dollar amounts of the coverage.

Compliance with the foregoing requirements shall not relieve the Contractor of their liability and obligation under this section or under any other section of this Agreement.

The Contractor shall be responsible for assuring that the insurance certificates required in conjunction with this Section remain in force for the duration of the Project. If insurance certificates are scheduled to expire during the contractual period, the Contractor shall be responsible for submitting new or renewed insurance certificates to the City at a minimum of thirty (30) calendar days in advance of such expiration. In the event that expired certificates are not replaced with new or renewed certificates that cover the contractual period, the City shall:

- a) Suspend the Agreement until such time as the new or renewed certificates are received by the City.
- b) The City may, at its sole discretion, terminate the Agreement for cause and seek damages from the Contractor in conjunction with the violation of the terms and conditions of the Agreement.

11.	PERFORMANCE AND PAYMENT	F BOND:	<u>100%</u>	
	Number of awards anticipated:	One		

#### 12. CITY PROJECT MANAGER

The Project Manager is hereby designated by the City as <u>Jose Custodio</u>, whose address is <u>100 N. Andrews Avenue</u>, <u>5<sup>th</sup> Floor</u>, <u>Fort Lauderdale</u>, <u>FL 33301</u>, <u>telephone number: (954) 828-5248</u>, <u>and email address is jcustodio@fortlauderdale.gov</u>. The Project Manager will assume all duties and responsibilities and will have the rights and authorities assigned to the Project Manager in the Contract Documents in connection with completion of the Work in accordance with this Agreement.

#### **13. LIQUIDATED DAMAGES** (See Article 16, Liquidated Damages, of the Contract for details)

Upon failure of the Contractor to complete the Work within the time specified for completion, the Contractor shall pay to the City the sum of **Two Hundred and Fifty Dollars (\$250.00)** for each and every calendar day that the completion of the Work is delayed beyond the time specified in this Agreement for completion, as fixed and agreed liquidated damages and not as a penalty, so long as the delay is caused by the Contractor. (See Article 16, Liquidated Damages Clause, of the Contract)

In addition, for work beyond the time (hour and minute) established for opening the taxiway/runway, following each closure of that taxiway/runway in accordance with the phasing plans, the City will charge the Contractor a rental fee for the Contractor's use of the taxiway/runway. The parties agree that the sum of \$500 for the first minute and \$50 for every minute thereafter shall be fixed as the rental rates for continuing a taxiway/runway closure beyond the time provided for opening the taxiway during each phase of work that requires taxiway/runway closure.

The Contractor shall pay to the City, or have withheld from monies due the Contractor, the rental sum of **\$500** per the first minute and **\$50** for every minute thereafter that the Contractor continues a taxiway/runway closure beyond the specified time provided for opening the taxiway/runway during each phase of work that requires closure.

Time for opening of the taxiway/runway and rental fee determinations shall be based upon the City's inspector's time keeping, not the Contractor. Contractor may request the inspector to advise him of remaining time periodically prior to opening, but inspector's time keeping shall be the sole determining factor as to whether the taxiway/runway reopened as scheduled without appeal.

#### **14. PAYMENT** (See Article 7, Payment, of the Contract for other details)

The City has implemented a Purchasing Card (P-Card) Program utilizing both VISA and MASTERCARD networks. Purchases from this contract will be made utilizing the City's Purchasing Card. Contractor will receive payment from the purchasing card in the same manner as other credit card purchases. Accordingly, bidders must presently have the ability to accept these credit cards or take whatever steps necessary to implement the ability before the start of the contract term, or contract award by the City. The City reserves the right to revise this program as necessary.

#### **15. WORK SCHEDULE:** As detailed on the plans

Any inspection requested by the contractor outside of the specified hours will be considered overtime to be paid by the Contractor.

#### **16. INSPECTION OVERTIME COST:** \$85.00/hr.

### CITY OF FORT LAUDERDALE CONSTRUCTION AGREEMENT

THIS AGREEM	ENT made	and enter	red into	this	day	of
<del>,</del>	20, by and	l between t	he City of	Fort Laude	erdale, a Flori	da
municipal corporation (() () () ()	City) and				, (Contracto	or),
WHEREAS, the C	•			•		
Invitation to Bid No.,;	and,	roject Numb	er,	which	was opened	on
WHEREAS, the C necessary work to accon		•	willingness	and capabil	ity to perform t	the

NOW, THEREFORE, the City and the Contractor, in consideration of the mutual covenants and conditions contained herein and for other good and valuable consideration, the receipt and sufficiency is hereby acknowledged, agree as follows:

#### **ARTICLE 1 – DEFINITIONS**

Whenever used in this Agreement or in other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural forms:

- 1.1 <u>Agreement</u> This written Agreement between the City and the Contractor covering the work to be performed including other Contract Documents that are attached to or incorporated in the Agreement.
- 1.2 <u>Application for Payment</u> The form accepted by the City which is to be used by the Contractor in requesting progress or final payment and which is to include such supporting documentation as is required by the Contract Documents
- 1.3 Approve The word approve is defined to mean review of the material, equipment or methods for general compliance with design concepts and with the information given in the Contract Documents. It does not imply a responsibility on the part of the City to verify in every detail conformance with plans and specifications.
- 1.4 <u>Bid</u> The offer or Bid of the Contractor submitted on the prescribed form setting forth the total prices for the Work to be performed.
- 1.5 <u>Bid Documents</u> –This Agreement, advertisement for Invitation to Bids, the Instructions to Bidders, the Bid Form (with supplemental affidavits and agreements), the Contract Forms, General Conditions, the Supplementary Conditions, the Specifications, and the Plans, which documents all become an integral part of the Contract Documents.
- 1.6 <u>Certificate of Substantial Completion</u> Certificate provided by the City certifying that all Work, excluding the punch list items, has been completed, inspected, and accepted by the City.

- 1.7 <u>Change Order</u> A change order is defined as a written order to a contractor approved by the City, authorizing a revision of an underlying agreement between the City and a contractor that is directly related to the original scope of work or an adjustment in the original contract price or the contract time directly related to the original scope of work, issued on or after the effective date of the contract.
- 1.8 <u>City</u> The City of Fort Lauderdale, Florida including but not limited to its employees, agents, officials, representatives, contractors, subcontractors, volunteers, successors and assigns, with whom the Contractor has entered into the Agreement and for whom the Work is to be provided.
- 1.9 <u>Contract Documents</u> The Contract Documents shall consist of this Agreement, Exhibits to this Agreement, Public Construction Bond, Performance Bond, Payment Bond and Certificates of Insurance, Notice of Award and Notice to Proceed, General Conditions as amended by the Special Conditions, Technical Specifications, Plans/Drawings, Addenda, Bid Form and supplement Affidavits and Agreements, all applicable provisions of State and Federal Law and any modification, including Change Orders or written amendments duly delivered after execution of Agreement, Invitation to Bid, Instructions to Bidders and Bid Bond, Contractor's response to the City's Invitation to Bid, Schedule of Completion, Schedule of Values, all amendments, modifications and supplements, change orders and work directive changes issued on or after the Effective Date of the Agreement, as well as any additional documents that are required to be submitted under the Agreement.

Permits on file with the City and or those permits to be obtained shall be considered directive in nature and will be considered a part of this Agreement. A copy of all permits shall be given to the City for inclusion in the Contract Documents. Terms of permits shall be met prior to acceptance of the Work and release of the final payment.

- 1.10 <u>Contract Price</u> The monies payable to the Contractor by the City under the Contract Documents and in accordance with the line item unit prices listed in the Bid.
- 1.11 <u>Contract Time</u> The number of calendar days stated in the Agreement for the completion of the Work. The dates on which the work shall be started and shall be completed as stated in the Notice to Proceed.
- 1.12 <u>Contractor</u> The person, firm, company, or corporation with whom the City has entered into the Agreement, including but not limited to its employees, agents, representatives, contractors, subcontractors, their subcontractors and their other successors and assigns.
- 1.13 Day A calendar day of twenty-four (24) hours ending at midnight.
- 1.14 <u>Defective</u> An adjective which when modifying the word "Work" refers to work that is unsatisfactory, faulty, or deficient, or does not conform to the Contract Documents or does not meet the requirements of any inspection, test or approval referred to in the Contract Documents, or has been damaged prior to the Project Manager's recommendation of final payment.

- 1.15 Effective Date of the Agreement The effective date of the agreement shall be the date the City Commission approves the work. The contractor shall provide all required payment and performance bonds and insurances to the City within ten (10) Calendar days following the City Commission approval. Upon verification of all bonds and insurances, the City will issue a notice to proceed (NTP) to the Contractor. Contract time will commence on the date when the Notice to Proceed is issued. The Contractor shall commence the work immediately upon receipt of the Notice to Proceed. Failure of the contractor to proceed with the work will constitute non-performance of the Contractor and would be ground for termination of the contract per ARTICLE 17 of the Agreement.
- 1.16 <u>Final Completion Date</u> The date the Work is completed, including completion of the final punch list, and delivered along with those items specified in the Contract Documents and is accepted by the City.
- 1.17 <u>Hazardous Materials (HAZMAT)</u> Any solid, liquid, or gaseous material that is toxic, flammable, radioactive, corrosive, chemically reactive, or unstable upon prolonged storage in quantities that could pose a threat to life, property, or the environment defined in Section 101(14) of Comprehensive Environmental Response, Compensation and Liability Act of 1980 and in 40 CFR 300.6. Also defined by 49 CFR 171.8 as a substance or material designated by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce and which has been so designated.
- 1.18 <u>Hazardous Substance</u> As defined by Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act; any substance designated pursuant to Section 311(b) (2) (A) of the Clean Water Act; any element, compound, mixture, solution or substance designated pursuant to Section 102 identified under or listed pursuant to Section 3001 of the Solid Waste Disposal Act {but not including any waste listed under Section 307[a] of the Clean Water Act}; any hazardous air pollutant listed under Section 112 of the Clean Air Act; and any imminently hazardous chemical substance or mixture pursuant to Section 7 of the Toxic Substances Control Act. The term does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance in the first sentence of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).
- 1.19 <u>Hazardous Waste</u> Those solid wastes designated by OSHA in accordance with 40 CFR 261 due to the properties of ignitability, corrosivity, reactivity, or toxicity. Any material that is subject to the Hazardous Waste Manifest requirements of the EPA specified in 40 CFR Part 262.
- 1.20 <u>Holidays</u> Those designated non-work days as established by the City Commission of the City of Fort Lauderdale.

- 1.21 <u>Inspection</u> The term "inspection" and the act of inspecting as used in this Agreement is defined to mean the examination of construction to ensure that it conforms to the design concept expressed in the plans and specifications. This term shall not be construed to mean supervision, superintending and/or overseeing.
- 1.22 <u>Notice of Award</u> The written notice by City to the Contractor stating that upon compliance by the Contractor with the conditions precedent enumerated therein, within the time specified that the City will sign and deliver this Agreement.
- 1.23 <u>Notice to Proceed</u> A written notice given by the City to the Contractor fixing the date on which the Contract Time will commence to run and on which the Contract Time will end.
- 1.24 <u>Plans</u> The drawings which show the character and scope of the work to be performed and which have been prepared or approved by the City and are referred to in the Contract Documents.
- 1.25 <u>Premises (otherwise known as Site or Work Site)</u> means the land, buildings, facilities, etc. upon which the Work is to be performed.
- 1.26 <u>Project</u> The total construction of the Work to be provided as defined in the Contract Documents.
- 1.27 Project Manager The employee of the City, or other designated individual who is herein referred to as the Project Manager, will assume all duties and responsibilities and will have the rights and authorities assigned to the Project Manager in the contract Documents in connection with completion of the Work in accordance with this Agreement. The Project Manager, or designee, shall be the authorized agent for the City unless otherwise specified.
- 1.28 <u>Punch List</u> The City's list of Work yet to be done or be corrected by the Contractor, before the Final Completion date can be determined by the City.
- 1.29 <u>Record Documents</u> A complete set of all specifications, drawings, addenda, modifications, shop drawings, submittals and samples annotated to show all changes made during the construction process.
- 1.30 Record Drawings or "As-Builts" A set of drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor. These documents will be signed and sealed by a Professional Engineer or a Professional Land Surveyor licensed in the State of Florida, hired by the Contractor at no additional expense to the City.
- 1.31 <u>Substantially Completed Date</u> A date when the Contractor has requested in writing, stating that the Work is substantially completed and is ready for an inspection and issuance of a final punch list for the Project. The date will be determined by the City after a substantial completion walk-thru has been conducted.

1.32 <u>Work</u> – The entire completed delivered product or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor and furnishing and incorporating material and equipment into the product, all as required by the Contract Documents.

#### ARTICLE 2 – SCOPE OF WORK

2.1 The Contractor shall complete all work as specified or indicated in the Contract Documents. The Project for which the Work under the Contract Documents may be the whole or only part is generally described as follows:

FORT LAUDERDALE EXECUTIVE AIRPORT SOUTH PERIMETER LOOP ROAD ITB 12029-683 PROJECT 12260

2.2 All Work for the Project shall be constructed in accordance with the Drawings and Specifications. The Work generally involves:

#### PROJECT DESCRIPTION

This project is located at Fort Lauderdale Executive Airport in the City of Fort Lauderdale. It is for the construction of an approximately 1,400 linear foot long asphalt perimeter road along the southeastern end of Runway 31. The work includes, but is not limited to, clearing and grubbing, unclassified excavation, grading, removal of existing milled asphalt road, limerock, asphalt paving, pavement striping, sodding, watering period, lighting and electrical works.

2.3 Within ten (10) days of the execution of this Agreement, the Contractor shall submit a Construction Schedule, Schedule of Values and a listing of those subcontractors that will be utilized by the Contractor. The general sequence of the work shall be submitted by the Contractor and approved by the City before any work commences. The City reserves the right to issue construction directives necessary to facilitate the Work or to minimize any conflict with operations.

#### **ARTICLE 3 – PROJECT MANAGER**

3.1 The Project Manager is hereby designated by the City as <u>Jose Custodio</u>, whose address is <u>100 N. Andrews Avenue</u>, <u>5<sup>th</sup> Floor</u>, <u>Fort Lauderdale</u>, <u>FL 33301</u>, <u>telephone number: (954) 828-5248</u>, <u>and email address is jcustodio@fortlauderdale.gov</u>. The Project Manager will assume all duties and responsibilities and will have the rights and authorities assigned to the Project Manager in the Contract Documents in connection with completion of the Work in accordance with this Agreement.

#### **ARTICLE 4 – CONTRACT DOCUMENTS**

The Contract Documents which comprise the entire Agreement between the City and Contractor are attached to this Agreement, are made a part hereof and consist of the following:

- 4.1 This Agreement. 4.2 The Contract Documents may only be altered, amended, or repealed in accordance with the specific provisions of the terms of this Agreement. 4.3 Exhibits to this Agreement: (Plans sheets [ ] to [ 1 inclusive). 4.4 Public Construction Bond, Performance Bond, Payment Bond and Certificates of Insurance. 4.5 Notice of Award and Notice to Proceed. 4.6 General Conditions as amended by the Special Conditions. 4.7 Technical Specifications. 4.8 Plans/Drawings. 4.9 Addenda number through 4.10 Bid Form and supplement Affidavits and Agreements. 4.11 All applicable provisions of State and Federal Law. 4.12 Invitation to Bid No., \_\_\_\_, Instructions to Bidders, and Bid Bond. 4.13 Contractor's response to the City's Invitation to Bid No., dated Schedule of Completion and Schedule of Values.
- 4.16 Any additional documents that are required to be submitted under the Agreement.

changes issued on or after the Effective Date of the Agreement.

4.17 Permits on file with the City and or those permits to be obtained shall be considered directive in nature and will be considered a part of this Agreement. A copy of all permits shall be given to the City for inclusion in the Contract Documents. Terms of permits shall be met prior to acceptance of the Work and release of the final payment.

4.15 All amendments, modifications and supplements, change orders and work directive

In the event of any conflict between the documents or any ambiguity or missing specification or instruction, the following priority is established:

- a. Specific direction from the City Manager (or designee).
- b. Approved change orders, addenda or amendments.
- c. Specifications (quality) and Drawings (location and quantity).
- d. Supplemental conditions or special terms.
- e. General Terms and Conditions.

f.	This Agreement dated	and a	ny attachments.
• •	i i iio i igi o o i i i o i ii aatoa	and a	i y attaci ii i i ci ito:

- g. Invitation to Bid No., \_\_\_\_\_\_, and the specifications prepared by the City.
- h. Contractor's response to the City's Invitation to Bid No., \_\_\_\_\_\_, dated \_\_\_\_\_.
- i. Schedule of Values.
- j. Schedule of Completion.

If during the performance of the Work, Contractor finds a conflict, error or discrepancy in the Contract Documents, Contractor shall so report to the Project Manager, in writing, at once and before proceeding with the Work affected shall obtain a written interpretation or clarification from the City.

It is the intent of the specifications and plans to describe a complete Project to be constructed in accordance with the Contract Documents. Any Work that may reasonably be inferred from the specifications or plans as being required to produce the intended result shall be supplied whether or not it is specifically called for. When words which have a well-known technical or trade meaning are used to describe Work, materials, or equipment, such works shall be interpreted in accordance with such meaning. Reference to standard specifications, manuals or codes of any technical society, organization or associations, or to the code of any governmental authority whether such reference be specific or implied, shall mean the latest standard specification, manual or code in effect as of the Effective Date of this Agreement, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall change the duties and responsibilities of the City, the Contractor, or any of their agents or employees from those set forth in the Contract Documents.

# **ARTICLE 5 – CONTRACT TIME**

- 5.1 The Contractor recognizes that **TIME IS OF THE ESSENCE**. The Work shall commence within <u>30</u> calendar days (20 working days) of the date of the Notice to Proceed. During this period contractor shall submit shop drawings, procure materials, establish staging area, coordinate and attend airfield security/badging classes, and begin mobilization.
- 5.2 The Work shall be Substantially Completed within <u>65</u> calendar days (43 working days) after the date when the Contract Time commences to run as provided in the Notice to Proceed.
- 5.3 The Work shall be finally completed on the Final Completion Date and ready for final payment in accordance with this Agreement within <u>95</u> calendar days (63 working days) after the date when the Contract Time commences to run as provided in the Notice to Proceed.

# **ARTICLE 6 – CONTRACT PRICE**

- 6.1 City shall pay Contractor for performance of the Work in accordance with Article 7, subject to additions and deletions by Change Order, as provided for in this Agreement.
- 6.2 The parties expressly agree that the Contract Price, which shall not exceed the amount of \$\_\_\_\_\_ constitutes the total maximum compensation payable to Contractor for performing the Work, plus any Work done pursuant to a Change Order. The Contract Price is in accordance with the line item unit prices listed in the Bid. Line items are based on a unit price cost multiplied by a defined quantity. Any additional duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at Contractor's expense without change to the Contract Price.
- 6.3 The Contract Price constitutes the compensation payable to Contractor for performing the Work plus any Work done pursuant to a Change Order. All duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at Contractor's expense without change in the Contract price.

#### **ARTICLE 7 – PAYMENT**

- 7.1 Contractor shall submit Applications for Payment in accordance with the Contract Documents. Applications for Payment will be processed by City as provided in the General Conditions.
- 7.2 Progress Payments. City shall make progress payments on account of the Contract Price on the basis of Contractor's monthly Applications for Payment, which shall be submitted by the Contractor between the first (1<sup>st</sup>) and the tenth (10<sup>th</sup>) day after the end of each calendar month for which payment is requested. All progress payments will be made on the basis of the progress of the Work completed.

- 7.3 Prior to Final Completion, progress payments will be made in an amount equal to ninety percent (90%) of the value of Work completed less in each case the aggregate of payments previously made.
- 7.4 Final Payment. Upon final completion of the Work in accordance with the General Conditions, as may be supplemented, the City shall pay Contractor an amount sufficient to increase total payments to one-hundred percent (100%) of the Contract Price. However, not less than ten percent (10%) of the Contract Price shall be retained until Record Drawings (as-builts), specifications, addenda, modifications and shop drawings, including all manufacturers' instructional and parts manuals are delivered to and accepted by the City.
- 7.5 City may withhold, in whole or in part, payment to such extent as may be necessary to protect itself from loss on account of:
  - 7.5.1 Defective work not remedied.
  - 7.5.2 Claims filed or reasonable evidence indicating probable filing of claims by other parties against Contractor or City because of Contractor's performance.
  - 7.5.3 Failure of Contractor to make payments properly to Subcontractors or for material or labor.
  - 7.5.4 Damage to another contractor not remedied.
  - 7.5.5 Liquidated damages and costs incurred by Consultant for extended construction administration, if applicable.
  - 7.5.6 Failure of Contractor to provide any and all documents required by the Contract Documents.

When the above grounds are removed or resolved satisfactory to the Project Manager, payment shall be made in whole or in part.

- 7.6 The City shall make payment to the Contractor in accordance with the Florida Prompt Payment Act, Section 218.70, Florida Statutes.
- 7.7 The City shall make payment to the Contractor through utilization of the City's P-Card Program.

#### **ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS**

In order to induce the City to enter into this Agreement, Contractor makes the following representations upon which the City has relied:

- 8.1 Contractor is qualified in the field of public construction and in particular to perform the Work and services set forth in this Agreement.
- 8.2 Contractor has visited the Work Site, has conducted extensive tests, examinations and investigations and represents and warrants a thorough familiarization with the nature and extent of the Contract Documents, the Work, locality, soil conditions, moisture conditions and all year-round local weather and climate conditions (past and present), and, in reliance on such tests, examination and investigations conducted by Contractor

and the Contractor's experts, has determined that no conditions exist that would in any manner affect the Proposed Price and that the project can be completed for the Proposed Price submitted within the Contract Time as defined in this Agreement. Furthermore, Contractor warrants and confirms that he is totally familiar with, understands and obligates Contractor to comply with all federal, state and local laws, ordinances, rules, regulations and all market conditions that affect or may affect the cost and price of materials and labor needed to fulfill all provisions of this Agreement or that in any manner may affect cost, progress or performance of the Work.

- 8.3 The Contractor has satisfied itself as to the nature and location of the Work under the Contract Documents, the general and local conditions of the Project, particularly those bearing upon availability of transportation, disposal, handling and storage of materials, availability of labor, water, electric power, and roads, the conformation and conditions at the ground based on City provided reports, 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 the Contract Documents.
- 8.4 The Contractor has also studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Works, and finds and has further determined that no conditions exist that would in any manner affect the Proposed Price and that the project can be completed for the Proposed Price submitted.
- 8.5 Contractor has made or caused to be made examinations, investigations, tests and studies of such reports and related data in addition to those referred to in Paragraphs 8.2, 8.3 and 8.4 above as he deems necessary for the performance of the Work at the Contract Prices, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents; and no additional examinations, investigations, tests, reports or similar data are, or will be, required by Contractor for such purposes.
- 8.6 Contractor has correlated the results of all such observations, examinations, investigations, tests, reports and data with the terms and conditions of the Contract Documents.
- 8.7 Contractor has given City written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution by City is acceptable to the Contractor.

#### 8.8 Labor

- 8.8.1 The Contractor shall provide competent, suitable qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. The Contractor shall at all times maintain good discipline and order at the site.
- 8.8.2 The Contractor shall, at all times, have a competent superintendent, capable of reading and thoroughly understanding the drawings and specifications, as the

- Contractor's agent on the Work, who shall, as the Contractor's agent, supervise, direct and otherwise conduct the Work.
- 8.8.3 The Contractor shall designate the superintendent on the job to the City, in writing, immediately after receipt of the Notice to Proceed. The Contractor understands and agrees that the superintendent's physical presence on the job site is indispensable to the successful completion of the Work. If the superintendent is frequently absent from the job site, the Project Manager may deliver written notice to the Contractor to stop work or terminate the Contract in accordance with Article 17.
- 8.8.4 The Contractor shall assign personnel to the job site that have successfully completed training programs related to trench safety, confined space and maintenance of traffic. A certified "competent person" shall be assigned to the job site. Personnel certified by the International Municipal Signal Associations with Florida Department of Transportation qualifications are required relative to maintenance of traffic. Failure to pursue the Work with the properly certified supervisory staff may result in notice to stop work or terminate the Contract in accordance with Article 17.

# 8.9 Materials:

- 8.9.1 The Contractor shall furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities and all other facilities and incidentals necessary for the execution, testing, initial operation and completion of Work.
- 8.9.2 All material and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. Suppliers shall be selected and paid by the Contractor; the City reserves the right to approve all suppliers and materials.
- 8.10 Work Hours: Except in connection with the safety or protection of persons, or the Work, or property at the site or adjacent thereto, and except as otherwise indicated in the Supplementary Conditions, all work at the site shall be performed during regular working hours between 7 a.m. and 6:00 p.m., Monday through Friday. The Contractor will not permit overtime work or the performance of work on Saturday, Sunday or any legal holiday (designated by the City of Fort Lauderdale) without the Project Manager's written consent at least seventy-two (72) hours in advance of starting such work. If the Project Manager permits overtime work, the Contractor shall pay for the additional charges to the City with respect to such overtime work. Such additional charges shall be a subsidiary obligation of the Contractor and no extra payment shall be made to the Contractor for overtime work. It shall be noted that the City's Inspector work hours are from 8:00 a.m. to 4:30 p.m. and any work requiring inspection oversight being performed outside of this timeframe shall be paid for by the Contractor as Inspector overtime. It shall be noted that the City's Inspector work hours are from 8:00 a.m. to 4:30 p.m. and any Work requiring inspection oversight being performed outside of this timeframe shall be paid for by the Contractor as Inspector overtime. The cost to the

Contractor to reimburse the City for overtime inspection is established at direct-labor and overtime costs for each person or inspector required. Incidental overtime costs for engineering, testing and other related services will also be charged to the Contractor at the actual rate accrued.

- 8.11 Patent Fee and Royalties: The Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work, or any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. The Contractor hereby expressly binds himself or itself to indemnify and save harmless the City from all such claims and fees and from any and all suits and action of every name and description that may be brought against City on account of any such claims, fees, royalties, or costs for any such invention or patent, and from any and all suits or actions that may be brought against said City for the infringement of any and all patents or patent rights claimed by any person, firm corporation or other entity.
- 8.12 Permits: The Contractor shall obtain and pay for all permits and licenses. There shall be no allowance for Contractor markup, overhead or profit for permits and licenses. The Contractor shall pay all government charges which are applicable at the time of opening of proposals. It shall be the responsibility of the Contractor to secure and pay for all necessary licenses and permits of a temporary nature necessary for the prosecution of Work.
- 8.13 <u>Law and Regulations</u>: The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations applicable to the Work. If the Contractor observes that the specifications or plans are at variance therewith, the Contractor shall give the Project Manager prompt written notice thereof, and any necessary changes shall be adjusted by any appropriate modifications. If the Contractor performs any work knowing or having reason to know that it is contrary to such laws, ordinances, rules and regulations, and without such notice to the Project Manager, the Contractor shall bear all costs arising therefrom; however, it shall not be the Contractor's primary responsibility to make certain that the specifications and plans are in accordance with such laws, ordinances, rules and regulations.
- 8.14 <u>Taxes:</u> The Contractor shall pay all sales, consumer, use and other similar taxes required to be paid by him in accordance with the laws of the City of Fort Lauderdale, County of Broward, State of Florida.
- 8.15 <u>Contractor Use of Premises:</u> The Contractor shall confine construction equipment, the storage of materials and equipment and the operations of workmen to areas permitted by law, ordinances, permits and/or the requirements of the Contract Documents, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment.

The Contractor shall not enter upon private property for any purpose without first securing the permission of the property owner in writing and furnishing the Project Manager with a copy of said permission. This requirement will be strictly enforced,

particularly with regard to such vacant properties as may be utilized for storage or staging by the Contractor.

The Contractor shall conduct his work in such a manner as to avoid damage to adjacent private or public property. Any damage to existing structures of work of any kind, including permanent reference markers or property corner markers, or the interruption of a utility service, shall be repaired or restored promptly at no expense to the City or property owner.

The Contractor will preserve and protect all existing vegetation such as trees, shrubs and grass on or adjacent to the site which do not reasonably interfere with the construction, as determined by the Project Manager. The Contractor will be responsible for repairing or replacing any trees, shrubs, lawns and landscaping that may be damaged due to careless operation of equipment, stockpiling of materials, tracking of grass by equipment or other construction activity. The Contractor will be liable for, or will be required to replace or restore at no expense to the City all vegetation not protected or preserved as required herein that may be destroyed or damaged.

During the progress of the work, the Contractor shall keep the premises free from accumulations of waste materials, rubbish and debris resulting from the Work. At the completion of the Work, the Contractor shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials and shall leave the site clean and ready for occupancy by the City. The Contractor shall restore to their original condition those portions of the site not designated for alteration by the Contract Documents at no cost to the City.

- 8.16 <u>Project Coordination:</u> The Contractor shall provide for the complete coordination of the construction effort. This shall include, but not necessarily be limited to, coordination of the following:
  - 8.16.1 Flow of material and equipment from suppliers.
  - 8.16.2 The interrelated work with affected utility companies.
  - 8.16.3 The interrelated work with the City where tie-ins to existing facilities are required.
  - 8.16.4 The effort of independent testing agencies.
  - 8.16.5 Notice to affected property owners as may be directed by the Project Manager.
- 8.17 Project Record Documents and Final As-Builts (Record Drawings): Contractor shall be responsible for maintaining up-to-date redline as-built drawings, on site, at all times during construction. All as-built information shall be surveyed and verified by a professional land surveyor registered in the State of Florida. Contractor shall provide the City with a minimum of three (3) sets of signed and sealed record drawings (Final As-Builts) and a CD of the electronic drawings files created in AutoCad 2014 or later. All costs associated with survey work required for construction layout and as-built preparation shall be the responsibility of the Contractor.

# 8.18 Safety and Protection:

- 8.18.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
  - 8.18.1.1 All employees working on the project and other persons who may be affected thereby.
  - 8.18.1.2 All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site.
  - 8.18.1.3 Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 8.18.2 The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. The Contractor shall notify owners of adjacent property and utilities when execution of the Work may affect them at least seventy-two (72) hours in advance (unless otherwise required). All damage, injury or loss to any property caused, directly or indirectly, in whole or in part by the Contractor, any subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, shall be remedied by the Contractor. The Contractor's duties and responsibilities for safety and protection of the Work shall continue until such time as all the Work is completed and accepted by the City.
- 8.19 <u>Emergencies:</u> In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the City is obligated to act to prevent threatened damage, injury or loss. The Contractor shall give the Project Manager prompt written notice of any significant changes in the Work or deviations from the Contract Documents caused thereby.
- 8.20 <u>Risk of Loss</u>: The risk of loss, injury or destruction shall be on the Contractor until acceptance of the Work by the City. Title to the Work shall pass to the City upon acceptance of the Work by the City.
- 8.21 Environmental: The Contractor has fully inspected the Premises and agrees, except as to the presence of any asbestos, to accept the Premises in an "as is" physical condition, without representation or warranty by the City of any kind, including, without limitation, any and all existing environmental claims or obligations that may arise from the presence of any "contamination" on, in or about the Premises. Further, Contractor and all entitles claiming by, through or under the Contractor, releases and discharges the City, from any claim, demand, or cause of action arising out of or relating to the

Contractor's use, handling, storage, release, discharge, treatment, removal, transport, decontamination, cleanup, disposal and/or presence of any hazardous substances including asbestos on, under, from or about the Premises. The Contractor shall have no liability for any pre-existing claims or "contamination" on the Premises.

The Contractor shall not use, handle, store, discharge, treat, remove, transport, or dispose of Hazardous Substances including asbestos at, in, upon, under, to or from the Premises until receipt of instructions from the City. At such time, a City approved Change Order, which shall not include any profit, shall authorize the Contractor to perform such services.

The Contractor shall immediately deliver to the Project Manager complete copies of all notices, demands, or other communications received by the Contractor from any governmental or quasi-governmental authority or any insurance company or board of fire underwriters or like or similar entities regarding in any way alleged violations or potential violations of any Environmental Law or otherwise asserting the existence or potential existence of any condition or activity on the Premises which is or could be dangerous to life, limb, property, or the environment.

For other and additional consideration, the Contractor hereby agrees, at its sole cost and expense, to indemnify and protect, defend, and hold harmless the City and its respective employees, agents, officials, officers, representatives, contractors and subcontractors, successors, and assigns (hereafter the "City") from and against any and all claims, demands, losses, damages, costs, expenses, including but not limited to mitigation, restoration, and natural restoration expenses, liabilities, assessments, fines, penalties charges, administrative and judicial proceedings and orders, judgments, causes of action, in law or in equity, remedial action requirements and/or enforcement actions of any kind (including, without limitation, attorneys' fees and costs) directly or indirectly arising out of or attributable to, in whole or in part, the Contractor's use, handling, storage, release, threatened release, discharge, treatment, removal, transport, decontamination, cleanup, disposal and/or presence of a Hazardous Substance (excluding asbestos) on, under, from, to or about the Premises or any other activity carried on or undertaken on or off the Premises by the Contractor or its employees, agents or subcontractors, in connection with the use, handling, storage, release, threatened release, discharge, treatment, mitigation, natural resource restoration, removal, transport, decontamination, cleanup, disposal and/or presence or any Hazardous Substance including asbestos located, transported, or present on, undue, from, to, or about the Premises. This indemnity is intended to be operable under 42 U.S.C. sections 9607, as amended, and any successor section.

The scope of the indemnity obligations includes, but is not limited to: (a) all consequential damages; (b) the cost of any required or necessary repair, cleanup, or detoxification of the applicable real estate and the preparation and implementation of any closure, remedial or other required plan, including without limitation; (i) the costs of removal or remedial action incurred by the United States government or the State of Florida or response costs incurred by any other person, or damages from injury to destruction of, or loss of, natural resources, including the cost of assessing such injury, destruction, or loss, incurred pursuant to the Comprehensive Environmental

Response, Compensation and Liability Act, as amended; (ii) the clean-up costs, fines, damages, or penalties incurred pursuant to any applicable provisions of Florida law; and (iii) the cost and expenses of abatement, correction or cleanup, fines, damages, response costs, or penalties which arise from the provisions of any other statute, law, regulation, code ordinance, or legal requirement state or federal; and (c) liability for personal injury or property damage arising under any statutory or common law tort theory, including damages assessed for the maintenance of a public private nuisance, response costs, or for the carrying on of an abnormally dangerous activity.

- 8.22 No Extended Damages: For other and additional good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the Contractor covenants and agrees that in the event of any delay of construction or for any other reason or allegation or claim, and notwithstanding the reason of the delay, reason, claim or allegation or who caused them or the construction delay or whether they were caused by the City, that there will be no entitlement to Contractor to or for any direct or indirect financial damages or losses for extended corporate overhead impact, extended project overhead impacts, project support services, mobilization or demobilization or by whatever other label or legal concept or theory and types of names or labels or basis such claims may have, or any business damages or losses of whatever type or nature, and Contractor hereby waives any right to make any such claim or claims. This provision will have application and effect when construction delays are anticipated and agreed upon by both the City and the Contractor.
- 8.23 No Liens: If any Subcontractor, supplier, laborer, or materialmen of Contractor or any other person directly or indirectly acting for or through Contractor files or attempts to file a mechanic's or construction lien against the real property on which the work is performed or any part or against any personal property or improvements or claim against any monies due or to become due from the City to Contractor or from Contractor to a Subcontractor, for or on account of any work, labor, services, material, equipment, or other items furnished in connection with the Work or any Change Order, Contractor agrees to satisfy, remove, or discharge such lien or claim at its own expense by bond, payment, or otherwise within twenty (20) days of the filing or from receipt of written notice from the City.

Additionally, until such time as such lien or claim is satisfied, removed or discharged by Contractor, all monies due to Contractor, or that become due to Contractor before the lien or claim is satisfied, removed or otherwise discharged, shall be held by City as security for the satisfaction, removal and discharge of such lien and any expense that may be incurred while obtaining such. If Contractor shall fail to do so, City shall have the right, in addition to all other rights and remedies provided by this Agreement or by law, to satisfy, remove, or discharge such lien or claim by whatever means City chooses at the entire and sole cost and expense of Contractor which costs and expenses shall, without limitation, include attorney's fees, litigation costs, fees and expenses and all court costs and assessments.

8.24 <u>Weather Emergencies</u>: Upon issuance of a Hurricane Watch by the National Weather Service, the Contractor shall submit to the City a plan to secure the work area in the event a Hurricane Warning is issued. The plan shall detail how the Contractor will

secure the Premises, equipment and materials in a manner as to prevent damage to the Work and prevent materials and equipment from becoming a hazard to persons and property on and around the Premises. The plan shall include a time schedule required to accomplish the hurricane preparations and a list of emergency contacts that will be available and in the City before, during and immediately after the storm.

Upon issuance of a Hurricane Warning by the National Weather Service, if the Contractor has not already done so, the Contractor shall implement its hurricane preparedness plan. Cost of development and implementation of the hurricane preparedness plan shall be considered as incidental to construction. Cost of any clean up and rework required after the storm will be considered normal construction risk within Florida and shall not entitle the Contractor to any additional compensation. Contractor shall be entitled to request an extension in time for completion of the Work, in accordance with the provisions of Article 15 of this Agreement, equal to the time he is shut down for implementation of the preparedness plan, the duration of the storm and a reasonable period to restore the Premises.

8.25 Force Majeure: No Party shall hold the other responsible for damages or for delays in performance caused by force majeure, acts of God, or other acts or circumstances beyond the control of the other party or that could not have been reasonably foreseen and prevented. For this purposes, such acts or circumstances shall include, but not be limited to weather conditions affecting performance, floods, epidemics, war, riots, strikes, lockouts, or other industrial disturbances, or protest demonstrations. Should such acts or circumstances occur, the parties shall use their best efforts to overcome the difficulties arising therefrom and to resume the Work as soon as reasonably possible with the normal pursuit of the Work.

Inclement weather, continuous rain for less than three (3) days or the acts or omissions of subcontractors, third-party contractors, materialmen, suppliers, or their subcontractors, shall not be considered acts of force majeure.

No Party shall be liable for its failure to carry out its obligations under the Agreement during a period when such Party is rendered unable by force majeure to carry out its obligation, but the obligation of the Party or Parties relying on such force majeure shall be suspended only during the continuance of the inability and for no longer period than the unexpected or uncontrollable event.

The Contractor further agrees and stipulates, that its right to excuse its failure to perform by reason of force majeure shall be conditioned upon giving written notice of its assertion that a Force Majeure delay has commenced within 96 hours after such an occurrence. The CONTRACTOR shall use its reasonable efforts to minimize such delays. The CONTRACTOR shall promptly provide an estimate of the anticipated additional time required to complete the Project.

8.26 <u>Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assisted Contracts:</u> The recipient shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR

part 26. The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under Part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. 3801 et seg.).

Additionally, the contractor assures that they, the sub recipient or the subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate. (This additional language must be included in each subcontract the prime contractor signs with a subcontractor.)

#### **ARTICLE 9 – CITY'S RESPONSIBILITIES**

- 9.1 The City shall furnish the data required of the City under the Contract Documents promptly and shall make payments to the Contractor promptly after they are due as provided in Article 7.
- 9.2 The City's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in the Contract Documents.
- 9.3 <u>Technical Clarifications and Interpretations:</u>
  - 9.3.1 The City shall issue, with reasonable promptness, such written clarifications or interpretations of the Contract Documents as it may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. Should the Contractor fail to request interpretation of questionable items in the Contract Documents, the City shall not entertain any excuse for failure to execute the Work in a satisfactory manner.
  - P.3.2 The City shall interpret and decide matters concerning performance under the requirements of the Contract Documents, and shall make decisions on all claims, disputes or other matters in question. Written notice of each claim, dispute or other matter will be delivered by claimant to the other Party but in no event later than five (5) days after the occurrence of event, and written supporting date will be submitted to the other Party within five (5) days after such occurrence. All written decisions of the City on any claim or dispute will be final and binding.

9.4 The Contractor shall perform all Work to the reasonable satisfaction of the City in accordance with the Contract Documents. In cases of disagreement or ambiguity, the City shall decide all questions, difficulties, and disputes of whatever nature, which may arise under or by reason of this Agreement or the quality, amount and value of the Work, and the City's decisions on all claims, questions and determination are final.

#### ARTICLE 10 - BONDS AND INSURANCE

- Public Construction and Other Bonds: The Contractor shall furnish Public 10.1 Construction or Performance and Payment Bonds ("Bond"), each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all the Contractor's obligations under the Contract Documents. These Bonds shall remain in effect until at least one (1) year after the date of final payment, except as otherwise provided by law. All Bonds shall be furnished and provided by the surety and shall be in substantially the same form as prescribed by the Contract Documents and be executed by such sureties as (i) are licensed to conduct business in the State of Florida, and (ii) are named in the current list of Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department and (iii) otherwise meet the requirements set forth herein that apply to sureties. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act.
  - 10.1.1 Performance Bond: The Contractor shall execute and record in the public records of Broward County, Florida, a payment and performance bond in an amount at least equal to the Contract Price with a surety insurer authorized to do business in the State of Florida as surety, ("Bond"), in accordance with Section 255.05, Florida Statutes (2014), as may be amended or revised, as security for the faithful performance and payment of all of the Contractor's obligations under the Contract Documents.
    - A Corporate Surety Bond legally issued, meeting the approval of, and running to the City in an amount not less than the Contract Price of such improvements, conditioned that the Contractor shall maintain and make all repairs to the improvements constructed by the Contractor at their own expense and free of charge to the City, for the period of one (1) year after the date of acceptance of the Work within such period by reason of any imperfection of the material used or by reason of any defective workmanship, or any improper, imperfect or defective preparation of the base upon which any such improvement shall be laid.
- 10.2 <u>Disqualification of Surety:</u> If the Surety on any Bond furnished by the Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in the State of Florida or it ceases to meet the requirements of clauses (i) and (ii) of Paragraph 10.1, the Contractor shall within five (5) days thereafter substitute another Bond and Surety, both of which shall be acceptable to the City.

# 10.3 <u>Insurance</u>

- 10.3.1 Contractor shall provide and shall require all of its sub-contractors to provide, pay for, and maintain in force at all times during the term of the Agreement, such insurance, including Property Insurance (Builder's Risk), Commercial General Liability Insurance, Business Automobile Liability Insurance, Workers' Compensation Insurance, Employer's Liability Insurance, and Umbrella/Excess Liability, as stated below, as well as Professional Liability insurance in the amount of \$1,000,000 for any Architectural and or Engineering requirements associated with the fulfillment of the contract if required. Such policy or policies shall be issued by companies authorized to do business in the State of Florida and having agents upon whom service of process may be made in the State of Florida. A Sample Insurance Certificate shall be included with the proposal to demonstrate the firm's ability to comply with insurance requirements. Provide a previous certificate or other evidence listing the insurance companies' names for all required coverage, and the dollar amounts of the coverage.
  - A. The City is required to be named as additional insured on the Commercial General Liability insurance policy. <u>BINDERS ARE UNACCEPTABLE</u>. The insurance coverage required shall include those classifications, as listed in standard liability insurance manuals, which most nearly reflect the operations of the Contractor. Any exclusions or provisions in the insurance maintained by the Contractor that precludes coverage for the work contemplated in this Agreement shall be deemed unacceptable, and shall be considered a breach of contract.
  - В. The Contractor shall provide the City an original Certificate of Insurance for policies required by Article 10. All certificates shall state that the City shall be given ten (10) days' notice prior to expiration or cancellation of the policy. The insurance provided shall be endorsed or amended to comply with this notice requirement. In the event that the insurer is unable to accommodate, it shall be the responsibility of the Contractor to provide the proper notice. Such notification will be in writing by registered mail, return receipt requested and addressed to the Finance Department. Such policies shall: (1) name the insurance company or companies affording coverage acceptable to the City, (2) state the effective and expiration dates of the policies, (3) include special endorsements where necessary. Such policies provided under Article 10 shall not be affected by any other policy of insurance, which the City may carry in its own name.
  - C. Contractor shall as a condition precedent of this Agreement, furnish to the City of Fort Lauderdale, c/o Project Manager, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301, Certificate(s) of Insurance upon execution of this Agreement, which indicate that insurance coverage has been obtained which meets the requirements as outlined below:

10.3.2 Property Insurance (Builder's Risk): - The Contractor shall purchase and maintain property insurance upon the Work at or off the site of 100% of the contract completed value. These policies shall insure the interest of the owner, contractor and subcontractors in the Work, and shall insure against "all risks" of physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage. All such insurance required by this paragraph shall remain in effect until the Work is completed and accepted by the City.

# 10.3.3 <u>Commercial General Liability</u>

A. Limits of Liability:

Bodily Injury and Property Damage - Combined Single Limit

Each Occurrence \$1,000,000
Project Aggregate \$1,000,000
General Aggregate \$2,000,000
Personal Injury \$1,000,000
Products/Completed Operations \$1,000,000

B. Endorsements Required:

City of Fort Lauderdale included as an Additional Insured

**Broad Form Contractual Liability** 

Waiver of Subrogation

Premises/Operations

**Products/Completed Operations** 

Independent Contractors

Owners and Contractors Protective Liability

Contractor's Pollution Liability

# 10.3.4 Business Automobile Liability

A. Limits of Liability:

Bodily Injury and Property Damage - Combined Single Limit

All Autos used in completing the contract including Hired, Borrowed or

Non-Owned Autos

Any One Accident \$1,000,000

B. Endorsements Required:

Waiver of Subrogation

# 10.3.5 Workers' Compensation and Employer's Liability Insurance

Limits: Workers' Compensation – Per Florida Statute 440 Employers' Liability - \$500,000

Any firm performing work on behalf of the City of Fort Lauderdale must provide Workers' Compensation insurance. Exceptions and exemptions can only be made if they are in accordance with Florida Law.

Contractor must be in compliance with all applicable State and Federal workers' compensation laws, including the U.S. Longshore Harbor Workers' Act or Jones Act.

- 10.3.6 <u>Umbrella/Excess Liability:</u> The Contractor shall provide umbrella/excess coverage with limits of no less than \$2,000,000 excess of Commercial General Liability, Automobile Liability and Employer's Liability.
- 10.3.7 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 Contractor's insurance must be provided by an A.M. Best's "A-" rated or better insurance company authorized to issue insurance policies in the State of Florida, subject to approval by the City's Risk Manager. Any exclusions or provisions in the insurance maintained by the Contractor that precludes coverage for work contemplated in this project shall be deemed unacceptable, and shall be considered breach of contract.

NOTE: CITY PROJECT NUMBER AND NAME MUST APPEAR ON EACH CERTIFICATE, AND THE CITY OF FORTLAUDERDALE MUST BE NAMED ON THE CERTIFICATE AS AN "ADDITIONAL INSURED".

<u>Sample Insurance Certificate</u> shall be included with the proposal to demonstrate the firm's ability to comply with insurance requirements. Provide a previous certificate or other evidence listing the insurance companies' names for all required coverage, and the dollar amounts of the coverage.

Compliance with the foregoing requirements shall not relieve the Contractor of their liability and obligation under this section or under any other section of this Agreement.

The Contractor shall be responsible for assuring that the insurance certificates required in conjunction with this Section remain in force for the duration of the Project. If insurance certificates are scheduled to expire during the contractual period, the Contractor shall be responsible for submitting new or renewed insurance certificates to the City at a minimum of thirty (30) calendar days in advance of such expiration. In the event that expired certificates are not replaced with new or renewed certificates that cover the contractual period, the City shall:

- A. Suspend the Agreement until such time as the new or renewed certificates are received by the City.
- B. The City may, at its sole discretion, terminate the Agreement for cause and seek damages from the Contractor in conjunction with the violation of the terms and conditions of the Agreement.

# ARTICLE 11- WARRANTY AND GUARANTEE, TESTS AND INSPECTIONS, CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

- 11.1 <u>Warranty:</u> The Contractor warrants and guarantees to the City that all Work will be in accordance with the Contract Documents and will not be defective. Prompt notice of all defects shall be given to the Contractor. All defective work, whether or not in place, may be rejected, corrected or accepted as provided in this Article.
  - 11.1.1 Warranty of Title: The Contractor warrants to the City that it possesses good, clear and marketable title to all equipment and materials provided and that there are no pending liens, claims or encumbrances against the equipment and materials.
  - 11.1.2 <u>Warranty of Specifications:</u> The Contractor warrants that all equipment, materials and workmanship furnished, whether furnished by the Contractor, its subcontractors or suppliers, will comply with the specifications, drawings and other descriptions supplied or adopted and that all services will be performed in a workmanlike manner.
  - 11.1.3 <u>Warranty of Merchantability:</u> The Contractor warrants that any and all equipment to be supplied pursuant to this Agreement is merchantable, free from defects, whether patent or latent in material or workmanship, and fit for the ordinary purposes for which it is intended.
- 11.2 <u>Tests and Inspections:</u> Contractor shall retain the services of an independent, certified, testing lab to perform all testing as required by the specifications, Contract drawings, and any applicable permitting agency. Contractor shall provide evidence of certification to the City before the work and testing is done. Testing results shall be submitted to the Engineer for review and approval at the time the results are provided to the Contractor. The Contractor shall give the Project Manager and City Inspector a minimum of twenty-four (24) hours' advanced notice of readiness of the Work for all required inspections, tests, or approvals and shall notify all applicable permitting agencies in a timely manner based on requirements set forth in the permit documents.
  - 11.2.1 Neither observations by the Project Manager nor inspections, tests or approvals by others shall relieve the Contractor from its obligations to perform the Work in accordance with the Contract Documents.
- 11.3 <u>Uncovering Work:</u> If any work that is to be inspected, tested or approved is covered without approval or consent of the Project Manager, it must, if requested by the Project Manager, be uncovered for observation and/or testing. Such uncovering and replacement shall be at the Contractor's sole expense unless the Contractor has given the Project Manager timely notice of the Contractor's intention to cover such Work and the Project Manager has not acted with reasonable promptness in response to such notice.
  - 11.3.1 If the Project Manager considers it necessary or advisable that Work covered in accordance with Paragraph 11.2.1, 11.2.2 and 11.2.3 be observed by the City

or inspected or tested by others, the Contractor at the City's request, shall uncover, expose or otherwise make available for observation, inspection or testing as the Project Manager may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, the Contractor shall bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including compensation for additional professional services, and an appropriate deductive Change Order shall be issued. If, however, such work is not found to be defective, the Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection testing and reconstruction if he makes a claim therefore as provided in Articles 14 and 15.

- 11.4 <u>City May Stop the Work:</u> If the Work is defective, or the Contractor fails to supply sufficient skilled supervisory personnel or workmen or suitable materials or equipment or the work area is deemed unsafe, the City may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the City to stop the Work shall not give rise to any duty on the part of the City to exercise this right for the benefit of the Contractor or any other party. The City will not award any increase in Contract Price or Contract Time if the Work is stopped due to the circumstances described herein.
- 11.5 Correction or Removal of Defective Work Before Final Payment: If required by the Project Manager, the Contractor shall promptly, without cost to the City and as Specified by the Project Manager, either correct any defective Work, whether or not fabricated, installed or completed, or if the Work has been rejected by the City remove it from the site and replace it with non-defective Work.
- 11.6 One Year Correction Period After Final Payment: If within one (1) year after the date of final acceptance, or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any work is found to be defective, the Contractor shall promptly, without cost to the City and in accordance with the City's written instructions, either correct such defective Work, or, if it has been rejected by the City, remove it from the site and replace it with non-defective Work.

If The Contractor does not promptly comply with the terms of such instructions or in an emergency where delay would cause serious risk of loss or damage, the City may have the defective Work corrected or the rejected Work removed and replaced, and all direct and indirect costs for such removal and replacement, including compensation for additional professional services, shall be paid by the Contractor.

11.7 <u>Acceptance of Defective Work, Deductions:</u> If, instead of requiring correction or removal and replacement of defective Work, the City, at the city's sole option, prefers to accept it, the City may do so. In such a case, if acceptance occurs prior to the Project Manager's recommendation of final payments, a Change Order shall be issued incorporating the necessary revisions in the Contracts Documents, including

- appropriate reduction in the Contract Price; or if the acceptance occurs after such recommendation, an appropriate amount shall be paid by the Contractor to the City.
- City May Correct Defective Work: If the Contractor fails within a reasonable time after 11.8 written notice of the Project Manager to proceed to correct defective Work or to remove and replace rejected Work as required by the Project Manager in accordance with Paragraph 11.5, or if the Contractor fails to perform the Work in accordance with the Contract Documents, the City may, after seven (7) days written notice to the Contractor, correct and remedy any such deficiency. In exercising its rights under this paragraph, the City shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, the City may exclude the Contractor from all or part of the site, take possession of all or part of the Work, suspend the Contractor's services related thereto and take possession of the Contractor's tools, construction equipment and materials stored at the site or elsewhere. The Contractor shall allow the City's representative agents and employees such access to the site as may be necessary to enable the City to exercise its rights under this paragraph. All direct and indirect costs of the City in exercising such rights shall be charged against the Contractor in an amount verified by the Project Manager, and a Change Order shall be issued incorporating the necessary revisions in the Contract Documents and a reduction in the Contract Price. Such direct and indirect costs shall include, in particular but without limitation, compensation for additional professional services required and costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of the Contractor's defective Work. The Contractor shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by the City of the City's right hereunder.

# **ARTICLE 12 – INDEMNIFICATION**

- 12.1 <u>Disclaimer of Liability:</u> The City shall not at any time, be liable for injury or damage occurring to any person or property from any cause, whatsoever, arising out of Contractor's construction and fulfillment of this agreement.
- 12.2 <u>Indemnification:</u> For other, additional good valuable consideration, the receipt and sufficiency of which is hereby acknowledged:
  - 12.2.1 Contractor shall, at its sole cost and expense, indemnify and hold harmless the City, its representatives, employees and elected and appointed officials from or on account of all claims, damages, losses, liabilities and expenses, direct, indirect or consequential including but not limited to fees and charges of engineers, architects, attorneys, consultants and other professionals and court costs arising out of or in consequence of the performance of this Agreement at all trial and appellate levels. Indemnification shall specifically include but not be limited to claims, damages, losses, liabilities and expenses arising out of or from (a) the negligent or defective design of the project and Work of this Agreement; (b) any act, omission or default of the Contractor, its Subcontractors, agents, servants or employees; (c) any and all bodily injuries, sickness, disease or death; (d) injury to or destruction of tangible property,

including any resulting loss of use; (e) other such damages, liabilities, or losses received or sustained by any person or persons during or on account of any operations connected with the construction of this Project including the warranty period; (f) the use of any improper materials; (g) any construction defect including both patent and latent defects; (h) failure to timely complete the work; (i) the violation of any federal, state, county or city laws, ordinances or regulations by Contractor, its subcontractors, agents, servants, independent contractors or employees; (j) the breach or alleged breach by Contractor of any term of the Agreement, including the breach or alleged breach of any warranty or quarantee.

- 12.2.2 Contractor agrees to indemnify, defend, save and hold harmless the City, its officers, agents and employees, from all damages, liabilities, losses, claims, fines and fees, and from any and all suits and actions of every name and description that may be brought against City, its officers, agents and employees, on account of any claims, fees, royalties, or costs for any invention or patent and/or for the infringement of any and all copyrights or patent rights claimed by any person, firm, or corporation.
- 12.2.3 Contractor shall pay all claims, losses, liens, settlements or judgments of any nature in connection with the foregoing indemnifications including, but not limited to, reasonable attorney's fees and costs for trails and appeals.
- 12.2.4 If any Subcontractor, supplier, laborer, or materialmen of Contractor or any other person directly or indirectly acting for or through Contractor files or attempts to file a mechanic's or construction lien against the real property on which the work is performed or any part or against any personal property or improvements thereon or make a claim against any monies due or to become due from the City to Contractor or from Contractor to a Subcontractor, for or on account of any work, labor, services, material, equipment, or other items furnished in connection with the Work or any change order, Contractor agrees to satisfy, remove, or discharge such lien or claim at its own expense by bond, payment, or otherwise within five (5) days of the filing or from receipt of written notice from the City.

Additionally, until such time as such lien or claim is satisfied, removed or discharged by Contractor, all monies due to Contractor, or that become due to Contractor before the lien or claim is satisfied, removed or otherwise discharged, shall be held by City as security for the satisfaction, removal and discharge of such lien and any expense that may be incurred while obtaining the discharge. If Contractor shall fail to do so, City shall have the right, in addition to all other rights and remedies provided by this Agreement or by law, to satisfy, remove, or discharge such lien or claim by whatever means City chooses at the entire and sole cost and expense of Contractor which costs and expenses shall, without limitation, include attorney's fees, litigation costs, fees and expenses and all court costs and assessments, and which shall be deducted from any amount owing to Contractor. In the event the amount due Contractor is less than the amount required to satisfy Contractor's obligation

- under this, or any other article, paragraph or section of this Agreement, the Contractor shall be liable for the deficiency due the City.
- 12.2.5 The Contractor and the City agree that Section 725.06(2), Florida Statutes controls the extent and limits of the indemnification and hold harmless provisions of this Agreement, if any, and that the parties waive any defects in the wording of this Article that runs afoul of said statutory section.

#### **ARTICLE 13 – CHANGES IN THE WORK**

- 13.1 Without invalidating this Agreement, the City may, at any time or from time to time order additions, deletions or revisions in the Work through the issuance of Change Orders. Upon receipt of a Change Order, the Contractor shall proceed with the Work involved. All Work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, an equitable adjustment will be made as provided in Article 14 or Article 15 on the basis of a claim made by either Party.
- 13.2 The Project Manager may authorize minor changes in the work not involving an adjustment in the Contract Price or the Contract Time, which are consistent with the overall intent of the Contract Documents. Such changes must be in writing and signed by the City and the Contractor.
- 13.3 If notice of any change affecting the general scope of the Work or change in the Contract Price is required by the provisions of any Bond to be given to the Surety, it will be the Contractor's responsibility to so notify the Surety, and the amount of each applicable Bond shall be adjusted accordingly. The Contractor shall furnish proof of such adjustment to the City.

#### ARTICLE 14 – CHANGE OF CONTRACT PRICE

Change of Contract Price, approved by City, shall be computed as follows:

- 14.1 <u>Cost of the Work</u>: The term "Cost of the Work" means the sum of all direct costs necessarily incurred and paid by Contractor in the proper performance of the Work.
  - Except as otherwise may be agreed to in writing by the City, these costs shall be in amounts no higher than those prevailing in the City and shall include only the following items and shall not include any of the costs itemized in Paragraph 14.3:
  - 14.1.1 Payroll costs for employees in the direct employ of the Contractor in the performance of the Work under schedules of job classifications agreed upon by the City and the Contractor. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus and

- cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, worker's compensation, health and retirement benefits, bonuses, sick leave, vacation and applicable holiday pay.
- 14.1.2 Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage, and required suppliers and field services. All cash discounts, rebates and refunds and all returns from sale of surplus materials and equipment shall accrue to the City, and the Contractor shall make provisions so that they may be obtained.
- 14.1.3 Supplemental costs including the following:
  - 14.1.3.1 Cost, including transportation and maintenance of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work.
  - 14.1.3.2 Rentals of all construction equipment and machinery and the parts whether rented from the Contractor or others in accordance with rental agreements approved by the City, and the costs of transporting, loading, unloading, installation, dismantling and removal. The rental of any such equipment, machinery or parts shall cease when the use is no longer necessary for the Work.
  - 14.1.3.3 Sales, consumer, use or similar taxes related to the Work and for which the Contractor is liable, imposed by laws and regulations.
  - 14.1.3.4 Royalty payments and fees for permits and licenses.
  - 14.1.3.5 The cost of utilities, fuel and sanitary facilities at the Work site.
  - 14.1.3.6 Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.
  - 14.1.3.7 Cost of premiums for additional bonds and insurance required because of changes in the Work.
- 14.2 The Contract Price may only be increased by a Change Order when Work is modified in accordance with Article 13 and approved by the City in writing. Any claim for an increase in the Contract Price resulting from a Change Order shall be based on written notice delivered to the Project Manager within ten (10) days of the occurrence of the Change Order giving rise to the claim. Notice of the amount of the claim with supporting data shall be included in the Change Order and delivered within twenty (20) days of such occurrence unless Project Manager allows an additional period of time to ascertain accurate cost data. Any change in the Contract Price resulting from any such claim shall be incorporated in the Change Order. IT IS EXPRESSLY AND SPECIFICALLY AGREED THAT ANY AND ALL CLAIMS FOR CHANGES TO THE

# CONTRACT PRICE SHALL BE WAIVED IF NOT SUBMITTED IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION.

- 14.3 <u>Not Included in the Cost of the Work:</u> The term "cost of the Work" shall not include any of the following:
  - 14.3.1 Payroll costs and other compensation of the Contractor's officers executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditor, accountants, purchasing and contracting agents, expediters, timekeepers, clerks and other personnel employed by the Contractor whether at the site or in the Contractor's principal or branch office for general administration of the work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 14.1.1, all of which are to be considered administrative costs covered by the Contractor's fee.
  - 14.3.2 Expenses of the Contractor's principal and branch offices other than the Contractor's office at the site.
  - 14.3.3 Any part of the Contractor's capital expenses, including interest on the Contractor's capital employed for the Work and charges against the Contractor for delinquent payments.
  - 14.3.4 Cost of premiums for all bonds and for all insurance whether or not the Contractor is required by the Contract Documents to purchase and maintain the same.
  - 14.3.5 Costs due to the negligence of the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.
  - 14.3.6 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 14.1
- 14.4 <u>Basis of Compensation:</u> The Contractor's compensation, allowed to the Contractor for overhead and profit, shall be determined as follows:
  - 14.4.1 A mutually acceptable negotiated fee:
    - 14.4.1.1 For costs incurred under Paragraphs 14.1.1 and 14.1.2, the Contractor's fee shall not exceed five percent (5%).
    - 14.4.1.2No fee shall be payable on the basis of costs itemized under Paragraphs 14.1.3.1, 14.1.3.2, 14.1.3.3, 14.1.3.4, 14.1.3.5, 14.1.3.6, 14.1.3.7, 14.3.1, 14.3.2, 14.3.3, 14.3.4, 14.3.5 and 14.3.6.

- 14.4.1.3 The amount of credit to be allowed by the Contractor to the City for any such change which results in a net decrease plus a deduction in the Contractor's fee by an amount equal to five percent (5%) for the net decrease.
- 14.4.1.4 When both additions and credits are involved in any one change the combined overhead and profit shall be figured on the basis of net increase if any, however, not to exceed five percent (5%) of the agreed compensation. Profit will not be paid on any Work not performed.
- 14.5 <u>Cost Breakdown Required:</u> Whenever the cost of any Work is to be determined pursuant to this Article, the Contractor will submit in form acceptable to the City an itemized cost breakdown together with supporting documentation. Whenever a change in the Work is to be based upon mutual acceptance of a lump sum, whether the amount is an addition, credit, or no-charge-in-cost, the Contractor shall submit an estimate substantiated by a complete itemized breakdown:
  - 14.5.1 The breakdown shall list quantities and unit prices for materials, labor, equipment and other items of cost.
  - 14.5.2 Whenever a change involves the Contractor and one (1) or more subcontractors and the change is an increase in the agreed compensation, the overhead and profit percentage for the Contractor and each subcontractor shall be itemized separately.
- 14.6 <u>Time for the City to Approve Extra Work:</u> Any Extra Work in an amount up to and not exceeding a cumulative amount of \$25,000 for a specific project can be approved by the City Manager and shall require a written Change Order proposal to be submitted to the Public Works Director for submittal and approval by the City Manager. Extra Work exceeding the cumulative amount of \$25,000 for a specific project must be approved by the City Commission and a written Change Order proposal must be submitted to the Public Works Director for submittal and approval by the City Manager and City Commission. No financial or time claim for delay to the project resulting from the Change Order approval process outlined above under Section 14.6 will be allowed.

#### ARTICLE 15 – CHANGE OF THE CONTRACT TIME

- 15.1 The Contract Time may only be changed by a Change Order. Any claim for an extension in the Contract Time shall be based on written notice delivered to the Project Manager within five (5) days of the occurrence of the event giving rise to the claim. Any change in the Contract Time resulting from any such claim shall be incorporated in a Change Order.
- 15.2 The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of the Contractor if a claim is made there for as provided in Paragraph 15.1. Such delays shall include but not be limited to, acts or neglect by the

- City, or to fires, floods, labor disputes, epidemics, abnormal weather conditions, or acts of God.
- 15.3 All time limits stated in the Contract Documents are of the essence. The provisions of this Article 15 shall not exclude recovery for damages for delay by the Contractor.
- 15.4 Delays caused by or resulting from entities, contractors or subcontractors who are not affiliated with the CONTRACTOR (non-affiliated Contractors) shall not give rise to a claim by the CONTRACTOR for damages for increases in material and/or labor costs. Such entities, contractors and subcontractors include, but are not limited to, the City's contractors and subcontractors, Florida Power and Light Company, AT&T and Florida East Coast Railway, LLC.
- 15.5 Rights of Various Interests: Whenever work being done by City's forces or by other contractors is contiguous to or within the limits of work covered by this Contract, the respective rights of the various interests involved shall be established by the Project Manager to secure the completion of the various portions of the work in general harmony.

#### ARTICLE 16 - LIQUIDATED DAMAGES

Upon failure of the Contractor to complete the Work within the time specified for 16.1 completion, the Contractor shall pay to the City the sum of Two Hundred and Fifty **Dollars** (\$250.00) for each and every calendar day that the completion of the Work is delayed beyond the time specified in this Agreement for completion, as fixed and agreed liquidated damages and not as a penalty, so long as the delay is caused by the Contractor. Should an act of God or the acts or omissions of the City, its agents or representatives, in derogation to the terms of this Agreement cause the delay, the Contractor shall not be responsible for the delay nor liquidated damages. Liquidated damages are fixed and agreed upon between the Parties, recognizing the impossibility of precisely ascertaining the amount of damages that will be sustained by the City as a consequence of such delay and both parties desiring to obviate any question of dispute concerning the amount of damages and the cost and effect of the failure of the Contractor to complete the Work on time. Liquidated damages shall apply separately to each portion of the Work for which a time of completion is given. The City shall have the right to deduct from or retain any compensation which may be due or which may become due and payable to the Contractor the amount of liquidated damages, and if the amount retained by the City is insufficient to pay in full such liquidated damages, the Contractor shall pay all liquidated damages in full. The Contractor shall be responsible for reimbursing the City, in addition to liquidated damages or other damages for delay, for all costs of engineering, architectural fees, and inspection and other costs incurred in administering the construction of the Project beyond the completion date specified or beyond an approved extension of time granted to the Contractor whichever is later. Delays caused by or resulting from entities, contractors or subcontractors who are not affiliated with the Contractor shall not give rise to a claim by Contractor for damages for increase in material and/or labor costs. Such entities, contractors and subcontractors include, but are not limited to, the City's

contractors and subcontractors, Florida Power and Light Company, AT&T, and Florida East Coast Railway, LLC.

In addition, for work beyond the time (hour and minute) established for opening the taxiway/runway, following each closure of that taxiway/runway in accordance with the phasing plans, the City will charge the Contractor a rental fee for the Contractor's use of the taxiway/runway. The parties agree that the sum of **Five Hundred Dollars** (\$500) for the first minute and **Fifty Dollars** (\$50) for every minute thereafter shall be fixed as the rental rates for continuing a taxiway/runway closure beyond the time provided for opening the taxiway/runway during each phase of work that requires taxiway/runway closure.

The Contractor shall pay to the City, or have withheld from monies due the Contractor, the rental sum of **Five Hundred Dollars (\$500)** per the first minute and **Fifty Dollars (\$50)** for every minute thereafter that the Contractor continues a taxiway/runway closure beyond the specified time provided for opening the taxiway/runway during each phase of work that requires closure.

Time for opening of the taxiway/runway and rental fee determinations shall be based upon the City's inspector's time keeping, not the Contractor. Contractor may request the inspector to advise him of remaining time periodically prior to opening, but inspector's time keeping shall be the sole determining factor as to whether the taxiway/runway reopened as scheduled without appeal.

No Extended Damages: For other and additional good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the Contractor covenants and agrees that in the event of any delay of construction or for any reason, allegation or claim, and notwithstanding the reason of the delay, reason, claim or allegation or who caused them or the construction delay or whether they were caused by the City, that there will be no entitlement to Contractor to or for any direct or indirect financial damages or losses for extended corporate overhead impact, extended project overhead impacts, project support services, mobilization or demobilization or by whatever other label or legal concept or theory and types of names or labels or basis such claims may have, or any business damages or losses of whatever type or nature, and Contractor hereby waives any right to make any such claim or claims. This provision will have application and effect when construction delays are anticipated and agreed upon by both the City and the Contractor.

# **ARTICLE 17 – SUSPENSION OF WORK AND TERMINATION**

17.1 City May Suspend Work: The City may, at any time and without cause, suspend the Work or any portion of the Work for a period of not more than ninety (90) days by notice in writing to the Contractor which shall fix the date on which Work shall be resumed. The Contractor shall resume the Work on the date fixed. The Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension, if the Contractor makes a claim as provided in Articles 14 and 15.

- 17.2 <u>City's Right to Terminate Contract:</u> The City may terminate this Agreement upon fifteen (15) calendar days' written notice upon the occurrence of any one or more of the following events:
  - 17.2.1 If the Contractor commences a voluntary case or a petition is filed against the Contractor, under any chapter of the Bankruptcy Code, or if the Contractor takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency.
  - 17.2.2 If the Contractor makes a general assignment for the benefit of creditors.
  - 17.2.3 If a trustee, receiver, custodian or agent of the Contractor is appointed under applicable law or under Contract, whose appointment or authority to take charge of property of the Contractor is for the purpose of enforcing a lien against such property or for the purpose of general administration of such property for the benefit of the Contractor's creditors.
  - 17.2.4 If Contractor fails to begin the Work within fifteen (15) calendar days after the Project Initiation Date, or fails to perform the Work with sufficient workers and equipment or with sufficient materials to ensure the prompt completion of the Work, or shall perform the Work unsuitably, or cause it to be rejected as defective and unsuitable, or shall discontinue the prosecution of the Work pursuant to the accepted schedule or if Contractor shall fail to perform any material term set forth in the Contract Documents, or from any other cause whatsoever shall not carry on the Work in an acceptable manner, Project Manager may give notice in writing to Contractor and its Surety of such delay, neglect or default, specifying the same.
  - 17.2.5 If the Contractor repeatedly fails to make prompt payments to subcontractors or for labor, material or equipment.
  - 17.2.6 If the Contractor repeatedly disregards proper safety procedures.
  - 17.2.7 If the Contractor disregards any local, state or federal laws or regulations.
  - 17.2.8 If the Contactor otherwise violates any provisions of this Agreement.
- 17.3 If Contractor, within a period of ten (10) calendar days after such notice, shall not proceed in accordance therewith, the City may exclude the Contractor from the Work site and take the prosecution of the Work out of the hands of the Contractor, and take possession of the Work and all of the Contractor's tools, appliances, construction equipment and machinery at the site and use them without liability to the City for trespass or conversion, incorporate in the Work all materials and equipment stored at the site or for which the City has paid the Contractor but which are stored elsewhere, and finish the Work as the City may deem expedient. In this instance, the Contractor shall not be entitled to receive any further compensation until the Work is finished.

- 17.3.1 If after notice of termination of Contractor's right to proceed, it is determined for any reason that Contractor was not in default, the rights and obligations of City and Contractor shall be the same as if the notice of termination had been issued pursuant to the Termination for Convenience clause as set forth in Section 17.5 below.
- 17.3.2 Upon receipt of Notice of Termination pursuant to Sections 17.2 or 17.5, Contractor shall promptly discontinue all affected work unless the Notice of Termination directs otherwise and deliver or otherwise make available to City all data, drawings, specifications, reports, estimates, summaries and such other information as may have been required by the Contract Documents whether completed or in process.
- 17.4 If the Contractor commits a default due to its insolvency or bankruptcy, the following shall apply:
  - 17.4.1 Should this Agreement be entered into and fully executed by the parties, funds released and the Contractor (Debtor) files for bankruptcy, the following shall occur:
    - 17.4.1.1 In the event the Contactor files a voluntary petition under 11 U.S.C. 301 or 302, or an order for relief is entered under 11 U.S.C. 303, the Contractor shall acknowledge the extent, validity, and priority of the lien recorded in favor of the City. The Contractor further agrees that in the event of this default, the City shall, at its option, be entitled to seek relief from the automatic stay pursuant to 11 U.S.C. 362. The City shall be entitled to relief from the automatic stay pursuant to 11 U.S.C. 362(d) (1) or (d) (2), and the Contactor agrees to waive the notice provisions in effect pursuant to 11 U.S.C. 362 and any applicable Local Rules of the United States Bankruptcy Court. The Contactor acknowledges that such waiver is done knowingly and voluntarily.
    - 17.4.1.2 Alternatively, in the event the City does not seek stay relief, or if stay relief is denied, the City shall be entitled to monthly adequate protection payments within the meaning of 11 U.S.C. 361. The monthly adequate protection payments shall each be in an amount determined in accordance with the Note and Mortgage executed by the Contractor in favor of the City.
    - 17.4.1.3 In the event the Contractor files for bankruptcy under Chapter 13 of Title 11, United States Code in additional to the foregoing provisions, the Contractor agrees to cure any amounts in arrears over a period not to exceed twenty-four (24) months from the date of the confirmation order, and such payments shall be made in addition to the regular monthly payments required by the Note and mortgage. Additionally, the Contractor shall agree that the City is over secured and, therefore, entitled to interest and attorney's fees pursuant to 11 U.S.C. 506(b). Such fees shall be allowed and payable as an

administrative expense. Further, in the event the Contractor has less than five (5) years of payments remaining on the Note, the Contractor agrees that the treatment afforded to the claim of the City under any confirmed plan of reorganization shall provide that the remaining payments shall be satisfied in accordance with the Note, and that the remaining payments or claim shall not be extended or amortized over a longer period than the time remaining under the Note.

- 17.4.2 Should this Agreement be entered into and fully executed by the parties, and the funds have not been forwarded to Contractor, the following shall occur:
  - 17.4.2.1 In the event the Contractor files a voluntary petition pursuant to 11 U.S.C. 301 or 302, or an order for relief is entered under 11 U.S.C. 303., the Contractor acknowledges that the commencement of a bankruptcy proceeding constitutes an event of default under the terms of this Agreement. Further, the Contractor acknowledges that this Agreement constitutes an executory contract within the meaning of 11 U.S.C. 365. The Contractor acknowledges that this Agreement is not capable of being assumed pursuant to 11 U.S.C. 365(c)(2), unless the City expressly consents in writing to the assumption. In the event the City consents to the assumption, the Contractor agrees to file a motion to assume this Agreement within ten (10) days after receipt of written consent from the City, regardless of whether the bankruptcy proceeding is pending under Chapter 7, 11, or 13 of Title 11 of the United States Code. The Contractor further acknowledges that this Agreement is not capable of being assigned pursuant to 11 U.S.C. 365(b)(1).
- 17.5 Termination for Convenience: This Contract may be terminated for convenience in writing by City upon thirty (30) days written notice to Contractor (delivered by certified mail, return receipt requested) of intent to terminate and the date on which such termination becomes effective. In such case, Contractor shall be paid for all work executed and expenses incurred prior to termination in addition to termination settlement costs reasonably incurred by Contractor relating to commitments which had become firm prior to the termination. Payment shall include reasonable profit for work/services satisfactorily performed. No payment shall be made for profit for work/services which have not been performed.
- 17.6 Where the Contractor's service have been so terminated by the City, the termination shall not affect any rights of the City against the Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due the Contractor by the City will not release the Contractor from liability.
- 17.7 The Contractor has no right, authority or ability to terminate the Work except for the wrongful withholding of any payments due the Contractor from the City.

#### ARTICLE 18 – DISPUTE RESOLUTION

- Resolution of Disputes: Questions, claims, difficulties and disputes of whatever nature which may arise relative to the technical interpretation of the Contract Documents and fulfillment of this Agreement as to the character, quality, amount and value of any work done and materials furnished, or proposed to be done or furnished under or, by reason of, the Contract Documents which cannot be resolved by mutual agreement of Contract Administrator and Contractor shall be submitted to the Consultant for resolution. When either party has determined that a disputed question, claim, difficulty or dispute is at an impasse, that party shall notify the other party in writing and submit the question, claim, difficulty or dispute to the Consultant for resolution. The parties may agree to a proposed resolution at any time without the involvement and determination of the Consultant.
  - 18.1.1 Consultant shall notify Contract Administrator and Contractor in writing of Consultant's decision within twenty-one (21) calendar days from the date of the submission of the question, claim, difficulty or dispute, unless Consultant requires time to gather information or allow the parties to provide additional information.
  - 18.1.2 In the event the determination of a dispute by the Consultant under this Article is unacceptable to any of the parties hereto, the party objecting to the determination must notify the other party and the City Manager, in writing within ten (10) days after receipt of the determination. The notice must state the basis of the objection and the proposed resolution. Final resolution of such dispute shall be made by the City Manager. The City Manager's decision shall be final and binding on the parties.
  - 18.1.3 All non-technical administrative disputes (such as billing and payment) shall be determined by Contract Administrator.
  - 18.1.4 During the pendency of any dispute and after a determination thereof, Contractor, Consultant, and Contract Administrator shall act in good faith to mitigate any potential damages including utilization of construction schedule changes and alternate means of construction. During the pendency of any dispute arising under this Agreement, other than termination herein, Contractor shall carry on the Work and adhere to the progress schedule. The Work shall not be delayed or postponed pending resolution of any disputes or disagreements.
  - 18.1.5 For any disputes which remain unsolved, within sixty (60) calendar days after Final Completion of the Work, the parties shall participate in mediation to address all unresolved disputes. A mediator shall be mutually agreed upon by the parties. Should any objection not be resolved in mediation, the parties retain all their legal rights and remedies under applicable law. If a party objecting to a determination, fails to comply in strict accordance with the requirements of this Article, said party specifically waives all of its rights provided hereunder, including its rights and remedies under applicable law.

#### **ARTICLE 19 – NOTICES**

19.1 All notices required by any of the Contract Documents shall be in writing and shall be deemed delivered upon mailing by certified mail, return receipt requested to the following:

To the City:

City Manager City of Fort Lauderdale 100 North Andrews Avenue Fort Lauderdale, Florida 33301

with copy to the:

Project Manager and City Attorney City of Fort Lauderdale 100 North Andrews Avenue Fort Lauderdale, Florida 33301

Γo the	Contr	actor:			

# **ARTICLE 20 – LIMITATION OF LIABILITY**

- 20.1 The City desires to enter into this Agreement only if in so doing the City can place a limit on the City's liability for any cause of action arising out of this Agreement, so that the City's liability for any breach never exceeds the sum of \$1,000. For other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Contractor expresses its willingness to enter into this Agreement with the knowledge that the Contractor's recovery from the City to any action or claim arising from the Agreement is limited to a maximum amount of \$1,000, which amount shall be reduced by the amount actually paid by the City to the Contractor pursuant to this Agreement, for any action or claim arising out of this Agreement. contained in this paragraph or elsewhere in this Agreement is in any way intended either to be a waiver of the limitation placed upon the City's liability as set forth in Section 768.28, Florida Statutes, or to extend the City's liability beyond the limits established in said Section 768.28; and no claim or award against the City shall include attorney's fees, investigative costs, expert fees, suit costs or pre-judgment interest.
- 20.2 No Extended Damages: For other and additional good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the Contractor covenants and agrees that in the event of any delay of construction or for any reason, allegation or claim, and notwithstanding the reason of the delay, reason, claim or allegation or

who caused them or the construction delay or whether they were caused by the City, that there will be no entitlement to Contractor to or for any direct or indirect financial damages or losses for extended corporate overhead impact, extended project overhead impacts, project support services, mobilization or demobilization or by whatever other label or legal concept or theory and types of names or labels or basis such claims may have, or any business damages or losses of whatever type or nature, and Contractor hereby waives any right to make any such claim or claims. This provision will have application and effect when construction delays are anticipated and agreed upon by both the City and the Contractor.

# **ARTICLE 21 – GOVERNING LAW**

21.1 This Agreement shall be governed by the laws of the State of Florida. Both Parties agree that the courts of the State of Florida shall have jurisdiction of any claim arising in connection with this Agreement. Venue for any claim, objection or dispute arising out of this Agreement shall be in Broward County, Florida. By entering into this Contract, Contractor and City hereby expressly waive any rights either party may have to a trial by jury or any civil litigation related to, or arising out of the Project. Contractor shall specifically bind all subcontractors to the provisions of this Contract.

### **ARTICLE 22 – MISCELLANEOUS**

- 22.1 The duties and obligations imposed by this Agreement and the rights and remedies available to the parties and, in particular but without limitation, the warranties, guaranties and obligations imposed upon the Contractor and all of the rights and remedies available to the City, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by laws or regulations, by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents, and the provisions of this Paragraph will survive final payment and termination or completion of this Agreement.
- 22.2 The Contractor shall not assign or transfer this Agreement or its rights, title or interests. The obligations undertaken by the Contractor pursuant to this Agreement shall not be delegated or assigned to any other person or firm. Violation of the terms of this Paragraph shall constitute a material breach of Agreement by the Contractor and the City any, at its discretion, cancel this Agreement and all rights, title and interest of the Contractor which shall immediately cease and terminate.
- 22.3 The Contractor and its employees, volunteers and agents shall be and remain an independent contractors and not agents or employees of the City with respect to all of the acts and services performed by and under the terms of this Agreement. This Agreement shall not in any way be constructed to create a partnership, association or any other kind of joint undertaking or venture between the Parties.

- 22.4 The City reserves the right to audit the records of the Contractor relating in any way to the Work to be performed pursuant to this Agreement at any time during the performance and term of this Agreement and for a period of three (3) years after completion and acceptance by the City. If required by the City, the Contractor agrees to submit to an audit by an independent certified public accountant selected by the City. The Contractor shall allow the City to inspect, examine and review the records of the Contractor at any and all times during normal business hours during the term of this Agreement.
- 22.5 The remedies expressly provided in this Agreement to the City shall not be deemed to be exclusive but shall be cumulative and in addition to all other remedies in favor of the City now or later existing at law or in equity.
- 22.6 Should any part, term or provisions of this Agreement be decided by the courts to be invalid, illegal or in conflict with any state or federal law, the validity of the remaining portion or provision shall not be affected.
- 22.7 Prohibition Against Contracting With Scrutinized Companies: Subject to Odebrecht Construction, Inc., v. Prasad, 876 F.Supp.2d 1305 (S.D. Fla. 2012), affirmed, Odebrecht Construction, Inc., v. Secretary, Florida Department of Transportation, 715 F.3d 1268 (11th Cir. 2013), with regard to the "Cuba Amendment," the Contractor certifies that it is not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2016), that it is not engaged in a boycott of Israel, and that it does not have business operations in Cuba or Syria, as provided in section 287.135, Florida Statutes (2016), as may be amended or revised. The City may terminate this Agreement at the City's option if the Contractor is found to have submitted a false certification as provided under subsection (5) of section 287.135, Florida Statutes (2016), as may be amended or revised, or been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2016), or is engaged in a boycott of Israel or has been engaged in business operations in Cuba or Syria, as defined in Section 287.135, Florida Statutes (2016), as may be amended or revised.
- 22.8 Public Entity Crimes: In accordance with the Public Crimes Act, Section 287.133, Florida Statutes, a person or affiliate who is a contractor, consultant or other provider, 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 the City, may not submit a bid on a contract with the City for the construction or repair of a public building or public work, may not submit bids on leases of real property to the City, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with the City, and may not transact any business with the City in excess of the threshold amount provided in Section 287.017, Florida Statutes, for category two purchases for a period of thirty-six (36) months from the date of being placed on the convicted vendor list. Violation of this section by Contractor shall result in cancellation of the City purchase and may result in Contractor debarment.

22.9 <u>Attorney Fees</u>: If CITY or CONSULTANT incurs any expense in enforcing the terms of this Agreement through litigation, the prevailing party in that litigation shall be reimbursed for all such costs and expenses, including but not limited to court costs, and reasonable attorney fees incurred during litigation.

#### 22.10 Public Records

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT <a href="mailto:precontract@fortlauderdale.gov">PRRCONTRACT@fortlauderdale.gov</a>, 954-828-5002, CITY CLERK'S OFFICE, 100 N. ANDREWS AVENUE, FORT LAUDERDALE, FLORIDA 33301.

#### Contractor shall:

- 1. Keep and maintain public records that ordinarily and necessarily would be required by the City in order to perform the service.
- Upon request from the City's custodian of public records, provide the City 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 in Chapter 119,
  Florida Statutes (2017), as may be amended or revised, or as otherwise provided
  by law.
- 3. Ensure that 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 the contract term and following completion of this contract if the Contractor does not transfer the records to the City.
- 4. Upon completion of the Contract, transfer, at no cost, to the City all public records in possession of the Contractor or keep and maintain public records required by the City to perform the service. If the Contractor transfers all public records to the City upon completion of this Contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of this Contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.

# ARTICLE 23 – FAA REQUIRED CONTRACT PROVISIONS FOR AIRPORT CONTRACTS (NON-AIP CONTRACTS)

23.1 <u>General Civil Rights Provisions:</u> The Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no

person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the Contractor and sub-tier contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

# 23.2 Title VI Clauses for Compliance with Non-Discrimination Requirements:

During the performance of this Contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

- Compliance with Regulations: The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts And Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this Contract.
- 2. Non-discrimination: The Contractor, with regard to the work performed by it during the Contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the Contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the Contractor's obligations under this Contract and the Nondiscrimination Acts And Authorities on the grounds of race, color, or national origin.
- 4. <u>Information and Reports:</u> The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the City or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts And Authorities and instructions. Where any information required of the Contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
- 5. <u>Sanctions for Noncompliance:</u> In the event of a Contractor's noncompliance with the Non-discrimination provisions of this Contract, the City will impose such Contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:

- a. Withholding payments to the Contractor under the Contract until the Contractor complies; and/or
- b. Cancelling, terminating, or suspending a Contract, in whole or in part.
- 6. <u>Incorporation of Provisions:</u> The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the City or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the City to enter into any litigation to protect the interests of the City. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

### 23.3 <u>Title VI List of Pertinent Nondiscrimination Acts and Authorities</u>:

During the performance of this Contract, the Contractor, for itself, its assignees, and successors in interest agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination In Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964):
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub- recipients and Contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and

- certain testing entities (42 U.S.C. §§ 12131 12189) as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

Fort Lauderdale Executive Airport South Perimeter Loop Road (Contractor) Project 12260

### **CITY**

IN WITNESS OF THE FOREGOING, the parties have set their hands and seals the day and year first above written.

	CITY OF FORT LAUDERDALE, a munici corporation of the State of Florida
	By: LEE R. FELDMAN, City Manager
	LEE IX. I LEDWAY, Oily Wanager
(CORPORATE SEAL)	ATTEST:
	By:
	JEFFREY A. MODARELLI City Clerk
_\9	city clerk
	Approved as to Legal Form:
Colx	By:
	RHONDA MONTOYA HASAN Assistant City Attorney

### **CONTRACTOR**

WITNESSES:	CONTRACTOR., a Florida corporation.		
	Ву		
Print Name	PRINT NAME	Title	
	ATTE	ST:	
Print Name	BY:	Constant	
(CORPORATE SEAL)	PRINT NAME	Secretary	
STATE OF FLORIDA: COUNTY OF BROWARD:	5/1		
The foregoing instrument was ack (Name), behalf of the Corporation.		day of, 2017, by, a Florida corporation, on	
SEAL	Notary Public, State	of Florida	
	Name of Notary Type	ed, Printed or Stamped	
☐ Personally Known or ☐ Produ	uced Identification:		
Type of Identification Produced:			

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### **GENERAL CONDITIONS**

Unless otherwise modified in the projects special conditions, the following General Conditions shall be part of the Contract:

**GC - 01 - DEFINITIONS -** The following words and expressions, or pronouns used in their stead, shall wherever they appear in the Contract and the Contract Documents, be construed as follows:

"Addendum" or "Addenda" - shall mean the additional Contract provisions issued in writing, by the Engineer, prior to the receipt of bids.

"Bid" – shall mean the offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

"Bidder" - shall mean any person, firm, company, corporation or entity submitting a Bid for the Work.

"Bonds" –shall mean Bid, performance and payment bonds and other instruments of security, furnished by Contractor and his surety in accordance with the Contract Documents.

"City" – shall mean the City of Fort Lauderdale, Florida, a Florida municipal corporation. In the event the City exercises its regulatory authority as a government body, the exercise of such regulatory authority and the enforcement of any rules, regulations, codes, laws and ordinances shall be deemed to have occurred pursuant to City's authority as a governmental body and shall not be attributable in any manner to the City as a party to this Contract. For the purpose of this Contract, "City" without modification shall mean the City Commission, and/or City Manager or his/her designee(s) as applicable.

"Construction Manager" - shall mean the Public Works Director or his/her designee.

"Construction Project Manager" - shall mean the Public Works Director or his/her designee

"Consultant" – shall mean a person, firm, company, corporation or other entity employed by the City to perform the professional services for the project.

"Contract Work" - shall mean everything expressed or implied to be required to be furnished and furnished by the Contractor by any one or more of the parts of the Contract Documents referred to in the Contract hereof except Extra Work as hereinafter defined, it being understood that, in case of any inconsistency in or between any part or parts of this Contract, the Public Works Director shall determine which shall prevail.

"Design Documents" – shall mean the construction plans and specifications included as part of a Bid/Proposal Solicitation prepared either by the City or by the Consultant under a separate Agreement with the City.

"Engineer" - shall mean the Public Works Director or his/her designee.

"Extra Work" - shall mean work other than that required by the Contract.

"Inspector" – shall mean an authorized representative of the City assigned to make necessary inspections of materials furnished by Contractor and of the Work performed by Contractor.

"Notice" - shall mean written notice sent by certified United States Mail, return receipt requested, or sent by commercial express carrier with acknowledgement of delivery, or via fax or email, or by hand delivery with a request for a written receipt of acknowledgment of delivery and shall be served upon the Contractor either personally or to its place of business listed in the Bid.

"Owner" - shall mean the City of Fort Lauderdale.

"Project Manager" - shall mean the Public Works Director or his/her designee.

"Public Works Director" -shall mean the Public Works Director of the City of Fort Lauderdale, Florida or his/her designee(s).

"Site" - shall mean the area upon or in which the Contractor's operations are carried out and such other areas adjacent thereto as may be designated as such by the Public Works Director.

"Subcontractor" - shall mean any person, firm, company, corporation or other entity, other than employees of the Contractor, who or which contracts with the contractor, to furnish, or actually furnishes labor and materials, or labor and equipment, or labor, materials and equipment at the site.

"Surety" - shall mean any corporation or entity that executes, as Surety, the Contractor's performance and payment bond securing the performance of this Contract.

GC - 02 - SITE INVESTIGATION AND REPRESENTATION - The Contractor acknowledges that it has satisfied itself as to the nature and location of the Work under the Contract Documents, the general and local conditions of the Site, particularly those bearing upon availability of transportation, disposal, handling and storage of materials, availability of labor, water, electric power, and roads, the conformation and conditions at the ground based on City provided reports, 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 the Contract Documents.

The Contractor acknowledges that it has conducted extensive tests, examinations and investigations and represents and warrants a thorough familiarization with the nature and extent of the Contract Documents, the Work, locality, soil conditions, moisture conditions and all year-round local weather and climate conditions (past and present), and, in reliance on such tests, examination and investigations conducted by Contractor and the Contractor's experts, has determined that no conditions exist that would in any manner affect the Bid Price and that the project can be completed for the Bid Price submitted.

The Contractor, on its own, has made or caused to be made examinations, investigations, tests and studies of reports and related data in addition to those referred above, as Contractor deemed necessary to perform the Work at the Bid price set by the Contractor, within the contract time and in accordance with the other terms and conditions of the Contract Documents and the Bid made by the Contractor; and no additional examinations, investigations, tests, reports or similar data are, or will be, required by Contractor to assure that the Work can be done at the Bid price set by the Contractor.

The Contractor further acknowledges that it has satisfied itself based on any geotechnical reports the City may provide and inspection of the project Site 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 in the Contract Documents and finds and has further determined that no conditions exist that would in

any manner affect the Bid price and that the project can be completed for the Bid price submitted. Any failure by the Contractor to acquaint itself with all the provided information and information obtained by visiting the project Site will not relieve Contractor from responsibility for properly estimating the difficulty or cost thereof under the Contract Documents. In the event that the actual subsurface conditions vary from the actual City provided reports, the Contractor shall notify the City and the Contract amount may be adjusted depending on the conditions, at the approval of the City.

- GC 03 SUBSTITUTIONS If the Contractor desires to use materials and/or products of manufacturer's names different from those specified in the Contract Documents, the Bidder requesting the substitution shall make written application as described herein. The burden of proving the equality of the proposed substitution rests on the Bidder making the request. To be acceptable, the proposed substitution shall meet or exceed all expressed requirements of the Contract Documents and shall be submitted upon the Contractor's letterhead, in addition to the "Contractor's Request for Substitution" form provided by the Public Works Director. The following requirements shall be met in order for the substitution to be considered:
  - 1. Requests for substitution shall reach the Public Works Director no less than ten (10) Working Days prior to the date set for opening of Bids; and
  - 2. Requests for substitution shall be accompanied by such technical data, as the party making the request desires to submit. The Public Works Director will consider reports from reputable independent testing laboratories, verified experience records from previous users and other written information valid in the circumstances; and
  - 3. Requests for substitution shall completely and clearly indicate in what respects the materials and/or products differ from those indicated in the Contract Documents; and
  - 4. Requests for substitution shall be accompanied by the manufacturer's printed recommendations clearly describing the installation, use and care, as applicable, of the proposed substitutions; and
  - Requests for substitution shall be accompanied by a complete schedule of changes in the Contract Documents, if any, which must be made to permit the use of the proposed substitution; and

If a proposed substitution is approved by the Public Works Director, an Addendum will be issued to prospective bidders not less than three (3) working days prior to the date set for opening of Bids. Unless substitutions are received and approved as described above, the successful Bidder shall be responsible for furnishing materials and products in strict accordance with the Contract Documents.

GC - 04 - CONTROL OF THE WORK - The Public Works Director shall have full control and direction of the Work in all respects. The Public Works Director and/or his authorized designee(s) shall, at all times, have the right to inspect the Work and materials. The Contractor shall furnish all reasonable facilities for obtaining such information, as the Public Works Director may desire respecting the quality of the Work and materials and the manner of conducting the Work. Should the Contractor be directed or permitted to perform night Work, or to vary the period which work is ordinarily carried on in the daytime, he shall give ample notice to the Public Works Director so that proper and adequate inspection may be provided. Such Work shall be done only under such regulations as are furnished in writing by the Public Works Director, and no extra compensation shall be allowed to the Contractor therefore. In the event of night work, the Contractor shall furnish such light, satisfactory to the Public Works Director, as will insure proper inspection. Nothing

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herein contained shall relieve the Contractor from compliance with any and all City ordinances relating to noise or Work during prohibited hours.

The Contractor shall keep the Public Works Director informed, a reasonable time in advance, as to his need for grades and lines in order that the same may be furnished and all necessary measurements made for records and for payment with the minimum of inconvenience to the Public Works Director or of delay to the Contractor. The Contractor shall submit to the Public Works Director or Inspector on the job a written request outlining the streets, etc., for which the Contractor desires lines and grades. It is the intention not to delay the Work for the giving of lines and grades, but when necessary, work operations shall be suspended for such reasonable time as the Public Works Director may require for this purpose. However, such cost increases shall be authorized either by the City Manager and/or designee, or the City Commission based upon the purchasing threshold amounts provided for in Chapter 2 of the City of Fort Lauderdale's Code of Ordinances.

GC - 05 - SUBCONTRACTOR - The Contractor shall not sublet, in whole or any part of the Work without the written consent and approval of the Public Works Director. Within ten (10) days after official notification of starting date, the Contractor must submit in writing, to the Public Works Director, a list of all Subcontractors. No Work shall be done by any Subcontractor until such Subcontractor has been officially approved by the Public Works Director. A subcontractor not appearing on the original list will not be approved without written request submitted to the Public Works Director and approved by the Public Works Director. In all cases, the Contractor shall give his personal attention to the Work of the Subcontractors and the Subcontractor is liable to be discharged by the Contractor, at the direction of the Public Works Director, for neglect of duty, incompetence or misconduct.

Acceptance of any Subcontractor, other person, or organization by the Public Works Director shall not constitute a waiver of any right of Public Works Director to reject defective Work or Work not in conformance with the Contract Documents.

Contractor shall be fully responsible for all acts and omissions of his Subcontractors and of persons and organizations directly or indirectly employed by them and of persons and organizations for whose acts any of them may be liable to the same extent that he is responsible for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relationship between City and any Subcontractor or other person or organization having a direct contract with Contractor, nor shall it create any obligation on the part of City to pay or to see to the payment of any moneys due to any Subcontractor or other person, or organization, except as may otherwise be required by law.

GC – 06 - QUANTITIES - It is mutually agreed that the proposal shows the approximate amounts only along with the Plans and the general location. It is also mutually agreed that no change will be made involving any departure from the general scheme of the Work and that no such change involving a material change in cost, either to the City or Contractor, shall be made, except upon written permission of the City. However, the Public Works Director shall have the right to make minor alternations in the line, grade, plan, form or materials of the Work herein contemplated any time before the completion of the same. That if such alterations shall diminish the quantity of the Work to be done, such alterations shall not constitute a claim for damages or anticipated profits. That if such alterations increase the amount of the Work to be done, such increase shall be paid for according to the quantity actually performed and at the unit price or prices stipulated therefore in the Contract.

The City shall, in all cases of dispute, determine the amount or quantity of the several kinds of Work which are to be paid for under this Contract, and shall decide all questions relative to the execution of the same, and such estimates and decisions shall be final and binding.

Any Work not herein specified, which might be fairly implied as included in the Contract, of which the City shall judge, shall be done by the Contractor without extra charge. However, such cost increases shall be authorized either by the City Manager and/or designee, or the City Commission based upon the purchasing threshold amounts provided for in Chapter 2 of the City of Fort Lauderdale's Code of Ordinances.

- **GC-07 NO ORAL CHANGES** Except to the extent expressly set forth in the Contract, no change in or modification, termination or discharge of the Contract in any form whatsoever, shall be valid or enforceable unless it is in writing and signed by the parties charged, therewith or their duly authorized representative.
- **GC 08 PERMITS AND PROTECTION OF PUBLIC** Permits on file with the City and or those permits to be obtained shall be considered directive in nature and will be considered a part of this Contract. A copy of all permits shall be given to the City and become part of the Contract Documents. Terms of permits shall be met prior to acceptance of the Work and release of the final payment.

The Contractor shall be required to observe all the ordinances in relation to obtaining permits for occupying, excavating, or in any way obstructing the streets and alleys. He shall erect and maintain barricades and sufficient safeguards around all excavations, embankments or obstructions; he shall place sufficient warning lights at or near the Work; keep the same burning from sunset to sunrise, employ watchmen, and strictly obey all laws and ordinances controlling or limiting those engaged in similar work.

Where there are telephones, light or power poles, water mains, conduits, pipes or drains or other construction, either public or private, in or on the streets or alleys, the Work shall be so conducted that no interruption or delay will be caused in the operation or use of the same. Proper written notice shall be given, and all the facilities, afforded the owners of such construction encountered or likely to be encountered, as will enable them to preserve the same from injury.

The Contractor shall not be permitted to interfere with public travel and convenience by grading or tearing up streets indiscriminately, but the Work of constructing the various items in this contract shall proceed in an orderly, systematic and progressive manner.

Contractor shall not load nor permit any part of any structure to be loaded with weights that will endanger the structure, nor shall he subject any part of the Work to stresses or pressures that will endanger it.

Where lifting operations involving the use of specialized cranes are required as part of construction, Contractor must make undertake the following investigation and submit the results and documentation to the Engineer prior to commencing any lifting operations: marking a very specific area in the field for the placement of the crane; a drawing showing the limitations of the job operation (i.e. not over adjacent properties or pedestrian and high vehicular traffic areas);underground utility exploration in the vicinity of the crane location, which may include ground penetrating radar to identify voids or old pipe or other subsurface features that could lead to sudden failure; assessment of the underlying soil and roadway materials and a worst case analysis based on entire load being distributed on just one or two outriggers; provision of properly sized pads under the outriggers; loading charts from manufacturer showing allowable configurations/loads; and inspection to make sure crane operation is in accordance with the permit conditions.

**GC – 09 - DISEASE REGULATIONS** - The Contractor shall enforce all sanitary regulations and take all precautions against infectious diseases as the Public Works Director may deem necessary. Should any infectious or contagious diseases occur among his employees, he shall arrange for

the immediate removal of the employee from the Site and isolation of all persons connected with the Work.

- GC 10 CONTRACTOR TO CHECK PLANS, SPECIFICATIONS, AND DATA The Contractor shall verify all dimensions, quantities, and details shown on the plans, supplementary drawings, schedules, or other data received from the Public Works Director, and shall notify the Public Works Director of all errors, omissions, conflicts and discrepancies found therein within three (3) working days of discovery. Failure to discover or correct errors, conflictions, or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory Work, faulty construction, or improper operation resulting there from nor from rectifying such condition at his own expense.
- **GC 11 SUPPLEMENTARY DRAWINGS** When, in the opinion of the Public Works Director, it becomes necessary to explain more fully the Work to be done, or to illustrate the work further, or to show any changes which may be required, drawings, known as supplementary drawings, with specifications pertaining thereto, will be prepared by the Public Works Director and copies will be given to the Contractor.

The supplementary drawings shall be binding upon the Contractor with the same force as the original Plans. Where such supplementary drawings require either less or more than the estimated quantities of work, credit to the City or compensations therefore to the Contractor shall be subject to the terms of the Contract.

**GC - 12 - MATERIALS AND WORKMANSHIP** - All material and workmanship shall, in every respect, be in conformity with approved modern practice and with prevailing standards of performance and quality. In the event of dispute the Public Works Director's decision shall be final. Wherever the Plans, specifications, Contract Documents, or the directions of the Public Works Director are unclear as to what is permissible and/or fail to note the quality of any Work, that interpretation will be made by the Public Works Director, which is in accordance with approved modern practice, to meet the particular requirements of the Contract.

In all cases, new materials shall be used, unless this provision is waived by notice from the City in writing.

- GC 13 SAFEGUARDING MARKS The Contractor shall safeguard all points, stakes, grade marks, monuments, and bench marks made or established on the Work, bear the cost of reestablishing same if disturbed, or bear the entire expense of rectifying Work improperly installed due to not maintaining or protecting or for removing without authorization, such established points, stakes and marks. The Contractor shall safeguard all existing and known property corners, monuments and marks not related to the Work and, if required, shall bear the cost of having them re-established by a licensed surveyor if disturbed or destroyed during the course of construction.
- **GC 14 EXISTING UTILITY SERVICE** All existing utility service shall be maintained with a minimum of interruption at the expense of the Contractor.
- **GC 15 JOB DESCRIPTION SIGNS** Contractor, at Contractor's expense, shall furnish, erect, and maintain suitable weatherproof signs on jobs over \$100,000 containing the following information:
  - 1. City Seal (in colors)
  - 2. Project or Improvement Number
  - 3. Job Description
  - 4. Estimated Cost
  - 5. Completion Date

Minimum size of sign shall be four feet high, eight feet wide and shall be suitably anchored. The entire sign shall be painted and present a pleasing appearance. Exact location of signs will be determined in the field. Two (2) signs will be required, one at each end of the job. All costs of this work shall be included in other parts of the work.

**GC - 16 - FLORIDA EAST COAST RIGHT-OF-WAY** - Whenever a City contractor is constructing within the Florida East Coast Railway Company's Right-of-Way, it will be mandatory that the contractor carry separate bodily injury and property damage insurance in the amounts as stated below. This insurance shall be taken out and maintained during the life of the Contract.

Bodily injury insurance in an amount not less than \$500,000.00 for injuries, including wrongful death to any one person, and subject to the same limit for each person, in an amount not less than \$1,000,000.00 on account of any one occurrence, and

Property damage insurance in an amount not less than \$500,000.00 for damages on account of any one occurrence and in an amount not less than \$1,000,000.00 for damages on account of all occurrences.

**GC - 17 - ACCIDENTS** - The Contractor shall provide such equipment and facilities as are necessary and/or required, in the case of accidents, for first aide services to be provided to a person who may be injured during the project duration. The Contractor shall also comply with the OSHA requirements as defined in the United States Labor Code 29 CFR 1926.50.

In addition, the Contractor must report immediately to the Public Works Director every accident to persons or damage to property, and shall furnish in writing full information, including testimony of witnesses regarding any and all accidents.

GC - 18 - SAFETY PRECAUTIONS - Contractor must adhere to the applicable environmental protection guidelines for the duration of a project. If hazardous waste materials are used, detected or generated at any time, the Project Manager must be immediately notified of each and every occurrence. The Contractor shall comply with all codes, ordinances, rules, orders and other legal requirements of public authorities (including OSHA, EPA, DERM, the City, Broward County, State of Florida, and Florida Building Code), which bear on the performance of the Work.

The Contractor shall take the responsibility to ensure that all Work is performed using adequate safeguards, including but not limited to: proper safe rigging, safety nets, fencing, scaffolding, barricades, chain link fencing, railings, barricades, steel plates, safety lights, and ladders that are necessary for the protection of its employees, as well as the public and City employees. All riggings and scaffolding shall be constructed with good sound materials, of adequate dimensions for their intended use, and substantially braced, tied or secured to ensure absolute safety for those required to use it, as well as those in the vicinity. All riggings, scaffolding, platforms, equipment guards, trenching, shoring, ladders and similar actions or equipment shall be OSHA approved, as applicable, and in accordance with all Federal, State and local regulations.

**GC – 19- DUST PREVENTION** - The Contractor shall, by means of a water spray, or temporary asphalt pavement, take all necessary precautions to prevent or abate a dust nuisance arising from dry weather or Work in an incomplete stage. All costs of this Work shall be included in cost of other parts of the Work.

Should the Contractor fail to abate a dust nuisance by the above methods, and then he will be required to immediately construct temporary patches per City standards.

GC – 20 - PLACING BARRICADES AND WARNING LIGHTS - The Contractor shall furnish and place, at his own expense, all barricades, warning lights, automatic blinker lights and such devices

necessary to properly protect the work and vehicular and pedestrian traffic. Should the Contractor fail to erect or maintain such barricades, warning lights, etc., the Public Works Director may, after 24 hours' notice to the Contractor, proceed to have such barricades and warning lights placed and maintained by City or other forces and all costs incurred thereof charged to the Contractor and may be retained by the City from any monies due, or to become due, to the Contractor.

GC – 21 - TRAFFIC CONTROL - The Contractor shall coordinate all Work and obtain, through the City's Transportation and Mobility Department, Broward County, Florida Department of Transportation, as applicable, any permits required to detour traffic or close any street before starting to work in the road. The following section: Part VI Traffic Controls for Street and Highway Construction and Maintenance Operations, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, U.S. Department of Transportation Federal Highway Administration, 2009, or current edition, shall be used as a guide for requirement and placement of traffic control devices, signs and barricades. The Public Works Director shall determine requirements for the above. The above publication is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. In the event that a Maintenance of Traffic (MOT) Plan is required, the Plan shall be prepared by an A.A.S.T.A. certified technician.

All traffic control devices, flashing lights, signs and barricades shall be maintained in working condition at all times.

**GC – 22 - COORDINATION** - The Contractor shall notify all utilities, transportation department, etc., in writing, with a copy to the Public Works Director before construction is started and shall coordinate his Work with them. The Contractor shall cooperate with the owners of any underground or overhead utility lines in their removal, construction and rearrangement operations in order that services rendered by these parties will not be unnecessarily interrupted.

The Contractor shall arrange his Work and dispose of his materials so as to not interfere with the operation of other Contractors engaged upon adjacent work and to join his Work to that of others in a proper manner and to perform his Work in the proper sequence in relation to that of other Contractors all as may be directed by the Public Works Director.

Each Contractor shall be responsible for any damage done by him or his agents to the work performed by another Contractor.

The Contractor shall contact the Broward County Transportation Department and the Florida Department of Transportation, as applicable, to verify and obtain location of any and all traffic conduits, loops, and street light underground services.

- GC 23 WATER Bulk water used for construction, flushing pipelines, and testing shall be obtained from fire hydrants. Contractor shall make payment for hydrant meter at Treasury Billing Office, 1st Floor, City Hall, 100 N. Andrews Avenue. With the paid receipt, contractor can pick up hydrant meter at the utility location office. No connection shall be made to a fire hydrant without a meter connected.
- GC 24 PROHIBITION AGAINST CONTRACTING WITH SCRUTINIZED COMPANIES Scrutinized Companies: Subject to Odebrecht Construction, Inc., v. Prasad, 876 F.Supp.2d 1305 (S.D. Fla. 2012), affirmed, Odebrecht Construction, Inc., v. Secretary, Florida Department of Transportation, 715 F.3d 1268 (11th Cir. 2013), with regard to the "Cuba Amendment," the Contractor certifies that it is not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2016), that it is not engaged in a boycott of Israel, and that it does not have business operations in Cuba or Syria, as

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provided in section 287.135, Florida Statutes (2016), as may be amended or revised. The City may terminate this Agreement at the City's option if the Contractor is found to have submitted a false certification as provided under subsection (5) of section 287.135, Florida Statutes (2016), as may be amended or revised, or been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2016), or is engaged in a boycott of Israel or has been engaged in business operations in Cuba or Syria, as defined in Section 287.135, Florida Statutes (2016), as may be amended or revised.

- GC 25 LOCATION OF UNDERGROUND FACILITIES If the Proposer, for the purpose of responding to this solicitation, requests the location of underground facilities through the Sunshine State One-Call of Florida, Inc. notification system or through any person or entity providing a facility locating service, and underground facilities are marked with paint, stakes or other markings within the City pursuant to such a request, then the Proposer shall be deemed non-responsive to this solicitation in accordance with Section 2-184(5) of the City of Fort Lauderdale Code of Ordinances.
- GC 26 USE OF FLORIDA LUMBER TIMBER AND OTHER FOREST PRODUCTS In accordance with Florida Statute 255.20 (3), The City specifies that lumber, timber, and other forest products used for this project shall be produced and manufactured in the state of Florida if such products are available and their price, fitness, and quality are equal. This requirement does not apply to plywood specified for monolithic concrete forms, if the structural or service requirements for timber for a particular job cannot be supplied by native species, or if the construction is financed in whole or in part from federal funds with the requirement that there be no restrictions as to species or place of manufacture.

The Bidder affirms by submitting a bid response to this solicitation that they will comply with section 255.20 (3) Florida Statutes.

GC – 27 – PUBLIC RECORDS/TRADE SECRETS/COPYRIGHT: The Proposer's response to the Solicitation is a public record pursuant to Florida law, which is subject to disclosure by the City under the State of Florida Public Records Law, Florida Statutes Chapter 119.07 ("Public Records Law"). The City shall permit public access to all documents, papers, letters or other material submitted in connection with this Solicitation and the Contract to be executed for this Solicitation, subject to the provisions of Chapter 119.07 of the Florida Statutes.

Any language contained in the Proposer's response to the Solicitation purporting to require confidentiality of any portion of the Proposer's response to the Solicitation, except to the extent that certain information is in the City's opinion a Trade Secret pursuant to Florida law, shall be void. If a Proposer submits any documents or other information to the City which the Proposer claims is Trade Secret information and exempt from Florida Statutes Chapter 119.07 ("Public Records Laws"), the Proposer shall clearly designate that it is a Trade Secret and that it is asserting that the document or information is exempt. The Proposer must specifically identify the exemption being claimed under Florida Statutes 119.07. The City shall be the final arbiter of whether any information contained in the Proposer's response to the Solicitation constitutes a Trade Secret. The City's determination of whether an exemption applies shall be final, and the proposer agrees to defend, indemnify, and hold harmless the City and the City's officers, employees, and agent, against any loss or damages incurred by any person or entity as a result of the City's treatment of records as public records. Proposals purporting to be subject to copyright protection in full or in part will be rejected.

EXCEPT FOR CLEARLY MARKED PORTIONS THAT ARE BONA FIDE TRADE SECRETS PURSUANT TO FLORIDA LAW, DO NOT MARK YOUR RESPONSE TO THE SOLICITATION AS PROPRIETARY OR CONFIDENTIAL. DO NOT MARK YOUR RESPONSE TO THE SOLICITATION OR ANY PART THEREOF AS COPYRIGHTED.

## IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

Telephone Number: (954) 828-5002

Mailing Address: City Clerk's Office

100 N. Andrews Avenue Fort Lauderdale, FL 33301

E-mail: prrcontract@fortlauderdale.gov

### Contractor shall:

- 1. Keep and maintain public records that ordinarily and necessarily would be required by the City in order to perform the service.
- 2. Upon request from the City's custodian of public records, provide the City 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 in Chapter 119, Florida Statutes (2017), as may be amended or revised, or as otherwise provided by law.
- 3. Ensure that 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 the contract term and following completion of this contract if the Contractor does not transfer the records to the City.
- 4. Upon completion of the Contract, transfer, at no cost, to the City all public records in possession of the Contractor or keep and maintain public records required by the City to perform the service. If the Contractor transfers all public records to the City upon completion of this Contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of this Contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.

## SUPPLEMENTAL CONDITIONS

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### SUPPLEMENTAL CONDITIONS PROJECT 12260 FORT LAUDERDALE EXECUTIVE AIRPORT SOUTH PERIMETER LOOP ROAD

### 1. SUPPLEMENTAL CONDITIONS

The supplemental conditions included herein are intended to address items of work not included or addressed in the Construction Specifications. In case of a conflict, the Construction Specifications shall be <u>subordinate</u> to corresponding sections of the Supplemental Conditions.

### 2. CONSTRUCTION PROJECT COORDINATION PLAN

The purpose of the following outline is to establish guidelines to ensure operational safety during construction activities on the Fort Lauderdale Executive Airport. The primary document of reference, which is also made a part of these specifications and shall be adhered to by the Contractor is the U. S. Department of Transportation Federal Aviation Administration Advisory Circular 150/5370-2F (or latest revision) and its references.

It is the intent of the notes contained in this outline to establish a plan for construction on the Airport in order to maximize safety and minimize time and economic loss to the aviation community, along with construction contractors and others directly affected by the project. The following objectives should be targeted by the Contractor and must be considered when planning construction schedules and operational activities.

- A. Keep the Airport operational for all user aircraft.
- B. Minimize delays for aircraft operations.
- C. Maintain safety of aircraft operations.
- D. Minimize delays to construction operations.
- E. Minimize aircraft operation/construction activity conflicts.

Maximum, safe utilization of the Airport during construction is the ultimate goal to be achieved through communication and cooperative coordination between Contractor, jobsite Inspector (as a representative of the Engineer), the Airport Management, and the ATCT, as described herein.

- 2.1 All operations in airfield area to be performed only in coordination with the ATCT, Airport Management, and the Inspector assigned to the project.
- 2.2 Construction equipment regularly operating in the airfield area shall be marked with a flag on a staff, at least 36" square and a flashing amber light. Flag shall consist of a checkered pattern of international orange and white squares of not less than 1 foot on each side (in accordance with FAA AC 150/5210-5).

Vehicles (including all cars, trucks, construction equipment, etc.) are forbidden to penetrate aircraft movement areas or runway approach areas unless they are escorted by an authorized vehicle having the required radio, or are controlled by flagmen under a control plan approved in advance. Communication on radios shall be restricted to safety and coordination communications with the ATCT, and shall not be used for routine construction communications between contractor's personnel. All vehicles must

obtain clearance from the control tower before entering aircraft movement areas. The control tower shall be informed of all activity within the aircraft movement areas

Any vehicle or contractor personnel crossing any aircraft movement areas without notifying ATCT personnel shall be fined the maximum amount of \$500.00 and shall not be allowed back on the construction site.

2.3 Materials stockpile and storage, vehicle parking, location of construction office (if requested), and storage of equipment when not in use shall be as directed by the Engineer. The Contractor shall dispose of all surplus materials and facilities removed from the limits of work in a manner and to a location acceptable to the Engineer and Airport Management.

Materials to be reused shall be stockpiled as directed above, and salvaged facilities desired to be retained by the Airport shall be stored as directed by the Engineer. Other removed materials shall be placed in approved spoil areas or other approved locations. Any surplus fill so removed shall be neatly graded as directed by the Engineer.

2.4 The Contractor shall ascertain the location of and protect all existing and new FAA cables, airport lighting cables and facilities, and appurtenant facilities during construction and ensure that all circuits and facilities are maintained in a safe and properly operable condition. The local FAA Airway Facilities Sector Field Office (AFSFO) personnel will, upon request, mark all FAA cables in the vicinity of construction once, prior to the start of work. Contact number to call to request locations is (954) 467-7099. At least two weeks should be allowed for requested work to be completed. The Contractor shall be responsible for protecting cable location markings, and shall be responsible for any damage to cables within three feet of the marked cable route.

The Contractor shall also ascertain the location of all utility services (water, sewer, gas, electrical, power, telephone, etc.) within the work limits and ensure that continual and equal service is maintained during all construction activities.

Should any FAA, FP&L, AT&T, or other outside utility company's cable or facility be inadvertently cut, damaged, or disrupted, the owner of that cable or facility shall be notified immediately. The Contractor shall not make any splices or repairs in such cables or facilities unless specifically authorized by the owner of that cable or facility. The Contractor shall be responsible for the cost of any repairs required.

All locations indicated on the plans are approximate and shall be field verified prior to beginning construction.

2.5 The Contractor's activities must not degrade in any way the security provided by the airport perimeter fence, unless Airport Management approves specific exemptions to this provision in advance of construction activities. Any temporary gates installed or fencing relocated for the Contractor at his expense shall maintain this project in a secure condition at all times. The Contractor shall provide a security guard at each of his access points to the airport, unless they are locked and secured, in order to prevent unauthorized persons from entering and to direct authorized construction vehicles on the proper route to their destination within the airport. A portable guard house shall be utilized at all construction gates and shall be located in close proximity to the gate. An employee siting in a car "watching the gate" shall not be acceptable. If any gate is found to be unlocked without a guard in place, or should the guard allow any access

### **FXE SOUTH PERIMETER LOOP ROAD**

### **CITY PROJECT NO. 12260**

without verifying the proper authority for access, the Contractor shall be fined \$500 for each occurance.

- 2.6 The Contractor shall be responsible for controlling smoke and dust or blowing sand or soil caused by construction activities using one or a combination of the following methods, to the satisfaction of the Engineer and the Airport Management:
  - A. Application of water and/or calcium chloride (minimum of three times per day or as directed by the Engineer).
  - B. Exposing the minimum area of erodible earth at one time.
  - C. Applying temporary mulch with or without seeding (only in locations as approved by Airport Management).
  - D. Using covered haul trucks.

Additionally, contractor shall be required to keep a vacuum sweeper vehicle with operator on duty during all hauling operations across pavement in use by aircraft. No additional compensation will be provided for dust or sand control.

- 2.7 Attractions for birds in the area of construction, such as trash, unprotected grass seeding, or ponded water must be avoided.
- 2.8 All electrical work shall be in strict accordance with the National Electric Code, latest edition. Electrical sub-contractor must furnish after hours contact phone number in case of emergency. This number must be an actual number and not an answering service.
- 2.9 Definitions:

<u>Air Operations Area (AOA)</u> - An AOA is any area of the airport used or intended to be used for landing, takeoff, or surface maneuvering of aircraft. An AOA shall include such paved or unpaved areas that are intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.

**NOTAM (Notice to Airmen)** - NOTAMs are advisories issued by FAA Flight Service Station when conditions at an airport exist that could adversely affect safe aircraft operations such as construction related closures or hazardous conditions.

Any construction activity within 200 feet from runway centerline or within 65 feet from taxiway centerline will be considered to be within the AOA and will require closure of the affected areas (the exception being work specifically approved by Airport Management and FAA up to active aprons and taxiways). Such closures of an AOA must be coordinated with Airport Management at least 48 hours prior to commencing proposed work in order that arrangements can be made for issuance of applicable NOTAMs. The Contractor shall not close an AOA until so authorized by Airport Management and until the necessary temporary barricades and closure markings are in place. The sequence of construction phases and updated work schedules shall be provided to the Engineer to enable close coordination with aircraft routing and operations and maintain the currency of NOTAMs during the construction period. The Contractor shall also advise the Airport Management when situations have been improved to a point where NOTAMs may be cancelled. Once a NOTAM has been issued, Contractor shall adhere strictly to the construction schedule agreed to for the NOTAM.

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2.10 At times when Runway 9-27 threshold is displaced, or equipment is operating in the ILS critical zone, the ILS must be taken off the air or ILS operations restricted by the ATCT. Also, when equipment is operating between a localizer antenna and its associated threshold, that localizer must be taken off the air. Due to such requirements, such work must be closely coordinated with the Airport Management requiring timing described above necessary for the issuance of applicable NOTAMs. If construction operations require shutdown of a navigational aid from service for more than 24 hours or in excess of 4 hours daily on consecutive days, a 45-day minimum notice is desirable prior to the facility shutdown. Additionally, the Contractor shall cease construction and remove all equipment from the critical area when directed by the FAA or airport personnel due to weather or other special operating conditions.

### 2.11 Definition:

Federal Aviation Regulations (FAR) Part 77 - Objects Affecting Navigable Airspace - Applicable section of this advisory establishes standards for determining obstructions in navigable airspace by establishing imaginary surfaces with relation to the airport and to each runway.

No penetrations of the imaginary surfaces defined in FAR Part 77 shall be allowed unless approval is obtained from Airport Management and the FAA. When penetrations are unavoidable, approval should be requested as far in advance as is practical to allow, if such penetrations are acceptable, sufficient time for issuance of applicable NOTAMs. The Contractor shall prepare appropriate sketches with precise locations shown on the Airport Layout Plan along with elevations depicting the obstructing objects' relationship to the imaginary surfaces. Special approval must be obtained from Airport Management and the FAA for use of equipment exceeding a height of 30 feet. All exceptionally tall equipment (such as cranes, derricks, etc.) operating on the airport shall be in direct radio communication with the control tower (e.g., two-way radios, ground control frequency of 121.75 Mhz, operators proficient in English, experienced or trained in such communication and required response).

- 2.12 All excavations exceeding 3 inches depth and width or slopes greater than 5% within runway or taxiway or runway/taxiway safety areas shall be backfilled or covered prior to reopening the runway or taxiway. No open trenches (exceeding 3 inches depth and width) will be permitted overnight or over weekends within the runway/taxiway safety areas. The Engineer and Airport Management must approve any deviation from the requirements. All open trenches, stockpiled material, and excavation not within the areas described above shall be permanently marked with orange flags and lighted with flashing amber light units which shall operate continuously.
- 2.13 Runways and taxiways shall be kept free of all debris, dirt, trash, refuse, water bottles, soda cans, etc., at all times. Material tracked onto these areas shall be removed immediately. Contractor must keep a vacuum sweeper vehicle with operator on site with operator on duty during all hauling operations across pavement in use by aircraft. Continuous inspections will be made. See item 2.6 for approved methods of debris control.
- 2.14 Work on the airport is also in close proximity to potable water supply wellfields, requiring that extreme care be taken when handling fuel, oils, etc. Any spillages should be promptly and properly cleaned up. The stipulations of the Broward County Water Resources Management Division "Checklist for Surface Water Management" are permit requirements and dictate preventative measures necessitated by construction in such wellfield areas.

- 2.15 Open flame welding or torch-cutting operations are prohibited unless adequate fire and safety precautions are provided and have been approved by the Engineer.
- 2.16 Construction safety meetings shall be established for the life of the contract to monitor, coordinate and adopt safety measures, on all matters of airport safety relating to this contract. Meetings will be scheduled by the Engineer at least once every week to discuss project schedule and applicable safety measures. These meetings shall be composed of the Contractor's superintendent, the Inspector, Airport Management, and (if available) the FAA/FDOT. In addition, representatives of the Fixed Base Operator (FBO) tenants may be invited, their attendance optional, and at their own discretion. The Owner reserves the right to amend the plan as necessary to maintain an acceptable level of safety during construction. Sub-contractors shall also be required to attend these meetings if they are scheduled to be performing any work on the project.
- 2.17 During the pre-construction Meeting, the Contractor shall designate a representative to be responsible for the safety aspects of the project. The representative shall be available on a 24-hour basis. In addition, the Contractor shall designate a responsible representative on call 24 hours per day for emergency maintenance of airport hazard lighting and barricades.
- 2.18 In addition to the appropriate notification procedures, temporary runway and taxiway closures require that the applicable lighting circuits be disconnected during the closure period. Temporarily closed taxiways are usually treated as unusable, or hazardous, areas (as described below).
- 2.19 Hazardous areas, in which no part of an aircraft may enter, are indicated by use of barricades with alternate orange and white markings. The barricades are supplemented with orange flags at least 20 by 20 inches square and made and installed so that they are always in the extended position and properly oriented. For nighttime use, the barricades are to be supplemented with flashing red lights. The intensity of the lights and spacing for barricades, flags, and lights must be such that they adequately delineate the hazardous area.

### 3. PROTECTION OF WILDLIFE AND NATURAL HABITAT

The Contractor shall make provisions to protect the existing wildlife on the airport within the limits of this project. Known nests for burrowing owls and turtles are marked with a white PVC **T** in the ground. Contractor shall investigate the stockpile area, work area, and haul routes for marked and unmarked nests before storing materials and beginning construction. All unmarked nests shall be marked with a white PVC **T**. Existing markers shall not be removed without Engineer's approval. Nests shall be protected with the construction of temporary safety fencing. Said fencing to be placed within a 50-foot radius of nesting holes, to be approximately 3 feet in height, and to be made out of orange PVC material.

All reasonable efforts must be made by the Contractor to protect the existing wildlife and their nests. Nests that lie directly in the construction area that cannot co-exist with construction must be brought to the Engineer's attention. Nests may not be displaced or destroyed without the Engineer's approval.

Work areas and access to work areas shall be clearly delineated by the Contractor to avoid vehicliar movement in turf areas that may contain nests or other features that could be damaged or destroyed by unnecessary traffic. All construction traffic shall be confined to paved areas to the greatest extent possible.

### 4. PORTABLE CONSTRUCTION LIGHTING

The Contractor is responsible for providing work area lighting of sufficient quality and quantity to construct the Work to the quality standards called for in the Plans and Specifications. At a minimum the construction lighting shall meet the following requirements:

a. For any construction that will be performed during nighttime hours the Contractor shall ensure that the work areas are adequately illuminated. A minimum of 10-foot candles of illumination shall be provided in the work areas, using maneuverable light plants with 1,000-watt metal halide floodlights, mounted as high as practicality will allow. The Contractor shall determine the number of light plants and their required spacing to achieve the illumination levels specified herein.

The light should be positioned to provide the most natural color illumination and contrast with a minimum of shadows. The pavement area shall be lighted at a maximum spacing of 100 feet from both sides to eliminate objectionable shadows. A demonstration of the adequacy of the lighting will be required prior to beginning any night work. The Contractor shall work with Airport Operations when determining positions for each portable light unit so that the lighting will not interfere with the vision of pilots or Air Traffic Control Tower personnel.

- b. For night work, the Contractor shall equip all paving machines, rollers, distributor trucks, and other equipment with artificial illumination to safely illuminate the area immediately surrounding their work areas.
- c. Contractor shall remove all equipment and store in the staging areas during non-working hours, and prior to the re-opening of the Runways.

### 5. STAND-BY EQUIPMENT – N/A

a. The Contractor shall maintain stand-by equipment at the construction site for all construction work to be performed under this Contract. The specific number and type of equipment shall be that which is necessary to complete the work planned for that work period should any piece of equipment break down. At a minimum, at least one milling machine, one paving machine, and one roller will be required on stand-by whenever the taxiway is being worked on. The Contractor is advised that work during 24-hour per day closures, night closures, and weekend closures is more intensive than that performed at other times; therefore, additional stand-by equipment may need to be provided by the Contractor for the 24-hour per day closures, night closures, and weekend closure work.

Standby equipment includes equipment such as paving machines, milling machines, rollers, trenching machines, core drills, backhoes, graders, and tack coat distributor trucks and any other equipment necessary to complete the proposed work. In addition, stand-by clean up equipment such as sweepers, brooms, vacuum trucks, water trucks, and air compressors with wands for blowing debris from cracks, shall be available to ensure timely re-opening of the pavement at the end of each work period.

b. Stand-by equipment may only be used to replace broken equipment during a work period. The Contractor shall properly repair or replace broken equipment before being allowed to proceed with the next work period.

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- c. The Contractor shall ensure arrangement for supply of enough material to re-open the construction area to aircraft operations in case of break down of an asphalt production plant. This will include back-up plants, storage of a minimum quantity of material, in storage bins at the start of each shift's work, as well as material in trucks. In the event of an emergency beyond the control of the Contractor that reduces asphalt production during a work period, the Contractor may be permitted to mill out materials placed to meet grade or transition requirements. Any material milled to facilitate re-opening of the runway due to break-down of an asphalt plant or lack of stored material shall not be eligible for payment.
- d. The Contractor shall submit a listing and description of all regular and standby equipment that will be provided for 24-hour per day closures, night closures, weekend closures, and other work, by number, type, size, and manufacturer to the Engineer for acceptance.
- e. Should Contractor fail to have adequate standby equipment in place at beginning of each work shift, the Contractor shall be denied opportunity to continue for that work shift. Said denial shall only be lifted when Contractor provides adequate standby equipment. Contractor shall not be enitled to additional time to compensate for lost time due to inadequate standby equipment being available.
- f. Contractor shall maintain adequate equipment on site at all times to allow adequate clean up to open pavement for aircraft use. At a minimum, the Contractor shall have a vacumn truck and a power broom on site and ready for use.

### 6. PRE-PHASE COORDINATION MEETINGS

At least 10 calendar days prior to beginning each phase of the Work, the Contractor shall hold a planning meeting to discuss, at a minimum, operational restrictions, work to be performed, haul routes (including Contractor signing and marking), closures, safety, testing requirements, submittal requirements, inspection requirements, schedule, communications, erosion control, stockpile locations and disposal schedule, location of stand-by equipment, salvaged materials container location, barricade layout, barricade placement schedule (including barricade storage areas during non-working hours) and other topics as appropriate. The Contractor shall submit a plan for all of the elements described above, to the Engineer for review, no less than 10 calendar days prior to each pre-phase meeting.

The Contractor shall prepare a construction traffic control plan for each haul route. The Contractor's traffic control plan shall conform to the requirements of the City traffic engineer, and shall be approved by the Engineer. The plan shall be included in Contractor's submittal for the pre-phase coordination meeting. When the haul route is not in use, all traffic control signs shall either be covered or removed and stored. The Contractor shall remove all construction signs after the completion of the work.

### 7. SCHEDULING AND DAILY OPERATIONS

All work hours will be subject to written approval of the Engineer and Airport Operations, and in accordance with the approved work schedule. The Contractor shall also provide weekly and daily work plans. The Contractor shall have equipment and personnel staged and ready to occupy the site at the start time listed. No runway closure will take place until the Contractor's equipment and personnel are in place as close as practical to the work area and ready to proceed into the work area and begin operatons. Prior to the end of each work shift, the Contractor shall arrange to have Airport Operations inspect the site to confirm that the site is being left in a satisfactory condition. The Contractor shall allow sufficient time to make any corrections and or cleanup items found to be deficient before

### **FXE SOUTH PERIMETER LOOP ROAD**

### **CITY PROJECT NO. 12260**

opening at the required times listed. Any runway or taxiway safety area that does not pass the operations inspection shall remain closed until corrective measures are complete and approved by Airport Operations.

### 8. OPERATING CONDITIONS AND SAFETY

All Contractor operations and activities shall comply with the requirements contained or identified in the Plans and these Specifications. Night work shall require use of sufficient portable light towers to provide safe and efficient operation conditions.

### 9. PHASING AND SCHEDULE NOTES

All Contractor phasing and scheduling of construction operations and activities shall comply with the requirements contained or identified in the Plans and these Specifications. The phasing schedule represents the general sequence of the Work. Although the intent is for each phase to be completed in the order indicated, the Contractor may be directed by the Engineer to change the order of phases, at no additional cost to the Owner.

### 10. CONTRACTOR'S CORRECTIVE ACTION PLAN

Should contractor repeatedly fail to open a runway/taxiway on time, City may instruct Contractor to stop work until such time as Contractor presents a plan acceptable to the City to modify operations to ensure opening of runway/taxiway at the scheduled time. For the purposes herein, repeatedly shall be defined as 3 or more times. Should said work stoppage be found to be necessary, it is understood that it is due solely to the Contractor's failure to perform in accordance with the contract requirements and the Contractor shall not be entitled to any additional time for construction, nor shall he be entitled to any additional compensation for any cause alleged to be due to the work stoppage.

# GEOTECHNICAL REPORT



REPORT OF GEOTECHNICAL ENGINEERING SERVICES SOUTH PERIMETER LOOP ROAD

FXE AIRPORT, FORT LAUDERDALE, FLORIDA
BROWARD COUNTY
PSI PROJECT NO. 0225-878

March 14, 2017



March 14, 2017

City of Fort Lauderdale | Public Works 100 N. Andrews Avenue, Fort Lauderdale, FL 33301

Attention: Mr. Jose Custodio, P.E. | Project Manager II

Re:

Report of Geotechnical Engineering Services

**South Perimeter Loop Road** 

FXE Airport,

Fort Lauderdale, FL

PSI Project No.: 0225-878

Dear Mr. Custodio:

**Professional Service Industries, Inc. (PSI)** has completed a geotechnical engineering study in connection with the noted project. Our services were provided in general accordance with our proposal No. 0225-197900, dated December 21, 2016. Authorization to perform our services was provided by means of a signed purchase order dated, February 27, 2017.

We trust this report is adequate for your current needs; however, should you have any questions or should additional information be required, please do not hesitate to contact our office at (954) 267-0944.

Respectfully Submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Certificate of Authorization No. 3684

Ernesto Bamos

Branch Manager

cc:

Addressee (PDF) File (1 and PDF) Juan Villegas, P.E. Sehlor Vice President

South Perimeter Loop Road FXE Airport, Fort Lauderdale, FL PSI Project No.: 0225-878

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### **TABLE OF CONTENTS**

1.0 PROJECT INFORMATION	 1
2.0 FIELD EXPLORATION AND SUBSURFACE CONDITION	
2.1 STANDARD PENETRATION TEST (SPT) BORINGS	1
3.0 SITE PREPARATION	
4.0 PAVEMENT SECTION	 4
5.0 REPORT LIMITATIONS	5

### **APPENDIX**

<b>Figure</b>	1:	
	10/05/19	

Site Vicinity Map

Figure 2:

**Boring Location Plan** 

**Boring Logs** 

Table 1:

Summary of Percolation Test Results

Schematic of Usual Open-Hole Percolation Test

Table 2:

Asphalt Core Thickness

**LBR** Result

21MAR 17 9:42AM



### South Perimeter Loop Road FXE Airport, Fort Lauderdale, FL

PSI Project No.: 0225-878

### 1.0 PROJECT INFORMATION

The area of study is located at FXE Airport in Fort Lauderdale, Florida. A site vicinity map identifying the project location is presented on Figure 1 of the Appendix.

As we understand, the project will include the construction of a new flexible pavement road at the South side of the airport to minimize the runway crossings, and to enhance the safety of Airport operations.

At the time of our study, the site was covered with a cover of either exposed soils or asphalt pavement. Our truck mounted drilling equipment did not experience any difficulty in moving around the site.

If any of the noted information is incorrect or has changed, please notify PSI so that we may amend the recommendations presented in this report, if appropriate.

### 2.0 FIELD EXPLORATION AND SUBSURFACE CONDITIONS

### 2.1 STANDARD PENETRATION TEST (SPT) BORINGS

To evaluate the subsurface conditions at the site, we drilled and sampled three SPT borings B-1. B-2 & B-3; that were advanced to a depth of 10 feet below grade. The SPT borings were performed using a D-90 truck mounted drill rig equipped with an automatic hammer. The approximate locations at which the borings where drilled are presented on Figure 2 of the Appendix.

After seating the sample spoon six inches, the number of successive blows required to drive the sampler twelve inches into the soil constitutes the test result commonly referred to as the "N" value. The "N" value has been empirically correlated with various soil properties and is considered to be indicative of the relative density of cohesionless soils and the consistency of cohesive materials. The recovered split spoon samples were visually classified in the field and transported to the laboratory for further review. Following completion of our field services, the boreholes were backfilled with excavated soil/rock, the asphaltic areas patched and the site generally cleaned, as required.

### 2.2 Percolation Tests

PSI performed two percolation test to a depth of about 10 feet below existing site grade at P-1 and P-2. The percolation test was performed in general accordance with the South Florida Water Management District (SFWMD) procedures for the "Usual Condition Constant Head" Percolation Test. SPT sampling was performed simultaneously as the boreholes were advanced using a 4-inch diameter casing. A 4-inch diameter perforated PVC pipe was placed in the borehole prior to retrieving the casing. Water was then pumped into the borehole in order to raise the water level as close to the ground surface as possible. Once the inflow equalized with the outflow rate, the average pumping rate and level of the water for this stabilized flow rate was recorded.

The hydraulic conductivity values determined from the tests are presented in Table 1 of the Appendix. The values are in units of cubic feet of flow per second, per square foot of seepage area, per foot of head (cfs/ft2-ft). The tabulated values are ultimate values. The designer should apply an appropriate factor of safety to the reported values.



Page 2

### 2.3 SUBSURFACE CONDITIONS

PSI Project No.: 0225-878

The soil types encountered in the various borings are presented on individual logs included in the **Appendix**. The stratification presented is based on visual observation of the recovered soil samples and the interpretation of the field logs by a geotechnical engineer. Included with the profiles are the N-values and groundwater levels measured at the time the borings were drilled.

The results of our borings performed for the study generally revealed exposed asphalt pavement. Below these surficial material the boring encountered granular materials consisting of light gray/brown fine sand and dark gray/brown sand to the maximum termination depth of the explorations at 10 feet below grade.

The Soil Survey of Broward County Florida identifies Margate fine sand as the primary mapping unit within the proposed project limits.

The groundwater table was measured within our borings at depths ranging from 6.0 to 6.7 feet below existing site grade at the time of drilling (February 2017). It should be noted that groundwater levels fluctuate seasonally in response to rainfall and the infiltration rate of the soil. At a time of the year different from the time of drilling, there is a possibility of a change in the recorded levels. We estimate that during the peak of the wet hydroperiod, with rainfall and recharge at a maximum, seasonal high groundwater levels will be at or near the measured groundwater levels reported herein.

We recommend that the contractor determine the actual groundwater level at the time of construction to assess groundwater impact on the construction procedure.

Please refer to the individual boring logs presented in the **Appendix** for details on the subsurface conditions at specific exploration locations.

### **3.0 SITE PREPARATION**

Based on the results of our field exploration, we anticipate site preparation procedures to include the steps listed below. All work should be carried out in accordance with current regulatory criteria with the site preparation work and construction activities being carried out with care so as not to impact the adjacent existing construction that is to remain. The earthwork observation and testing required herein should be performed under the supervision of PSI personnel.

- 1. If not already done, provisions should be made to relocate any interfering utility lines within the construction area. Excavations resulting from the removal of unwanted pipes should be infilled with suitable granular soils that are thoroughly compacted.
- 2. Site preparation for the proposed development should include clearing the vegetation and stripping and removal of the topsoil/asphalt pavement to expose clean granular soils. All unwanted ground cover should be completely removed from the site and properly disposed of. This work should be carried out in accordance with current regulatory criteria.
- 3. The cleared exposed subgrade should be densified using a self-propelled vibratory roller which imparts a dynamic force of not less than 10 tons. Densification of the soils should be performed within the proposed development areas plus a 5-foot wide perimeter extending beyond the outside edge of the same, where practical. Densification operations should continue until the subgrade soils are firm and unyielding. Any area of the exposed



PSI Project No.: 0225-878

surface that deflects excessively under the weight of the compaction equipment should be excavated approximately 24 inches and be replaced with compacted structural fill. Soils in this interval should be compacted to at least 95 percent of the Modified Proctor maximum dry density determined per ASTM D-1557.

- 4. Structural fill material may be composed of either clean sands or limerock. The fill should consist of an inorganic, non-plastic material, free of any man-made debris and limerock with a three inch maximum particle size. Proper control of the placement and compaction of new fills for the project should be exercised by a representative of the geotechnical engineer. The fill materials should be placed in lifts not exceeding 12 inches in loose thickness. Each lift should be compacted to at least 95 percent of the Modified Proctor maximum dry density near the optimum moisture content as determined by ASTM D-1557. Fill to be compacted with a vibratory plate tamper or a small walk behind vibratory roller should be placed in lifts not exceeding six inches in loose thickness.
  - A) The structural fill to be placed and compacted above the water table should have a Unified Soil Classification System designation of GP, GW, SP, SW, GP-GM, GW-GM, SW-SM, or SP-SM containing less than 12 percent material passing the No. 200 sieve.
  - B) The use of a commercially available fill material by the name "Cyclone sand" should not be permitted for the project. Cyclone sand contains large amounts of fines and is therefore very sensitive to moisture. The moisture sensitivity of the material makes it difficult to compact and achieve the desired densities.
- 5. Groundwater control may be required at this site, if required for either excavation dewatering or removal of temporarily perched water from a rain event. Such water can be controlled by pumping from sumps located in ditches or pits. Groundwater should be maintained at least one foot below the bottom of any excavation made during construction operations, or, at least two feet below the surface of any compaction operations.
- 6. It is mandated by federal regulations that all excavations, whether they be utility trenches, basement excavations or footing excavations, be constructed in accordance with OSHA guidelines. It is our understanding that these regulations are being strictly enforced and if they are not closely followed, the owner and the contractor could be liable for substantial penalties.



FXE Airport, Fort Lauderdale, FL PSI Project No.: 0225-878

Page 4

### **4.0 PAVEMENT SECTION SUGGESTIONS**

Flexible pavement sections in this geographic area typically consist of an asphaltic concrete wearing course, a limerock base course and a stabilized subgrade (sub-base). Based on the expected traffic loading and our experience in the area, the typical pavement section thicknesses noted in **Table A** shown on the following page are considered suitable for this project.

**Table A: Typical Pavement Section Suggestions** 

Type of Layer		Material Description	Layer Thickness (inches)	
Pavement			<b>Light Duty</b>	<b>Medium Duty</b>
(A) (B) Flexible (SB)	(A)	Florida DOT Asphalt Type S	1.5	2.5
	(B)	Crushed limerock with a minimum LBR of 100, compacted to 98% of the Modified Proctor maximum dry density	6.0	8.0
	(SB)	Stabilized sub-grade (sub-base) fill with a minimum LBR of 40 compacted to 95% of the Modified Proctor maximum dry density	12.0	12.0
	(C)	Florida DOT Portland Cement Concrete	5.0	6.0
Rigid	(SB)	Granular subgrade compacted to 95% or more of the Modified Proctor maximum dry density	12.0	12.0
(A) = As	sphaltic C	oncrete, (B) = Base Course, (SB) = Stabilize (C) = Concrete	ed Sub-grade (	Sub-base)

The base course materials in the pavements should consist of crushed limerock having a minimum Limerock Bearing Ratio (LBR) of 100. Base materials should meet the requirements presented in the latest revisions of the Florida Department of Transportation "Specifications for Road and Bridge Construction", Section 911 (limestone). The base course should be compacted to at least 98 percent of the material's maximum dry density (ASTM D-1557). The subgrade should be stabilized to a depth of 12 inches to achieve a minimum LBR of 40. This can be obtained by blending base material (limerock) with the existing subgrade soils. The required mixing ratio should be determined by laboratory testing. The stabilized subgrade should be compacted to at least 95 percent of the maximum dry density (ASTM D-1557).

Where dumpsters are to be parked on the pavement, so that considerable load is transferred from relatively small steel supports, it is recommended that rigid concrete pavement be constructed. In addition, in areas utilized for loading and unloading heavy duty-trucks considerations should also be given to using a rigid pavement. A minimum portland concrete pavement thickness of 5 inches should be placed in parking areas (light duty) and 6 inches in loading areas (medium duty), if rigid pavements are to be employed. The subgrade soils below concrete pavements should be compacted to a minimum density of 95% of the modified Proctor maximum dry density (ASTM D-1557). The LBR requirement for the subgrade soils is only required for the "flexible" pavement section.

The concrete should be reinforced as necessary to withstand the traffic loadings anticipated and jointed to reduce the potential for crack development. The minimum rigid pavement thickness recommended herein is based upon concrete with an unconfined compressive strength of 4,000



Page 5

**South Perimeter Loop Road** FXE Airport, Fort Lauderdale, FL PSI Project No.: 0225-878

pounds per square inch (psi) and a modulus of rupture of 450 psi. Fill that may be required to raise grades in pavement areas should be compacted to at least 95 percent of the material's maximum dry density (ASTM D-1557).

Finally, we recommend that a minimum separation of at least two feet be maintained between the bottom of the base and the estimated seasonal high groundwater table levels.

Actual pavement section thicknesses and the reinforcement details for the rigid pavement section should be provided by the Design Civil Engineer based on traffic loads, volume, and the owner's design life requirements. The noted sections represent minimum thicknesses for typical local construction practices and, as such, periodic maintenance should be anticipated. All pavement materials and construction procedures should conform to FDOT, American Concrete Institute (ACI), or appropriate city/county requirements

### **5.0 REPORT LIMITATIONS**

Our professional services have been performed, findings obtained, and recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices at the time of this report. This company is not responsible for the conclusions, opinions or recommendations made by others based on this data. No other warranties are implied or expressed. After the plans and specifications are complete, it is recommended that PSI be provided the opportunity to review the final design and specifications, in order to verify that the earthwork and foundation recommendations are properly interpreted and implemented. At that time, it may be necessary to submit supplemental recommendations.

The scope of investigation was intended to evaluate soil conditions within the influence of the proposed foundations. The analyses and recommendations submitted in this report are based upon the data obtained from the soil borings performed at the locations indicated. If any subsoil variations become evident during the course of this project, a re-evaluation of the recommendations contained in this report will be necessary after we have had an opportunity to observe the characteristics of the conditions encountered. The applicability of the report should also be reviewed in the event significant changes occur in the design, nature or location of the proposed structures.

The scope of our services did not include an environmental assessment for the presence or absence of hazardous or toxic materials in the soil and groundwater. Any statements in this report regarding odors, staining of soils, or other unusual conditions observed are strictly for the information of our client.

This report has been prepared for the exclusive use of the City of Fort Lauderdale and their design consultants for the construction of the aforementioned proposed development at the FEX Airport in Fort Lauderdale, Florida.



City of Fort Lauderdale Bid 12029-683 **APPENDIX** CAM #18-0276 Exhibit 3 p. 106 3/7/2018 6:58 AM Page 106 of 246

### City of Fort Lauderdale

### **SITE VICINITY MAP**



**GEOTECHNICAL ENGINEERING SERVICES** South Perimeter Loop Road - Fort Lauderdale **FXE Airport, Florida** 

DRAWN:

PSI PROJECT No.: 0225-878

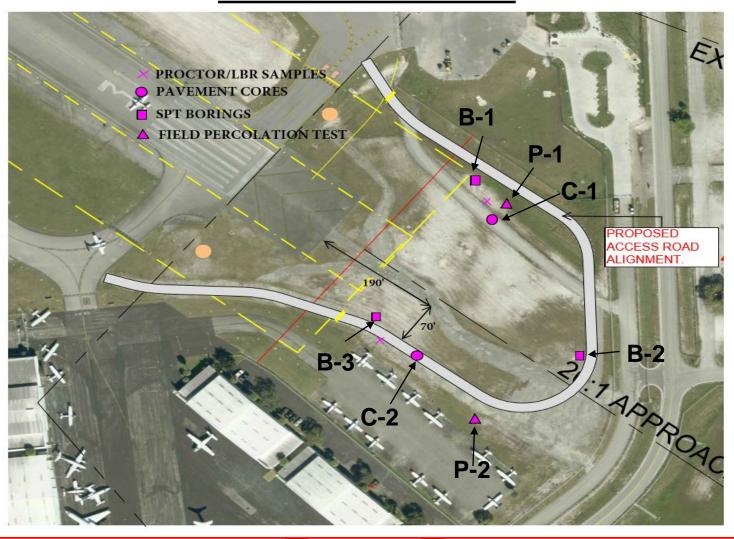
WCF CHKD::

DATE: 03/14/2017

ER



### **BORING LOCATION PLAN**



**GEOTECHNICAL ENGINEERING SERVICES** South Perimeter Loop Road - Fort Lauderdale **FXE Airport, Florida** 

DATE: 03/14/2017

DRAWN: ER

CHKD:: WCF

SHEET No.: PSI PROJECT No.: 0225-878



Professional Service Industries, Inc. 6500 N.W. 12th Avenue, Suite 116 Fort Lauderdale, FL 33309 Telephone: (954) 267-0965 Fax: (954) 267-0944

# **LOG OF BORING B-1**

Sheet 1 of 1

PSI Job No.: 0225-878 Project:

Location:

South Perimeter Loop Road

**FXE Airport** Fort Lauderdale, Florida

Drilling Method: SPT Sampling Method: SS Hammer Type: Automatic Boring Location: Refer to Sheet 3

WATER LEVELS While Drilling 6.7 feet ▼ Upon Completion 6.7 feet

		Fo	ort L	aude	rdale,	, Florida	Boring Location	: Refe	er to Sheet 3			▼ Del		N/A	P. Hec
Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A MATERIAL DES	CRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	N in  × Moistu	ST DATA blows/ft   re  25  NGTH, tsf  **	PL LL 50	Additional Remarks	
	- 0	.Oc		1		ASPHALT (5 Inches)  Light Brown/Gray LIMEROCK (4 Inches)  Light Brown/Gray FINE SANI		GP	32-22-7-7 N=29			© (S)	4.0		
				2				SP	6-5-5-5 N=10					,	
	- 5 -			3					4-4-3-4 N=7		•				
				4		Z Dark Brown/Gray FINE SAND			3-4-3-4 N=7		<b>O</b>			21MAR 17	Q.
	 - 10 -			5				SP	4-5-5-9 N=10	_	0				
Complete Date Book Date Book Logged Drilling	oring S oring C By:	Started: Comple			10.0 f 2/27/1 2/27/1 S.C. Serco	17 Auger	Cutting Poon	Shelby Tand Au Calif. Sa Texas C	uger D ampler R	atitud ongitu rill Ri emar	ude: g: D-90				

Sheet 1 of 1

0225-878

South Perimeter Loop Road

PSI Job No.:

Project:

Professional Service Industries, Inc. 6500 N.W. 12th Avenue, Suite 116 Fort Lauderdale, FL 33309 Telephone: (954) 267-0965 Fax: (954) 267-0944

**LOG OF BORING B-2** 

Drilling Method: SPT WATER LEVELS Sampling Method: SS While Drilling

Location: FXE Airport Fort Lauderdale, Florida			Sampling Method: SS Hammer Type: Automatic Boring Location: Refer to Sheet 3					\[             \Psi\$ While Drilling        6.5 feet            \[             \Psi\$ Upon Completion        6.5 feet            \[             \Psi\$ Delay        N/A					
Elevation (feet) Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A MATERIAL DESC	CRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	TEST N in blo  Moisture  STRENG	PENETRATION DATA ows/ft  PL LL ST H, tsf # Qp	Additional Remarks	
			1		ASPHALT (4 Inches)  Light Brown/Gray LIMEROCK (4 Inches)  Light Brown/Gray FINE SAND		GP	8-7-7-7 N=14		0	.0 4.0		
			2				SP	5-5-5-6 N=10		0			
- 5 -			3		Dark Brown/Gray FINE SAND			4-4-4-5 N=8					
	\ \ -		4	*			SP	4-5-7-9 N=12					
 - 10 -			5					7-8-7-8 N=15	-	0		21M88 17	914
ompletion Date Boring Sate Boring Caged By:	tarted: complete		2 2 5 5	0.0 ft 2/27/1 2/27/1 3.C. Serco	7 III Augor Cu	utting	helby 1 and Au alif. Sa exas C	iger Dr mpler Re	ntitude engitu rill Rig emarl	ıde: g: D-90			

Fax: (954) 267-0944

Professional Service Industries, Inc. 6500 N.W. 12th Avenue, Suite 116 Fort Lauderdale, FL 33309 Telephone: (954) 267-0965

# **LOG OF BORING B-3**

Sheet 1 of 1

PSI Job No.: Project: Location:

0225-878 South Perimeter Loop Road

**FXE Airport** 

Fort Lauderdale, Florida

Drilling Method: SPT Sampling Method: SS

Hammer Type: Automatic

WATER LEVELS While Drilling 6.0 feet

▼ Upon Completion 6.0 feet

		Fo	rt L	aude	erdale,	Florida	Boring Location:	Refe	er to Sheet 3			▼ Upon Co ▼ Delay	mpletion 6.0 feet N/A	
Elevation (feet)	Depth, (feet)	Graphic Log	Sample Type	Sample No.	Recovery (inches)	Station: N/A Offset: N/A  MATERIAL DES	CRIPTION	USCS Classification	SPT Blows per 6-inch (SS)	Moisture, %	N in bl  X Moisture  STREN  Qu	GTH, tsf  # Qp	Additional Remarks	
	- 0 -			1		ASPHALT (4 Inches)  Light Brown/Gray LIMEROCk (4 Inches)  Light Brown/Gray FINE SAND		GP	19-9-5-5 N=14		<u>o</u>	2.0 4	.0	
				2				SP	4-4-4-5 N=8		<b> </b> 			
	- 5 -			3	-	/ Dark Brown/Gray FINE SAND			4-4-3-4 N=7					
	-			4				SP	3-3-4-6 N=7				21MAR 17	and
_	10			5					6-7-7-7 N=14	-	0			
	ing Sing C	epth: tarted: complet	ed:	2	10.0 ft 2/27/1 2/27/1 S.C.	7 M Augor (	Cutting 🖰 Ha	helby Tand Au	iger Di	atitud ongitu rill Rig	ide: g: D-90			

Texas Cone

Rock Core

Serco Drilling Inc.

**Drilling Contractor:** 

City of Fort Lauderdale Bid 12029-683



# TABLE 1: SUMMARY OF PERCOLATION TEST RESULTS SOUTH PERIMETER LOOP ROAD - BROWARD COUNTY, FL FXE AIRPORT FORT LAUDERDALE, FLORIDA

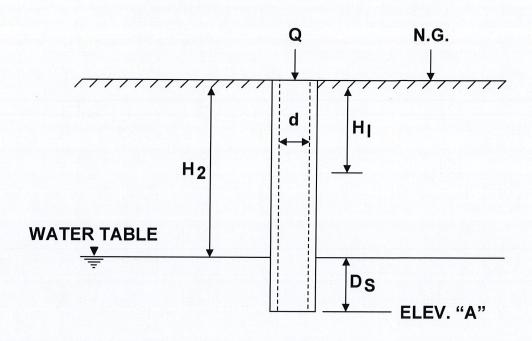
PSI PROJECT No.: 0225-878

Test	Date	Diam	eter	Depth of	Depth to Groundwater Level		Hydraulic	Saturated Hole	Average	K, Hydraulic
No.	Performed	Casing	Perforated PVC	Hole	Below Ground	Below Ground Surface (Feet)		Depth, Ds	Flow Rate, Q	Conductivity
		(Inches)	(Inches)	(Feet)	Prior to Test	<b>During Test</b>	(Feet)	(Feet)	(gpm)	cfs/ft <sup>2</sup> -ft
P-1	2/27/2017	4	4	10.0	6.7	0.0	6.7	3.3	10.4	4.9E-04
P-2	2/27/2017	4	4	10.0	6.6	0.0	6.6	3.4	6.0	2.8E-04

#### Note:

- (1) The above hydraulic conductivity values are for a french drain installed to the same depth as the borehole tests. The values represent an ultimate value. The designer should apply the appropriate factor of safety.
- (2) The hydraulic conductivity values were calculated based on the South Florida Water Management District's USUAL OPEN HOLE CONSTANT HEAD percolation test procedure as shown on the following page.
- (3) A diameter of six inches was used in the computation of the Hydraulic Conductivity value presented in the above table.

# **USUAL OPEN – HOLE TEST**



21MMR 17 9:43AM

$$K = \frac{4Q}{\pi d (2H_2^2 + 4H_2D_S + H_2d)}$$

K= HYDRAULIC CONDUCTIVITY (CFS/FT.2 - FT.HEAD)

Q= "STABILIZED" FLOW RATE (CFS)

d= DIAMETER OF TEST HOLE (FEET)

H<sub>2</sub> = DEPTH TO WATER TABLE (FEET)

DS = SATURATED HOLE DEPTH (FEET)

**ELEV. "A"= PROPOSED TRENCH BOTTOM ELEV.** 

H<sub>I</sub> = AVERAGE HEAD ON UNSATURATED HOLE SURFACE (FT.HEAD)





# TABLE 2: SUMMARY OF ASPHALT CORE THICKNESS RESULTS SOUTH PERIMETER LOOP ROAD - BROWARD COUNTY, FL

# FXE AIRPORT FORT LAUDERDALE, FLORIDA PSI PROJECT No.: 0225-878

Test	Date	Core Diameter	Core Thickness
No.	Performed	(Inches)	(inches)
C-1	2/27/2017	3.55	5.00
C-2	2/27/2017	3.50	1.19

21 MAR 17 9:43A

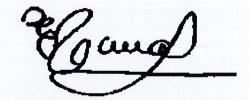


Professional Service Industries, Inc. 6500 N.W. 12th Avenue, Suite 116 Fort Lauderdale, FL 33309 Eng Certificate Of Authorization 3684 Phone: (954) 267-0965 Fax: (954) 267-0944

# Report No: MAT:0225878-2-S1

ssue No. 1

These test results apply only to the specific locations and materials noted and may not represent any other locations or elevations. This report may not be reproduced, except in full, without written permission by Professional Service Industries, Inc. If a non-compliance appears on this report, to the extent that the reported non-compliance impacts the project, the resolution is outside the PSI scope of engagement.



Approved Signatory: Ernesto Ramos (Branch Manager)
Date of Issue: 3/13/2017

# **Material Test Report**

Client: CITY OF FORT LAUDERDALE CC: 100 NORTH ANDREWS AVENUE, 4TH FLOOR - ENGINEERING

4TH FLOOR - ENGINEERING FORT LAUDERDALE, FL 33301

Project: 12260- SOUTH PERIMETER LOOP RO

FORT LAUDERDALE, FL

# Sample Details

Sample ID: 0225878-2-S1 Lift:

Client Sample ID: Date Sampled:

878-2-S1 02/27/17

Sampled By: Specification:

Lucet Jonassaint Embankment, Fill.

Supplier:

On Site

Source: Material: Existing Material WHITE SAND (FILL)

Sampling Method: Roadway base/sub - AASHTO T 2 - 5.3.4

Soil Description: White Fine Sand
General Location: Proposed Access Road
Location: Sampled from Top of Surface

# **Other Test Results**

Description	Method	Result	Limits
	AASHTO M 145		
General Classification	Granular	Materials	
Group Classification		A-3(0)	
Tested By	Jose	e Labrada	
Date Tested		3/13/2017	
Method	AASHTO T 180	D	
Maximum Dry Density (lb/ft³)		102.3	
Adjusted Maximum Dry Density (lb/ft³)		102.3	
Optimum Water Content (%)		11.6	
Adjusted Optimum Water Content (%)		11.6	
Visual Description	White F	ine Sand	
Tested By Others		False	
Oversize Material (%)		0	
Date Tested		3/13/2017	
Liquid Limit (%)	AASHTO T 89-1	3 N/A	
Plastic Limit (%)	AASHTO T 90-0	0 NP	
Plasticity Index	AASHTO T 90-0	0 NP	
Tested By	Jose	Labrada	
Date Tested	3	3/13/2017	
Group Symbol	ASTM D 2487	SP	
Group Name	Poorly gra	ded sand	
Tested By	Jose	Labrada	
Date Tested	3	3/13/2017	
Organic Content 1	FM 1-T267	0.50	
Organic Content 2		0.30	
Organic Content 3		0.20	
Average Organic Content		0.3	
Date Tested	3	3/13/2017	

# **Particle Size Distribution**

Method: AASHTO T 27, AASHTO T 11

Drying by: Oven
Date Tested: 3/13/2017
Tested By: Jose Labrada

Sieve Size	% Passing
3½in (90.0mm)	100
2in (50.0mm)	100
3/4in (19.0mm)	100
3/8in (9.5mm)	100
No.4 (4.75mm)	100
No.10 (2.0mm)	100
No.20 (850µm)	100
No.40 (425µm)	96
No.60 (250µm)	56
No.100 (150µm)	7
No.200 (75µm)	0.7
Finer No.200 (75µm	0.7

21 MAR

7 9:43AM

Limits

# Chart



#### Comments

NP = Non Plastic



Professional Service Industries, Inc. 6500 N.W. 12th Avenue, Suite 116 Fort Lauderdale, FL 33309 Eng Certificate Of Authorization 3684 Phone: (954) 267-0965 Fax: (954) 267-0944

# **Limerock Bearing Ratio Test Report**

CITY OF FORT LAUDERDALE

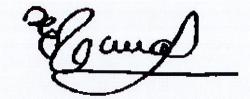
100 NORTH ANDREWS AVENUE, 4TH FLOOR - ENGINEERING FORT LAUDERDALE, FL 33301

12260- SOUTH PERIMETER LOOP RO

FORT LAUDERDALE, FL

# Report No: LBR:0225878-2-S1

These test results apply only to the specific locations and materials noted and may not represent any other locations or elevations. This report may not be reproduced except in full, without written permission by Professional Service Industries, Inc. If a non-compliance appears on this report, to the extent that the reported non-compliance impacts the project, the resolution is outside the PSI scope of engagement.



Approved Signatory: Ernesto Ramos (Branch Manager)
Date of Issue: 3/13/2017

Sample Details

Sample ID: 0225878-2-S1

Client Sample ID: 878-2-S1

Source:

**Existing Material** 

Specification:

Embankment, Fill.

**Tested By:** 

Jose Labrada

**Date Sampled:** 2/27/2017

Sampling Method: Roadway base/sub - AASHTO T 2 - 5.3.4

Material:

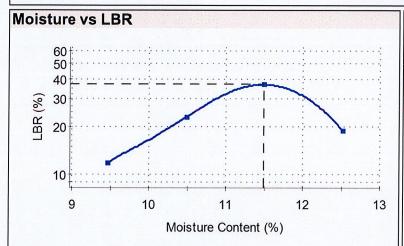
WHITE SAND (FILL)

Location:

Sampled from Top of Surface

**Date Tested:** 

3/13/2017



# **Test Results**

FM 5-515

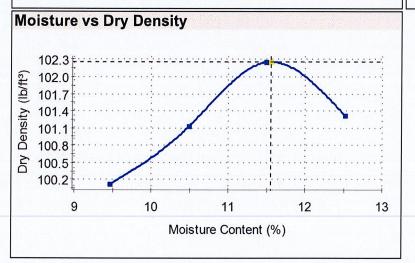
Required LBR (%): Percent Retained (2 Inch): 0

Maximum LBR (%):

MDD (lb/ft3):

102.3

OMC (%): 11.6



Comments

Form No: 110226, Report No: LBR:0225878-2-S1

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CAM #18-0276 Exhibit 3

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# **TECHNICAL SPECIFICATIONS**

# SECTION 011000 SUMMARY

# **PART 1 - GENERAL**

# 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.
  - 1. The written specifications package entitled Fort Lauderdale Executive Airport South Perimeter Loop Road, City Project P12260.

# 1.2 INTENT OF DRAWINGS AND SPECIFICATIONS

- A. Intent of the drawings and specifications is to cover an installation complete in every respect. It is not necessarily intended to provide every detail on drawings or in the specifications. The City will not be responsible for absence of any detail, which the Contractor may require, nor for any special construction that may be found necessary as work progresses. If an item is either indicated or specified, it shall be considered sufficient for inclusion of said item in the contract. Contractor shall furnish and install materials and equipment normally furnished with such systems and as needed to complete a fully operational installation, whether mentioned or not, which are customary to the trade.
- B. Incidental accessories not usually shown or specified, but which are necessary for the proper installation and operation shall be included in the work without additional cost to the City, as if herein depicted or specified.
- C. Any material or work not shown on drawings, but mentioned in specifications, or vice versa, shall be furnished, delivered and installed by the Contractor without additional cost to the City.
- D. Drawings are diagrammatic and indicate the general arrangement of systems and work indicated (do not scale drawings).

# 1.3 SUMMARY

- A. This Section includes the following:
  - 1. Project Information
  - Work covered by the Contract Documents
  - 3. Construction Hours
  - 4. Use of Premises
  - 5. Work restrictions
  - Mobilization

# 1.4 PROJECT INFORMATION

- A. Project Identification: Project 12260 Executive Airport South Perimeter Loop Road
  - 1. Project Location: 6000 NW 21st Avenue, Fort Lauderdale, FL 33309

- B. Owner: City of Fort Lauderdale
  - 1. City's Representative: Fernando Blanco, Airport Engineer / Project Manager II
  - 2. City's Representative: Jose Custodio, Project Manager II

## 1.5 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work is defined by the Contract Documents and consists of the following:
  - 1. The work includes, but is not limited to the following: clearing and grubbing, unclassified excavation, removal of existing milled asphalt road, limerock, paving, sodding and watering, lighting and electrical work, and striping.
  - 2. Project will be constructed under a single prime contract.
    - a. Division of work: The division of work among its separate Subcontractors is the responsibility of the General Contractor, and the City assumes no responsibility to act as arbitrator to establish subcontract limits between any sections of the work.

# 1.6 CONSTRUCTION HOURS

- A. The Work shall be conducted during night hours as indicated in the construction plans.
- B. Before commencing Work, submit a schedule showing the sequence, commencement and completion dates for the Work.

# 1.7 USE OF PREMISES

- A. General: Contractor shall have full use of project site for construction operations during construction period.
- B. Use of Site: Limit use of project site to areas within the contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
  - 1. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to City, City's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
    - a. Schedule deliveries to minimize use of driveways and entrances.
    - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

## 1.8 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations as listed here and in the construction plans.
  - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.

- B. On-Site Work Hours: Work shall be generally performed as indicated in the construction plans.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by City or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
  - 1. Notify City not less than two working days in advance of proposed utility interruptions.
  - 2. Do not proceed with utility interruptions without City's written permission.
- D. Employee Identification: Owner will provide identification tags for Contractor personnel working on the Project site. Require personnel to utilize identification tags at all times.

# 1.9 MOBILIZATION

A. The work specified in this Section shall consist of the preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site; and for the establishment of temporary offices, testing services, safety equipment and first aid supplies, sanitary and other facilities, survey services, site clean-up, restoration of disturbed sodded areas and photographs as required by these Specifications and Special Provisions, and any Federal, State and/or local laws and regulations. The costs of any other pre-construction expense necessary for the start of the work, excluding the cost of construction materials, shall also be included in this Section.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION 011000** 

3/7/2018 6:58 AM

# SECTION 012600 CONTRACT MODIFICATION PROCEDURES

#### **PART 1 - GENERAL**

## 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

# 1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Sections include the following:
  - 1. Division 01 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.

#### 1.3 MINOR CHANGES IN THE WORK

A. Engineer will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on form included following the end of Part 3.

## 1.4 REQUESTS FOR INFORMATION

A. If latent or unforeseen conditions arise that may require changes in the Work, the Contractor may submit a Request for Information to the Project Manager on the form included following the end of Part 3.

## 1.5 PROPOSAL REQUESTS

- A. City-Initiated Proposal Requests: Engineer will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
  - 1. Proposal Requests issued by Engineer are not instructions either to stop work in progress or to execute the proposed change.
  - 2. Within time specified in Proposal Request after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include costs of labor and supervision directly attributable to the change.

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- d. Include an updated Contractor's Construction Schedule that indicates the effect of the change.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Engineer.
  - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
  - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
  - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - 4. Include costs of labor and supervision directly attributable to the change.
  - 5. Include an updated Contractor's Construction Schedule that indicates the effect of the change.
  - 6. Comply with requirements in General Conditions Section GC-03 "Substitution" if the proposed change requires substitution of one product or system for product or system specified.

# 1.6 ADMINISTRATIVE CHANGE ORDERS

A. Unit Price Adjustment: Refer to Construction Agreement, Article 14, for administrative procedures for preparation of Change Order Proposal for adjusting the Contract Sum to reflect measured scope of unit price work.

## 1.7 CHANGE ORDER PROCEDURES

A. On City's approval of a Proposal Request, Engineer will issue a Change Order for signature of the Contractor on City's standard form. The Change Order will not be official until approved by the appropriate City Officials and signed by the City Engineer, City Manager.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION 012600** 

CITY PROJECT NO: #P

# SUPPLEMENTAL INSTRUCTIONS FOR MINOR CHANGES

CITY OF FORT LAUDERDALE

REQUEST NO:

PROJECT: OWNER: <b>C</b> i TO:	ity (	of Fort Lauderdale	DATE: CONTRACTOR: CONTRACT DATED:
issued in acc Contract Timacceptance	cord ne. of t	be carried out in accordance with the dance with the Contract Documents we Prior to proceeding in accordance with the descriptions for minor changes the the City.	without change in Contract Sum or th these instructions, indicate your
DESCRIPTION	ON:		
ATTACHME	NTS	S:	
ENGINEER:			
FAXED TO:	(	) Contractor ) Site Office ) Eng. Insp. (954) 828-5074	
CC: Project   Main File		pector	

# PROPOSAL REQUEST

# CITY OF FORT LAUDERDALE

CITY PROJECT NO: #P	REQUEST NO:
PROJECT: OWNER: City of Fort Lauderdale TO: Please submit an itemized quotation for changincidental to the proposed modifications to the	
THIS IS NOT A CHANGE ORDER NOR A DI WORK DESCRIBED HEREIN.	RECTION TO PROCEED WITH THE
DESCRIPTION:	
ATTACHMENTS:	
ENGINEER:	
FAXED TO: ( ) Contractor ( ) Site Office ( ) Eng. Insp. (954) 828-5074	
CC: Project Inspector Main File	

**CONTRACT MODIFICATION PROCEDURES** 

# REQUEST FOR SUBSTITUTION CITY OF FORT LAUDERDALE

CITY PROJECT NO: #P	REQUEST NO:
PROJECT: OWNER: City of Fort Lauderdale TO:	DATE: CONTRACTOR: CONTRACT DATED:
NAME AND ADDRESS OF CONTRACTOR:	_
hereby requests acceptance of the following ption".  NAME AND DESCRIPTION OF SPECIFIED	
MANUFACTURER:	
SPECIFICATION SECTION PARAGRAPH(S) DRAWING DETAIL	NUMBER
NAME AND DESCRIPTION OF PROPOSED	<u> </u>
MANUFACTURER:	
TELEDI IONE.	N:
DOES SUBSTITUTION AFFECT OTHER MAYES NO IF YES, ATTACHED OF SUBSTITUTION REQUIRE REVISION BUILDING OR ELECTRICAL OR MECHANIC YES NO IF YES, ATTACHED OF SUBSTITUTION REQUIRE REVISION BUILDING OR ELECTRICAL OR MECHANIC YES NO IF YES, ATTACHED OF SUBSTITUTION REPORTS OF THE PROPERTY OF	COMPLETE DATA. NOR REDESIGN OF ANY COMPONENT OF CAL WORK?
THE ATTACHED DATA IS FURNISHED FOR ( )CATALOG ( ) DRAWINGS ( ) SAMPLES ( )	

# REQUEST FOR SUBSTITUTION

SAVING TO CITY FOR ACCEPTING SUBSTITUTE:	
COST OF SPECIFIED ITEM:	DOLLARS
(\$) COST OF SUBSTITUTION ITEM:	DOLLARS
(\$)	DOLLANG
TOTAL SAVINGS (CREDIT) TO CITY FOR ACCEPTIN	
(\$)	
THE UNDERSIGNED HEREBY CERTIFIES THAT THIS HAS BEEN FULLY CHECKED AND COORDINATED W DOCUMENTS, THAT THE PROPOSED SUBSTITUTION REQUIREMENTS OF THE CONTRACT DOCUMENTS INFORMATION IS TRUE AND ACCURATE.	VITH THE CONTRACT ON MEETS OR EXCEEDS THE
FIRM NAME:	
BY:	
DATE SIGNED:	
PRINT NAME LEGIBLY:	
FAXED TO: CC	

# **SECTION 012900 PAYMENT PROCEDURES**

## **PART 1 - GENERAL**

#### 1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Α. Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 **SUMMARY**

- This Section specifies administrative and procedural requirements necessary to prepare and Α. process Applications for Payment.
- Related Sections include the following: B.
  - 1. Division 01 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
  - Division 01 Section "Unit Prices" for administrative requirements governing use of unit 2. prices.
  - Division 01 Section "Construction Progress Documentation" for administrative 3. requirements governing preparation and submittal of Contractor's Construction Schedule and Submittals Schedule.
- C. BASIS OF PAYMENT - The price for each items shall include the furnishing of all labor, materials, equipment and incidentals required to complete the construction and to repair in a manner satisfactory to the Engineer any and all damage, as a result of work under this contract, done to existing structures, pavement, grass, utility pipe lines, conduits, drains, catch basins, and including all above and underground obstructions not specifically named here-in: replacing in a manner satisfactory to the Engineer and or all of the above items which may be damaged beyond repair as a result of work under this contract.
- D. Retainage: The City shall retain a portion of each partial payment according to the following schedule:
  - The City will retain ten percent (10%) of all monies earned by Contractor until the work has been accepted by the City as Finally Complete.

#### 1.3 APPLICATIONS FOR PAYMENT

- The General Contractor must meet with the City Representative on or about the 25th of each Α. month. The City Representative will go over the pay items and agree on the quantities and the dollar amounts of the work completed during the month. The parties will sign a copy of the agreed amounts and a copy will be left with each representative.
- B. The General Contractor will make up a partial pay request using the City-supplied forms and submit the request to the City Representative before the first of the upcoming month.
- Each pay request must be accompanied by a partial release of lien by the General C.

PAYMENT PROCEDURES

Contractor and by all Subcontractors, suppliers, and for all labor, as outlined below.

- 1. Starting with the second (2nd) pay request and for each and every pay request thereafter, the General Contractor shall submit partial release of liens from all Subcontractors, suppliers, and laborers covering the preceding month's request (SEE FOLLOWING EXAMPLE).
- 2. EXAMPLE: In the first (1st) pay request, payment is requested by General Contractor for the electrician. The General Contractor must attach his partial release of lien.
- 3. For the second (2nd) pay request, the General Contractor must attach his partial release of lien from the electrician for the amounts billed in the 1st pay request; i.e., the General Contractor will be running one (1) month behind with the releases from the Subcontractors, suppliers, etc., until the final pay request.
- D. For the final pay request, the General Contractor will be required to submit FINAL release of liens for ALL Subcontractors, suppliers, etc., and for ALL labor BEFORE FINAL PAYMENT WILL BE MADE.
- E. No partial payments, after the first payment, will be made until all partial release of liens are submitted for the preceding month's billing, as described
- F. Each Application for Payment shall be consistent with previous applications and payments as certified by and paid for by City.
- G. Payment Application Forms: Use City Form "PERIODIC ESTIMATE FOR PARTIAL PAYMENT" as form for Applications for Payment.
  - 1. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. City will return incomplete applications without action.
  - 2. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
  - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- H. Release of Lien: With each Application for Payment, submit release of lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
  - 1. Submit partial release of lien on each item for amount requested in previous application, after deduction for retainage, on each item.
  - 2. When an application shows completion of an item, submit final release of lien.
  - 3. City reserves the right to designate which entities involved in the Work must submit release of lien forms.
- I. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
  - List of subcontractors.
  - 2. Contractor's Construction Schedule (preliminary if not final).
  - Certificates of insurance and insurance policies.
  - 4. Performance and payment bonds.

- J. City may withhold, in whole or in part, payment to such extent as may be necessary to protect itself from loss on account of:
  - 1. Defective Work not remedied.
  - 2. Claims filed or reasonable evidence indicating probable filing of claims by other parties against Contractor or City because of Contractor's performance.
  - Failure of Contractor to make payments properly to Subcontractors or for material or labor.
  - 4. Damage to another contractor not remedied.
  - 5. Liquidated damages and costs incurred by City and/or Consultant for extended construction administration.
  - 6. Failure of Contractor to provide any and all documents required by the Contract Documents.
- K. No partial payment estimate will be processed for any contract which is beyond the contract completion date. After a contract runs past the completion date, only a final payment will be made when all work is complete.
- L. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
  - 1. Evidence of completion of Project closeout requirements.
  - 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
  - 3. Updated final statement, accounting for final changes to the Contract Sum.
  - 4. Evidence that claims have been settled.
  - 5. Final, liquidated damages settlement statement.
- M. The acceptance of final payment shall constitute a waiver of all claims by contractor, except those previously made in strict accordance with the provisions of the Contract and identified by Contractor as unsettled at the time of the application for final payment.
- N. If evidence is produced before the final settlement of all or any balance, that the party of the second part has failed to pay to laborers, employed on this work, or failed to pay for the materials used therein, or if the City has reason to suspect the same, the City may withhold such balance and, upon written evidence satisfactory to the City as to the amount due for such labor and materials, settle and pay for the same and charge the amounts to the party of the second part and deduct the same from said balance or balances.
- O. Payment for Insurance and Surety/Performance and Payment Bonds can be made upon submittal of the first contractor request for payment, less standard retainage.
- P. The work specified in this Section shall consist of the preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site; and for the establishment of temporary offices, testing services, safety equipment and first aid supplies, sanitary and other facilities, survey services, site clean-up, restoration of disturbed sodded areas and photographs as required by these Specifications and Special Provisions, and any Federal, State and/or local laws and regulations. The costs of any other pre-construction expense necessary for the start of the work, excluding the cost of construction materials, shall also be included in this Section.

PAYMENT PROCEDURES

012900-3

Measurement of mobilization for payment shall be the work under this Section completed and accepted in accordance with the Plans and these Specifications.

Percent of Original Contract Amount Earned	Allowable Percent of the Lump Sum Price For Mobilization
5	25
25	25
50	40
100	10

Partial payments for the item "Mobilization" shall be made in accordance with the above schedule and the sum total of all the partial payments for the item "Mobilization" will be limited to 5% of the original Contract Amount for the project. Any remaining amount will be paid upon completion of all work under the Project.

The standard retainage will be applied to these allowances. Partial payments made on this item shall in no way act to preclude or limit any of the provisions for partial payments otherwise provided for by the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION 012900** 

# SECTION 013100 PROJECT MANAGEMENT AND COORDINATION

# **PART 1 - GENERAL**

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. Coordination Drawings.
  - Submittals.
  - 3. Special Project Procedures.
  - 4. Administrative and supervisory personnel.
  - 5. Project meetings.
  - 6. Requests for Interpretation (RFIs).
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility will be assigned to a specific contractor.
- C. Related Sections include the following:
  - 1. Division 01 Section "Summary of Multiple Contracts" for a description of the division of Work among separate contracts and responsibility for coordination activities not in this Section.
  - 2. Division 01 Section "Construction Progress Documentation" for preparing and submitting Contractor's Construction Schedule.
  - 3. Division 01 Section "Execution Requirements" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
  - 4. Division 01 Section "Closeout Procedures" for coordinating closeout of the Contract.
  - 5. Division 01 Section "General Commissioning Requirements" for coordinating the Work with Owner's Commissioning Authority.

# 1.3 **DEFINITIONS**

A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Documents.

# 1.4 COORDINATION

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.
- B. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work.

#### FXE SOUTH PERIMETER LOOP ROAD

PROJECT 12260

Each contractor shall coordinate its operations with operations, included in different Sections that depend on each other for proper installation, connection, and operation.

- 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
- 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
- 3. Make adequate provisions to accommodate items scheduled for later installation.
- 4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- C. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
  - 1. Prepare similar memoranda for City and separate contractors if coordination of their Work is required.
- D. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
  - 1. Preparation of Contractor's Construction Schedule.
  - 2. Preparation of the Schedule of Values.
  - 3. Installation and removal of temporary facilities and controls.
  - 4. Delivery and processing of submittals.
  - 5. Progress meetings.
  - Pre-installation conferences.
  - 7. Project closeout activities.
  - 8. Startup and adjustment of systems.
  - 9. Project closeout activities.

# 1.5 SUBMITTALS

- A. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.
  - 1. Content: Project-specific information, drawn accurately to scale. Do not base Coordination Drawings on reproductions of the Contract Documents or standard printed data. Include the following information, as applicable:
    - a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
    - b. Indicate required installation sequences.
    - c. Indicate dimensions shown on the Contract Drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Construction Project Manager for resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

- 2. Sheet Size: At least 8-1/2 by 11 inches (215 by 280 mm) but no larger than 24 by 36 inches (750 by 1000 mm).
- 3. Number of Copies: Submit two opaque copies of each submittal. Construction Project Manager will return one copy.
  - a. Submit five copies where Coordination Drawings are required for operation and maintenance manuals. Construction Project Manager will retain two copies; remainder will be returned. Mark up and retain one returned copy as a Project Record Drawing.
- 4. Refer to individual Sections for Coordination Drawing requirements for Work in those Sections.
- B. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
  - 1. Name, address, and telephone number of entity performing subcontract or supplying products.
  - 2. Number and title of related Specification Section(s) covered by subcontract.
- C. Key Personnel Names: Within 10 days of contract award, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.
  - 1. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

# 1.6 SPECIAL PROJECT PROCEDURES

- A. Discrepancies, Errors: Should discrepancies or errors appear in the drawings or specifications concerning materials, workmanship, or quantity of work to be performed, the Contractor will be required to immediately notify the City before proceeding with the work. If the Contractor fails to notify the City and proceeds with the work, Contractor will be required to correct the errors at his/her own expense. In the event of a conflict between the drawings and specifications, the City will decide on the way to perform the work or supply the materials. See also General Conditions, "Contractor to Check Plans and Data," Section GC-10
- B. Dimensions and Measurements: The figured dimensions on the drawings or notes including dimensions shall be used for construction instead of measurements of the drawings by scale. No scale measurements shall be used as a dimension for construction. Dimensions on all drawings as well as the detail drawings themselves are subject in every case to measurements of adjacent or previously completed work. All such measurements necessary shall be taken before undertaking any work dependent upon such data. Field verification of dimensions on plans is mandatory since actual locations, distances, and levels will be governed by actual field conditions.
- C. Discrepancies or Inconsistencies: Should any discrepancy or inconsistency appear between

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larger and smaller scale drawings in any of the divisions of the specifications or in any of the contract documents, such discrepancy shall be immediately submitted to the City for correction before proceeding with the work in question. In no case shall the Contractor make any alterations, erasures, changes or modifications in the drawings or specifications.

- 1. Should it appear that any of the work as specified or shown by the drawings is not sufficiently detailed or explained, the Contractor shall apply to the City for such further details or information as may be necessary for full understanding of the work in question.
- 2. The data set forth in these specifications and indicated on the drawings are as accurate as can be obtained, but their extreme accuracy is not guaranteed. Final application thereto shall be determined on the job as conditions may demand and subject to the approval of the City.
- D. Plans and Specifications Acknowledgment by Subcontractors and Suppliers: All Subcontractors and suppliers must submit, through the General Contractor to the City Engineer, a statement on their individual letterhead stationary, signed and sealed with their corporate seal, or a notarized statement on their letterhead stationery in the absence of a corporate seal, that the individual Subcontractor or Supplier:
  - 1. Has received or reviewed a FULL set of approved plans and specifications for the project,
  - 2. Is aware that items concerning their particular trade may be shown and/or detailed in other trades or sections of the plans and specifications, and
  - 3. Will comply with said plans, specifications and all applicable codes and permit requirements.
- E. In the event a Subcontractor or Supplier notes a mistake or details appear incomplete, or if there are questions or concerns with the plans and specifications, the Subcontractor or Supplier will immediately notify the General Contractor. No work will proceed until such conflicts or questions are resolved in writing.
- F. The Subcontractor will not be permitted to start work, nor will any Shop drawings/submittals be accepted for review from a supplier until this letter of acknowledgment is received and approved by the General Contractor and City Engineer. Also, the City will not process any pay request for the work of any Subcontractor or Supplier whose acknowledgment letter is not on file with the City.

## 1.7 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. The Contractor shall employ a competent superintendent who can communicate with spoken English, and who shall be in attendance at the site full-time when any work is in progress. The superintendent shall be satisfactory to the City's Engineer and shall not be changed except with the consent of the City's Engineer.
- B. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.
  - 1. Include special personnel required for coordination of operations with other contractors.

# 1.8 PROJECT MEETINGS

A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.

- 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Construction Project Manager of scheduled meeting dates and times.
- 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
- 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Construction Project Manager, within 48 hours of the completion of the meeting.
  - a. Minutes from all meetings shall be prepared by the Contractor, reflecting all items discussed as well as agreed upon or suggested solutions. These minutes shall be a true reflection of what actually happened at the meeting.
  - b. Items discussed and not resolved or being handled by any one of the parties present shall be reflected along with the name of the person responsible in all ongoing minutes until it is resolved.
  - c. Minutes shall be typewritten within 24 hours from the completion of the meeting. They shall immediately be delivered electronically to all parties present and followed by a copy through the mail to the Construction Project Manager.
  - d. All items requiring information and not resolved shall be reflected in each and every set of minutes thereafter until it is totally resolved.
- B. Initialization Meeting: Within ten (10) days of notification of contract award, the Contractor, the Construction Project Manager, the Designer of Record, and other assigned City's staff shall meet. The purpose of this meeting will be to quantify and clarify all items that must be presented by the Contractor at the Preconstruction meeting. The Contractor shall submit a schedule of values for the Project at this meeting for review by the City. The City's comments will be presented to the Contractor at the pre-construction meeting.
- C. Preconstruction Meeting: After the contract(s) has been awarded, executed, and a tentative work schedule has been composed, and prior to the start of the work, the Contractor(s), the Construction Project Manager, the City's Representative, and other persons and/or governmental agencies that are involved shall meet. The minimum agenda is to include but is not limited to the following:
  - 1. Distribute and discuss list of major Subcontractors
  - 2. Tentative construction schedule
  - Phasing
  - 4. Critical work sequencing and long-lead items
  - 5. Relation and coordination of Prime Contractor
  - 6. Designation of key personnel and their duties
  - 7. Procedures for processing field decisions and Change Orders
  - 8. Procedures for RFIs
  - 9. Procedures for testing and inspecting
  - 10. Adequacy of distribution of contract documents
  - 11. Submittal of Shop drawings, project data, and samples
  - 12. Procedures for maintaining Record documents
  - 13. Use of premises
  - 14. Work restrictions
  - 15. City's occupancy requirements
  - 16. Responsibility for temporary facilities and controls
  - 17. Procedures for moisture and mold control
  - 18. Major equipment deliveries and priorities
  - 19. Working hours

- 20. Safety and first-aid procedures
- 21. Security procedures
- 22. Housekeeping procedures including progress cleaning
- 23. Schedule of values
- 24. Processing of payments or contract
- D. Progress Meetings: Conduct progress meetings at bi-weekly intervals. Coordinate dates of meetings with preparation of payment requests.
  - Attendees: In addition to representatives of City and the Construction Project Manager, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Review and approve minutes of previous Progress Meeting.
    - b. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
      - 1) Review schedule for next period.
    - c. Review present and future needs of each entity present, including the following:
      - 1) Interface requirements.
      - 2) Sequence of operations.
      - 3) Status of submittals.
      - 4) Deliveries.
      - 5) Off-site fabrication.
      - 6) Access.
      - 7) Site utilization.
      - 8) Temporary facilities and controls.
      - 9) Work hours.
      - 10) Hazards and risks.
      - 11) Progress cleaning.
      - 12) Quality and work standards.
      - 13) Status of correction of deficient items.
      - 14) Field observations.
      - 15) RFIs.
      - 16) Status of proposal requests.
      - 17) Pending changes.
      - 18) Status of Change Orders.
      - 19) Pending claims and disputes.
      - 20) Documentation of information for payment requests.

- 3. Minutes: General Contractor shall record the meeting minutes. These minutes shall indicate all items discussed as well as agreed upon or suggested solutions. They shall be a true reflection of what occurred at the meeting.
- 4. Reporting: Within 48 hours, distribute minutes of the meeting by electronic means to each party present and to parties who should have been present.
  - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
- E. Coordination Meetings: Conduct Project coordination meetings at bi-weekly intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and pre-installation conferences.
  - Attendees: In addition to representatives of City and the Construction Project Manager, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
  - Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to Combined Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
    - b. Schedule Updating: Revise Combined Contractor's Construction Schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
    - c. Review present and future needs of each contractor present, including the following:
      - 1) Interface requirements.
      - 2) Sequence of operations.
      - 3) Status of submittals.
      - 4) Deliveries.
      - 5) Off-site fabrication.
      - 6) Access.
      - 7) Site utilization.
      - 8) Temporary facilities and controls.
      - 9) Work hours.
      - 10) Hazards and risks.
      - 11) Progress cleaning.
      - 12) Quality and work standards.
      - 13) Change Orders.

- 3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.
- F. Project Closeout Conference: City shall Schedule and conduct a project closeout conference, at a time convenient to City and Construction Project Manager, but no later than <u>30</u> days prior to the scheduled date of Substantial Completion.
  - 1. Conduct the conference to review requirements and responsibilities related to Project closeout.
  - 2. Attendees: Authorized representatives of City, City's Commissioning Authority, Construction Project Manager, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
    - a. Preparation of record documents.
    - b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
    - c. Submittal of written warranties.
    - d. Requirements for preparing operations and maintenance data.
    - e. Requirements for delivery of material samples, attic stock, and spare parts.
    - f. Requirements for demonstration and training.
    - g. Preparation of Contractor's punch list.
    - h. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
    - i. Submittal procedures.
    - j. Coordination of separate contracts.
    - k. Owner's partial occupancy requirements.
    - I. Installation of Owner's furniture, fixtures, and equipment.
    - m. Responsibility for removing temporary facilities and controls.
  - 4. Minutes: Entity conducting meeting will record and distribute meeting minutes.

# 1.9 REQUESTS FOR INTERPRETATION (RFIs)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
  - 1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
  - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
- City Project Number
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- 2. City Project Name.
- 3. Date.
- 4. Name of Contractor.
- 5. RFI number, numbered sequentially.
- 6. Specification Section number and title and related paragraphs, as appropriate.
- 7. Drawing number and detail references, as appropriate.
- 8. Field dimensions and conditions, as appropriate.
- 9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
- 10. Contractor's signature.
- Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
  - a. Supplementary drawings prepared by Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.
- C. Hard-Copy RFIs: Form at end of this Section.
  - 1. Identify each page of attachments with the RFI number and sequential page number.
- D. Software-Generated RFIs: Software-generated form with substantially the same content as indicated above. Word Template is available upon request from the City Engineer's Office.
  - 1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- E. Construction Project Manager's Action: Construction Project Manager will review each RFI, determine action required, and return it. Allow seven days for Construction Project Manager's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.
  - 1. The following RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for coordination information already indicated in the Contract Documents.
    - d. Requests for adjustments in the Contract Time or the Contract Sum.
    - e. Requests for interpretation of Construction Project Manager's actions on submittals.
    - f. Incomplete RFIs or RFIs with numerous errors.
  - 2. Construction Project Manager's action may include a request for additional information, in which case Construction Project Manager's time for response will start again.
  - 3. Construction Project Manager's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
    - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Construction Project Manager in writing within 10 days of receipt of the RFI response.

- F. On receipt of Construction Project Manager's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Construction Manager within seven days if Contractor disagrees with response.
- G. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log bi-weekly. Include the following:
  - 1. Project name.
  - 2. Name and address of Contractor.
  - 3. RFI number including RFIs that were dropped and not submitted.
  - 4. RFI description.
  - 5. Date the RFI was submitted.
  - 6. Date Construction Project Manager's response was received.
  - 7. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
  - 8. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

# 1.10 MAINTENANCE OF AIRPORT OPERATIONS TRAFFIC

# A. DESCRIPTION:

- 1. The work specified in this Section consists of maintaining traffic within the limits of the project for the duration of the construction period. It shall include the construction and maintenance of any necessary detour facilities along the project and the furnishing, installing and maintaining of traffic control and safety devices required for safe and expeditious movement of traffic as may be called for on the plans. The term "Maintenance of Traffic" or MOT as used herein shall include all of such facilities, devices and operations as are required for the safety and convenience of the public as well as for minimizing public nuisance; all as specified in this Section. The Section also includes installing temporary orange plastic fencing around any owl or tortoise nests, as directed by the Project Manager or Owner's Representative.
- When the project plans include or identify a specific Maintenance of Traffic Plan, alternate proposals will be considered when they are found to be equal to or better than the plan specified. In no case may the Contractor begin work until the Project Manager has approved the Maintenance of Traffic Plan in writing. Modifications to the Maintenance of Traffic Plan that become necessary shall also be approved in writing. Except in an emergency, as determined by the Project Manager, no changes to the approved plan will be allowed until approval to change such plan has been received.
- The Contractor shall conduct their operations in such a manner that no undue hazard will result due to the requirements of this section, and the procedures and policies described therein shall in no way act as a waiver of any of the terms of the liability of the Contractor or their surety.

#### B. CONSTRUCTION METHODS

 The contractor shall be responsible for performing daily inspections, including weekends and holidays, with some inspections at nighttime, of the installations on the project and replace all equipment and devices not conforming to the approved standard during that inspection. The project personnel will be advised of the schedule of these inspections and be given the opportunity to join in the inspection as is deemed necessary. 2. The responsibility for installation and maintenance of adequate traffic control devices, warning devices and barriers, for the protection of the traveling public and workers, as well as to safeguard the work area in general shall rest with the Contractor. The required traffic control devices, warning devices and barriers shall be erected by the Contractor prior to creation of any hazardous condition and in conjunction with any necessary rerouting of traffic. The Contractor shall immediately remove, turn or cover any devices or barriers that do not apply to existing conditions.

The Contractor shall make the Project Manager aware of any scheduled operation which will affect traffic patterns or safety sufficiently in advance of commencing such operation to permit their review of the plan for installation of traffic control devices, warning devices, or barriers proposed by the Contractor.

The Contractor shall assign one of their employees the responsibility of maintaining the position and condition of all traffic control devices, warning devices and barriers throughout the duration of the contract. The Project Manager shall be kept advised at all times as to the identification and means of contacting this employee on a 24-hour basis.

- 3. All traffic control devices (including signs), warning devices, barricades and barriers shall be furnished by the Contractor.
- 4. Traffic control devices, warning devices, and barriers shall be kept in the correct position, properly directed, clearly visible and clean at all times. Damaged, defaced or dirty Devices or barriers shall be immediately repaired, replaced or cleaned as directed.
- The Contractor shall provide competent flagmen to direct traffic where one-way operation in a single lane is in effect and in other situations as may be required by the standards established.
- 6. Where a detour changes the lane use or where normal vehicle paths are altered during construction, all existing pavement markings that will be in conflict with the adjusted vehicle paths shall be removed. Over-painting will not be allowed. The removal may be accomplished by any method that will not materially damage the surface texture of the pavement and which will eliminate the previous marking pattern regardless of weather and light conditions.

All pavement markings that will be in conflict with "next phase of operation" vehicle paths shall be removed as described above, prior to opening to traffic, when possible. Markings that cannot be removed prior to changing traffic patterns will be removed as soon as practicable. The term "practicable" shall be interpreted as meaning or implying:

- **a.** Marking removal equipment will be scheduled for use immediately following any change in lanes.
- **b.** If darkness or inclement weather interferes with removal operations, such operations will be accomplished during the next daylight period or as soon thereafter as weather conditions permit.
- **c.** If equipment failures occur such equipment will be repaired, replaced, or leased so that the removal can be accomplished by the following day.

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7. The Contractor shall provide portable light towers as required for work. The towers shall be trailer mounted, that can be folded for easy transport and storage. The towers shall contain a diesel generator to power a minimum 6000 watts and have fuel capacity to operate at full load for a minimum of 48 hours. It shall be designed to be weather proof. The towers shall be telescoping and capable of rotating over 360 degrees and shall have a minimum of four (4) 1000 watt metal halide floodlights.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

**END OF SECTION 013100** 

# **SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION**

#### PART 1 - GENERAL

# 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
  - 1. Startup Construction Schedule.
  - 2. Contractor's Construction Schedule.
  - 3. Submittals Schedule.
  - 4. Daily construction reports.
  - 5. Material location reports.
  - 6. Site condition reports.
  - 7. Special reports.

# B. Related Sections include the following:

- 1. Division 01 Section "Summary of Multiple Contracts" for preparing a combined Contractor's Construction Schedule.
- 2. Division 01 Section "Payment Procedures" for submitting the Schedule of Values.
- 3. Division 01 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes.
- 4. Division 01 Section "Submittal Procedures" for submitting schedules and reports.
- 5. Division 01 Section "Photographic Documentation" for submitting construction photographs.
- 6. Division 01 Section "Quality Requirements" for submitting a schedule of tests and inspections.

## 1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
  - 1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
  - 2. Predecessor Activity: An activity that precedes another activity in the network.
  - 3. Successor Activity: An activity that follows another activity in the network.
- B. Cost Loading: The allocation of the Schedule of Values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Contract Sum, unless otherwise approved by the Construction Project Manager.
- C. CPM: Critical path method, which is a method of planning and scheduling a construction

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- project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- D. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- E. Event: The starting or ending point of an activity.
- F. Float: The measure of leeway in starting and completing an activity.
  - 1. Float time is not for the exclusive use or benefit of either City or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
  - 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
  - 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.
- G. Milestone: A key or critical point in time for reference or measurement.
- H. Network Diagram: A graphic diagram of a network schedule, showing activities and activity relationships.
- I. Resource Loading: The allocation of manpower and equipment necessary for the completion of an activity as scheduled.

# 1.4 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
  - 1. Working electronic copy of schedule file in MS Project.
  - 2. PDF electronic file.
  - 3. Two (2) paper copies.
- B. Startup construction schedule.
  - 1. Approval of cost-loaded, startup construction schedule will not constitute approval of schedule of values for cost-loaded activities.
- C. Startup Network Diagram: Of size required to display entire network for entire construction period. Show logic ties for activities.
- D. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
  - Submit a working electronic copy of schedule, using software indicated, and labeled to comply with requirements for submittals. Include type of schedule (initial or updated) and date on label.
- E. Daily Construction Reports: Submit **one (1)** copy at **weekly** intervals.

# 1.5 QUALITY ASSURANCE

- A. Scheduling Consultant Qualifications: An experienced specialist in CPM scheduling and reporting, with capability of producing CPM reports and diagrams within 24 hours of Construction Project Manager's request.
- B. Prescheduling Conference: Conduct conference at Project site to comply with requirements in Division 01 Section 013100 "Project Management and Coordination." Review methods and procedures related to the Preliminary Construction Schedule and Contractor's Construction Schedule, including, but not limited to, the following:
  - 1. Review software limitations and content and format for reports.
  - 2. Verify availability of qualified personnel needed to develop and update schedule.
  - 3. Discuss constraints.
  - 4. Review time required for review of submittals and resubmittals.
  - 5. Review requirements for tests and inspections by independent testing and inspecting agencies.
  - 6. Review time required for Project closeout and City startup procedures.
  - 7. Review and finalize list of construction activities to be included in schedule.
  - 8. Review submittal requirements and procedures.
  - 9. Review procedures for updating schedule.

# 1.6 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
  - 1. Secure time commitments for performing critical elements of the Work from parties involved.
  - 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

#### **PART 2 - PRODUCTS**

#### 2.1 SUBMITTALS SCHEDULE

- A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.
  - 1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.
  - 2. Initial Submittal: Submit concurrently with preliminary bar-chart schedule and network diagram. Include submittals required during the first 60 days of construction. List those required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.

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- a. At Contractor's option, show submittals on the Preliminary Construction Schedule, instead of tabulating them separately.
- 3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's Construction Schedule.

# 2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend schedule from date established for the Notice to proceed to date of Final Completion.
- B. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- C. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
  - 1. Activity Duration: Define activities so no activity is longer than ten (10) days, unless specifically allowed by Construction Project Manager.
  - 2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
  - 3. Submittal Review Time: Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
  - 4. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Construction Project Manager's administrative procedures necessary for certification of Substantial Completion.
  - 5. Punch List and Final Completion: Include not more than **thirty (30)** days for completion of punch list items and final completion.
- D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
  - 1. Phasing: Arrange list of activities on schedule by phase.
  - 2. Products Ordered in Advance: Include a separate activity for each product. Include delivery date indicated in Division 01 Section "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
  - 3. Work Restrictions: Show the effect of the following items on the schedule:
    - a. Coordination with existing construction.
    - b. Limitations of continued occupancies.
    - c. Uninterruptible services.
    - d. Partial occupancy before Substantial Completion.
    - e. Use of premises restrictions.

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- f. Provisions for future construction.
- g. Seasonal variations.
- h. Environmental control.
- Retain subparagraph and associated subparagraphs below for large projects and complicated small projects. Consider limiting it to critical work or important subcontracts.
- 5. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
  - a. Subcontract awards.
  - b. Submittals.
  - c. Purchases.
  - d. Installation.
  - e. Tests and inspections.
  - f. Adjusting.
- E. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, Final Completion.
- F. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
  - 1. Unresolved issues.
  - 2. Unanswered Requests for Information.
  - 3. Rejected or unreturned submittals.
  - 4. Notations on returned submittals.
  - 5. Pending modifications affecting the Work and Contract Time.
- G. Recovery Schedule: When periodic update indicates the Work is **fourteen (14)** or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, and equipment required to achieve compliance, and dating by which recovery will be accomplished.
- H. Computer Software: Prepare schedules using a program that has been developed specifically to manage construction schedules.
  - 1. Microsoft Project 2010 for Windows 7 operating system.

#### 2.3 STARTUP CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Submit preliminary horizontal bar-chart-type construction schedule seven (7) days prior to the date established for the Pre-Construction Conference.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities for first **ninety (90)** days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.

CONSTRUCTION PROGRESS DOCUMENTATION

# 2.4 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Construction Schedule within **fourteen (14)** days of date established for the Notice to Proceed. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of Project.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
  - 1. For construction activities that require 3 months or longer completing, indicate an estimated completion percentage in **ten (10)** percent increments within time bar.

#### 2.5 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
  - 1. List of subcontractors at Project site.
  - 2. List of separate contractors at Project site.
  - 3. Approximate count of personnel at Project site.
  - 4. Equipment at Project site.
  - Material deliveries.
  - 6. High and low temperatures and general weather conditions.
  - 7. Accidents.
  - 8. Meetings and significant decisions.
  - 9. Unusual events (refer to special reports).
  - 10. Stoppages, delays, shortages, and losses.
  - 11. Meter readings and similar recordings.
  - 12. Emergency procedures.
  - 13. Orders and requests of authorities having jurisdiction.
  - 14. Change Orders received and implemented.
  - 15. Construction Change Directives received and implemented.
  - 16. Services connected and disconnected.
  - 17. Equipment or system tests and startups.
  - 18. Partial Completions and occupancies.
  - 19. Substantial Completions authorized.
- B. Material Location Reports: At <u>weekly</u> intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site. Indicate the following categories for stored materials:
  - 1. Material stored prior to previous report and remaining in storage.
  - 2. Material stored prior to previous report and since removed from storage and installed.
  - 3. Material stored following previous report and remaining in storage.
- C. Site Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a request for interpretation. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

CONSTRUCTION PROGRESS DOCUMENTATION

#### 2.6 SPECIAL REPORTS

- A. General: Submit special reports directly to City within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.
- B. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, and response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise City in advance when these events are known or predictable.

#### **PART 3 - EXECUTION**

#### 3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Scheduling Consultant: Engage a consultant to provide planning, evaluation, and reporting using CPM scheduling.
  - In-House Option: City may waive the requirement to retain a consultant if Contractor employs skilled personnel with experience in CPM scheduling and reporting techniques. Submit qualifications.
  - 2. Meetings: Scheduling consultant shall attend all meetings related to Project progress, alleged delays, and time impact.
- B. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
  - Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
  - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
  - 3. As the Work progresses, indicate Actual Completion percentage for each activity.
- C. Distribution: Distribute copies of approved schedule to Construction Project Manager, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
  - 1. Post copies in Project meeting rooms and temporary field offices.
  - When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

#### **END OF SECTION 013200**

# SECTION 013233 PHOTOGRAPHIC DOCUMENTATION

#### **PART 1 - GENERAL**

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for the following:
  - 1. Preconstruction photographs.
  - 2. Periodic construction photographs.
  - 3. Final Completion construction photographs.
  - 4. Preconstruction video recordings.
  - 5. Periodic construction video recordings.
  - 6. Web-based construction photographic documentation.
- B. Related Sections include the following:
  - 1. Division 01 Section "Submittal Procedures" for submitting photographic documentation.
  - 2. Division 01 Section "Closeout Procedures" for submitting digital media as Project Record Documents at Project closeout.
  - 3. Division 31 Section "Site Clearing and Grubbing" for photographic documentation before site clearing operations commence.

#### 1.3 INFORMATIONAL SUBMITTALS

- A. Construction Photographs: Submit digital media files of each photographic view within **seven (7)** days of taking photographs.
  - 1. Format: Minimum 3200 by 2400 pixels, in unaltered original files, with same aspect ratio as the sensor, uncropped, date and time stamped, in folder named by date of photograph. File names shall be in the following format: City project number date taken (YYMMDD) picture number (example: 10350-090408-011 would indicate project number 10350 taken on April 8, 2009 photograph number 11). Submit on CD with folders for separate dates.
  - 2. Identification: On jewel case and CD, provide an applied label with the following information:
    - a. Name of Project.
    - b. Name of Contractor.
    - c. Dates photographs were taken.

# 1.4 COORDINATION

A. Auxiliary Services: Cooperate with photographer and provide auxiliary services requested, including access to Project site.

PHOTOGRAPHIC DOCUMENTATION

#### 1.5 USAGE RIGHTS

B. Obtain and transfer copyright usage rights from photographer to Owner for unlimited reproduction of photographic documentation.

#### PART 2 - PRODUCTS

#### 2.1 PHOTOGRAPHIC MEDIA

A. Digital Images: Provide images in JPG format, produced by a digital camera with minimum sensor size of 8 megapixels, and at an image resolution of not less than 3200 by 2400 pixels.

# **PART 3 - EXECUTION**

#### 3.1 CONSTRUCTION PHOTOGRAPHS

- A. Aerial Photographer: Engage a qualified commercial aerial photographer to take aerial construction photographs.
- B. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
- C. Daily Progress Photographs: Take daily photographs to document progress. Take photographs of all work that will be concealed by subsequent construction activity. Such photographs shall fully document actual installed conditions.
- D. Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.
  - 1. Date and Time: Include date and time in filename for each image.
  - 2. Field Office Images: Maintain one set of images accessible at the field office at Project site, available at all times for reference. Identify images same as for those submitted to Architect.
- E. Preconstruction Photographs: Before **commencement of excavation, commencement of demolition, or starting construction,** take photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, or, as directed by Architect.
  - 1. Flag **excavation areas** and **construction limits** before taking construction photographs.
  - 2. Take **ten (10)** photographs to show existing conditions adjacent to property before starting the Work.
- F. Periodic Construction Photographs: Take minimum **ten (10)** photographs weekly, with timing each month adjusted to coincide with the cutoff date associated with each Application for Payment. Select vantage points, including aerial photographs to show status of construction and progress since last photographs were taken.

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G. Final Completion Construction Photographs: Take **ten (10)** color photographs after date of Substantial Completion for submission as Project Record Documents.

# 3.2 CONSTRUCTION VIDEO RECORDINGS (N/A)

**END OF SECTION 013233** 

# SECTION 013300 SUBMITTAL PROCEDURES

#### **PART 1 - GENERAL**

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Sections include the following:
  - 1. Division 01 Section "Payment Procedures" for submitting Applications for Payment and the Schedule of Values.
  - 2. Division 01 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes and for submitting Coordination Drawings.
  - 3. Division 01 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule and the Submittals Schedule.
  - 4. Division 01 Section "Photographic Documentation" for submitting construction photographs
  - 5. Division 01 Section "Closeout Procedures" for submitting warranties.

#### 1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Engineer's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Engineer's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

#### 1.4 ACTION SUBMITTALS

- A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Engineer's and additional time for handling and reviewing submittals required by those corrections.
  - Coordinate submittal schedule with list of subcontracts, and Contractor's construction schedule
  - 2. Initial Submittal: Submit concurrently with startup construction schedule. List those

SUBMITTAL PROCEDURES

- submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
- 3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.
  - a. Submit revised submittal schedule to reflect changes in current status and timing for submittals.

#### 1.5 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Engineer's Digital Data Files: Electronic digital data files of the Contract Drawings will be provided by City for Contractor's use.
  - 1. City will furnish Contractor one set of digital data drawing files of the Contract Drawings.
    - a. Engineer makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.
    - b. Digital Drawing Software Program: The Contract Drawings are available in AutoCad 2010 dwg format.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
  - 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Engineer's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
  - 1. Initial Review: Allow 10 working days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Engineer will advise Contractor when a submittal being processed must be delayed for coordination.
  - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
  - 3. Resubmittal Review: Allow ten (10) working days for review of each resubmittal.

#### PART 2 - PRODUCTS

# 2.1 SUBMITTAL PROCEDURES

A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.

SUBMITTAL PROCEDURES

- 1. Action Submittals: Submit four (4) paper copies of each submittal unless otherwise indicated. Engineer will return three copies.
- 2. Informational Submittals: Submit four (4) paper copies of each submittal unless otherwise indicated. Engineer will return three copies.
- B. Shop Drawings: Prepare Project-specific information. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data, unless submittal based on City's digital data drawing files is otherwise permitted.
  - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Identification of products.
    - b. Schedules.
    - c. Compliance with specified standards.
  - 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches.
  - 3. Submit Shop Drawings in the following format:
    - a. Four (4) copies of each submittal. Engineer will retain two copies; remainder will be returned.

# **PART 3 - EXECUTION**

# 3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Engineer.
- B. See requirements in Section 017700.
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, and date of Contractor's approval.

#### 3.2 ENGINEER'S ACTION

- A. General: Engineer will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Engineer will review each submittal, make marks to indicate corrections or modifications required, and return it. Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
  - 1. Approved as submitted
  - 2. Approved as noted
  - 3. Revise and resubmit
  - 4. Rejected.

SUBMITTAL PROCEDURES

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- C. Informational Submittals: Engineer will review each submittal and will not return it, or will return it if it does not comply with requirements. Engineer will forward each submittal to appropriate party.
- D. Partial or incomplete submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

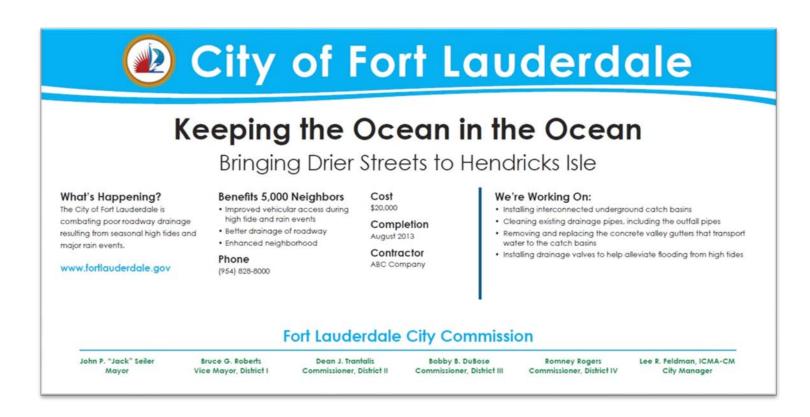
**END OF SECTION 013300** 

SUBMITTAL PROCEDURES

# **SECTION 015900 - CONSTRUCTION SIGN**

#### PART 1 GENERAL

Contractor, at contractor's expense, shall furnish and install a **4' x 8'** sign (with white painted posts) prior to start of construction. A sample sign template is below but is not specific to the project. The exact style and design of the sign will be provided by the CITY to the Contractor during the preconstruction meeting in PDF format.



See Page 2, "Construction Sign Request Form", for information on the sign for this Project.

**END OF SECTION** 

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# Construction Sign Request Form

Title (Bold):						
Fort Lauderdale Executive Airport South Perimeter Loop Road						
Title (Not Bold):						
What's Happening?						
Construction of loop perimeter road on the south	end of Fort Lauderdale Executive Airport.					
Benefits:						
Minimize Runway vehicle crossings to improve air	rfield operations and safety.					
Number of Neighbors Benefitted:	Cost:					
N/A	T.B.D					
Month and Year of Expected Completion:	Contractor:					
December 2017	T.B.D					
Phone: 954-828-8000						
We're Working On:						
Project Manager Signature	Date					
Senior Project Manager Signature	Date					

# SECTION 017700 CLOSEOUT PROCEDURES

## **PART 1 - GENERAL**

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

# 1.2 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
  - 1. Substantial Completion procedures.
  - 2. Final completion procedures.
  - 3. Warranties.
  - 4. Final cleaning.
  - 5. Repair of the Work.

# B. Related Sections include the following:

- 1. Division 01 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.
- 2. Division 01 Section "Photographic Documentation" for submitting Final Completion construction photographs and negatives.
- 3. Division 01 Section "Execution Requirements" for progress cleaning of Project site.
- 4. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
- 5. Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
- 6. Division 01 Section "Demonstration and Training" for requirements for instructing City's personnel.
- 7. Divisions 02 through 33 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For cleaning agents.
- B. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
- C. Certified List of Incomplete Items: Final submittal at Final Completion.

# 1.4 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.

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# C. As Built Project Record Survey

- 1. Upon completion of the work, after Substantial Completion and before Final Acceptance, the Contractor will supply to the Engineer a complete "as built" survey of the entire project site. The "as-built" project record survey shall be performed in conjunction with the paving operation, the Contractor will supply to the Engineer a complete "as built" survey of the centerline profile and corresponding cross-section grades at all 50 foot stations in the longitudinal direction. Provide survey points at all profile grade change locations as defined on the proposed profile. Provide survey points at all PC and PT locations as defined on the Geometry Plan. Provide as-built elevations in all additional locations where proposed elevations are given on the plans. All survey points, including horizontal and vertical control, property corners, section corners and references (hereinafter referred to as "survey points") shall be clearly marked and referenced prior to construction. These survey points must be sufficiently referenced so that they can be re-established after construction if they are disturbed.
- 2. This "as built" survey will be a complete topographic survey of the entire project site surrounded by the limit of construction plus 50-feet in all directions. If any work is done outside the limits of construction for any reason, this limit of survey will be increased to include this area plus 50-feet. This survey shall be certified by a Registered Land Surveyor as meeting the minimum Technical Standards for topographic surveys as set forth in chapter 5J-17, Florida Administrative Code. The survey data must be supplied as a signed and sealed drawing (24" x 36"), PDF file (24" x 36"), and "readable" AutoCAD CADD file. All cogo points in the drawing file are to be Civil 3D point objects. All survey data shall also be supplied in ASCII format. ASCII format shall be comma delimited PNEZD with complete point descriptions. Each point or feature shown on the survey shall have a corresponding point or points in the ASCII file and the descriptions of the points in the ASCII file shall correspond to the call outs and descriptions of the point and features on the survey. The topographic survey shall describe the entire site at the same scale as the construction drawings and will be arranged on the required size sheets in a neat and logical manner. Larger scale details are to be provided to clarify any complicated or complex areas. The horizontal and vertical control and datum established and shown on the project plans shall be the basis of the survey. Work specified herein shall be considered incidental to the project scope and will not be paid as a separate item.

#### 1.5 MAINTENANCE MATERIAL SUBMITTALS

A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

#### 1.6 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of **ten (10)** days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities.

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- Include occupancy permits, operating certificates, and similar releases.
- 2. Submit closeout submittals specified in other Division 01 Sections, including project record documents, operation and maintenance manuals, final completion construction photographic documentation, damage or settlement surveys, property surveys, and similar final record information.
- 3. Submit closeout submittals specified in individual Divisions 02 through 33 Sections, including specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of **ten (10)** days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
  - 1. Advise Owner of pending insurance changeover requirements.
  - 2. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
  - 3. Complete startup and testing of systems and equipment.
  - 4. Perform preventive maintenance on equipment used prior to Substantial Completion.
  - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training video recordings specified in Division 01 Section "Demonstration and Training."
  - 6. Advise Owner of changeover in heat and other utilities.
  - 7. Participate with Owner in conducting inspection and walkthrough with local emergency responders.
  - 8. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
  - 9. Complete final cleaning requirements, including touchup painting.
  - Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of ten (10) days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Construction Project Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Construction Project Manager will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
  - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
  - 2. Results of completed inspection will form the basis of requirements for final completion.

# 1.7 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
  - 1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
  - 2. Certified List of Incomplete Items: Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.

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- 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of **ten (10)** days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Construction Project Manager will either proceed with inspection or notify Contractor of unfulfilled requirements. Construction Project Manager will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
  - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

# 1.8 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
  - 1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
  - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
  - 3. Include the following information at the top of each page:
    - a. Project number and name.
    - b. Date.
    - c. Name of Architect
    - d. Name of Contractor.
    - e. Page number.
  - 4. Retain and revise one of four subparagraphs below if default submittal format in Division 01 Section "Submittals Procedures" is not appropriate. Due to nature of punch list process, electronic worksheet software is often preferred file type. Submit list of incomplete items in the following format:
    - a. City of Fort Lauderdale Punch List Inspection Form
    - b. MS Excel electronic file. Construction Project Manager will return annotated file.
    - c. PDF electronic file. Construction Project Manager will return annotated file.
    - d. Three (3) paper copies. Construction Project Manager will return two (2) copies.

#### 1.9 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Construction Project Manager for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Partial Occupancy: Submit properly executed warranties within fifteen (15) days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- C. Organize warranty documents into an orderly sequence based on the table of contents of

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Project Manual.

- Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11inch (215-by-280-mm) paper.
- 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
- 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- 4. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
- D. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS (N/A)

PART 3 - EXECUTION (N/A)

**END OF SECTION 017700** 



# PUNCH LIST

Project:					
To (Contractor):	A/E Project N	Site Visit Date:  A/E Project Number:  Contract For:			
The following items require the attention of responsibility of the Contractor to complete al			ll-inclusive, and the failure to	o include any items on this list	does not alter the
ItemRoomLocationNumberNumber(Area)I	Description			Correction/Completion Date	Verification A/E Check
Attachments					
Signed by:				Date:	
Copies: Owner Consultants					File
Copyright 1996, Construction Specifications Institu	te,	Page of			September 1996

601 Madison Street, Alexandria, VA 22314-1791

CSI Form 14.1A

City of Fort Lauderdale Bid 12029-683



# **Public Works Department-Engineering**

Final Inspection Punch-List Corrective Action Form

Project Number:	Project Name:	Inspection Date:
Contractor:	Project Manager:	Inspector:

Item Description of Definions		mpleted	<b>6</b>
No. Description of Deficiency	Contractor	PM/CI	Comments
	ļ		
	Description of Deficiency	DESCRIPTION OF DETICIONS	Date Completed Contractor PM/CI

**City of Fort Lauderdale**Public Works Department -Engineering

Form Number INSP 0001

Version 1.0
\_\_\_\_ of \_\_\_\_
CAM #18-0276
Exhibit 3
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#### Instructions for completing the Final Inspection Punch-list Corrective Action Form.

The Construction Project Manager, in conjunction with the assigned construction inspector is responsible for preparing this form. It shall be completed in cooperation with the project's prime contractor and will be used as the official record for any and all punch-list items. Under no circumstances shall final payment be made until all items identified on this form are corrected to the satisfaction of the Construction Project Manager.

- 1. Prior to scheduling Substantial Completion/Final Inspection, all permits should be cleared by the building department, all O&M Manuals should be turned over to the city, and all warranty information should be provided in a three ring binder and on CD-ROM.
- 2. Schedule inspection, coordinating with necessary staff to properly evaluate the completeness of the project.
- 3. The Final Inspection Punch-list Corrective Action Form is to be used to document discrepancies that are minor in nature (i.e., paint chips, minor blemishes, etc....) if major items of work are not complete, lack required quality, or are not acceptable for any reason, the final inspection should be rescheduled for a time when these items have been completed.
- 4. Fill in the form completely: Project Number and Name, Date of inspection, the contractor's name, PM and inspector's names should all be filled in.
- 5. Beginning with item number 1, list the description of the deficiency, and any amplifying information required to fully document the item to be corrected. For instance, Item No. 1; Description of Deficiency Door entering main office sticks; Notes Door should be adjusted to open and close properly.
- 6. Use as many forms as required to fully document the inspection results. In the lower right hand side of the form indicate page number and total number of forms used (for example 1 of 4)
- 7. If there is any disagreement as to whether or not an item is a deficiency, it should be documented and then
- 8. When an item is corrected, the Contractor shall initial the form and indicate the date work was completed. If the PM/CI concurs with the acceptance of the work, they will initial and date in the corresponding block.
- 9. Substantial completion will not be issued if there is a large number of punch list items or if there are major deficiencies with the work. If you have any questions regarding whether or not an item is major, or if there are a large number deficiencies, contact the Senior Project Manager.
- 10. Under no circumstances will final payment be made without documented completion of the Punch-List.

# SECTION 311000 SITE CLEARING AND GRUBBING

#### **PART 1 GENERAL**

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Removing surface debris.
  - 2. Removing designated paving and curbs.
  - 3. Removing designated trees, shrubs, and other plant life.
  - 4. Removing abandoned utilities.
  - 5. Excavating topsoil.
- B. Related Sections:
  - 1. Section 312316 Excavation

#### 1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

- A. Site Clearing:
  - 1. Basis of Measurement: By acre.
  - 2. Basis of Payment: Includes clearing site, loading and removing waste materials from site.

#### 1.3 SUBMITTALS

A. Section 013300 - Submittal Procedures: Requirements for submittals.

#### 1.4 QUALITY ASSURANCE

- A. Conform to applicable codes for environmental requirements, and disposal of debris.
- B. Perform Work in accordance with City of Fort Lauderdale Standards.
- C. Maintain one copy of each document on site.

# PART 2 PRODUCTS (NOT USED)

#### PART 3 EXECUTION

# 3.1 EXAMINATION

- A. Section 013000 Administrative Requirements: Verification of existing conditions before starting work.
- B. Identify waste area for placing removed materials.

#### 3.2 PREPARATION

A. Call Sunshine State one Call of Florida, Inc. at 811 not less than two full working days before performing Work.

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 Request underground utilities to be located and marked within and surrounding construction areas.

#### 3.3 PROTECTION

- Locate, identify, and protect utilities indicated to remain from damage.
- B. Protect trees, plant growth, and features designated to remain, as final landscaping as specified in Section 015000 Temporary Facilities and Controls.
- C. Protect benchmarks, survey control points, and existing structures from damage or displacement.

#### 3.4 CLEARING

- A. Clear areas required for access to site and execution of Work as shown on the plans.
- B. Remove trees and shrubs within the limits of construction unless otherwise indicated on the plans. Remove stumps, main root ball, and root system to a depth of 24 inches.
- C. Clear undergrowth and deadwood, without disturbing subsoil.

#### 3.5 REMOVAL

- A. Remove debris, rock, and extracted plant life from site.
- B. Remove asphalt millings/pavement as indicated on the Drawings. Neatly saw cut edges at right angles to surface. Bituminous pavement designated for removal shall be sawcut as shown on the plans or as directed by the Engineer, removed by milling or in mass, and disposed of off-site or as indicated on the plans. Stock piling of the removed material will not be allowed within the Runway Safety Area (RSA) or Taxiway Safety Area (TSA) limits as shown on the plans without written permission of the Engineer.

The Contractor shall use care when removing existing pavement adjacent to pavement that is proposed to remain, such that lower-paving courses will not "slough" or be disturbed. If lower paving courses, such as limerock base courses or native materials are disturbed at the pavement match line, the Contractor will be required to repair the existing pavement(s) at no additional cost to the Owner.

- C. Remove abandoned utilities. Indicated removal termination point for underground utilities on Record Documents.
- D. Continuously clean-up and remove waste materials from site. Do not allow materials to accumulate on site.
- E. Do not burn or bury materials on site. Leave site in clean condition.

#### 3.6 TOPSOIL EXCAVATION

- A. Excavate topsoil from areas to be further excavated, relandscaped, or regraded without mixing with foreign materials for use in finish grading.
- B. Do not excavate wet topsoil.

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- C. Stockpile in area designated on site to depth not exceeding 6 feet and protect from erosion. Stockpile material on impervious material and cover over with same material until disposal.
- D. Remove excess topsoil not intended for reuse, from site.

# **END OF SECTION**

# SECTION 312316 EXCAVATION

#### **PART 1 GENERAL**

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Excavation.
  - 2. Embankment.
- B. Related Sections:
  - 1. Section 312323 Fill.
  - 2. Document: Geotechnical report; bore hole locations and findings of subsurface materials.

#### 1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

- A. Excavating Soil Materials:
  - 1. Basis of Measurement: By cubic yard.
  - 2. Basis of Payment: Includes general excavating to required elevations, loading and placing materials in stockpile or removing from site. Over Excavating: Payment will not be made for over excavated work nor for replacement materials.

#### 1.3 REFERENCES

A. City of Fort Lauderdale Standards when working within 24 inches of utility lines.

#### 1.4 SUBMITTALS

A. Section 013300 - Submittal Procedures: Requirements for submittals.

#### 1.5 QUALITY ASSURANCE

A. Perform Work in accordance with City of Fort Lauderdale Standards.

# PART 2 PRODUCTS (NOT USED)

#### PART 3 EXECUTION

#### 3.1 PREPARATION

- A. Call Sunshine State One Call of Florida, Inc. at 811 not less than two full working days before performing Work.
  - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- B. Identify required lines, levels, contours, and datum.
- C. Notify utility companies to remove and/or relocate utilities.

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- D. Protect utilities indicated to remain from damage.
- E. Protect benchmarks, survey control points, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

#### 3.2 EXCAVATION

#### A. EXCAVATION

- 1. **Unclassified Excavation.** Unclassified excavation shall consist of the excavation and disposal of all material, regardless of its nature, which is not otherwise classified and paid for under the following items.
- 2. **Borrow Excavation.** Borrow excavation shall consist of approved material required for the construction of embankment or for other portions of the work in excess of the quantity of usable material available from required excavations. Borrow material shall be obtained from areas within the limits of the airport property but outside the normal limits of necessary grading, or from areas outside the airport.
- 3. **Unsuitable Excavation.** Any material containing vegetable or organic matter, such as muck, peat, organic silt, or sod shall be considered unsuitable for use in embankment construction. Material, when approved by the Engineer as suitable to support vegetation, may be used on the embankment slope.

#### **B. CONSTRUCTION METHODS**

1. **General.** Before beginning excavation, grading, and embankment operations in any area, the area shall be completely cleared and grubbed.

The suitability of material to be placed in embankments shall be subject to approval by the Engineer. All unsuitable material shall be disposed of in waste areas shown on the plans. All waste areas shall be graded to allow positive drainage of the area and of adjacent areas. The surface elevation of waste areas shall not extend above the surface elevation of adjacent usable areas of the airport, unless specified on the plans or approved by the Engineer.

When the Contractor's excavating operations encounter artifacts of historical or archaeological significance, the operations shall be temporarily discontinued. At the direction of the Engineer, the Contractor shall excavate the site in such a manner as to preserve the artifacts encountered and allow for their removal. Such excavation will be paid for as extra work.

Those areas outside of the pavement areas in which the top layer of soil material has become compacted, by hauling or other activities of the Contractor shall be scarified and disked to a depth of 4 inches (100 mm), in order to loosen and pulverize the soil.

#### C. EXCAVATION

No excavation shall be started until the work has been staked out by the Contractor and the Engineer has obtained elevations and measurements of the ground surface. All suitable excavated material shall be used in the formation of embankment, subgrade, or for other purposes shown on the plans. All unsuitable material shall be disposed of as shown on the plans.

When the volume of the excavation exceeds that required to construct the embankments to the grades indicated, the excess shall be used to grade the areas of ultimate development or disposed of as directed. When the volume of excavation is not sufficient for constructing the fill to the grades indicated, the deficiency shall be obtained from borrow areas.

The grade shall be maintained so that the surface is well drained at all times. When necessary, temporary drains and drainage ditches shall be installed to intercept or divert surface water that may affect the work.

- Selective Grading. When selective grading is indicated on the plans, the more suitable material as designated by the Engineer shall be used in constructing the embankment or in capping the pavement subgrade. If, at the time of excavation, it is not possible to place this material in its final location, it shall be stockpiled in approved areas so that it can be measured for payment for rehandling as specified in paragraph 3.3.
- 2. Undercutting. Rock, shale, hardpan, loose rock, boulders, or other material unsatisfactory for safety areas, subgrades, roads, shoulders, or any areas intended for turfing shall be excavated to a minimum depth of 12 inches (300 mm), or to the depth specified by the Engineer, below the subgrade. Muck, peat, matted roots, or other yielding material, unsatisfactory for subgrade foundation, shall be removed to the depth specified. Unsuitable materials shall be disposed of at locations shown on the plans. This excavated material shall be paid for at the contract unit price per cubic yard for Unclassified Excavation. The excavated area shall be refilled with suitable material obtained from the grading operations or borrow areas and compacted to specified densities. The necessary refilling will constitute a part of the embankment. Where rock cuts are made and refilled with selected material, any pockets created in the rock surface shall be drained in accordance with the details shown on the plans.
- 3. Removal of Utilities. The removal of existing structures and utilities required to permit the orderly progress of work will be accomplished by someone other than the Contractor, e.g., the utility unless otherwise shown on the plans. All existing foundations shall be excavated for at least 2 feet (60 cm) below the top of subgrade or as indicated on the plans, and the material disposed of as directed. All foundations thus excavated shall be backfilled with suitable material and compacted as specified herein.
- 4. **Compaction Requirements.** The subgrade under areas to be paved shall be compacted to a depth of 18 inches and to a density of not less than 100 percent of the maximum density as determined by ASTM D 1557. The material to be compacted shall be within +/- 2 percent of optimum moisture content before rolled to obtain the prescribed compaction (except for expansive soils).

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The in-place field density shall be determined in accordance with ASTM D 1556 or ASTM D 2167. Stones or rock fragments larger than 4 inches (100 mm) in their greatest dimension will not be permitted in the top 6 inches (150 mm) of the subgrade. The finished grading operations, conforming to the typical cross section, shall be completed and maintained at least 1,000 feet (300 m) ahead of the paving operations or as directed by the Engineer.

In cuts, all loose or protruding rocks on the back slopes shall be barred loose or otherwise removed to line of finished grade of slope. All cut-and-fill slopes shall be uniformly dressed to the slope, cross section, and alignment shown on the plans or as directed by the Engineer.

#### D. BORROW EXCAVATION

Borrow area(s) within the airport property are indicated on the plans. Borrow excavation shall be made only at these designated locations and within the horizontal and vertical limits as staked or as directed.

When borrow sources are outside the boundaries of the airport property, it shall be the Contractor's responsibility to locate and obtain the supply, subject to the approval of the Engineer. The Contractor shall notify the Engineer, at least 15 days prior to beginning the excavation, so necessary measurements and tests can be made. All unsuitable material shall be disposed of by the Contractor. All borrow pits shall be opened up to expose the vertical face of various strata of acceptable material to enable obtaining a uniform product. Borrow pits shall be excavated to regular lines to permit accurate measurements, and they shall be drained and left in a neat, presentable condition with all slopes dressed uniformly.

# E. EMBANKMENT

Where an embankment is to be constructed to a height of 4 feet (120 cm) or less, all sod and vegetable matter shall be removed from the surface upon which the embankment is to be placed, and the cleared surface shall be completely broken up by plowing or scarifying to a minimum depth of 6 inches (150 mm). This area shall then be compacted as indicated in paragraph 2.6. When the height of fill is greater than 4 feet (120 cm), sod not required to be removed shall be thoroughly disked and recompacted to the density of the surrounding ground before construction of embankment.

Where embankments are to be placed on natural slopes steeper than 3 to 1, horizontal benches shall be constructed as shown on the plans.

No direct payment shall be made for the work performed under this section. The necessary clearing and grubbing and the quantity of excavation removed will be paid for under the respective items of work.

#### F. FORMATION OF EMBANKMENTS

Embankments shall be formed in successive horizontal layers of not more than 6 inches (200 mm) in loose depth for the full width of the cross section, unless otherwise approved by the Engineer.

The grading operations shall be conducted, and the various soil strata shall be placed, to produce a soil structure as shown on the typical cross section or as directed. Materials

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such as brush, hedge, roots, stumps, grass and other organic matter, shall not be incorporated or buried in the embankment.

Operations on earthwork shall be suspended at any time when satisfactory results cannot be obtained because of rain, freezing, or other unsatisfactory conditions of the field. The Contractor shall drag, blade, or slope the embankment to provide proper surface drainage.

The material in the layer shall be within +/-2 percent of optimum moisture content before rolling to obtain the prescribed compaction. In order to achieve a uniform moisture content throughout the layer, wetting or drying of the material and manipulation shall be required when necessary. Should the material be too wet to permit proper compaction or rolling, all work on all of the affected portions of the embankment shall be delayed until the material has dried to the required moisture content. Sprinkling of dry material to obtain the proper moisture content shall be done with approved equipment that will sufficiently distribute the water. Sufficient equipment to furnish the required water shall be available at all times. Samples of all embankment materials for testing, both before and after placement and compaction, will be taken for each 1,000 cubic yards. Based on these tests, the Contractor shall make the necessary corrections and adjustments in methods, materials or moisture content in order to achieve the correct embankment density.

Rolling operations shall be continued until the embankment is compacted to not less than 95 percent of maximum density for noncohesive soils, and 90 percent of maximum density for cohesive soils as determined by ASTM D 1557. Under all areas to be paved, the embankments shall be compacted to a depth of 18 inches and to a density of not less than 100 percent of the maximum density as determined by ASTM D 1557.

On all areas outside of the pavement areas, no compaction will be required on the top 4 inches (100 mm).

The in-place field density shall be determined in accordance with ASTM D 1556 or ASTM D 2167.

Compaction areas shall be kept separate, and no layer shall be covered by another until the proper density is obtained.

During construction of the embankment, the Contractor shall route his/her equipment at all times, both when loaded and when empty, over the layers as they are placed and shall distribute the travel evenly over the entire width of the embankment. The equipment shall be operated in such a manner that hardpan, cemented gravel, clay, or other chunky soil material will be broken up into small particles and become incorporated with the other material in the layer.

In the construction of embankments, layer placement shall begin in the deepest portion of the fill; as placement progresses, layers shall be constructed approximately parallel to the finished pavement grade line.

When rock and other embankment material are excavated at approximately the same time, the rock shall be incorporated into the outer portion of the embankment and the other material shall be incorporated under the future paved areas. Stones or fragmentary rock larger than 4 inches (100 mm) in their greatest dimensions will not be allowed in the top 6 inches (150 mm) of the subgrade. Rockfill shall be brought up in layers as specified or as directed and every effort shall be exerted to fill the voids with the finer material forming a

dense, compact mass. Rock or boulders shall not be disposed of outside the excavation or embankment areas, except at places and in the manner designated by the Engineer.

When the excavated material consists predominantly of rock fragments of such size that the material cannot be placed in layers of the prescribed thickness without crushing, pulverizing or further breaking down the pieces, such material may be placed in the embankment as directed in layers not exceeding 2 feet (60 cm) in thickness. Each layer shall be leveled and smoothed with suitable leveling equipment and by distribution of spalls and finer fragments of rock. These type lifts shall not be constructed above an elevation 4 feet (120 cm) below the finished subgrade.

Frozen material shall not be placed in the embankment nor shall embankment be placed upon frozen material.

There will be no separate measurement of payment for compacted embankment, and all costs incidental to placing in layers, compacting, disking, watering, mixing, sloping, and other necessary operations for construction of embankments will be included in the contract price for excavation, borrow, or other items.

#### G. FINISHING AND PROTECTION OF SUBGRADE

After the subgrade has been substantially completed the full width shall be conditioned by removing any soft or other unstable material that will not compact properly. The resulting areas and all other low areas, holes or depressions shall be brought to grade with suitable select material. Scarifying, blading, rolling and other methods shall be performed to provide a thoroughly compacted subgrade shaped to the lines and grades shown on the plans.

Grading of the subgrade shall be performed so that it will drain readily. The Contractor shall take all precautions necessary to protect the subgrade from damage. He/she shall limit hauling over the finished subgrade to that which is essential for construction purposes.

All ruts or rough places that develop in a completed subgrade shall be smoothed and recompacted.

No subbase, base, or surface course shall be placed on the subgrade until the subgrade has been approved by the Engineer.

### H. HAUL

All hauling will be considered a necessary and incidental part of the work. Its cost shall be considered by the Contractor and included in the contract unit price for the pay of items of work involved. No payment will be made separately or directly for hauling on any part of the work.

# I. TOLERANCES

In those areas upon which a subbase or base course is to be placed, the top of the subgrade shall be of such smoothness that, when tested with a 16-foot (4.8 m) straightedge applied parallel and at right angles to the centerline, it shall not show any deviation in excess of 1/2-inch (12 mm), or shall not be more than 0.05-foot (.015 m) from true grade as established by grade hubs or pins. Any deviation in excess of these amounts shall be corrected by loosening, adding, or removing materials; reshaping; and recompacting by sprinkling and rolling.

On safety areas, intermediate and other designated areas, the surface shall be of such smoothness that it will not vary more than 0.10 foot (0.03 m) from true grade as established by grade hubs. Any deviation in excess of this amount shall be corrected by loosening, adding or removing materials, and reshaping.

#### J. TOPSOIL

When topsoil is specified or required as shown on the plans, it shall be salvaged from stripping or other grading operations. If, at the time of excavation or stripping, the topsoil cannot be placed in its proper and final section of finished construction, the material shall be stockpiled at approved locations. Stockpiles shall not be placed within 200 feet of runway pavement or 59 feet of taxiway pavement and shall not be placed on areas that subsequently will require any excavation or embankment. If, in the judgment of the Engineer, it is practical to place the salvaged topsoil at the time of excavation or stripping, the material shall be placed in its final position without stockpiling or further rehandling.

Upon completion of grading operations, stockpiled topsoil shall be handled and placed as directed.

No direct payment will be made for topsoil. The quantity removed and placed directly or stockpiled shall be paid for at the contract unit price per cubic yard (cubic meter) for "Unclassified Excavation."

#### 3.3 FIELD QUALITY CONTROL

- A. Section 014000 Quality Requirements and 017000 Execution and Closeout Requirements: Field inspecting, testing, adjusting, and balancing.
- B. Perform inspection of excavation and controlled fill operations in accordance with applicable code.
- C. Request visual inspection of bearing surfaces by the Owner's representative before installing subsequent work.

#### 3.4 PROTECTION

- A. Prevent displacement or loose soil from falling into excavation; maintain soil stability.
- B. Protect structures, utilities and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth operations.

#### **END OF SECTION**

# SECTION 312513 EROSION CONTROLS

# **PART 1 GENERAL**

# 1.1 SUMMARY

- A. This section specifies work required to protect surface water quality during construction in accordance with the requirements of the South Florida Water Management District (SFWMD), the Florida Department of Transportation (FDOT), the Florida Department of Environmental Protection (FDEP), and the Florida Administrative Code (FAC).
- B. Haul routes, stockpile areas, and other areas used by the Contractor that are outside the actual contract limits shall be protected from erosion, siltation, scouring, and the effects of dewatering. Erosion devices shall be installed where necessary to protect all areas disturbed or affected by the Contractor's activities.

#### 1.2 UNIT PRICE

- A. Temporary Air and Water Pollution, Soil Erosion and Siltation Control:
  - 1. Basis of Measurement:

Temporary benches, dikes, dams and sediment basins will be considered incidental to other earthwork items, and no separate measurement will be made.

Temporary baled hay or straw barriers shall be based on the weight, in tons, or baled hay or straw barriers as documented by weight tickets furnished to the Engineer when material is delivered.

Silt fence will be measured based on per linear foot in place.

Temporary grassing and sod, sandbagging and slope drains, if required, will be considered incidental to other work items, and no separate measurement will be made.

2. Basis of Payment: Per lump sum. Includes all labor, equipment, materials and incidentals necessary to satisfactorily construct and maintain the item specified.

# 1.3 REFERENCES

- A. Applicable Standards:
  - 1. FAC Section 62-302 Surface Water Quality Standards
  - 2. FDOT Section 985 Geotextile Fabrics
  - 3. FDOT Index 102 Roadway and Traffic Design Standards
- B. Standardization: Materials and supplies shall be the standard products of manufacturers and will be approved when it is demonstrated that they are acceptable relative to composition, durability, usefulness, and convenience for the purpose intended.

# 1.4 SUBMITTALS

- A. Provide a list of materials proposed to be used under this section.
- B. Provide a manufacturers cut sheet describing the materials' physical properties and compatibility for the use intended.

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#### **PART 2 - PRODUCTS**

#### 2.1 MATERIALS

- A. Silt Fence:
  - 1. Wood Stakes: 2" by 4" pressure treated lumber.
  - 2. Barrier Fabric: Geotextile fabric meeting the requirements for erosion control in FDOT Section 985.
  - 3. Fasteners: Galvanized nails or staples of adequate size to maintain structural adequacy.

#### **PART 3 - EXECUTION**

#### 3.1 INSTALLATION

- A. General: Prior to the start of any construction activity, install silt fences and/or turbidity barriers at all locations where the possibility exists that construction activities may cause an increase in the turbidity of surface water outside of the construction limits (this includes both upstream and downstream of the project site).
- B. Silt Fence: Install silt fences in conformance with the Drawings. The barriers shall remain in place for the duration of the construction activity(ies) and shall be replaced, relocated, or increased in number as necessary to maintain water quality requirements.

#### 3.2 MAINTENANCE OF EROSION CONTROL SYSTEMS

A. Any damage to the turbidity or erosion control systems shall be immediately repaired. Work activities in the area shall be suspended until repairs are completed.

#### 3.3 REMOVAL OF TURBIDITY AND EROSION CONTROL SYSTEMS

- A. Ground Cover: Prior to removing the turbidity and silt fence erosion control systems, grass seed and mulch or sodding shall be installed where required in the contract documents. Ground cover installation shall begin within 48 hours of completion of the work or any other time necessary to prevent erosion, sedimentation, or turbid discharges into surrounding water bodies or wetlands.
- B. Work Suspension: When suspension of the work for extended periods of time may contribute to water quality degradation, the Contractor shall install ground cover in areas of concern as directed.
- C. Erosion control systems shall remain in place until all construction is completed.

# **END OF SECTION**

# SECTION 321120 SUBGRADE STABILIZATION

#### **PART 1 GENERAL**

#### 1.1 SUMMARY

- A. The work under this Section consists of the construction of a stabilized subgrade course composed of granular materials and insitu soils, constructed on a prepared existing soil stratum or on top of placed soil embankment, in accordance with the Plans and Specifications.
- B. The Contractor shall be solely responsible for all work performed and quality control procedures performed under this Item.

# 1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

- A. Stabilized Subgrade
  - 1. Basis of Measurement: By the number of square yards of each thickness actually constructed and accepted in accordance with the Plans and Specifications.
  - 2. Basis of Payment: Includes furnishing all materials, labor, equipment, processes, tools, and incidentals necessary to complete the work under this Section.

#### 1.3 REFERENCES

- A. ASTM International
  - 1. ASTM D4318 Liquid Limit, Plastic Limit, and Plasticity Index of Soils
  - 2. ASTM D1557 Moisture Density Relations of Soils using 10 lb. Rammer and an 18 inch Drop.

#### 1.4 SUBMITTALS

A. Section 013300 – Submittal Procedures: Requirements for Submittals

### **PART 2 PRODUCTS**

#### 2.1 MATERIALS

- A. The stabilized subgrade course shall be constructed of either newly mined limerock material or of salvaged non-plastic limerock materials mixed with existing natural insitu granular and/or limerock material. Stabilizing material shall meet the requirements of Section 321123.
- B. Salvaged limerock used in the work platform shall meet the chemical and organic requirements specified for new limerock and its use shall be subject to approval by the Owner's representative.
- C. Contractor shall submit laboratory test showing that the proposed mixture of soils and limerock shall, in the ratio proposed for use in the field, result in not less than the Limerock Bearing Ratio (LBR) called for in the plans.

#### **PART 3 CONSTRUCTION METHODS**

#### 3.1 GENERAL

A. The stabilized subgrade course shall be constructed to the depth shown on the Plans, or as directed by the Owner's representative. The materials shall be placed, mixed, shaped and compacted using the methods and procedures specified in this Section. Compaction tests shall be performed on this stabilized soil layer as specified in this Section and as shown on the Plans.

#### 3.2 OPERATION IN PITS

A. All work involved in clearing and stripping pits and handling unsuitable material encountered shall be performed by the Contractor at his expense. The limerock material shall be obtained from FDOT approved pits or sources, subject to approval by the Owner's representative. The material in the pits shall be excavated and handled in such manner that a uniform and satisfactory product is secured.

# 3.3 EQUIPMENT

- A. All equipment necessary for the proper construction of the work shall be of the proper design and capacity to perform the intended work, shall be in first-class working condition and shall have been approved by the Owner's representative before construction is allowed to start.
- B. The Contractor shall provide an approved lightweight 16 foot straightedge of aluminum construction for use by the Owner's representative in testing the finished surface.

#### 3.4 PREPARING UNDERLYING COURSE

- A. Before any stabilizing material is placed, the Contractor shall prepare and condition the underlying course as specified. The underlying course shall be checked and accepted by the Owner's representative before placing and spreading operations are started.
- B. Grade control between the edges of the pavement shall be accomplished using grade stakes, steel pins, or forms placed in lines parallel to the centerline of the pavement and at intervals which will permit string lines or check boards to be placed between the stakes, pins, or forms.
- C. To protect the subgrade and to ensure proper drainage, the spreading and/or mixing of the stabilizing material shall begin along the centerline of the pavement on a crowned section or on the high side of pavements with a one-way slope.

#### 3.5 MATERIALS ACCEPTANCE IN EXISTING CONDITION

A. When the subbase material is obtained in a uniform and satisfactory condition and it contains approximately the required moisture, such material may, with the approval of the Owner's representative, be moved directly to the spreading equipment for placing. The material shall be approved material meeting the requirements of Article 2.1, and it may be obtained from off-site rock pits, select salvaged onsite limerock materials, or it may be produced from a crushing, screening and blending plant. The moisture content of the material shall be approximately that required to obtain maximum density. Any minor deficiency or excess of moisture may be corrected by surface sprinkling or by

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aeration. In such instances, mixing or manipulation may be required immediately preceding the rolling, to obtain the required moisture content. The completed surface shall be bladed or dragged, if necessary, to obtain a smooth uniform surface true to line and grade.

#### 3.6 MIXED IN PLACE

- A. When materials from different sources are to be proportioned and mixed or blended in place, the relative proportions of the components of the mixture shall be as determined by the Contractor and approved by the Owner's representative prior to commencing work under this Section.
- B. The stabilizing material shall be deposited and spread evenly to a uniform thickness and width.
- C. The required amount of materials shall be placed, and thoroughly mixed and blended by means of graders, discs, harrows, rotary tillers, supplemented by other suitable equipment if necessary. The mixing shall continue until the mixture is uniform throughout. Areas of segregated material shall be corrected by the addition of material if required. Water shall be uniformly applied prior to and during the mixing operations, if necessary, to maintain the material at its required moisture content. When the mixing and blending has been completed, the material shall be spread in a uniform layer which, when compacted, will meet the requirements of thickness, bearing value and typical cross section.

#### 3.7 GENERAL METHODS FOR PLACING

- A. The stabilized subgrade courses shall be constructed in layers of not less than 3 inches nor greater than 6 inches in compacted thickness. The material, as spread, shall be of uniform gradation with no pockets of fine or coarse materials. The stabilized subgrade material, unless otherwise permitted by the Owner's representative, shall not be spread more than 2,000 square yards in advance of the rolling. No material shall be placed in rain or on a soft, muddy, or disturbed course.
- B. The Contractor shall prevent the incorporation of foreign material into the subbase course mixture.

#### 3.8 FINISHING AND COMPACTING

- A. After spreading or mixing, the stabilized subgrade material shall be thoroughly compacted by rolling and sprinkling, as necessary. Sufficient rollers shall be furnished to adequately handle the rate of placing, mixing and spreading of the subbase course.
- B. Rolling shall progress gradually from the center of the lane under the construction, or from one side toward previously placed material, by lapping uniformly each preceding track by at least 12 inches. Rolling of the stabilized subgrade material shall continue until the materials are thoroughly set and stable, and the subbase course and the subgrade soil below has been compacted to not less than 100% of maximum density at optimum moisture and tested as required by this Section, as shown on the Plans, and as determined by ASTM D-1557.
- C. The course shall not be rolled when the underlying course is soft or yielding or when the rolling causes undulation in the subbase course. When the rolling develops

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irregularities that exceed ½ inch when tested with a 16-foot straightedge, the irregular surface shall be loosened and then refilled with the same kind of material as that used in constructing the course and again rolled as required above.

- D. In those places inaccessible to rollers, the stabilized subgrade material may be tamped thoroughly with mechanical or hand tampers, provided that specified densities are obtained.
- E. Sprinkling during rolling, if necessary, shall be in the amount and by equipment approved by the Owner's representative. Water shall not be added in such a manner or quantity to cause the underlying layer to become soft or yielding.

#### 3.9 SURFACE TEST

A. After the course is completely compacted, the surface shall be tested for accuracy of grade and crown; any portion found to fail in accuracy of grade or crown shall be scarified, reshaped, recompacted, and otherwise manipulated as the Owner's representative may direct until the required accuracy is obtained. The finished surface shall not vary more than ½ inch when tested with an approved 16-foot straightedge applied parallel with, and at right angles to, the centerline.

#### 3.10 THICKNESS

A. The thickness of the completed stabilized subgrade course shall be determined by depth tests taken at intervals so each test represents no more than 500 square yards or as otherwise directed by the Owner's representative. The depth tests shall be made by test holes, at least 3 inches in diameter through the subbase. When the deficiency in thickness is more than ½ inch and correction by adding material will exceed subbase finished elevation, the Contractor shall correct such areas by removing subbase materials, correcting the subgrade and reconstructing the base. Correction work not exceeding allowable subbase finished elevation may be made by scarifying, adding satisfactory mixture, rolling, sprinkling, reshaping, and finishing in accordance with these specifications. The Contractor shall replace the subbase material where borings are taken for test purposes. The thickness of the subbase in the affected area shall be remeasured by depth tests or elevations.

#### 3.11 PROTECTION

A. Work on stabilized subgrade course shall not be conducted when the subgrade is wet or is otherwise unsatisfactory. No traffic of any kind, including construction traffic, will be permitted on the completed stabilized subgrade course except equipment employed in the construction of the next course.

#### 3.12 MAINTENANCE

A. Following the final shaping of the material, the stabilized subgrade shall be maintained throughout its entire area, until the Contractor starts construction of the next course.

#### **END OF SECTION**

#### SECTION 321123 LIME ROCK BASE COURSE

#### **PART 1 - GENERAL**

#### 1.1 SUMMARY

- A. The work under this section shall consist of a base course composed of lime rock constructed on the prepared underlying course in accordance with these specifications and shall conform to the dimensions and typical cross section shown on the plans.
- B. The Contractor shall be solely responsible for all work performed and quality control procedures performed under this Item.

#### 1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

- A. Limerock Base Course
  - Basis of Measurement: By the number of square yards of 8" thick limerock actually constructed and accepted in accordance with the Plans and Specifications.
  - 2. Basis of Payment: Includes furnishing all materials, labor, equipment, processes, tools, and incidentals necessary to complete the work under this Section.

#### 1.3 REFERENCES

- A. ASTM International
  - 1. ASTM C136 Sieve Analysis if Fine and Coarse Aggregates
  - 2. ASTM D698 Moisture Density Relations of Soils using 5.5 lb. Rammer and an 12 inch Drop.
  - ASTM D4318 Liquid Limit, Plastic Limit, and Plasticity Index of Soils
  - 4. ASTM D1557 Test for Laboratory Compaction Characteristics of Soil Using Modified Effort

#### 1.4 SUBMITTALS

A. Section 013300 – Submittal Procedures: Requirements for Submittals

#### **PART 2 - PRODUCTS**

#### 2.1 MATERIALS

A. The lime rock base course material shall consist of fossiliferous limestone of uniform quality, and shall not contain hard or flinty pieces that will cause a rough surface containing pits and pockets. The rock shall show no tendency to "air slake" or undergo chemical change when exposed to the weather. The material when watered and rolled shall be capable of being compacted into a dense and well-bonded base.

The oolitic type of lime rock shall meet the following requirements:

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Carbonates of calcium and magnesium - not less than 70%.

Oxides of iron and aluminum - not more than 2%.

The combined amount of carbonates, oxides, and silica shall be at least 97%. The material shall be non-plastic.

All other types of lime rock shall contain not less than 95% of carbonates of calcium and magnesium. Liquid limit shall not exceed 35, plasticity index shall not exceed 6, as determined in accordance with ASTM D 4318.

The chemical analysis of lime rock shall consist of determining the insoluble silica, iron oxide, and alumina by solution of the sample in hydrochloric (HCl) acid, evaporating, dehydrating, redissolving the residue, and neutralizing with ammonium hydroxide, filtering, washing, and igniting the residue lime rock. The difference between the percentage of insoluble matter and 100% is reported as carbonates of calcium and magnesium.

The lime rock shall not contain more than 0.5% of roots, leaf mold, organic, or foreign matter and shall be obtained from pits from which all overburden has been removed previous to blasting and quarrying.

The gradation of the lime rock shall meet the following requirements:

Sieve Designation Percentage by Weight

(square openings) Passing Sieves

3-1/2 inch (90.mm) 100 3/4 inch (19.0 mm) 50-100

All fine material shall consist entirely of dust of fracture.

#### PART 3 – CONSTRUCTION METHODS

#### 3.1 SOURCES OF SUPPLY

A. All work involved in cleaning and stripping pits, including the handling of unsuitable material shall be performed by the Contractor at his/her own expense. The lime rock shall be obtained from approved sources. The pits shall be operated in such a manner that a clean and uniform material will be secured.

#### **3.2 EQUIPMENT**

A. All equipment necessary for the proper construction of this work shall be on the project, in firstclass working condition, and approved by the Engineer before construction is permitted to start.

#### 3.3 PREPARING UNDERLYING COURSE

A. The underlying course shall be checked and accepted by the Engineer before placing and spreading operations are started. Any ruts or soft yielding places caused by improper drainage conditions, hauling, or any other cause shall be corrected at the Contractor's expense before the base course is placed thereon. Material shall not be placed on frozen subgrade.

#### 3.4 PLACING AND SPREADING

A. All base course material shall be placed on the prepared underlying course and compacted in layers to the thickness shown on the plans. The depositing and spreading of the material on the prepared course or on a completed layer shall commence where designated and shall progress without breaks. The material shall be deposited and spread in lanes in a uniform layer and without segregation of size to such loose depth that, when compacted, the layer shall have the required thickness. When more than one layer is required, the construction procedure described herein shall apply similarly to each layer, excepting the scarifying and rerolling of the surface which shall apply to only the top layer.

The rock shall be transported to locations where it is to be used over rock previously placed and dumped at the end of the preceding spread. It shall then be spread uniformly with shovels, forks, or approved mechanical spreaders especially constructed for this purpose. In no case shall rock be dumped directly onto the underlying course. Transporting over the underlying course will not be permitted, except as directed, in which case it must be protected by planking if rutting occurs. During the dumping and spreading operations, the rock shall be brought to the proper moisture content to obtain maximum density. If water is added, it shall be uniformly mixed to the full depth of the course by discing. All segregated areas of fine or coarse rock shall be removed and replaced with well-graded rock, and approved by the Engineer. Lime rock shall not be spread when the subgrade is in an unsuitable condition.

The lime rock base course shall be constructed in a layer not less than 8 inches (200 mm) of compacted thickness. The base course shall be constructed in lanes or strips parallel with the centerline of the paved area.

During the placing operation, sufficient caution shall be exercised to prevent the incorporation of subgrade, subbase, or shoulder material in the lime rock.

#### 3.5 ROLLING

A. Immediately after completion of the spreading operations, the base material shall be thoroughly compacted. The number, type, and weight of rollers shall be sufficient to compact the mixture to the required density.

The field density of the compacted material shall be at least 100 percent of the maximum density of laboratory specimens prepared from samples of the base material delivered to the jobsite. The laboratory specimens shall be compacted and tested in accordance with ASTM D 1557. The in-place field density shall be determined in accordance with ASTM D 1556. The moisture content of the material at the start of compaction shall not be below nor more than 1-1/2 percentage points above the optimum moisture content.

Field density tests shall be taken daily at random locations. No fewer than two tests per day with no test representing an area greater than 1,200 square yards.

#### 3.6 FINISHING BASE COURSE

A. After the watering and rolling of the base course, the entire surface shall be scarified to a depth of at least 3 inches (75 mm) and shaped to the exact crown and cross section with a blade grader. The scarified material shall be rewatered and thoroughly rolled. Rolling shall continue until the base is bonded and compacted into a dense, unyielding mass, true to grade and cross section. The scarifying and rolling of the surface of the base shall follow the initial

rolling of the lime rock by not more than 4 days. When the lime rock base is constructed in two layers, the scarifying of the surface shall be to a depth of 2 inches (50 mm).

If, in the opinion of the Engineer, the surface of the base is glazed or cemented to the extent that the prime coat could not penetrate properly, and after determining that the condition of the base meets all requirements, he will direct that the surface of the base be hard-planed with a blade grader and broomed immediately prior to the application of the prime coat. This hard-planning shall be done in such a manner that only the glazed or cemented surface is removed, leaving a granular or porous condition that will allow free penetration of the prime material. The material planed from the base shall be removed from the base area.

If at any time the underlying material becomes churned up and mixed with the base course material, the Contractor shall, without additional compensation, dig out and remove the mixture, reshape and compact the underlying course, and replace the materials removed with clean rock which shall be watered and rolled until satisfactorily compacted.

Where cracks, checks, or failures appear in the base, either before or after priming and before the surface course is laid, the Contractor shall remove such cracks, checks, or failures by rescarifying, reshaping, watering, rolling, and adding lime rock where necessary.

#### 3.7 SURFACE TOLERANCE

A. After the course has been completely compacted, the surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified, reshaped, recompacted, and otherwise manipulated as the Engineer may direct until the required smoothness and accuracy are obtained. The finished surface shall not vary more than 3/8 inch (9 mm) from a 16-foot (4.8 mm) straightedge when applied to the surface parallel with, and at right angles to, the centerline. In testing surface of the harder lime rocks, measurement of clearances from the straightedge shall not include small holes caused by individual pieces being pulled out by the grader.

#### 3.8 THICKNESS

A. The thickness of the base course shall be determined by depth tests or elevations taken at intervals in such a manner that each test shall represent 300 square yards (250 square meters), or it shall be as otherwise directed by the Engineer. The depth tests shall be made by test holes through the base at least 3 inches (75 mm) in diameter. Where the base deficiency is more than 1/2 inch (12 mm), the Contractor shall correct such areas by scarifying and adding rock. The base shall be scarified, rock added, and tapered a distance of 100 feet (30 m) in each direction from the edge of the deficient area for each inch of rock added. The affected area shall then be watered, bladed, rolled, and brought to a satisfactory state of compaction, required thickness, and cross section. The thickness of the base in the affected area shall be remeasured by depth tests or elevations. The operations of scarifying, adding rock, and rerolling shall continue until the base thickness is within the 1/2-inch (12 mm) tolerance of base thickness. The final base thickness of the reconditioned area shall be used to determine the average job thickness.

The average job thickness shall be the average of the depth measurement as above outlined and shall be within 1/4 inch (6 mm) of the thickness shown on the typical cross section. On individual depth measurements, thicknesses more than 1/2 inch (12 mm) in excess of that shown on the plans shall be considered as specified thickness plus 1/2 inch (12 mm) in

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computing the average job thickness. The Contractor shall replace, at his/her expense, the lime rock removed from test holes.

#### 3.9 PROTECTION

A. Work on the base course shall not be accomplished during freezing temperatures nor when the subgrade is wet. When the aggregate contains frozen materials or the underlying course is frozen, the construction shall be stopped.

Hauling equipment may be routed over completed portions of the base course, provided no damage results and provided that such equipment is routed over the full width of the base course to avoid rutting or uneven compaction. However, the Engineer in charge shall have full and specific authority to stop all hauling over completed or partially completed base course when, in his/her opinion, such hauling is causing damage. Any damage resulting to the base course from routing equipment over the base course shall be repaired by the Contractor at his/her own expense.

#### 3.10 MAINTENANCE

A. Following the completion of the base course, the Contractor shall perform all maintenance work necessary to keep the base course in a condition satisfactory for priming. After priming, the surface shall be kept clean and free from foreign material. The base course shall be properly drained at all times. If cleaning is necessary, or if the prime coat becomes disturbed, any work or restitution necessary shall be performed at the expense of the Contractor.

**END OF SECTION** 

#### SECTION 321213.23 BITUMINOUS PRIME COAT

#### **PART 1 - DESCRIPTION**

#### 1.1 SUMMARY

A. The work under this section shall consist of an application of bituminous prime coat on the prepared base course in accordance with these specifications and in reasonably close conformity to the plans.

#### 1.2 UNIT PRICE – MEASUREMENT AND PAYMENT

- A. Bituminous Prime Coat
  - 1. Basis of Measurement: By the number of gallons of prime coat applied in accordance with the Plans and Specifications.
  - 2. Basis of Payment: Includes furnishing all materials, labor, equipment, processes, tools, and incidentals necessary to complete the work under this Section.

#### 1.3 REFERENCES

- A ASTM International
  - ASTM D977 Emulsified Asphalt

#### 1.4 SUBMITTALS

A. Section 013300 – Submittal Procedures: Requirements for Submittals

#### **PART 2 - MATERIALS**

#### 2.1 BITUMINOUS MATERIAL

A. Asphalt emulsion prime coat, Type SS-1h, complying with Florida Department of Transportation requirements.

#### **PART 3 - CONSTRUCTION METHODS**

#### 3.1 WEATHER LIMITATIONS

A. The prime coat shall be applied only when the existing surface is dry or contains sufficient moisture to get uniform distribution of the bituminous material, when the atmospheric temperature is above 60°F (15°C), and when the weather is not foggy or rainy. The temperature requirements may be waived, but only when so directed by the Engineer.

#### 3.2 EQUIPMENT

A. The equipment used by the Contractor shall include a self-powered pressure bituminous material distributor and equipment for heating bituminous material.

The distributor shall be designed, equipped, maintained, and operated so that bituminous material at even heat may be applied uniformly on variable widths of surface at the specified rate. The allowable variation from the specified rate shall not exceed 10 percent. Distributor equipment shall include a tachometer, pressure gauges, volume-measuring devices or a calibrated tank, and a thermometer for measuring temperatures of tank contents. The distributor shall be self-powered and shall be equipped with a power unit for the pump and full circulation spray bars adjustable laterally and vertically.

If the distributor is not equipped with an operable quick shut off valve, the prime operations shall be started and stopped on building power. The Contractor shall remove blotting sand prior to asphalt concrete lay down operations at no additional expense to the owner.

A power broom and/or blower shall be provided for any required cleaning of the surface to be treated.

#### 3.3 APPLICATION OF BITUMINOUS MATERIAL

A. Immediately before applying the prime coat, the full width of the surface to be primed shall be swept with a power broom to remove all loose dirt and other objectionable material.

The bituminous material including solvent shall be uniformly applied with a bituminous distributor at the rate of 0.25 to 0.50 gallons per square yard (1.20 to 2.40 liters per square meter) depending on the base course surface texture. The type of bituminous material and application rate shall be approved by the Engineer prior to application.

Following the application, the primed surface shall be allowed to dry not less than 48 hours without being disturbed or for such additional time as may be necessary to permit the drying out of the prime coat until it will not be picked up by traffic or equipment. This period shall be determined by the Engineer. The surface shall then be maintained by the Contractor until the surfacing has been placed. Suitable precautions shall be taken by the Contractor to protect the primed surface against damage during this interval, including supplying and spreading any sand necessary to blot up excess bituminous material.

#### 3.4 BITUMINOUS MATERIAL CONTRACTOR'S RESPONSIBILITY

A. Samples of the bituminous materials that the Contractor proposes to use, together with a statement as to their source and character, must be submitted and approved before use of such material begins. The Contractor shall require the manufacturer or producer of the bituminous materials to furnish material subject to this and all other pertinent requirements of the contract. Only satisfactory materials, so demonstrated by service tests, shall be acceptable.

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The Contractor shall furnish vendor's certified test reports for each carload, or equivalent, of bituminous material shipped to the project. The test reports shall contain all the data required by the applicable specification. If the Contractor applies the prime material prior to receipt of the tests reports, payment for the material shall be withheld until they are received. If the material does not pass the specifications it shall be replaced at the contractor's expense. The report shall be delivered to the Engineer before permission is granted for use of the material. The furnishing of the vendor's certified test report for the bituminous material shall not be interpreted as basis for final acceptance. All such test reports shall be subject to verification by testing samples of materials received for use on the project.

**END OF SECTION** 

#### SECTION 321216 ASPHALT PAVING

#### **PART 1 - DESCRIPTION**

#### 1.1 SUMMARY

A. The work under this section shall consist of the application of a bituminous asphalt paving on the prepare dbase coarse in accordance with these specifications and in reasonably close conformity to the plans

#### 1.2 UNIT PRICE – MEASUREMENT AND PAYMENT

#### A. Asphalt Paving

- 1. Basis of Measurement: By the number of tons of asphalt paving applied in accordance with the Plans and Specifications.
- 2. Basis of Payment: Includes furnishing all materials, labor, equipment, processes, tools, and incidentals necessary to complete the work under this Section.

#### B. Pavement Markings

- Basis of Measurement: By the number of square feet of pavement markings and taxiway markings (including glass beads) applied in accordance with the Plans and Specifications.
- 2. Basis of Payment: Includes furnishing all materials, labor, equipment, processes, tools, and incidentals necessary to complete the work under this Section.

#### 1.3. SUMMARY

- A. Section Includes:
  - 1. Hot-mix asphalt paving.
  - 2. Pavement-marking paint.
  - 3. Taxiway marking paint.
  - 4. Glass beads.

#### B. Related Sections:

1. Division 31 Section "Earth Moving" for aggregate subbase and base courses and for aggregate pavement shoulders.

#### 1.4 SUBMITTALS

- A. Product Data: For each type of product indicated. Include technical data and tested physical and performance properties.
  - 1. Job-Mix Designs: Certification, by authorities having jurisdiction, of approval of each job mix proposed for the Work.
- B. Material Certificates: For each paving material, from manufacturer.

#### 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A paving-mix manufacturer registered with and approved by authorities having jurisdiction or the DOT of state in which Project is located.
- B. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of Florida Department of Transportation for asphalt paving work.
  - Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.
- C. Pre-installation Conference: Conduct conference at Project site.

#### 1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver pavement-marking materials to Project site in original packages with seals unbroken and bearing manufacturer's labels containing brand name and type of material, date of manufacture, and directions for storage.
- B. Store pavement-marking materials in a clean, dry, protected location within temperature range required by manufacturer. Protect stored materials from direct sunlight.

#### 1.7 PROJECT CONDITIONS

- A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate cure, or if the following conditions are not met:
  - 1. Prime Coat: Minimum surface temperature of 60 deg F (15.6 deg C).
  - 2. Asphalt Surface Course: Minimum surface temperature of 60 deg F (15.6 deg C) at time of placement.
- B. Pavement-Marking Paint: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 55 deg F (12.8 deg C) for water-based materials, and not exceeding 95 deg F (35 deg C).

#### PART 2 - PRODUCTS

#### 2.1 AGGREGATES

- A. General: Use materials and gradations that have performed satisfactorily in previous installations.
- B. Coarse Aggregate: ASTM D 692, sound; angular crushed stone, crushed gravel, or cured, crushed blast-furnace slag.
- C. Fine Aggregate: **ASTM D 1073**, sharp-edged natural sand or sand prepared from stone, gravel, cured blast-furnace slag, or combinations thereof.
  - 1. For hot-mix asphalt, limit natural sand to a maximum of 20 percent by weight of the total aggregate mass.

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D. Mineral Filler: ASTM D 242, rock or slag dust, hydraulic cement, or other inert material.

#### 2.2 ASPHALT MATERIALS

- A. Asphalt Cement: ASTM D 3381 for viscosity-graded material.
- B. Prime Coat: Asphalt emulsion prime coat complying with Florida Department of Transportation DOT requirements.
- C. Water: Potable

#### 2.3 AUXILIARY MATERIALS

- 1. Sand: ASTM D 1073, Grade Nos. 2 or 3.
- 2. Pavement-Marking Paint: Latex, waterborne emulsion, lead and chromate free, ready mixed, complying with FS TT-P-1952, Type II, with drying time of less than three minutes.
  - 1. Colors: White.
- 3. Taxiway Paint: Waterborne paint meeting the requirements of Federal Specification TT-P-1952E, Type II.
  - 1. Colors: Yellow-33538 or 33655 in accordance with Federal Standard No. 595.
  - 2. Colors: Black-37038 in accordance with Federal Standard No. 595.
  - 3. Glass Beads: Glass beads for all permanent yellow paint in accordance with Federal Specification TT-B-1325D, Type III.
- 4. Hot-Mix Asphalt: Dense, hot-laid, hot-mix asphalt plant mixes approved by authorities having jurisdiction and designed according to procedures in Al MS-2, "Mix Design Methods for Asphalt Concrete and Other Hot-Mix Types."
  - 1. Provide mixes with a history of satisfactory performance in geographical area where Project is located.
  - 2. Provide mixes complying with composition, grading, and tolerance requirements in ASTM D 3515 for the following nominal, maximum aggregate sizes:
    - a. Base Course: 1 inch (25 mm).
    - b. Surface Course: ½ inch (13 mm).

#### **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

- A. Verify that subgrade is dry and in suitable condition to begin paving.
- B. Proof-roll subgrade below pavements with heavy pneumatic-tired equipment to

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identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

- 1. Completely proof-roll subgrade in one direction, Limit vehicle speed to 3 mph (5 km/h).
- 2. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Engineer, and replace with compacted backfill or fill as directed.
- C. Proceed with paving only after unsatisfactory conditions have been corrected.

#### 3.2 HOT-MIX ASPHALT PLACING

- A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.
  - 1. Place hot-mix asphalt base course in number of lifts and thicknesses indicated.
  - 2. Place hot-mix asphalt surface course in single lift.
  - 3. Spread mix at minimum temperature of 250 deg F (121 deg C).
  - 4. Begin applying mix along centerline of crown for crowned sections and on high side of one-way slopes unless otherwise indicated.
  - 5. Regulate paver machine speed to obtain smooth, continuous surface tree of pulls and tears in asphalt-paving mat.
- B. Place paving in consecutive strips not less than 10 feet (3 m) wide unless infill edge strips of a lesser width are required.
- C. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

#### 3.3 JOINTS

- A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.
  - 1. Clean contact surfaces and apply tack coat to joints.
  - 2. Offset longitudinal joints, in successive courses, a minimum of 6 inches (150 mm).
  - 3. Offset transverse joints, in successive courses, a minimum of 24 inches (600 mm).
  - 4. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method according to Al MS-22, for both "Ending a Lane" and "Resumption of Paving Operations."

#### 3.4 COMPACTION

A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot, hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.

- 1. Complete compaction before mix temperature cools to 185 deg F (85 deg C).
- B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.
- C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:
  - Average Density: 92 percent of reference maximum theoretical density according to ASTM D 2041, but not less than 90 percent nor greater than 96 percent.
- D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.
- E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
- F. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
- G. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

#### 3.5 INSTALLATION TOLERANCES

- A. Pavement Thickness: Compact each course to produce the thickness indicated within the following tolerances
  - 1. Surface Course: Plus 1/4 inch (6 mm), no minus.
- B. Pavement Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot (3-m) straightedge applied transversely or longitudinally to paved areas:
  - 1. Surface Course: 1/8 inch (3 mm)
  - 2. Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template is 1/4 inch (6 mm).

#### 3.6 PAVEMENT MARKING

- A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Engineer.
- B. Allow paving to age for **30** days before starting pavement marking.
- C. Sweep and clean surface to eliminate loose material and dust.

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D. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils (0.4 mm).

#### 3.7 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- B. Thickness: In-place compacted thickness of hot-mix asphalt courses will be determined according to ASTM D 3549.
- C. Surface Smoothness: Finished surface of each hot-mix asphalt course will be tested for compliance with smoothness tolerances.
- D. Replace and compact hot-mix asphalt where core tests were taken.
- E. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

#### 3.8 DISPOSAL

A. Except for material indicated to be recycled, remove excavated materials from Project site and legally dispose of them in an EPA-approved landfill.

**END OF SECTION 321216** 

## SECTION 324010.01 INSTALLATION OF AIRPORT LIGHTING SYSTEMS

#### **PART 1- GENERAL**

#### 1.1 SUMMARY

A. This item shall consist of airport lighting systems furnished, relocated, installed or modified in accordance with these specifications, and the applicable Advisory Circulars. The systems are to be installed at the locations indicated and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the Owner.

#### 1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

- A. Taxiway Flush Mount Light
  - 1. Basis of Measurement: By the number of taxiway flush mount lights installed and accepted in accordance with the Plans and Specifications including removal of existing junction can/light base can, temporary wiring to maintain existing system in operation, identification, transformer, connector kits, labor, drilling, disconnect/reconnect existing circuit, coring of pavement, fixture, extension ring spacers, dam rings, steel covers, splice kits, connector kits, carbon steel coated bolts, flexible sealant, and rigid cement compound.
  - 2. Basis of Payment: Includes furnishing all materials, labor, equipment, processes, tools, and incidentals necessary to complete the work under this Section.

#### 1.3 REFERENCES

- A. FAA Advisory Circulars. Contractor shall use the latest version of the listed advisories:
  - 1. L-823 Connectors, Cable (AC 150/5345-26D)
  - 2. L-830 Transformers, Isolation, 60HZ (AC 150/5345-47C)
  - 3. L-831 Transformers, Isolation, 60HZ (AC 150/5345-47C)
  - 4. L-852 Lights, Taxiway, In Pavement (AC 150/5345-46D, AC 150/5340-30G)
  - 5. L-868 Light Base, Load Bearing (AC 150/5345-42G)
  - 6. L-869 Junction Boxes (AC 150/5345-42G)

#### 1.4 SUBMITTALS

A. Section 013300 – Submittal Procedures: Requirements for Submittals

#### **PART 2 - PRODUCTS**

#### 2.1 GENERAL

- A. Airport lighting equipment and materials covered by FAA specifications shall have the prior approval of the Federal Aviation Administration, Airport Services, Washington, D.C. 20591.
- B. All other equipment and materials covered by the other referenced specifications shall be subject to acceptance through the manufactures certification of compliance with the applicable specifications. The Contractor shall submit the manufacturer's certificates of compliance with the applicable equipment submittals.
- C. Lists of the equipment and materials required for a particular system are contained in the applicable advisory circulars.
- D. If the Contractor elects to furnish and install airport lighting equipment requiring additional wiring, transformers, adapters, mountings, etc., to those shown on the drawings and or listed in the specifications, any cost for these items shall be incidental to the equipment cost.
- E. Only the specified type, style, class, and etc., of FAA approved equipment, when indicated in the plans or specifications, will be acceptable even though equipment of other types, styles, classes, etc. may be FAA approved. "FAA approved" as used herein means approved under the Airport Lighting Equipment Certification Program as described in Advisory Circular (AC) 150/5345-53, latest revision.
- F. All airfield lighting fixtures shall have been manufactured and shall perform in accordance with FAA AC 150/5345-46, latest edition. Any defect in design, materials (excluding lamps), or workmanship, which may occur during proper and normal use, shall be warranted for a period of one (1) year from date of installation. This warranty must include specifically warrants against water leakage, damage, and corrosion to the lamps, electrical connections, and optical elements internal to the luminaries. Any above mentioned defect requires the manufacturer to repair or replace, at its option, the defective part(s) or entire fixture at no additional cost. All other equipment shall be guaranteed free from defects in manufacturing, workmanship, and materials for a period of 12 months from placement into service.
- G. Manufacturer's certifications shall not relieve the Contractor of the Contractor's responsibility to provide materials in accordance with these specifications and acceptable to the Engineer. Materials supplied and/or installed that do not materially comply with these specifications shall be removed, when directed by the Engineer and replaced with materials, which do comply with these specifications, at the sole cost of the Contractor.
- H. All items required per this section are for use on a 6.6 amp primary series circuit unless specifically noted otherwise.

#### 2.2 FIXTURES

A. Fixture pay items shall include, as applicable, a deep base can, top can section, base plate, properly sized spacer ring (w/concrete ring), properly sized L-830 transformers, L-823 connectors, and all incidentals and appurtenances required to provide a fully functional and operating lighting system to the satisfaction of the Engineer. All alignment, leveling, aiming, etc. is included as a component part of the fixture pay item.

#### 2.3 SEMI-FLUSH IN PAVEMENT LIGHT FIXTURES

A. All semi-flush in pavement light fixtures shall be Style 3, Class 2, Mode 1 and 6.6A with a total height of the fixture above the finished grade (x) shall be x < 0.25 inch. Fixtures shall be type L-825T with LED type lamps. Light fixtures shall be aluminum with integral lighting unit and optic assembly. It shall be capable of being placed on both new and existing L-868 lighting bases. All fixtures shall be equipped with a ground lug affixed to the underside of the fixture sized for a #6 AWG. Provide #6 AWG XHHW grounding conductor between the fixture and the internal grounding lug of the base can with sufficient length (minimum 3ft) to allow for the fixture removal.

#### 2.4 ISOLATION TRANSFORMERS

A. Isolation transformers shall be for 20 Amp or 6.6 Amp series lamps (as required) conforming to requirement of Advisory Circular 150/5345-47, latest addition. Isolation transformers shall be compatible with the L-823 connector kits for watertight connections and per FAA requirements.

#### 2.5 TAPE

A. Rubber and plastic electrical tapes shall be Scotch Electrical Tape Numbers 23 and 88, respectively, as manufactured by the Minnesota Mining and Manufacturing Company, or an approved equal. Electrical coating shall be Scotchkote as manufactured by Minnesota Mining and Manufacturing Company, or an approved equal.

#### 2.6 CONCRETE

A. Concrete for backfill and base cans not in the runway/taxiway safety areas or in existing pavement where aircraft traffic will not resume immediately upon reopening, shall attain a minimum 28 day strength of 4,000 psi. A concrete mix design shall be submitted and approved before commencement of work.

#### 2.7 CONDUIT

- A. Rigid steel conduit and fittings shall conform to the requirements of Federal Specifications WW-C-581.
- B. Plastic conduit and fittings shall meet the requirements of Federal Specifications W-C-1094, Type II.

#### 2.8 CABLE CONNECTION

- A. In line connections of underground primary cables shall be of the type called for on the drawings and shall be listed below.
  - 1. The Field Attached Plug-in Splice. Field connections shall be accordance with Figure 3 of AC 150/5345-26, latest addition, Specification for L-823 Plug and Receptacle, Cable Connectors, employing connector kits. This splice is approved for field attachment to single conductor cable. The kits shall be the Integro "Complete Kit" or approved alternate. It shall be the Contractors responsibility to determine the outside diameter of the cable to be spliced and to furnish appropriately sized connector kits and/or adapters. This is especially critical in splicing new cables to existing, where the outside diameter of the two cables may differ. Contractor shall coordinate with the connector kit manufacturer for all cable to cable connections and all cable to transformers connections for full compatibility of watertight connections and provide all necessary transformers and connectors kits accordingly.
  - 2. The Factory Molded Plug-in Splice. Specification for L-823 Connectors, Factory Molded to Individual Conductors, are approved. L-823 Connector kits shall be Integro "Complete Kit" or approved alternate. Contractor shall coordinate with the connector kit manufacturer for all cable to cable connections and all cable to transformers connections for full compatibility of watertight connections and provide all necessary transformers and connectors kits accordingly.

#### 2.9 LIGHT BASES

- A. The light base cans shall be steel and shall be L-868 for load bearing installations. The sizes shall be shown on the contract drawings. The cans shall be manufactured in accordance with Advisory Circular 150/5345-42, latest edition. All cans, spacer and flange rings shall be Class 1, hot dipped galvanized steel. Internal and external grounding lugs shall be provided in each base can.
  - The L-868 bases shall be used for load bearing installations in pavement. Two piece base cans shall be used, the bases shall utilize standard riser rings to adjust the fixture to the proper height subsequent to the overlay. In addition, flange rings with concrete rings shall be compatible with each other and shall be steel. Carbon steel coated bolts shall be used for the installation of all fixtures onto the bases.
  - The spacer rings are designed as a nominal 0.75 inch thickness, however the spacer rings may be required to be thinner or thicker depending on base can installation and paving techniques. The contractor shall be responsible to measure and determine the required thickness of each individual spacer ring, top can section or base can extension required to put the airfield lighting fixture at the correct elevation, azimuth and rotation per FAA Advisory Circulars, latest editions. The Contractor's bid price shall include furnishing and installing all spacer rings, top can sections and base can extensions required.

#### 2.10 CONNECTORS

The connectors for the primary L-824, 5KV, class C cable and the connectors for Α. the secondary 600 volt cable shall be L-823 plug type.

#### 2.11 **BOLTING HARDWARE**

All airfield bolting hardware shall be fluoropolymer metallic-ceramic coated SAE Α. J429 Grade 2 carbon steel bolts per FAA Engineering Brief 83 and meet FAA requirements. Bolt coating shall be orange. All bolts 1/4 inch and larger shall be hex head type. All bolts smaller than 1/4 inch trade size shall be recessed Allen type. All bolted connections shall utilize an anti-rotational locking type device. The base can cover and fixture mounting bolts shall extend thru the base can mounting flange into the base can a minimum of 0.75 inch beyond machined thread system. The bolts shall have enough thread length so they do not shoulder out before the fixture is securely tightened.

#### 2.12 **FILLERS AND ADHESIVES**

Α. Joint sealing filler shall be FAA type P-605 and adhesive compounds shall be FAA type P-606. The P-605 and P-606 shall be formulated so they are compatible with the pavement type with which they are to be used.

#### **PART 3- CONSTRUCTION METHODS**

#### 3.1 **GENERAL**

A. The installation and testing details for the systems shall be as specified in the applicable Advisory Circulars or manufacturers specifications as approved by the Engineer. All fixtures, base cans, etc., shall be installed as shown on the plans or approved shop drawing and in accordance with the applicable FAA Advisory Circulars and manufacturers' recommendations. Tolerances given in the FAA Advisory Circulars, these specifications, and the plans shall not be exceeded. Where no tolerance is given, no deviation is permitted. Items not installed in accordance with the FAA Advisory Circulars, these specifications and plans shall be replaced by and at the expense of the Contractor.

#### 3.2 **PLACING LIGHTS**

All new or relocated light fixtures or junction cans shall be installed at the location Α. indicated in the plans or as directed by the Engineer. For runway or taxiway edge lighting systems, installation and installation tolerances, the Contractor shall conform to the FAA Advisory Circular 150/5340-30, latest edition. Stake location of all light fixtures prior to installation to demonstrate accuracy of layout, spacing intervals, and coordination with paving joints and utilities.

Page 201 of 246

- B. The Contractor will be held responsible for all correct leveling, adjustment, and orientation of all lights installed by him/her.
- C. Provide slack cable inside the light base and transformer housing to permit connections of the primary leads to the lamp leads with a disconnecting plug and receptacle.
- D. The bases for base-mounted light unit shall be installed as shown in the plans, at the specified location. The cable entrance hubs are to be oriented in the proper direction. With the base properly oriented and held at the proper elevation, place concrete is sloped away from the flange portion of the base so that the sloped outer edges of the concrete are the surface grade. Grade elevation shall be as established by the Engineer. Light bases which are too high or too low shall be removed and reset.
- E. Edge light units shall be 10 feet off the striped edge of pavement (unless specifically indicated otherwise). On straight sections, they shall be optically in line when sighted from either end of a straight section. Base cans for edge light units shall be installed at the designated locations with top flanges at the required elevation and within 2 degrees of level. All elevated edge lights shall be installed at an equal height above grade not to exceed 14 inches. Transverse alignment shall be plus or minus 1/2 inch; longitudinal alignment (parallel to edge) shall be plus or minus 3 inches.
- F. Dow Corning Compound 111 valve lubricant non-curing sealant or approved equal shall be used to seal between sections of base cans, spacer rings, adapter rings or fixtures.
- G. An identification tag shall be installed with each fixture, sign, etc., as shown in the plans. Stainless steel circuit identification tags identifying each circuit shall be attached to each cable in the fixture, on each side of all cable to cable splices and on the cable side of the cable to transformer splices. Provide three feet (3') of slack in each end of each cable in each base can. All connections shall be able to be made above ground.

**END OF SECTION** 

#### **SECTION 329113 - SOIL PREPARATION**

#### PART 1 GENERAL

#### 1.01 SEQUENCING AND SCHEDULING

A. Rough grade areas to be planted or seeded prior to performing Work specified under this Section.

#### PART 2 PRODUCTS

#### 2.01 TOPSOIL

- A. General: Uniform mixture of 50 percent sand and 50 percent muck in a loose friable condition, free from objects larger than 1-1/2 inches maximum dimension, and free of subsoil, roots, grass, other foreign matter, hazardous or toxic substances, and deleterious material that may be harmful to plant growth or may hinder grading, planting, or maintenance.
- B. Textural Amendments: Amend as necessary to conform to required composition.
- C. Source: Import topsoil if onsite material fails to meet specified requirements or is insufficient in quantity.

#### 2.02 SOURCE QUALITY CONTROL

- A. Topsoil Analysis/Testing: Performed by county or state soil testing service or approved certified independent testing laboratory.
- B. Should soil tests prove the topsoil to alkaline or above the accepted minimum for salt content, the topsoil shall be removed and replaced by acceptable material at Contractor's expense.

#### PART 3 EXECUTION

#### 3.01 SUBGRADE PREPARATION

- A. The subgrade shall be 4 inches lower than finished grade with 2 inches of topsoil added to sod areas.
- B. Scarify subgrade to minimum depth of 6 inches where topsoil is to be placed.
- C. Remove stones over 2-1/2 inches in any dimension, sticks, roots, rubbish, and other extraneous material.
- D. Limit preparation to areas which will receive topsoil within 2 days after preparation.

SOIL PREPARATION 329113-1

#### 3.02 TOPSOIL PLACEMENT

- A. Topsoil Thickness:
  - 1. Sodded Areas: 2 inches.
  - 2. Planting Beds: 6 inches.
- B. Do not place topsoil when subsoil or topsoil is excessively wet or otherwise detrimental to the Work.
- C. Mix soil amendments with topsoil before placement or spread on topsoil surface and mix thoroughly into entire depth of topsoil before planting or seeding.
- D. Uniformly distribute to within 1/2-inch of final grades. Fine grade topsoil eliminating rough or low areas and maintaining levels, profiles, and contours of subgrade.
- E. Remove stones exceeding 1-1/2 inches, roots, sticks, debris, and foreign matter during and after topsoil placement.
- F. Remove surplus subsoil and topsoil from site. Grade stockpile area as necessary and place in condition acceptable for planting or seeding.

**END OF SECTION** 

SOIL PREPARATION 329113-2

#### **SECTION 329223 - SODDING**

#### PART 1 GENERAL

#### 1.01 DEFINITIONS

A. Maintenance Period: Begin maintenance immediately after each area is planted (sod) and continue for a period of 8 weeks after all planting under this Section is completed.

#### B. Satisfactory Stand:

- 1. Grass or Section of Grass that has:
  - a. No bare spots larger than 3 square feet.
  - b. Not more than 10 percent of total area with bare spots larger than 1 square foot.
  - c. Not more than 15 percent of total area with bare spots larger than 6 square inches.

#### 1.02 DELIVERY, STORAGE, AND PROTECTION

#### A. Sod:

- 1. Do not harvests if sod is excessively dry or wet to the extent survival may be adversely affected.
- 2. Harvest and deliver sod only after laying bed is prepared for sodding.
- 3. Roll or stack to prevent yellowing.
- 4. Deliver and lay within 24 hours of harvesting.
- 5. Keep moist and covered to protect from drying from time of harvesting until laid.

#### 1.03 WEATHER RESTRICTIONS

A. Perform Work under favorable weather and soil moisture conditions as determined by accepted local practice.

#### 1.04 SEQUENCING AND SCHEDULING

- A. Prepare topsoil as specified in Section 329113, Soil Preparation, before starting Work of this Section.
- B. Complete Work under this Section within 10 days following completion of soil preparation.
- C. Notify Engineer at Least 3 Days in Advance of:
  - 1. Each material delivery.
  - 2. Start of planting activity.

D. Planting Season: Those times of year that are normal for such Work as determined by accepted local practice.

#### 1.05 MAINTENANCE SERVICE

- A. Contractor: Perform maintenance operations during maintenance period to include:
  - 1. Watering: Keep surface moist.
  - 2. Washouts: Repair by filling with topsoil, and replace sodded areas.
  - 3. Mowing: Mow to 2 inches after grass height reaches 3 inches, and mow to maintain grass height from exceeding 3 1/2 inches.
  - 4. Resod unsatisfactory areas or portions thereof immediately at the end of the maintenance period if a satisfactory stand has not been produced, at which time maintenance period shall recommence.
  - 5. Resod during next planting season if scheduled end of maintenance period falls after September 15.

#### PART 2 PRODUCTS

#### 2.01 FERTILIZER

- A. Commercial, uniform in composition, free-flowing, suitable for application with equipment designed for that purpose. Minimum percentage of plant food by weight.
- B. Mix:
  - 1. Nitrogen: Sixteen.
  - 2. Phosphoric Acid: Four.
  - 3. Potash: Eight.

#### 2.02 SOD

- A. Unless a particular type of sod is called for, sod may be of either St. Augustine Floritam or Bahia grass, at the Contractor's option.
  - 1. Use Bahia grass where no irrigation system exists.
  - 2. Use St. Augustine Floritam where an irrigation system is in use.
- B. Strongly rooted pads, capable of supporting own weight and retaining size and shape when suspended vertically from a firm grasp on upper 10 percent of pad.
  - 1. Grass Height: Normal.
  - 2. Strip Size: Supplier's standard, commercial size rectangles.
  - 3. Soil Thickness: Uniform; 1-inch plus or minus 1/4-inch at time of cutting.
  - 4. Age: Not less than 10 months or more than 30 months.

- 5. Condition: Healthy, green, moist; free of diseases, nematodes and insects, and of undesirable grassy and broadleaf weeds. Yellow sod, or broken pads, or torn or uneven ends will not be accepted
- 6. Any netting contained within the sod shall be certified by the manufacturer to be bio-degradable within a period of 3 months from installation.

#### PART 3 EXECUTION

#### 3.01 PREPARATION

- A. Grade Areas to Smooth, Even Surface with Loose, Uniformly Fine Texture:
  - 1. Roll and rake, remove ridges, fill depressions to meet finish grades.
  - 2. Limit such Work to areas to be planted within immediate future.
  - 3. Remove debris, and stones larger than 1 1/2 inches diameter, and other objects that may interfere with planting and maintenance operations.
- B. Moisten prepared areas before planting if soil is dry. Water thoroughly and allow surface to dry off before seeding. Do not create muddy soil.
- C. Restore prepared areas to specified condition if eroded or otherwise disturbed after preparation and before planting.
- D. Limit preparation to those areas that can be sodded within 72 hours after preparation.

#### 3.02 FERTILIZER

- A. Apply evenly over area in accordance with manufacturer's instructions. Mix into top 2 inches of top soil.
- B. Application Rate: 20 pounds per 1,000 square feet (1,000 pounds per acre).

#### 3.03 SODDING

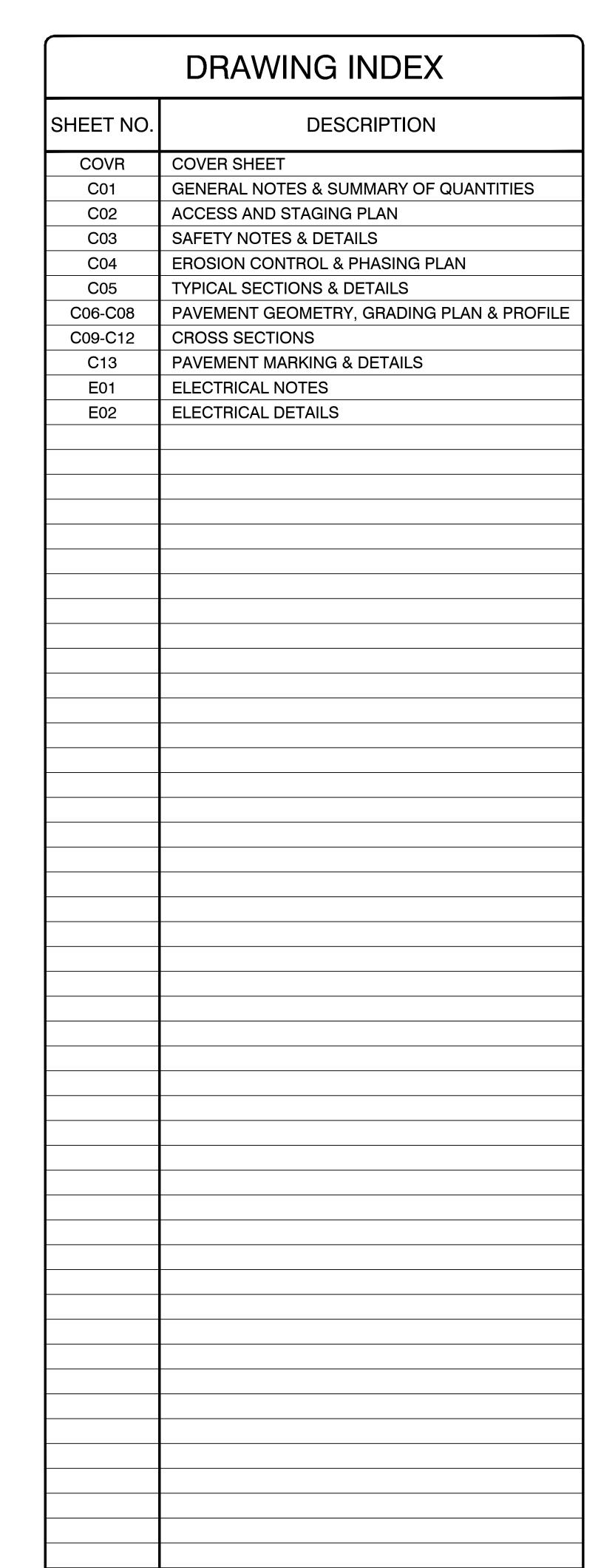
- A. Do not plant dormant sod, or when soil conditions are unsuitable for proper results.
- B. Pre-wet the area prior to placing sod. Lay sod to form solid mass with tightly fitted joints; butt ends and sides, do not overlap:
  - 1. Stagger strips to offset joints in adjacent courses.
  - 2. Work from boards to avoid damage to subgrade or sod.
  - 3. Tamp or roll lightly to ensure contact with subgrade; work sifted soil into minor cracks between pieces of sod, remove excess to avoid smothering adjacent grass.
  - 4. Complete sod surface true to finished grade, even, and firm.

- C. Fasten sod on slopes to prevent slippage with wooden pins 6 inches long driven through sod into subgrade, until flush with top of sod. Install at sufficiently close intervals to securely hold sod.
- D. Water sod with fine spray immediately after planting. During first month, water daily or as required to maintain moist soil to depth of 4 inches.

#### 3.04 FIELD QUALITY CONTROL

- A. Eight weeks after sodding is complete and on written notice from Contractor, Engineer will, within 15 days of receipt, determine if the sod has been satisfactorily established.
- B. If the sod is not satisfactorily established, Contractor shall replace the sod and repeat the requirements of this Section.

**END OF SECTION** 





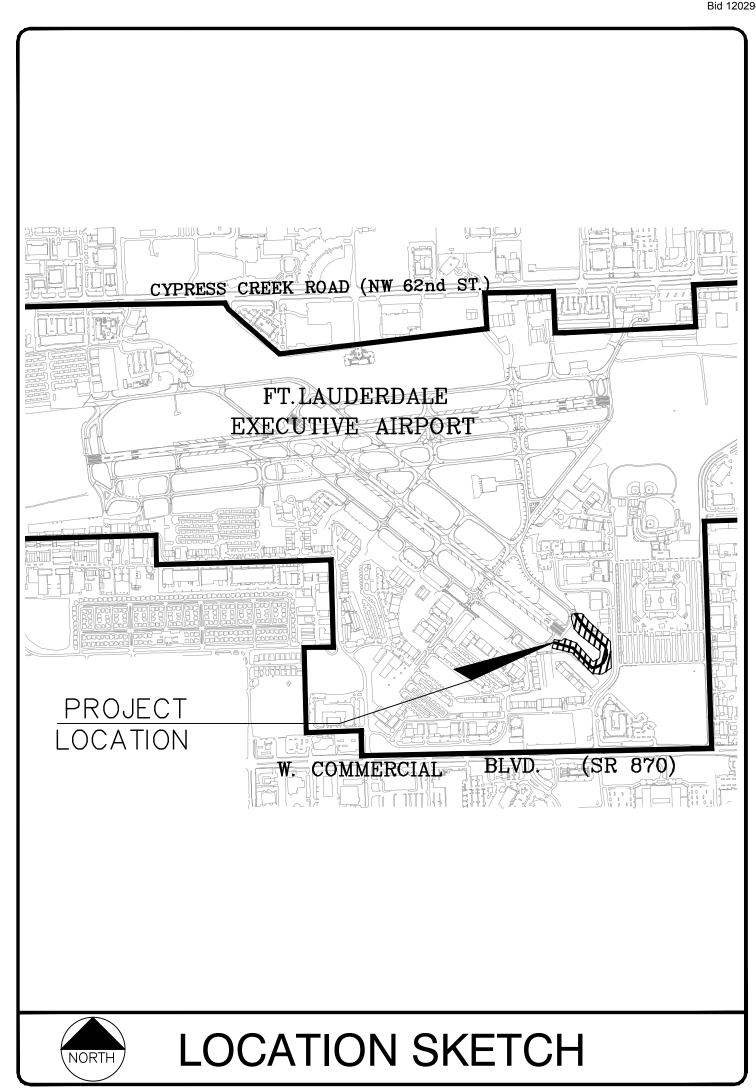
# CITY OF FORT LAUDERDALE

# CITY PROJECT NO. 12260 EXECUTIVE AIRPORT SOUTH PERIMETER LOOP ROAD

6000 NW 21st Avenue FORT LAUDERDALE, FLORIDA

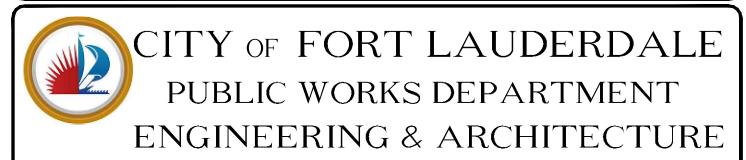


ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE TAKEN INTO ACCOUNT WHEN OBTAINING SCALED DATA.





6000 NW 21st Avenue. Fort Lauderdale. Florida



100 North Andrews Avenue, Fort Lauderdale, Florida 33301

# FORT LAUDERDALE CITY COMMISSION

JOHN P. "JACK" SEILER MAYOR BRUCE G. ROBERTS COMMISSIONER - DISTRICT I DEAN J. TRANTALIS COMMISSIONER - DISTRICT II ROBERT L. McKINZIE COMMISSIONER - DISTRICT III COMMISSIONER - DISTRICT IV ROMNEY ROGERS

PROJECT MANAGER JOB TITLE PHONE NO. SENIOR PROJECT MANAGER JILL PRIZLEE, P.E. (954) 828-5962 FERNANDO BLANCO (954) 828-6536 AIRPORT ENGINEER JOSE CUSTODIO, P.E. PROJECT MANAGER (954) 828-5248

DATE: 04/2017 CAD FILE: 12260-000-COVR DRAWING FILE No.: 4-140-39**BID SET** 

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- 2. THE CONTRACTOR SHALL COMPLY WITH ALL CITY, COUNTY AND STATE TRAFFIC REGULATIONS CONCERNING THE USE OF STREETS AND ROADWAYS FOR DELIVERIES AND HAULING. ANY DAMAGE DONE TO THE ROADWAYS DUE TO THE CONTRACTOR'S EQUIPMENT OR HAULING OPERATIONS SHALL BE REPAIRED TO THE OWNER'S SATISFACTION, AT NO COST TO THE OWNER. ALL HAULING UNITS TRANSPORTING LOOSE MATERIALS (SOIL, LIMEROCK, ETC.) SHALL BE FULLY COVERED.
- 3. THE CONTRACTOR SHALL COOPERATE WITH AIRPORT AUTHORITIES, USERS, TENANTS AND FIRE DEPARTMENT WHILE WORKING ON THIS PROJECT.
- 4. THE CONTRACTOR'S SUPERINTENDENT SHALL BE ON THE CONSTRUCTION SITE AT ALL TIMES DURING WORKING HOURS WHILE THIS PROJECT IS IN PROGRESS. THE CONTRACTOR'S SUPERINTENDENT SHALL BE THE DESIGNATED RESPONSIBLE CONTRACTOR REPRESENTATIVE, AND SHALL BE AVAILABLE IN CASE OF EMERGENCIES ON A 24-HOUR BASIS AND SHALL BE FLUENT IN ENGLISH.
- 5. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- 6. CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC DURING CONSTRUCTION IN ACCORDANCE WITH THESE PLANS AND ALL STATE, COUNTY AND LOCAL REQUIREMENTS.
- 7. BARRICADES ARE TO REMAIN UNTIL ALL PROJECT CONSTRUCTION IS COMPLETED UNLESS NOTED OTHERWISE.
- 8. THE CONTRACTOR SHALL CONDUCT THE FINAL CLEANING OF AFFECTED AIRPORT PAVEMENTS PRIOR TO REOPENING THE PAVEMENTS TO AIRPORT TRAFFIC. THE CONTRACTOR IS RESPONSIBLE FOR CONTINUOUS DAILY CLEAN UP OF THE WORK AREA. THE CONTRACTOR SHALL CONDUCT VACUUM CLEANING OF AFFECTED AIRPORT PAVEMENTS PRIOR TO REOPENING EACH PHASE OF THE PAVEMENTS TO AIR TRAFFIC. CONTRACTOR SHALL CONDUCT VACUUM CLEANING OF ACTIVE AIRPORT PAVEMENTS IMMEDIATELY FOLLOWING ANY ACCESS ONTO OR CROSSING THE PAVEMENT BY CONSTRUCTION TRAFFIC.
- 9. ALL LOCATIONS, DIMENSIONS AND ELEVATIONS MUST BE VERIFIED BY THE CONTRACTOR IN THE FIELD BEFORE COMMENCING WORK. ANY DISCREPANCY MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- 10. CONTRACTOR SHALL NOTE IN THE RECORD DRAWINGS ANY AND ALL PIPES. DUCTS AND CABLES FOUND DURING EXCAVATION. INDICATE EXACT POSITION, ELEVATION, DIRECTION, SIZE, MATERIAL, PURPOSE AND ACTIVE STATUS IF KNOWN.
- 11. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES TO PROTECT EXISTING ABOVE GROUND IMPROVEMENTS THAT ARE TO REMAIN IN PLACE. ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED SATISFACTORY TO THE OWNER, AT THE EXPENSE OF THE CONTRACTOR.
- 12. EXISTING UTILITIES ARE SHOWN ON THE PLANS IN APPROXIMATE LOCATIONS. IT IS THE CONTRACTORS' RESPONSIBILITY TO SATISFY THEMSELVES AS TO THE LOCATION OF ALL UNDERGROUND FACILITIES WITHIN LIMITS OF CONSTRUCTION. ALL EXISTING UTILITIES, CABLES, EQUIPMENT, DEVICES, ETC., DESIGNATED TO REMAIN IN SERVICE WHICH ARE DAMAGED IN THE COURSE OF THE CONTRACT SHALL BE IMMEDIATELY REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
- 13. WHILE PERFORMING THE WORK, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ANY AND ALL EXISTING AIRPORT OPERATIONS AND AIRCRAFT, VEHICULAR TRAFFIC AND PEDESTRIAN TRAFFIC NOT WITHIN THE CONSTRUCTION LIMITS FOR THE CURRENT PHASE OF CONSTRUCTION.
- 14. CONTRACTOR'S EMPLOYEES VEHICLES SHALL BE PARKED WITHIN THE CONTRACTOR'S STAGING AND STORAGE AREA. PARKING WILL NOT BE ALLOWED ALONG THE RIGHT-OF-WAY OF ANY PUBLIC ROADWAY. EMPLOYEE VEHICLES WILL NOT BE ALLOWED IN THE AIR OPERATION AREA (AOA).
- 15. CONSTRUCTION EQUIPMENT SHALL BE PARKED ONLY WITHIN THE CONTRACTOR'S STAGING AND STORAGE AREA OUTSIDE ESTABLISHED HOURS OF CONSTRUCTION.
- 16. RUBBER TIRED VEHICLES ONLY SHALL BE ALLOWED ON EXISTING AIRPORT PAVEMENT WHICH IS TO REMAIN.
- 17. THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN THE SITE FREE OF TRASH. ALL TRASH SHALL BE TOTALLY REMOVED FROM THE WORK AREA BEFORE THE END OF EACH WORK PERIOD.
- 18. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL CLEAN AND RESTORE THE SITE. ALL RUBBISH AND OTHER MATERIAL SHALL BE DISPOSED OF OFF AIRPORT PROPERTY AT CONTRACTOR'S DISCRETION AND EXPENSE. THE CONTRACTOR SHALL RESTORE ALL GRASSED AND PAVED AREAS WHICH ARE DISTURBED BY CONSTRUCTION ACTIVITY TO THEIR PRE CONSTRUCTION CONDITION.
- 19. ALL CONSTRUCTION STAKEOUT SHALL BE BY A QUALIFIED FLORIDA REGISTERED LAND SURVEYOR. AND IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY DEVIATIONS FROM EXISTING GRADES AS SHOWN ON THE PLANS SHALL IMMEDIATELY BE REPORTED TO THE ENGINEER. THE CONTRACTOR SHALL AT THEIR EXPENSE, HAVE A QUALIFIED FLORIDA REGISTERED LAND SURVEYOR REPLACE ANY DISTURBED MONUMENT.
- 20. ALL EXISTING UTILITIES ARE TO REMAIN UNLESS OTHERWISE NOTED.
- 21. REFER TO THE CONTRACTOR ACCESS AND STAGING AREA PLAN FOR ACCESS POINTS TO BE USED BY THE CONTRACTOR FOR THIS PROJECT.
- 22. ANY AND ALL REQUIRED UTILITIES FOR THE CONTRACTOR'S OPERATIONS SHALL BE ARRANGED FOR AND PAID FOR BY THE CONTRACTOR DIRECTLY WITH THE APPROPRIATE UTILITY AGENCIES. UTILITY ARRANGEMENTS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. THE CONTRACTOR SHALL USE THE STORAGE AND STAGING AREA SHOWN ON THE PLANS FOR ITS SHOP, MATERIAL AND EQUIPMENT STORAGE AND OTHER PROJECT RELATED ACTIVITIES, INCLUDING EMPLOYEE PARKING. ALL COSTS ASSOCIATED WITH PREPARING THE STORAGE AND STAGING AREA SITE SHALL BE BORNE BY THE CONTRACTOR. THIS INCLUDES, BUT IS NOT LIMITED TO, CLEARING AND GRADING OF THE SITE, CONSTRUCTION OF ALL TEMPORARY UTILITIES, ACCESS ROADS, ALL SECURITY FENCING, CLEANUP AND RESTORATION OF SITE TO ORIGINAL CONDITION.
- 23. DO NOT SCALE DRAWINGS. USE GIVEN DIMENSIONS ONLY. LARGE SCALE PLANS GOVERN OVER SMALL SCALE
- 24. THE CONTRACTOR SHALL ENDEAVOR TO PROTECT PRIVATE PROPERTY. ANY DAMAGE CAUSED BY THE CONTRACTOR IN THE PERFORMANCE OF THEIR WORK SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTORS EXPENSE.
- 25. ANY UNITED STATES COAST AND GEODETIC SURVEY (U.S.C.&G.S.) MONUMENTATION WITHIN THE CONSTRUCTION LIMITS SHALL BE PROTECTED. IF A MONUMENT IS IN DANGER OF DAMAGE, THE CONTRACTOR SHALL NOTIFY:

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF SURVEYS AND MAPPING ATTN: LAMAR EVERST 3900 COMMONWEALTH BLVD. SUITE 309 TALLAHASSEE, FLORIDA 32399

- TELEPHONE NO. (850) 245-2636 26. CONTRACTOR SHALL PROVIDE CONSTRUCTION SITE ACCESS TO THE OWNER AND ITS REPRESENTATIVES FOR
- 27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THE WORK AREA AND COORDINATING THE OVERALL SECURITY OF THE WORK AREA AND MATERIAL STORAGE AND STAGING AREAS WITH THE OWNER.
- 28. B.M. DATA IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-'88).

INSPECTION PURPOSES.

29. ALL LABOR, MATERIALS, AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS ADOPTED BY THE CITY OF FORT LAUDERDALE AND THE PLANS AND CONSTRUCTION SPECIFICATIONS. WHERE CONFILICTS OR OMISSIONS EXIST, THE CITY OF FORT LAUDERDALE STANDARDS SHALL DICTATE. SUBSTITUTIONS AND DEVIATIONS FROM PLANS AND SPECIFICATIONS SHALL BE PERMITTED WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE CITY OF FORT LAUDERDALE ENGINEERING DIVISION.

### LEGEND

10.45	PROPOSED ELEVATION
	EDGE OF PAVEMENT
	LIMITS OF REGRADING
	MILLED ASPHALT REMOVAL
<i></i>	SAWCUT PAVEMENT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
	EXISTING EDGE OF PAVEMENT
<del>-10.45-</del>	EXISTING ELEVATION
—— FO ——	FIBER OPTIC
——— FM ———	FORCE MAIN
——— WM———	WATER MAIN
<b>\( \rightarrow</b>	EXISTING TAXIWAY EDGE LIGHT

APPROXIMATE LIMITS OF NEW PAVEMENT ASPHALT MILLINGS REMOVAL (MILLINGS NOT USED FOR SUBGRADE STABILIZATION SHALL BE DISPOSED OF OFFSITE AT NO COST TO THE OWNER.) TEMPORARY SILT FENCE. RUNWAY PROTECTION ZONE RPZ RSA RUNWAY SAFETY AREA D.S. DEPARTURE SURFACE POFZ PRECISION OBSTACLE FREE ZONE ROFA RUNWAY OBSTACLE FREE AREA

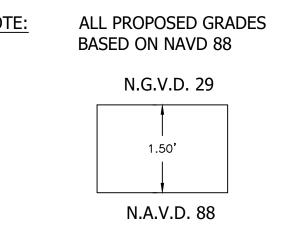
4444

LIGHTED BARRICADES (LOW-LEVEL)

TYPE II BARRICADES

W/FLASHING LIGHTS

BID NO.	ITEM	UNIT	QUANTIT
1	Mobilization	LS	1
2	Maintenance of Air Operations Area Traffic	LS	1
3	Temporary Fence for Owl/Tortoise Nests	EA	5
4	Temporary Air and Water Pollution, Soil Erosion, and Siltation Control	LS	1
5	Asphalt Pavement Milling/Removal	SY	6,900
6	Clearing & Grubbing	AC	1.5
7	Unclassified Excavation	CY	(510)/
8	Stabilized Subgrade (12" Thickness)	SY	3,300
9	Lime Rock Base Course (8" Thickness)	SY	2,950
10	Bituminous Prime Coat	GAL	920
11	1-1/2" Thick SP-9.5 Asphalt Course	TON	240
12	Argentine Bahia Sod (Including 30-day Watering Period)	SY	6,500
13	Permanent Airfield Painting with Type III Glass Beads (Yellow Paint)	SF	330
14	Permanent Airfield Painting with No Glass Beads (Black Paint)	SF	210
15	6" White, Thermoplastic Striping, Permanent	LF	2,900
16	Retroreflective Pavement Markers	EA	60
17	Post Mounted Signs	EA	6
18	Intercept conductors	LS	1
19	Remove existing base can	EA	2
20	Temporary wiring	LS	1
21	L-852T LED flush mounted taxiway edge light	EA	2
22	Portable Lighted Closure Marker "X"	LS	1
23	Concrete encasement	LF	120
24	Émbankment in Place	ČY	1,800





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OUT 'OTAL:

LOOP

**CALL 48 HOURS BEFORE DIGGING** FAA FACILITIES 954-356-7212

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12260-C01-NOTES

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ACCESS / HAUL ROUTE

CONTRACTOR'S STAGING AND STORAGE AREA.

CONTRACTOR'S STAGING AND STORAGE AREA.

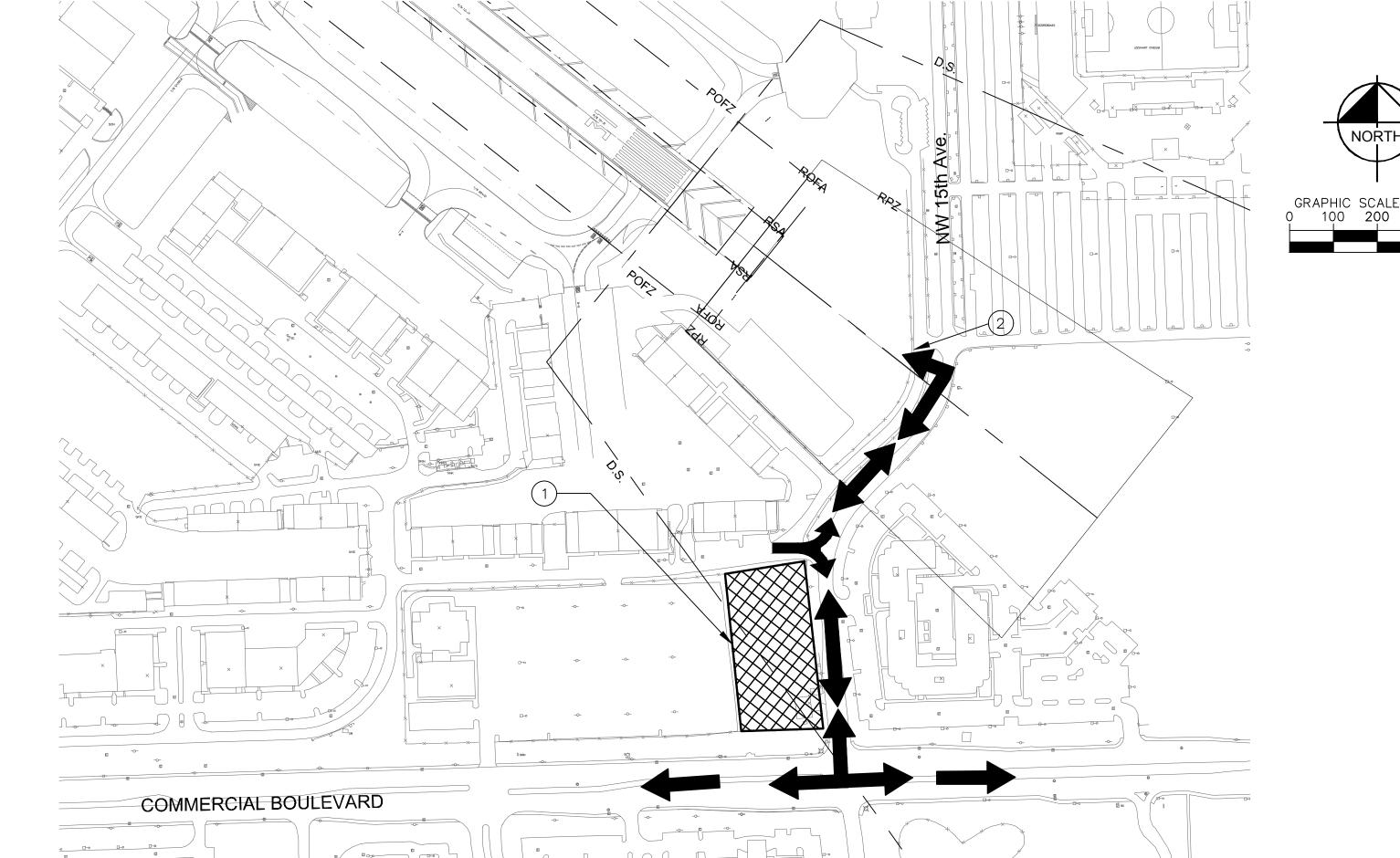
CONTRACTOR'S ACCESS GATE. CONTRACTOR TO REMOVE EXISTING GATES PRIOR TO CONSTRUCTION AND INSTALL TEMPORARY DOUBLE GATES. TEMPORARY GATES TO BE REMOVED AND ORIGINAL GATES RESTORED AFTER CONSTRUCTION IS COMPLETE. INSTALLATION AND REMOVAL OF TEMPORARY GATES ARE TO BE INCLUDED IN MOBILIZATION.

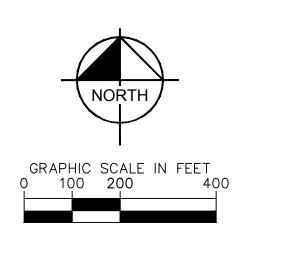
### CONTRACTOR STAGING AREA NOTES:

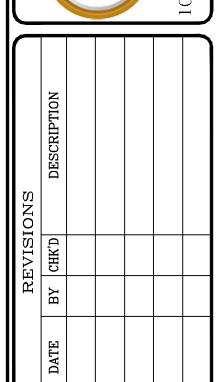
- 1. THE EXACT LIMITS, LIGHTING AND SECURITY REQUIREMENTS OF THE CONTRACTOR'S STAGING AND STORAGE AREA SHALL BE ESTABLISHED BY THE CONTRACTOR WITH THE APPROVAL OF THE OWNER IN THE AREAS GENERALLY AS SHOWN ON THE PLANS. ANY AND ALL REQUIRED UTILITIES FOR THE CONTRACTOR'S OPERATIONS SHALL BE ARRANGED FOR AND PAID FOR BY THE CONTRACTOR DIRECTLY WITH THE APPROPRIATE UTILITY AGENCIES. UTILITY ARRANGEMENTS SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER. THE CONTRACTOR SHALL USE THE STORAGE AND STAGING AREA SHOWN ON THE PLANS FOR ITS FIELD OFFICE, SHOP, MATERIAL AND EQUIPMENT STORAGE, AND OTHER PROJECT RELATED ACTIVITIES, INCLUDING EMPLOYEE PARKING. ALL COSTS ASSOCIATED WITH PREPARING THE STORAGE AND STAGING AREA SITE SHALL BE BORNE BY THE CONTRACTOR. THIS INCLUDES BUT IS NOT LIMITED TO, CLEARING AND GRADING OF THE SITE, CONSTRUCTION OF ALL TEMPORARY UTILITIES, ACCESS ROADS, ALL SECURITY FENCING, CLEAN-UP AND RESTORATION OF SITE TO ORIGINAL
- 2. CONSTRUCTION EQUIPMENT SHALL BE PARKED ONLY WITHIN CONTRACTOR'S STAGING AND STORAGE AREA OUTSIDE OF ESTABLISHED HOURS OF CONSTRUCTION.

#### ACCESS AND HAUL ROAD NOTES:

- 1. HAUL ROADS TO BE USED UNDER THIS PROJECT SHALL BE THOSE INDICATED ON THE DRAWINGS OR OTHERWISE SPECIFICALLY AUTHORIZED BY THE OWNER. IN GENERAL, THE CONTRACTOR SHALL CONFINE EQUIPMENT AND HAULING TO THE AREAS UNDER CONSTRUCTION. NO DEBRIS SHALL BE ALLOWED ON THE ROADWAYS OR AIRPORT PAVED SURFACES. ACTIVE TAXIWAYS SHALL BE KEPT FREE OF DEBRIS AT ALL TIMES. CONTRACTOR SHALL MAINTAIN VACUUM SWEEPERS ON SITE FOR THAT USE. OTHER PAVEMENTS SHALL BE CLEANED BY THE CONTRACTOR DAILY, AND AS REQUIRED, USING VACUUM SWEEPERS TO KEEP ALL ACCESS AND CONSTRUCTION AREAS CLEAR OF SOILS, CLODS OR OTHER DEBRIS.
- 2. THE ACCESS POINTS TO THE PROJECT SITE ARE SHOWN ON THE PLANS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL AIRPORT SERVICE ROADS TO THEIR PRECONSTRUCTION CONDITION WHERE SUCH ROADS ARE USED BY THE CONTRACTOR FOR HAULING OPERATIONS.
- 4. THE CONTRACTOR SHALL RESTORE ALL TURFED AND PAVED AREAS USED FOR HAUL ROADS TO THEIR ORIGINAL CONDITION, INCLUDING THE ESTABLISHMENT OF TURF. ALL COSTS FOR CONSTRUCTING, REMOVING AND RESTORING OF HAUL ROADS REQUIRED FOR THE COMPLETION OF THE WORK SHALL BE BORNE BY THE CONTRACTOR.
- 5. THE CONTRACTOR SHALL NOT PERMIT ANY UNAUTHORIZED CONSTRUCTION PERSONNEL OR TRAFFIC ON THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL TO AND FROM THE VARIOUS CONSTRUCTION AREAS ON THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR THE IMMEDIATE CLEAN—UP OF ANY DEBRIS DEPOSITED AT THE PROJECT SITE AND ALONG ANY ROAD AS A RESULT OF HIS/HER CONSTRUCTION TRAFFIC. DIRECTIONAL SIGNAGE AT THE ACCESS GATE AND ALONG THE DELIVERY ROUTE TO THE STORAGE AREA OR WORK SITE SHALL BE APPROVED BY THE OWNER. ALL CONTRACTOR'S MATERIAL ORDERS FOR DELIVERY TO THE SITE SHALL BE DIRECTED TO THE ACCESS POINTS IDENTIFIED.
- 6. RUBBER TIRED VEHICLES ONLY SHALL BE ALLOWED ON EXISTING AIRPORT PAVEMENT WHICH IS TO REMAIN.
- 7. THE CONTRACTOR, THROUGH THE CONTRACTOR SECURITY OFFICER, SHALL ESTABLISH AND MAINTAIN A LIST OF CONTRACTOR AND SUBCONTRACTOR VEHICLES AUTHORIZED TO OPERATE ON THE SITE.
- 8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF—SITE ROUTES (STATE HIGHWAYS, COUNTY ROADS OR CITY STREETS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE.
- 9. ALL CONTRACTOR VEHICLES AND TRAFFIC SHALL REMAIN WITHIN THE DESIGNATED CONSTRUCTION AREAS, STAGING AREAS OR HAUL ROUTES.
- 10. ALL CONTRACTOR VEHICLES SHALL DISPLAY IN FULL VIEW LOGOS CONSPICUOUSLY PLACED ON EACH SIDE OF THE VEHICLE WITH 4" MINIMUM LETTER HEIGHT . ALL VEHICLES OPERATING IN THE ACTIVE AOA DURING HOURS OF LOW VISIBILITY OR DARKNESS SHALL BE EQUIPPED WITH A FLASHING AMBER (YELLOW) DOME—TYPE LIGHT MOUNTED ON TOP OF THE VEHICLE AND OF SUCH INTENSITY TO CONFORM TO AIRPORT CODES FOR MAINTENANCE AND EMERGENCY VEHICLES.
- 11. NO CONTRACTOR VEHICLES ARE TO CROSS ACTIVE RUNWAYS, NAVAID CRITICAL AREAS, TAXIWAYS AND APPROACH CLEAR ZONES UNLESS THE ESCORT IS UNDER THE DIRECT CONTROL OF THE AIRPORT GROUND CONTROLLER. IT SHALL BE UNDERSTOOD BY THE CONTRACTOR THAT AIRPORT TRAFFIC ON RUNWAYS, TAXIWAYS AND APRONS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC.
- 12. CONTRACTOR SHALL PROVIDE ADEQUATE PROFESSIONALLY PAINTED SIGNS TO DIRECT MATERIAL SUPPLIERS AND EMPLOYEES TO THE CONSTRUCTION SITE. SIGN AT ENTRANCE GATE SHALL BE PROFESSIONALLY PAINTED 4' X 8' AND READ "CONSTRUCTION VEHICLES ONLY -NO VENDORS ALLOWED."
- 13. CONTRACTOR ACCESS GATES SHALL BE GUARDED OR LOCKED. CONTRACTOR SHALL PROVIDE GATE GUARDS.
- 14. ACCESS GATE LOCATION IS SUBJECT TO APPROVAL BY OWNER.
- 15. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL REMOVE ACCESS GATE AND RESTORE FENCE, SWALES, SOD ETC. TO ORIGINAL







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CALL 48 HOURS BEFORE YOU DIG IT'S THE LAW! Know what's **below.** Call before you dig

DIAL 811 SUNSHINE STATE ONE CALL OF FLORIDA, INC. **CALL 48 HOURS BEFORE DIGGING** FAA FACILITIES 954-356-7212

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# **CONSTRUCTION SAFETY NOTES:** 1. ALL CONSTRUCTION FOR THIS PROJECT SHALL CONFORM

- TO THE GUIDELINES SET FORTH IN FEDERAL AVIATION ADMINISTRATION (FAA) AC150/5370-2F "OPERATIONAL SAFETY AIRPORTS DURING CONSTRUCTION", AND THESE PLANS AND SPECIFICATIONS.
- 2. CONSTRUCTION ACTIVITIES ARE NOT PERMITTED WITHIN THE RUNWAY SAFETY AREA (RSA) OF ANY RUNWAY THAT IS OPEN FOR AIRCRAFT OPERATIONS. (SEE SECTION 221, AC 150/5370-2F, CHAPTER 2)
- 3. CONSTRUCTION ACTIVITIES ARE NOT PERMITTED WITHIN TAXIWAY SAFETY AREA (TSA) OF AN ACTIVE TAXIWAY PLUS AN ON- APRON TAXILANE WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER. (SEE SECTION 211, AC No. 150/5370-2F, CHAPTER 2)
- 4. NO CONSTRUCTION TRAFFIC SHALL ENTER OR CROSS ANY ACTIVE AIRPORT OPERATIONAL AREA EXCEPT UPON AUTHORIZATION BY THE OWNER. THIS SPECIFICALLY INCLUDES THE RUNWAY PROTECTION ZONES AND THE RUNWAY AND TAXIWAY CONSTRUCTION SAFETY LIMITS IDENTIFIED IN CONSTRUCTION NOTES 2 AND 3.
- 5. NO CONSTRUCTION TRAFFIC SHALL ENTER OR CROSS ANY LOCALIZER OR GLIDE SLOPE CRITICAL AREA EXCEPT UPON AUTHORIZATION BY THE OWNER.
- 6. IN ORDER FOR THE CONTRACTOR TO OPERATE WITHIN THE AIR OPERATIONS AREA, APPROPRIATE NOTICES TO AIRMEN (NOTAMS) MUST BE ISSUED BY THE OWNER THROUGH THE FAA FLIGHT SERVICE STATION. THESE NOTICES PROVIDE INFORMATION ON CLOSED, LIMITED, OR HAZARDOUS CONDITIONS TO AIRMEN AND USERS OF THE AIRPORT. A 48-HOUR NOTICE IS REQUIRED FOR ISSUANCE OF THE NOTAM. ALL CONSTRUCTION OPERATIONS MUST BE CLOSELY COORDINATED WITH THE OWNER FOR NOTAM ISSUANCE.
- 7. AIRCRAFT OPERATIONS SHALL AT ALL TIMES HAVE PRIORITY OVER ALL VEHICLES, EQUIPMENT AND PERSONNEL. THE CONTRACTOR SHALL EMPLOY STRICT MEASURES TO PREVENT ANY CONFLICT BETWEEN HIS PERSONNEL AND AIRCRAFT ON ANY ACTIVE AIRFIELD PAVEMENT. THE CONTRACTOR SHALL REMAIN CLEAR OF ACTIVE RUNWAYS AND TAXIWAYS.

- 8. ALL CONTRACTOR VEHICLES, INCLUDING HAULING VEHICLES, THAT ARE AUTHORIZED TO OPERATE WITHIN THE SECURITY FENCE ON THE AIRPORT WITHIN THE DESIGNATED LIMITS OF CONSTRUCTION OR HAUL ROUTES AS DEFINED HEREIN, SHALL DISPLAY IN FULL VIEW ABOVE THE VEHICLE A 3'x3' OR LARGER ORANGE AND WHITE CHECKERBOARD FLAG, EACH CHECKERBOARD COLOR BEING 1'SQUARE. WHEN OPERATING DURING PERIODS OF DARKNESS OR LIMITED VISIBILITY. CONTRACTOR'S VEHICLES SHALL BE EQUIPPED WITH ROTATING OR FLASHING AMBER LIGHTS. DURING SUCH PERIODS, HAULING VEHICLES NOT SO EQUIPPED SHALL BE ESCORTED BY A VEHICLE SO EQUIPPED.
- 9. CONTRACTOR SHALL CONTROL THE ON-AIRPORT MOVEMENT AND ACTIVITIES OF ITS EMPLOYEES AND SUBCONTRACTORS.
- 10. OPEN-FLAME WELDING OR TORCH-CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS ARE PROVIDED AND HAVE BEEN APPROVED BY THE OWNER.
- 11. OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIALS AT THE CONSTRUCTION SITE SHALL BE PROMINENTLY MARKED WITH ORANGE FLAGS AND LIGHTED WITH FLASHING AMBER LIGHT UNITS (ACCEPTABLE TO THE OWNER) DURING HOURS OF RESTRICTED VISIBILITY OR DARKNESS.
- 12. STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT AS A RESULT OF AIRCRAFT, WIND, AND/OR OTHER REASON.
- 13. ANY DAMAGE TO THE EXISTING AIRPORT LIGHTING SYSTEM CAUSED BY CONSTRUCTION OPERATIONS SHALL BE IMMEDIATELY NOTED TO THE OWNER AND REPAIRED BY THE CONTRACTOR AT ITS OWN EXPENSE.
- 14. CONTRACTOR GENERATED DEBRIS, WASTE AND LOOSE MATERIAL CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR, PROPELLERS AND ROTORS, OR OF BEING INGESTED BY JET ENGINES SHALL NOT BE LEFT ON ACTIVE AIRCRAFT MOVEMENT AREAS. MATERIAL DROPPING WITHIN THESE AREAS SHALL BE REMOVED IMMEDIATELY AND CONTINUOUSLY DURING WORKING HOURS.

- 15. CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMING ALL PERSONS UNDER ITS CONTROL THAT UNAUTHORIZED CONSTRUCTION PERSONNEL FOUND IN RESTRICTED AREAS OF THE AIRPORT SHOWN ON THE SAFETY PLAN ARE SUBJECT TO ARREST FOR A PUNISHABLE FEDERAL OFFENSE AND WILL PROMPTLY AND PERMANENTLY BE REMOVED FROM THE JOB.
- 16. CONTRACTOR ACCESS GATES SHALL BE MANNED BY A CONTRACTOR SUPPLIED GATE GUARD OR REMAIN LOCKED AT ALL TIMES. APPROVED GATE GUARD SHALL CONTROL ACCESS TO ALLOW ONLY AUTHORIZED CONSTRUCTION TRAFFIC TO ENTER THE SITE.
- 17. CONTRACTOR SHALL PROVIDE TRAINED FLAGMEN TO COORDINATE AND CONTROL CONSTRUCTION TRAFFIC WHEN OPERATING ACROSS ANY ACTIVE TAXIWAY OR RUNWAY. FLAGMEN SHALL BE EQUIPPED WITH RADIOS ON GROUND CONTROL FREQUENCY AND SHALL ALLOW TRAFFIC CROSSINGS OF ACTIVE TAXIWAYS AND RUNWAYS ONLY UPON SPECIFIC AUTHORIZATION BY AIR TRAFFIC CONTROL. FLAGMEN SHALL ALSO BE PROVIDED FOR CONTROLLING EQUIPMENT ENTERING AND LEAVING THE PROJECT AREA.
- 18. CONTRACTOR SHALL CONTROL AND ESCORT ALL CONSTRUCTION TRAFFIC ENTERING THE SECURED AREA OF THE AIRPORT TO PREVENT CONFLICTS WITH AIRCRAFT OPERATIONS. NO PRIVATE VEHICLES WILL BE ALLOWED ON THE AIRPORT.
- 19. SPECIAL ACCESS REQUIREMENTS AND OPERATING LIMITATIONS ARE REQUIRED INSIDE THE SECURITY FENCE. THE CONTRACTOR SHALL DELINEATE WORK LIMITS WITHIN THESE AREAS USING ORANGE CONSTRUCTION FENCE. CONFINE MEN, EQUIPMENT AND MATERIALS OUTSIDE OF THE TAXIWAY OBJECT FREE AREA (TOFA) WHEN TAXIWAY IS ACTIVE.
- 20. CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY LIGHTED BARRICADES EVERY 30 FEET BOTH SIDE OF HARD ROAD TO CLEARLY MARK THE DESIGNATED ACCESS ROUTES TO AFFECTED AREAS OF AIRPORT PROPERTY. CONTRACTOR SHALL CONTROL ACCESS TO THE WORKING AREA BY CONSTRUCTION VEHICLES AS DELINEATED ON THIS PLAN.

ORANGE PLASTIC

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- 21. THE CONTRACTOR SHALL HAVE ACCESS TO THE SECURED AREA OF THE AIRPORT ONLY AT THE LOCATION DESIGNATED ON THE PLANS OR APPROVED BY THE OWNER. ALL OTHER ACCESS SHALL BE BY SPECIAL REQUEST AND SUBJECT TO APPROVAL BY THE OWNER. THE CONTRACTOR SHALL PROVIDE FLAGMEN TO COORDINATE AND CONTROL CONSTRUCTION TRAFFIC WHEN OPERATING ACROSS ANY ACTIVE TAXIWAY OR APRON.
- 22. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN FLASHING LIGHTS AND BARRICADES ALONG TAXIWAY EDGES WHEREVER OPEN EXCAVATIONS OR IRREGULAR GRADES ARE LEFT WITHIN THE SAFETY AREA OF AN ACTIVE TAXIWAY OR WHERE TEMPORARY PAVEMENT CLOSURES OR AIRCRAFT LIMITATIONS ARE REQUIRED. BARRICADES SHALL BE SPACED NO MORE THAN 20 FEET ON CENTER OR AS NOTED ALONG THE AFFECTED PAVEMENT EDGE OR ACROSS THE PAVEMENT OF A CLOSED TAXIWAY. THE CONTRACTOR SHALL DAILY MAINTAIN THE LIGHTS AND BARRICADES IN AN OPERABLE CONDITION FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL FURNISH THE OWNER A CONTACT NUMBER FOR 24-HOUR MAINTENANCE OF LIGHTS AND BARRICADES.
- 23. THE CONTRACTOR SHALL PERFORM CONSTRUCTION OPERATIONS AS NECESSARY TO PREVENT ATTRACTION TO BIRDS CAUSED BY PONDED WATER AND GRASS SEED.
- 24. REFER TO THE GENERAL NOTES FOR REQUIREMENTS PERTAINING TO STORAGE OF CONSTRUCTION EQUIPMENT AND MATERIALS WHEN NOT IN USE.

WOOD POSTS

STAPLE OR TIE

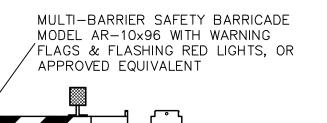
FABRIC TO POSTS

- BARBED WIRE

<sup>7</sup>2"x2" MIN.

25. THE CONTRACTOR SHALL COMPLY WITH ALL SECURITY REQUIREMENTS SPECIFIED HEREIN OR MANDATED BY FAA OR TSA. THE CONTRACTOR SHALL DESIGNATE IN WRITING TO THE OWNER THE NAME OF ITS "CONTRACTOR SECURITY OFFICER". THE CONTRACTOR SECURITY OFFICER SHALL REPRESENT THE CONTRACTOR ON THE SECURITY REQUIREMENTS OF THE CONTRACT.

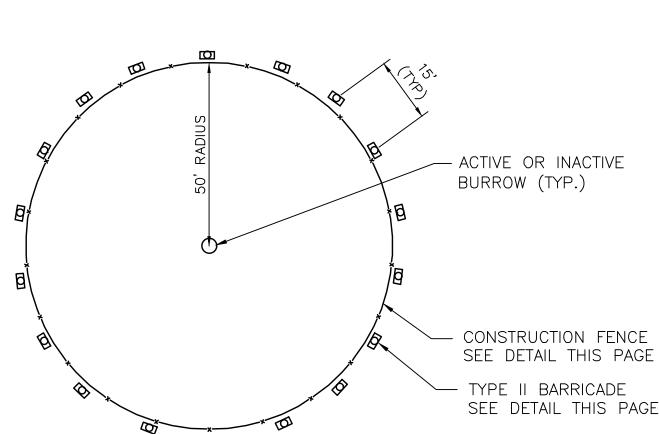
- 26. THE CONTRACTOR'S SECURITY OFFICER SHALL BE RESPONSIBLE FOR BRIEFING ALL CONTRACTOR PERSONNEL ON THESE REQUIREMENTS. CONTRACTOR EMPLOYEES WHO REQUIRE ACCESS TO THE SECURE AREA OF THE AIRPORT SHALL ATTEND THE OWNER'S SECURITY TRAINING SESSION AND SHALL BE BRIEFED ON THESE REQUIREMENTS PRIOR TO WORKING IN THE CONSTRUCTION AREAS.
- 27. ALL CONTRACTOR PERSONNEL WHO REQUIRE ACCESS TO THE SECURE AREA OF THE AIRPORT SHALL HAVE OWNER ISSUED IDENTIFICATION BADGES DISPLAYED AT ALL TIMES WHEN WORKING INSIDE THE AIRCRAFT OPERATIONS AREA. THE AIRPORT ID PROGRAM IS UNDER CONSTANT REVIEW BY THE FAA AND THE AUTHORITY AND ALL CONTEMPORARY REQUIREMENTS WILL GOVERN. THE CONTRACTOR SHALL ASSIGN THE CONTRACTOR SECURITY OFFICER DESCRIBED ABOVE AS THE SINGLE POINT CONTACT FOR ALL IDENTIFICATION BADGING REQUIREMENTS.
- 28. THE CONTRACTOR SHALL ACQUAINT ITS SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITIES AND OPERATIONS THAT ARE INHERENT AT THIS AIRPORT AND SHALL CONDUCT ITS CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND TO THE GUIDELINES ON SAFETY.
- 29. ITEMS FOR CONTROL OF SAFETY DURING CONSTRUCTION SUCH AS VEHICLE LIGHTING, ETC. SHALL BE PAID FOR IN ACCORDANCE WITH SPECIFICATION S-102 AND SHALL BE CONSIDERED AS A SUBSIDIARY OBLIGATION FOR THE CONTRACTOR COVERED UNDER THESE ITEMS.



# LOW LEVEL AIRFIELD BARRICADE DETAIL

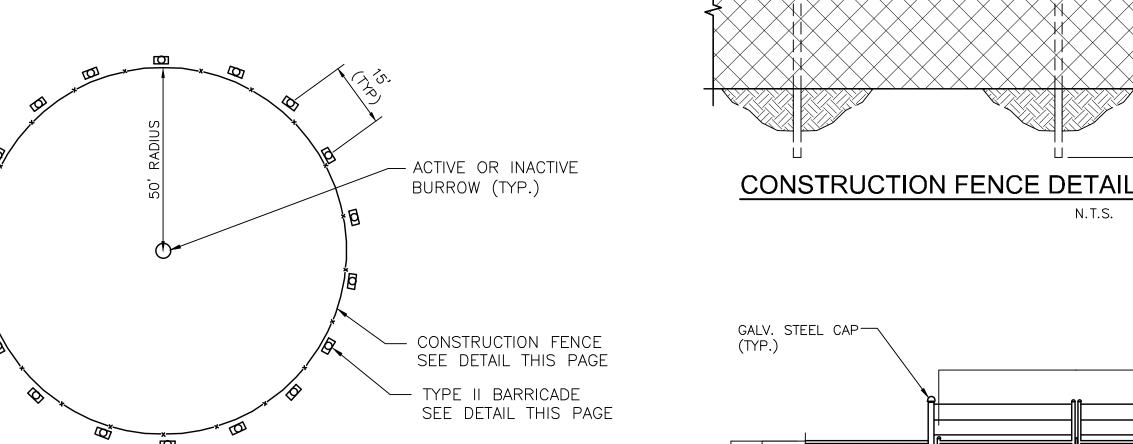
# NOTES:

- 1. BARRICADES SHALL BE PLACED AS SHOWN TO DELINEATE THE CONTRACTOR'S WORK AREAS.
- 2. BARRICADE SECTIONS SHALL BE WHITE. ALL INCIDENTAL CONNECTORS, SPACERS, SPLICE PLATES, ETC., SHALL BE PAINTED WHITE.
- 3. ALL BARRICADES SHALL BE CHECKED VISUALLY FOR SIGNS OF WEAR AND TEAR ON A WEEKLY BASIS AND SHALL BE REPAINTED WHEN DEEMED APPROPRIATE BY THE ENGINEER. THE CONDITIONS OF LIGHTING UNITS SHALL BE CHECKED DAILY. ALL LIGHT FIXTURES SHALL BE VERIFIED OPERATING BY THE CONTRACTOR ON A DAILY BASIS BEFORE THE CONTRACTOR CEASES OPERATION FOR THE DAY. THE AREAS AROUND ALL BARRICADES SHALL BE CLEANED AS DIRECTED IN THE GENERAL NOTES AND THE SAFETY NOTES.
- 4. BARRICADES ALONG ACTIVE APRON OR TAXIWAY PAVEMENT SHALL BE PLACED APPROXIMATELY 10 FEET FROM THE EDGE OF THE FULL STRENGTH PAVEMENT. BARRICADES SHALL BE PLACED AT A SPACING NO GREATER THAN 20 FEET CENTER TO CENTER.
- 5. ALTERNATE FORMS OF BARRICADES MAY BE PROPOSED BY THE CONTRACTOR WHICH MEET THESE FUNCTIONAL REQUIREMENTS. APPROVALS OF ANY SUCH SUBSTITUTION (IF GRANTED) SHALL BE BY THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
- 6. THE FINAL LOCATION FOR THE BARRICADES SHALL BE ESTABLISHED IN THE FIELD WITH CONCURRENCE FROM THE OWNER.
- 7. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, RELOCATE AND REMOVE ALL BARRICADES. ALL WORK SHALL BE INCIDENTAL TO MAINTENANCE OF TRAFFIC IN THE A.O.A.
- 8. THE CONTRACTOR SHALL DAILY MAINTAIN THE LIGHTS AND THE BARRICADES IN OPERABLE CONDITION. THE CONTRACTOR SHALL HAVE REPLACEMENT LIGHTS AND BATTERIES ON SITE AND SHALL REPLACE LIGHTS AND/OR BATTERIES WITHIN ONE HOUR OF NOTIFICATION BY THE ENGINEER OR AIRPORT PERSONNEL. CONTRACTOR SHALL FURNISH THE OWNER WITH THE NAME AND TELEPHONE NUMBER FOR AN ON-CALL REPRESENTATIVE 24 HOURS PER DAY, SEVEN DAYS PER WEEK TO REPLACE BATTERIES AND INOPERATIVE LIGHTS AND MAINTAIN THE BARRICADES.
- 9. FLASHING LIGHTS SHALL BE PLACED AT THE ENDS AND AT CORNERS OF EACH LINE OF BARRICADES, ALL OTHER LIGHTS ON BARRICADES SHALL BE STEADY-BURN.



NOTE: IF FULL FENCE ENCLOSURE IS NOT USED IT IS PAID AS A

# **BURROW FENCING DETAIL**



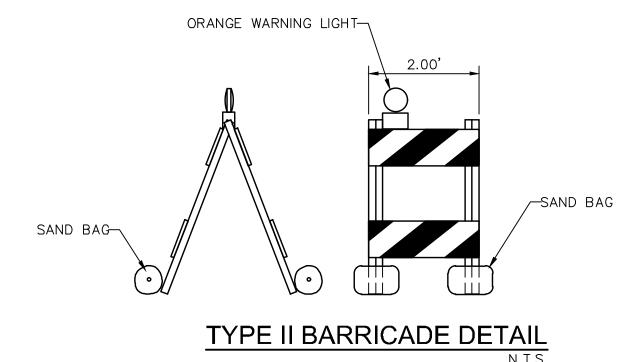
FRACTION

# GALV. STEEL CAP-(TYP.) 1/2"ø END CHAIN LOCK -POSTS AND OPENING GATE POSTS (TYP.) PROPOSED TEMPORARY CONC. FTG. DOUBLE SWING GATE (TYP.)

# TEMPORARY SECURITY **DOUBLE SWING GATE**

# TEMPORARY SECURITY DOUBLE SWING GATE NOTES:

- 1. TEMPORARY GATES TO BE REMOVED AFTER CONSTRUCTION IS COMPLETE. COST OF GATES ARE TO BE INCLUDED IN MOBILIZATION PAY ITEM. EXACT LOCATION TO BE COORDINATED WITH OWNER.
- 2. GATE TO BE RECESSED 20' FROM ROADWAY.



# **CLOSED TAXIWAY MARKING NOTES:**

TEMPORARY CLOSED TAXIWAY MARKINGS SHALL BE CONSTRUCTED OF AN EASILY REMOVABLE MATERIAL, SUCH AS PLYWOOD OR FABRIC, AND HELD IN PLACE WITH SAND BAGS PAINTED YELLOW. TEMPORARY CLOSED TAXIWAY MARKING SHALL BE YELLOW IN COLOR.

- THE CONTRACTOR SHALL PLACE TEMPORARY CLOSED TAXIWAY MARKINGS ON THE CENTERLINE OF THE FACILITY TO BE CLOSED AS SHOWN ON PLANS OR AS DIRECTED BY THE AIRPORT ENGINEER.
- NO PAYMENT WILL BE MADE FOR RELOCATIONS OF TEMPORARY CLOSED TAXIWAY MARKINGS.
- 4. PAYMENT FOR ITEM IS INCLUDED IN MOT. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS ITEM.

# TEMPORARY TAXIWAY CLOSURE MARKER

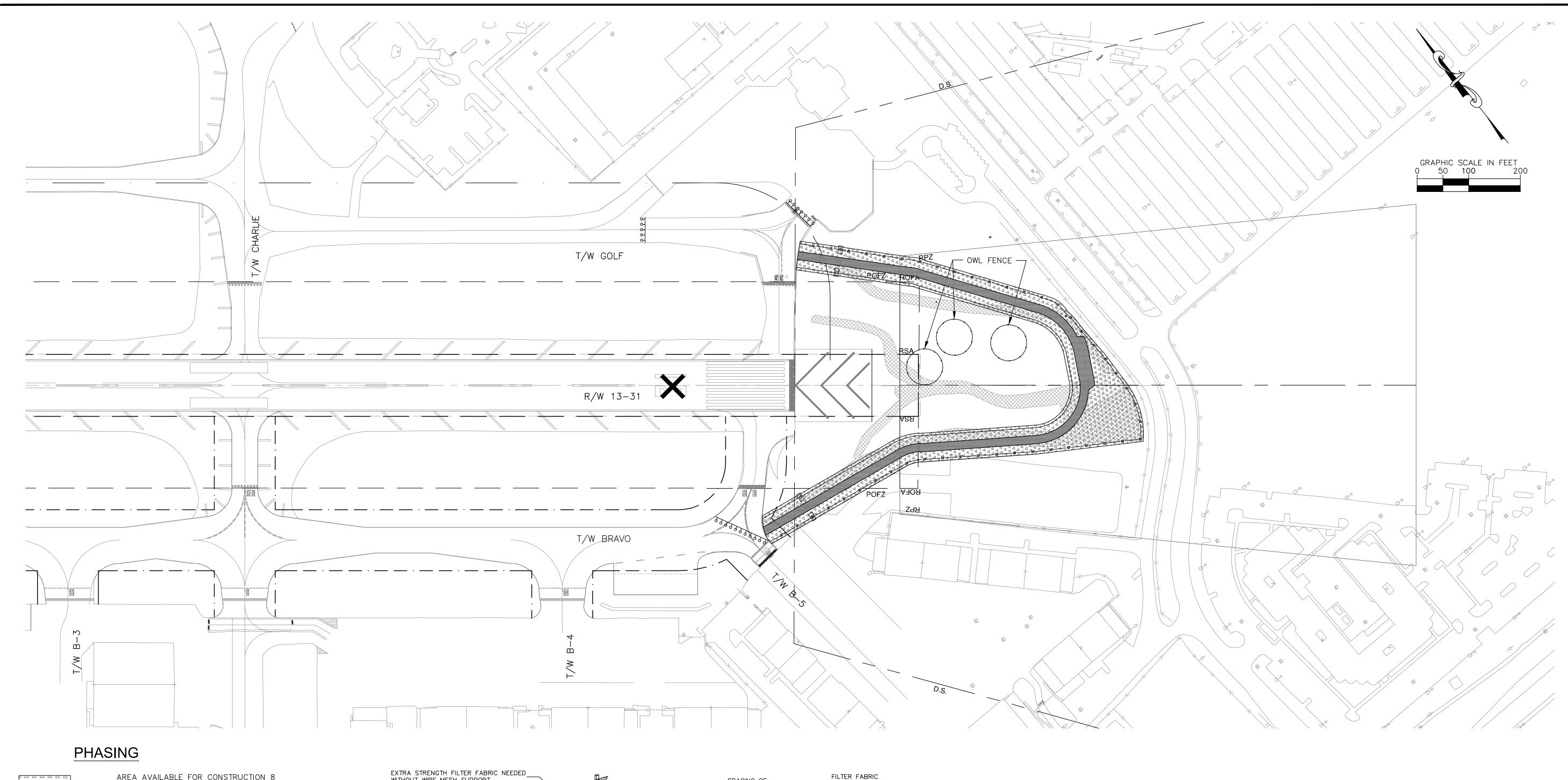


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Exhibit 3

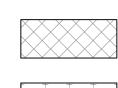


 AREA AVAILABLE FOR CONSTRUCTION 8 HOURS PER DAY, MONDAY THROUGH FRIDAY FROM 10:00 P.M. TO 6:00 A.M.

### LEGEND



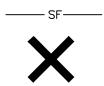
APPROXIMATE LIMITS OF NEW PAVEMENT



ASPHALT MILLINGS REMOVAL (MILLINGS NOT USED FOR SUBGRADE STABILIZATION SHALL BE DISPOSED OF OFFSITE AT NO COST TO THE OWNER.) SEE GENERAL NOTE 1.



MILLED ASPHALT AREA TO REMAIN



LIGHTED "X" RUNWAY CLOSURE MARKER

RUNWAY PROTECTION ZONE

TEMPORARY SILT FENCE.

RPZ RSA

RUNWAY SAFETY AREA

D.S. DEPARTURE SURFACE

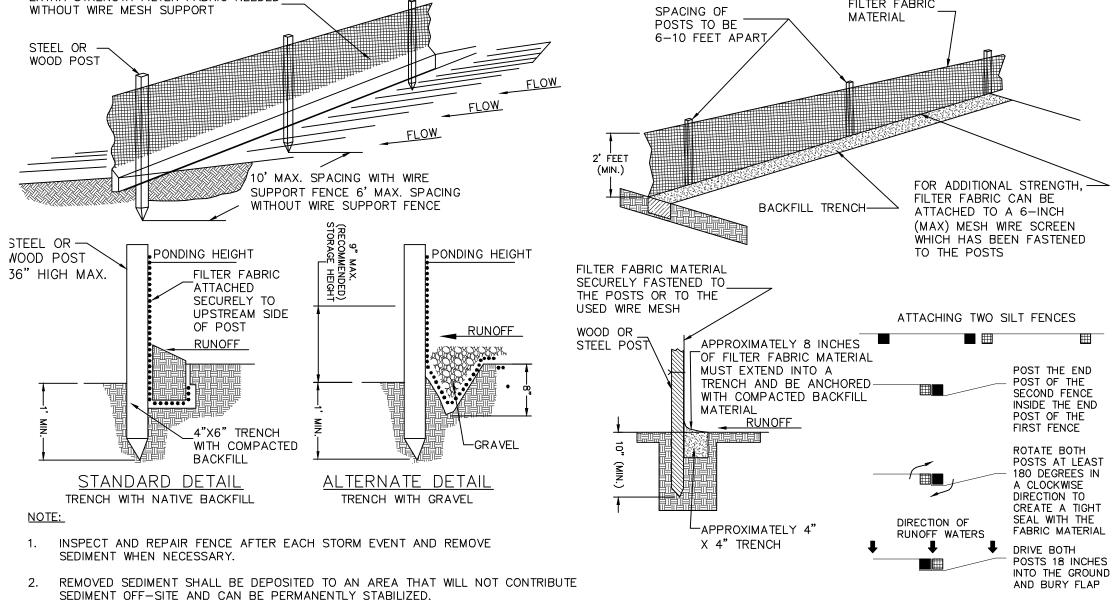
POFZ PRECISION OBSTACLE FREE ZONE

ROFA RUNWAY OBSTACLE FREE AREA

LIGHTED BARRICADES (LOW-LEVEL) 7 7 7 7 (TO BE INSTALLED WHEN WORKING AND REMOVED AT END OF WORK DAY)

0

TYPE II BARRICADES W/FLASHING LIGHTS



3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE

SILT FENCE DETAIL

PONDING EFFICIENCY.

SILT FENCE INSTALLATION DETAIL

N.T.S.

POST THE END

POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE

POSTS AT LEAST

180 DEGREES IN

DIRECTION TO CREATE A TIGHT

SEAL WITH THE

FABRIC MATERIAL

AND BURY FLAP

A CLOCKWISE

## STORM WATER POLLUTION PREVENTION NOTES:

- EROSION CONTROL MEASURES SHALL BE EMPLOYED TO MINIMIZE SOIL EROSION AND TURBIDITY OF SURFACE WATERS LOCATED DOWNSTREAM OF ANY CONSTRUCTION ACTIVITY. WHILE THE VARIOUS MEASURES 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 FURTHEST PRACTICAL UPSTREAM
  - B. STORMWATER INLETS SHALL BE PROTECTED DURING CONSTRUCTION BY SILT FENCE, HAY BALE, AND/OR TURBIDITY BARRIER. PROTECTION MEASURES SHALL BE EMPLOYED AS SOON AS PRACTICAL DURING THE VARIOUS STAGES OF CONSTRUCTION. MEASURES SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS
- 2. 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 BROAD 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.
- 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.
- 4. 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.
- 5. PAYMENT FOR TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL SHALL BE INCLUDED IN BID ITEM NO. 4.

### **GENERAL NOTES:**

1. EXISTING ASPHALT MILLINGS REMOVAL AREA SHOWN ON THIS SHEET SHALL BE SODDED BY CONTRACTOR AFTER ASPHALT MILLINGS ARE REMOVED.



**CALL 48 HOURS BEFORE DIGGING** FAA FACILITIES 954-356-7212

PRO EXE SOU ERO PHA

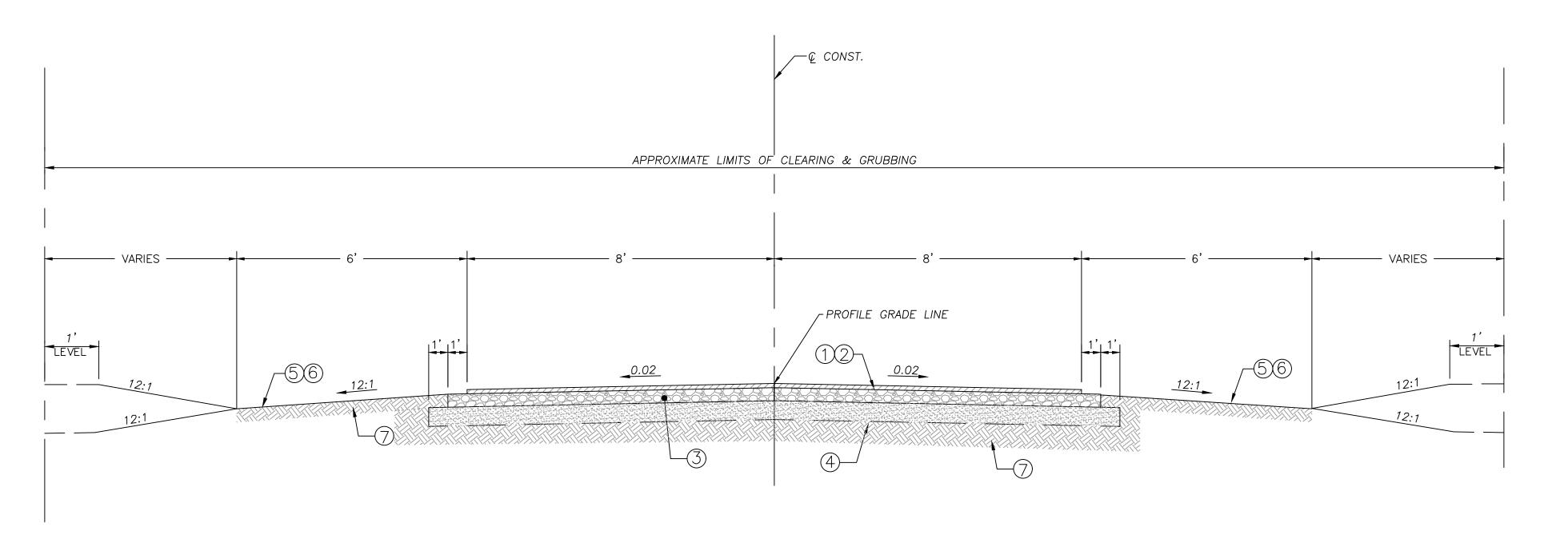
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Exhibit 3 p. 213 Page 213 of 246

# PROPOSED Q LOOP ROAD



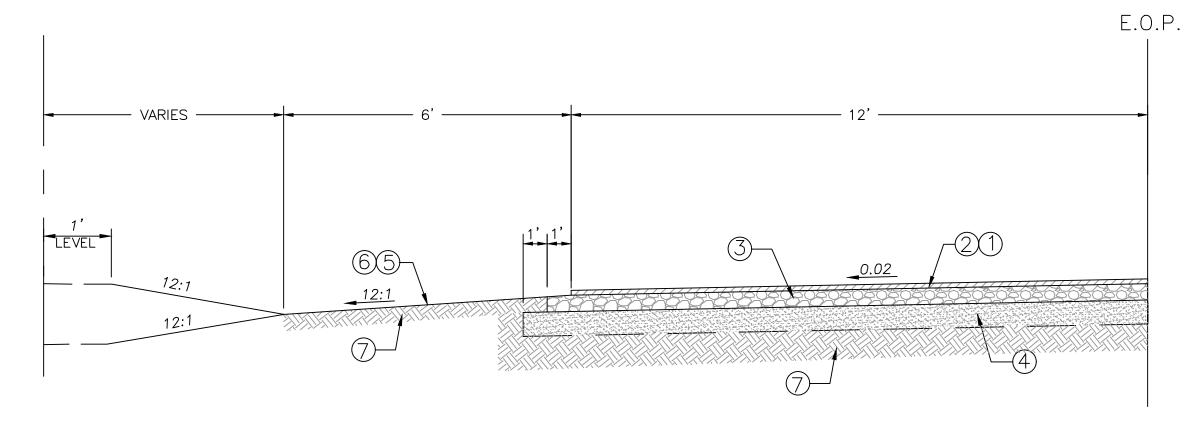
TYPICAL SECTION

SCALE: 1"=2' (STA. 0+25.00 TO STA. 5+94.63)

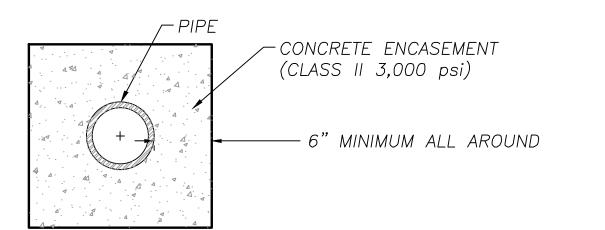
(STA. 6+97.42 TO STA. 14+13.94)

## <u>LEGEND:</u>

- 1 1 1/2" THICK SP-9.5 ASPHALT
- ② BITUMINOUS PRIME COAT.
- $\bigcirc$  8" LIMEROCK BASE COMPACTED TO 98% MAX. DENSITY PER AASHTO T-180.
- 4) 12" STABILIZED SUBGRADE COMPACTED TO 100% MAX. DRY DENSITY PER AASHTO T-180. MINIMUM LBR OF 40.
- 5 BAHIA SOD
- 6 2" TOPSOIL
- EXISTING COMPACTED SUBGRADE



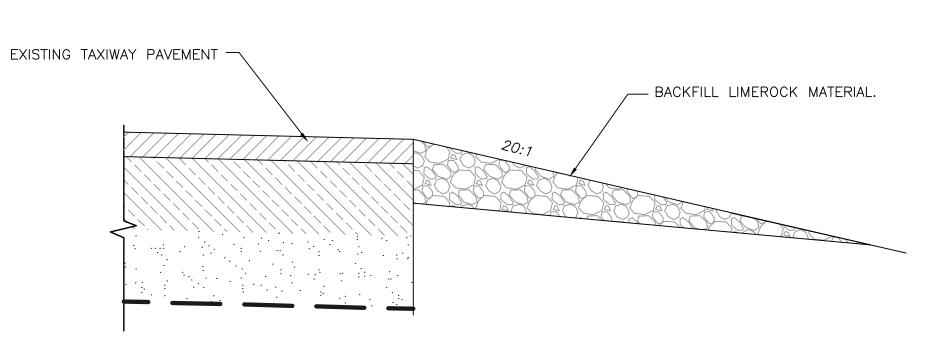
TYPICAL SHOULDER SECTION SCALE: 1"=2(STA. 5+94.63 TO STA. 6+97.42)



# <u>NOTES</u>:

- 1. WHERE MINIMUM COVER, 36", IS NOT AVAILABLE ENCASEMENT WILL BE REQUIRED.
- 2. ALL CONCRETE ENCASEMENTS MUST BE FORMED AND INSPECTED BY THE CITY'S INSPECTOR PRIOR TO PLACING CONCRETE AND BACKFILLING.
- 3. BEGINNING AND ENDING OF ENCASEMENTS SHALL NOT BE MORE THAN 6" FROM A PIPE JOINT.

CONCRETE ENCASEMENT DETAIL SCALE: 1"=10'



TEMPORARY BACKFILL DETAIL FOR AIRFIELD



S M BID

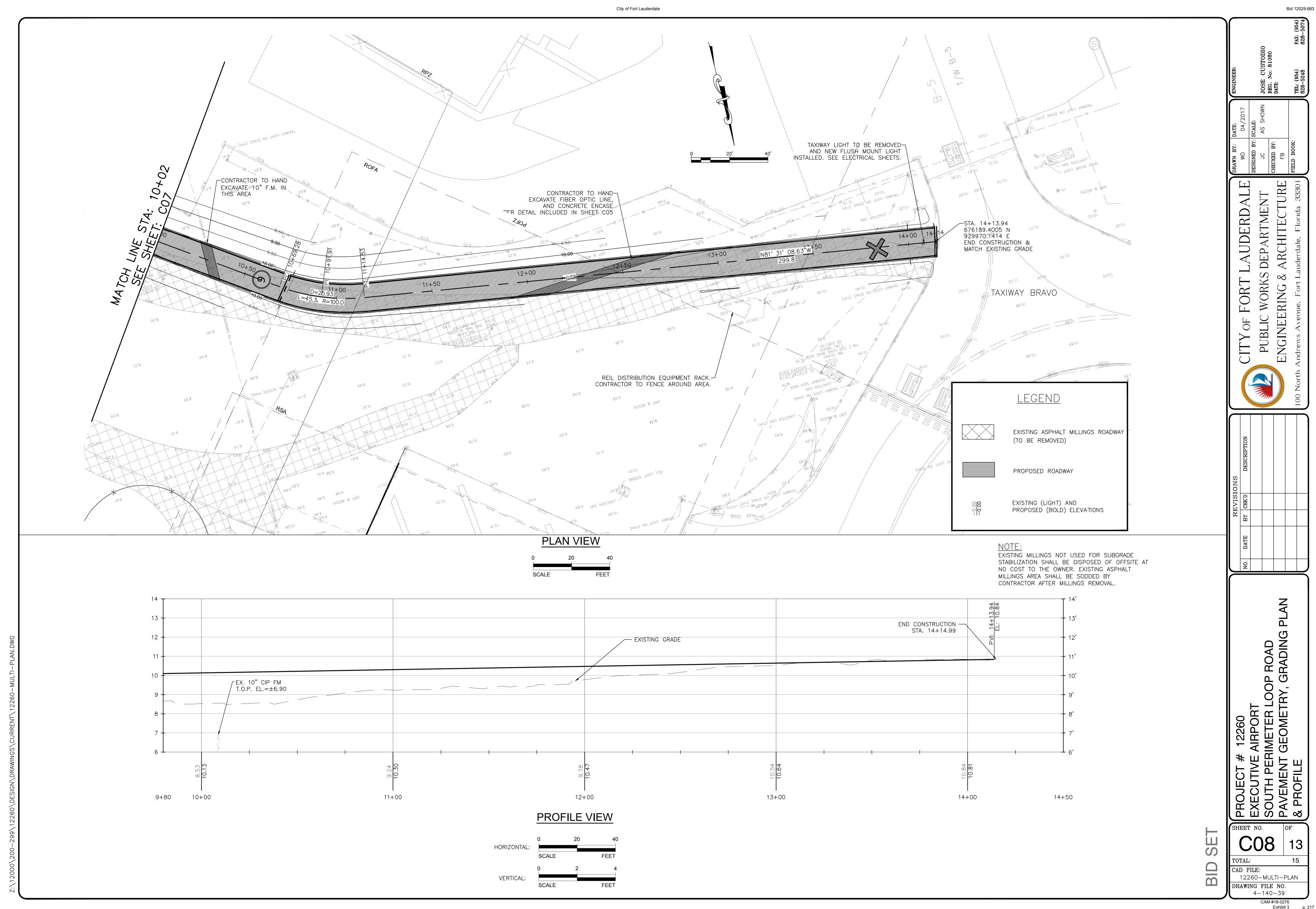
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CAM #18-0276 Exhibit 3 p. 214 Page 214 of 246

3/7/2018 6:58 AM

12260-MULTI-PLAN

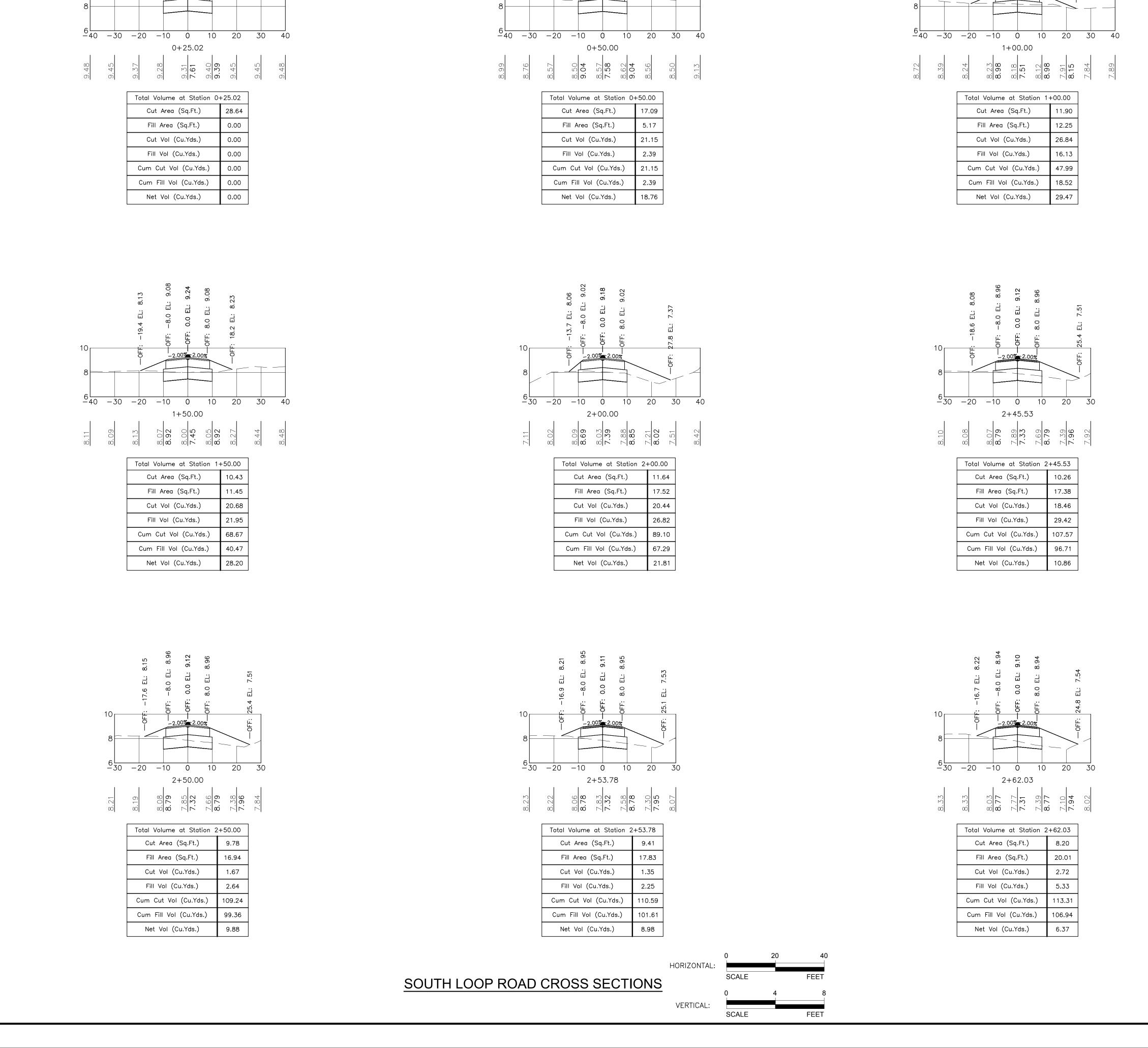
CAM #18-0276 Exhibit 3 p. 216 Page 216 of 246



3/7/2018 6:58 AM

Exhibit 3 p. 217
Page 217 of 246

City of Fort Lauderdale Bid 12029-683



ARCHITECTURE

CITY OF FORT LAUDERDALE

WORKS

DRAWING FILE NO. 4-140-39 CAM #18-0276 Exhibit 3 Page 218 of 246

12260-MULTI-PLAN

ROAD

PROJECT EXECUTIN SOUTH PI CROSS SI

CAD FILE:

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FAX: (954) 828-5074

S DEPARTMENT ARCHITECTURE

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CITY OF FORT LAUDERDALE

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DRAWING FILE NO. 4-140-39 CAM #18-0276 Exhibit 3 p. 219 Page 219 of 246

12260-MULTI-PLAN

ROAD

PROJECT #
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SOUTH PERI

CAD FILE:

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**DIAL 811** 

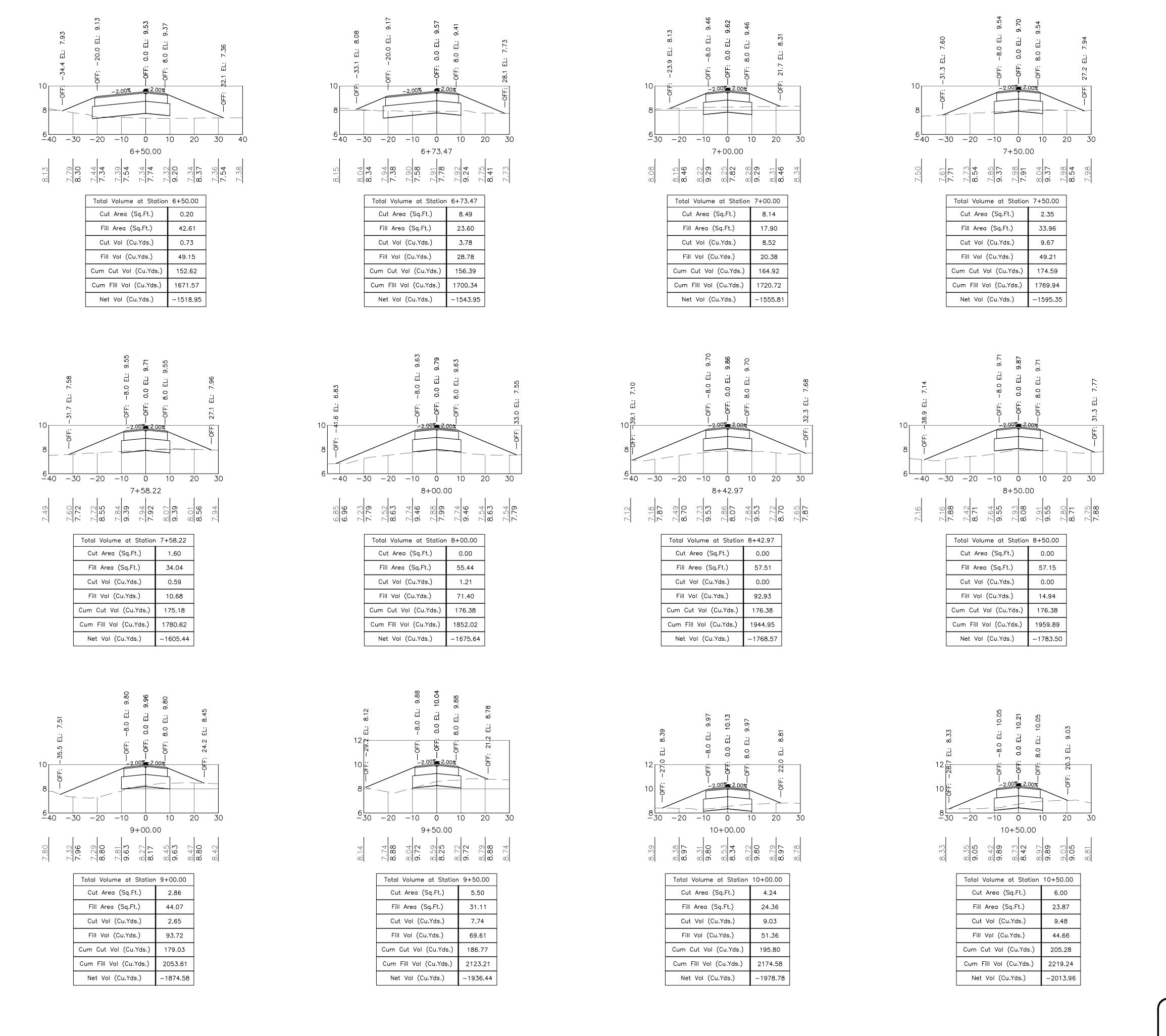
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HORIZONTAL:

VERTICAL:

SCALE

SOUTH LOOP ROAD CROSS SECTIONS

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13 CAD FILE: 12260-MULTI-PLAN DRAWING FILE NO. 4-140-39

ROAD

4 12260 AIRPORT SIMETER LOOP F

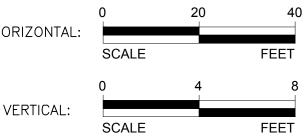
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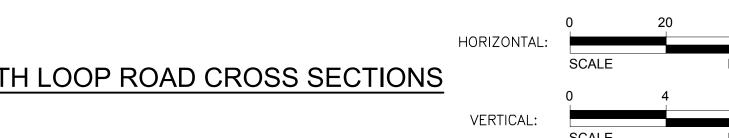
CAM #18-0276 Exhibit 3 Page 220 of 246

TURE

AUDERDALE

# SOUTH LOOP ROAD CROSS SECTIONS





-30	-20	-10	U	10	J	20	30
		14	4+00.C	0			
10.49	10.29	10.40	10.84	10.82	10.49	10.73	10.78
	Total	Volume	at Stat	ion	14+	00.00	]
	Cut	Area (	Sq.Ft.)		3	3.74	
	Fill	Area (S	Sq.Ft.)		C	).38	
Ī	Cut	Vol (Cu	u.Yds.)		6	5.29	
Ī	Fill	Vol (Cu	ı.Yds.)		C	).35	
	Cum (	Cut Vol	(Cu.Yds	.)	49	91.83	
	Cum I	Fill Vol	(Cu.Yds.	.)	23	09.61	
Ī	Net	Vol (Cı	u.Yds.)		-18	317.78	
_				•			_
	1	Total Cut Fill Cum Cum	Total Volume Cut Area ( Fill Area (S Cut Vol (Cu Fill Vol (Cu Cum Cut Vol Cum Fill Vol	Total Volume at State  Cut Area (Sq.Ft.)  Fill Area (Sq.Ft.)  Cut Vol (Cu.Yds.)  Fill Vol (Cu.Yds.)  Cum Cut Vol (Cu.Yds.)	Total Volume at Station  Cut Area (Sq.Ft.)  Fill Area (Sq.Ft.)  Cut Vol (Cu.Yds.)  Cum Cut Vol (Cu.Yds.)  Cum Fill Vol (Cu.Yds.)	14+00.00   6	Total Volume at Station 14+00.00  Cut Area (Sq.Ft.) 33.74  Fill Area (Sq.Ft.) 0.38  Cut Vol (Cu.Yds.) 65.29  Fill Vol (Cu.Yds.) 491.83  Cum Fill Vol (Cu.Yds.) 2309.61

10+68.87

Total Volume at Station 10+68.87

Total Volume at Station 11+50.00

Cut Vol (Cu.Yds.) 17.16

13+50.00

Total Volume at Station 13+50.00

Cut Area (Sq.Ft.)

Fill Area (Sq.Ft.)

Cut Vol (Cu.Yds.)

Fill Vol (Cu.Yds.)

Cum Cut Vol (Cu.Yds.)

Cum Fill Vol (Cu.Yds.)

Net Vol (Cu.Yds.)

36.77

0.00

62.62

0.19

426.54

2309.26

-1882.72

Cut Area (Sq.Ft.)

Fill Area (Sq.Ft.)

Fill Vol (Cu.Yds.)

Cum Cut Vol (Cu.Yds.)

Cum Fill Vol (Cu.Yds.)

Net Vol (Cu.Yds.)

13.12

11.04

18.62

248.47

2279.83

-2031.36

9.79

19.41

5.51

15.12

210.79

2234.36

-2023.57

Cut Area (Sq.Ft.)

Fill Area (Sq.Ft.)

Cut Vol (Cu.Yds.)

Fill Vol (Cu.Yds.)

Cum Cut Vol (Cu.Yds.)

Cum Fill Vol (Cu.Yds.)

Net Vol (Cu.Yds.)

<i>←</i>   <i>←</i>   <i>← ←</i>  0) <i>←</i>	
Total Volume at Station	14+00.00
Cut Area (Sq.Ft.)	33.74
Fill Area (Sq.Ft.)	0.38
Cut Vol (Cu.Yds.)	65.29
Fill Vol (Cu.Yds.)	0.35
Cum Cut Vol (Cu.Yds.)	491.83
Cum Fill Vol (Cu.Yds.)	2309.61
Net Vol (Cu.Yds.)	-1817.78

10+91.49

Total Volume at Station 10+91.49

13.13

16.39

9.65

13.88

220.44

2248.23

-2027.79

Cut Area (Sq.Ft.)

Fill Area (Sq.Ft.)

Cut Vol (Cu.Yds.)

Fill Vol (Cu.Yds.)

Cum Cut Vol (Cu.Yds.)

Cum Fill Vol (Cu.Yds.)

Net Vol (Cu.Yds.)

12+00.00

Total Volume at Station 12+00.00

Cut Vol (Cu.Yds.) 28.00

Cut Area (Sq.Ft.)

Fill Area (Sq.Ft.)

Fill Vol (Cu.Yds.)

Cum Cut Vol (Cu.Yds.)

Cum Fill Vol (Cu.Yds.)

Net Vol (Cu.Yds.)

17.12

6.85

16.56

276.47

2296.39

-2019.92

<u> </u>		7
me at Station	14+00.00	
a (Sq.Ft.)	33.74	
a (Sq.Ft.)	0.38	
(Cu.Yds.)	65.29	
(Cu.Yds.)	0.35	
Vol (Cu.Yds.)	491.83	
Vol (Cu.Yds.)	2309.61	
(Cu.Yds.)	-1817.78	
		,

Total Volume at Station 14+13.94	
75157 75151775 51 5151577	
Cut Area (Sq.Ft.) 30.43	
Fill Area (Sq.Ft.) 0.00	
Cut Vol (Cu.Yds.) 16.57	
Fill Vol (Cu.Yds.) 0.10	
Cum Cut Vol (Cu.Yds.) 508.40	
Cum Fill Vol (Cu.Yds.) 2309.71	
Net Vol (Cu.Yds.) -1801.31	

01 01 01 05 05 05 05 05 05 05 05 05 05 05 05 05	0	
Total Volume at Station	14+13.94	
Cut Area (Sq.Ft.)	30.43	
Fill Area (Sq.Ft.)	0.00	
Cut Vol (Cu.Yds.)	16.57	
Fill Vol (Cu.Yds.)	0.10	
Cum Cut Vol (Cu.Yds.)	508.40	
Cum Fill Vol (Cu.Yds.)	2309.71	
Net Vol (Cu Yds )	_1801 31	

12		OFF: -10.0 EL: 10.84	0.5 — OFF: 0.0 EL: 10.84	——————————————————————————————————————		
8 -30	-20	-10	0	10	20	30
		14	1+13.9	4		
10.94	10.85	10.85	10.84	10.88	10.90	10.95

		-10.0 EL: 10.84 -8.0 EL: 10.68	DFF: 0.0 EL: 10.84	8.0 EL: 10.68 10.4 EL: 10.88		
12			Ť	-0FF: -0FF:		
10			00%-2.0	00%		
8 -30	-20	-10	0	10	20	30
		14	1+13.9	4		
46	.85	85	.84	88.	90	95

		-10.0 EL: 10.84 -8.0 EL: 10.68	)FF: 0.0 EL: 10.84	8.0 EL: 10.68 : 10.4 EL: 10.88		
12		-0FF:	.007-2.0	-0-1 -0-1 -0-1		
8 -30	-20	-10	0	10	20	 30
		1.	4+13.9	4		
0.94	0.85	0.85	0.84	0.88	06.0	0.95

	Net Vol (Cu.Yds.)				-1	991.97	
12 10			0.5 — OFF: 0.0 EL: 10.84		——————————————————————————————————————		
8 <u>L</u> -30	-20	-10	0	1	0	20	30
		1	4+13.9	4			
4	35	35	4	00	4	90	95

12	OFF: -18	-0FF:	-0-F:	- : <u>H</u> O-	" 5				
10		-2	.00% -2.0	0%	 		-		
8 -30	-20	-10	0	1	0	20	30		
		12	2+50.0	0					
9.68	9.53	9.76	10.16	10 28	10.29	10.10	9.78		
	Total	Volume	at Stat	ion	12+	50.00	]		
	Cut	Cut Area (Sq.Ft.) 23.23							
	Fill	Area (S	Sq.Ft.)			3.32			
	Cut	Vol (Cı	u.Yds.)		3	37.37			
							1		

9.42

313.84

2305.81

Fill Vol (Cu.Yds.)

Cum Cut Vol (Cu.Yds.)

Cum Fill Vol (Cu.Yds.)

	—OFF:  -18.5 EL: 9.52	2 — OFF: -8.0 EL: 10.40	00° 2.00 EL: 10.56				
30	-20	-10	0	10	20	<u>3</u> 0	
		12	2+50.0	0			
	9.53	9.76	10.16 8.77	10.28	10.10	9.78	

	18.5 EL: 9.52	-8.0 EL: 10.40	0.0 EL: 10.56	3FF: 3:9 EL: 10:29			
12	OFF: -18		-0-F:	ĨΥ			
10		-2	2.	00%			
8	-20	-10	0	10	20	 30	
		12	2+50.0	00			
		12	()	തിത			

11+00.00

City of Fort Lauderdale

	1 1.
Total Volume at Station	11+00.00
Cut Area (Sq.Ft.)	13.03
Fill Area (Sq.Ft.)	16.60
Cut Vol (Cu.Yds.)	4.14
Fill Vol (Cu.Yds.)	4.81
Cum Cut Vol (Cu.Yds.)	224.58
Cum Fill Vol (Cu.Yds.)	2253.04
Net Vol (Cu.Yds.)	-2028.47

8.75	9.25 9.25 9.25 8.53	9.11	8.95
	Total Volume at Station	11+14.12	
	Cut Area (Sq.Ft.)	12.69	
	Fill Area (Sq.Ft.)	16.98	
	Cut Vol (Cu.Yds.)	6.74	
	Fill Vol (Cu.Yds.)	8.17	
	Cum Cut Vol (Cu.Yds.)	231.32	
	Cum Fill Vol (Cu.Yds.)	2261.21	
	Net Vol (Cu.Yds.)	-2029.89	

-1945.15

Net Vol (Cu.Yds.)

2 2 6		7 - OFF: -8.0 EL: 10	2.0 EL: 10.	%—OFF: 8.0 EL: 10.1	—OFF: 21.0 EL: 9.09		
3L -30	-20	-10	Ö	10	20	30	
		1	1+14.1	2			
) ()	8.56	9.02	9.25 <b>8.53</b>	9.31	9.16	8.95	
						]	

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		.,—OFF: -8.0 EL: 10.16	0.0 EL: 10.32	%—OFF: 8.0 EL: 10.16	—OFF: 21.0 EL: 9.09		
8 <u>L</u> -30	-20	-10	0	10	20	30	
		11	1+14.1	2			
3.75	3.56	0.00	3.53	0.00	9.11	3.95	

	13+00.00	32 O	30		CII Y OF FURI	PUBLIC WORKS	ENGINEERING &	100 North Andrews Avenue, Fort La
Г	Total Volume at Station	13+00.00	08 6		NO			
-	Cut Area (Sq.Ft.)	30.86			DESCRIPTION			
	Fill Area (Sq.Ft.)	0.20			)ESC			
	Cut Vol (Cu.Yds.)	50.09			<b>-</b>			
	Fill Vol (Cu.Yds.)	3.26		REVISIONS				
	Cum Cut Vol (Cu.Yds.)	363.93		VIS	CHK'D			
	Cum Fill Vol (Cu.Yds.)	2309.07		[] [당]	<u>ນ</u>	+		_

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SNO	DESCRIPTION			
REVISIONS	BY CHK'D			
R	BY			
	DATE			

				100 North And
VISIONS	DESCRIPTION			
/ISI	HK'D			

JUEKUALE	ARTMENT	CHITECTURE	lale, Florida 33301
YOF FURI LAUDERDALE	BLIC WORKS DEPARTMENT	INEERING & ARCHITECTURE	vs Avenue, Fort Lauderdale, Florida 33301

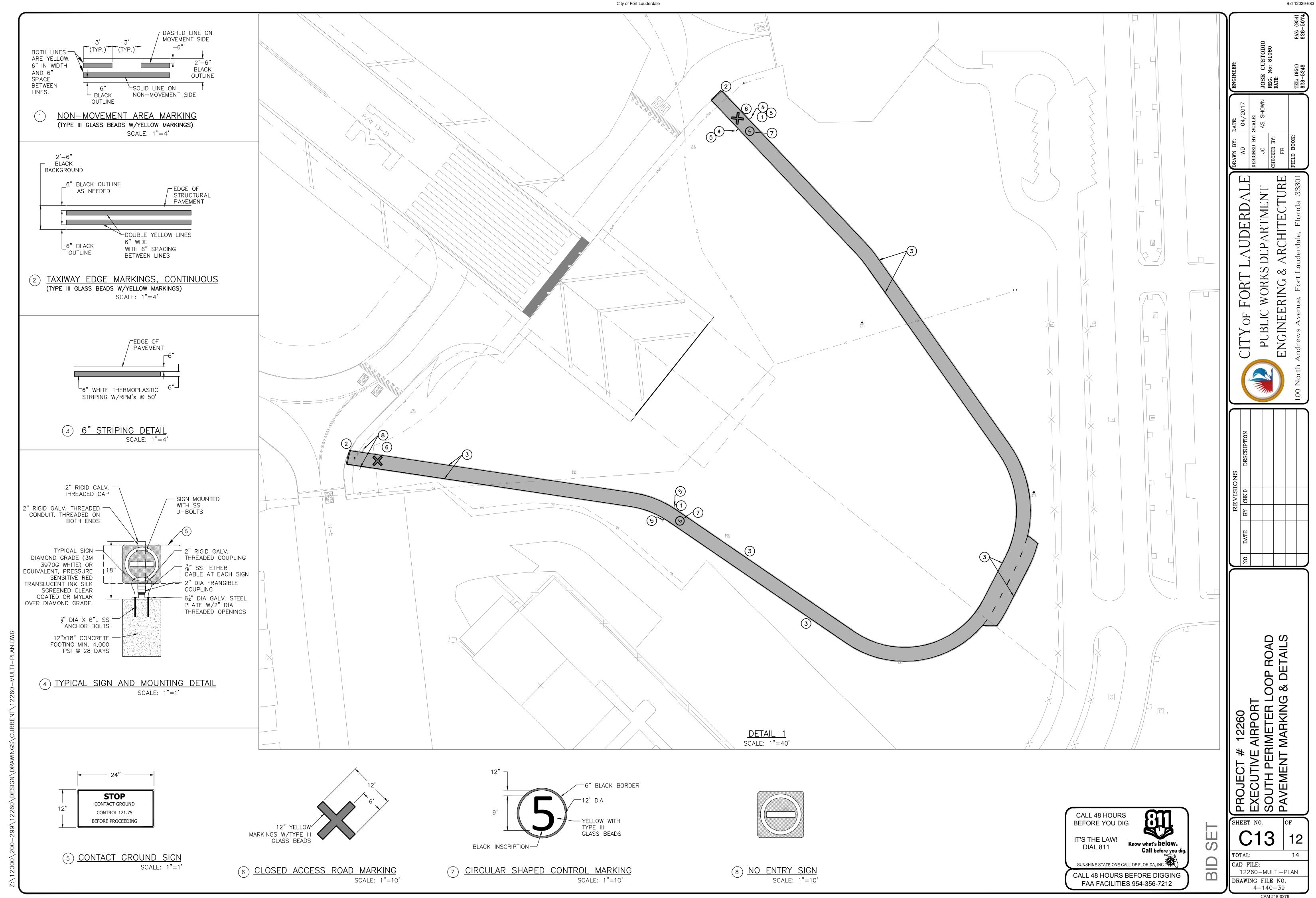
JOSE CUSTODIO REG. No: 81080 DATE:	TEL: (954) F
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Bid 12029-683

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BD

4-140-39



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CAM #18-0276 Exhibit 3 p. 222 Page 222 of 246

NGINEERING

OTAL: CAD FILE: 12260-MULTI-PLAN  $\mathbf{m}$ DRAWING FILE NO. 4-140-39

### GENERAL NOTES

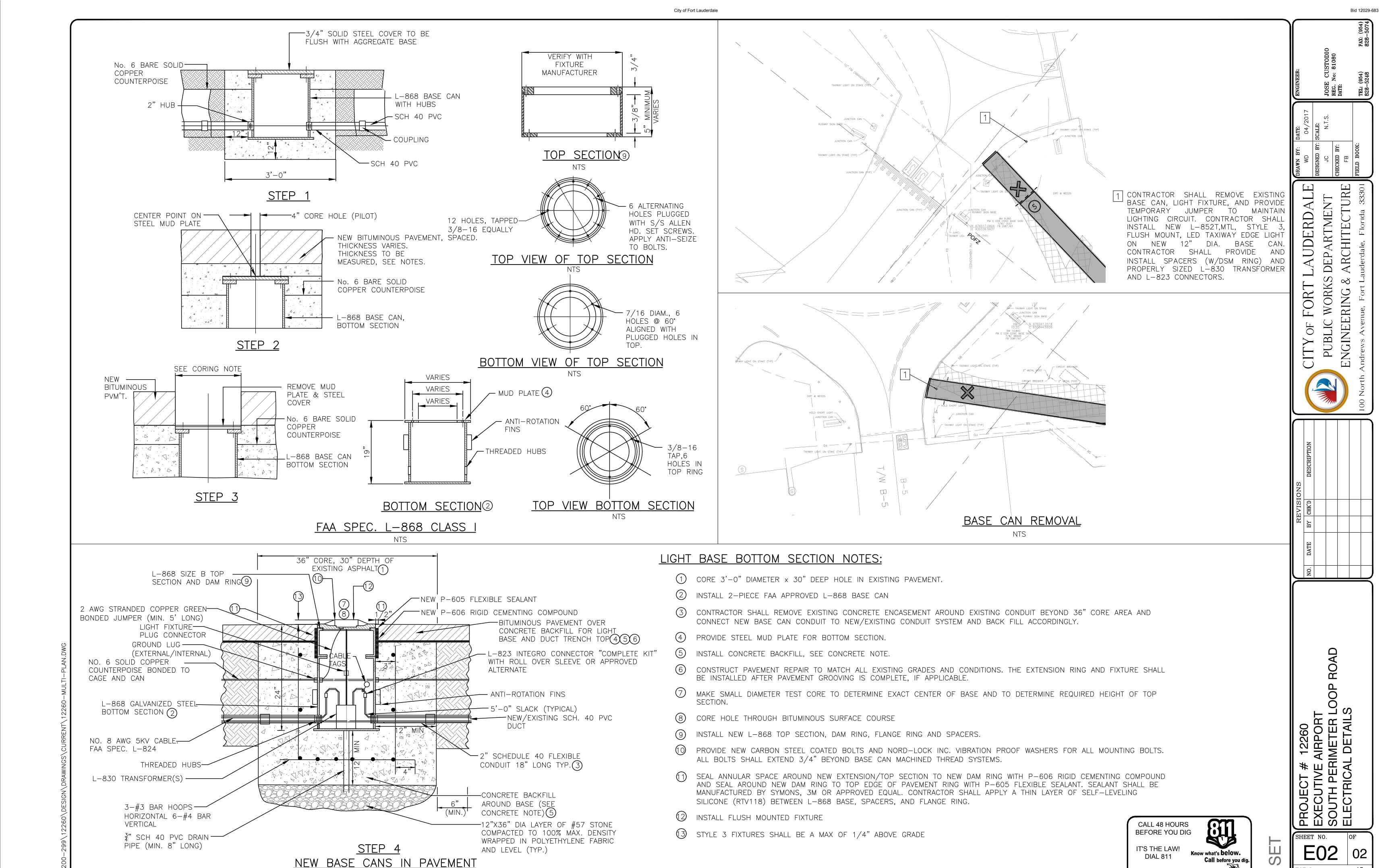
- 1. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR TO INSTALL THE ELECTRICAL SYSTEMS AS INDICATED ON THE DRAWINGS. ITEMS NOT SHOWN BUT OBVIOUSLY NECESSARY FOR COMPLETION OF THE WORK SHALL BE INCLUDED.
- 2. THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, LOCAL CODES, CITY CODES, ALL LATEST FEDERAL AVIATION ADMINISTRATION STANDARDS AND ADVISORIES, AND ALL CITY OF FORT LAUDERDALE FLORIDA BUILDING CODES.
- 3. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INSPECTIONS, AND APPROVALS.
- 4. THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE SITE ELECTRICAL ENGINEER, CITY OF FORT LAUDERDALE AND FAA.
- 5. ELECTRICAL REPRESENTATIVES ARE AS FOLLOWS: CITY OF FORT LAUDERDALE AIRPORT - NICK SLAGLE - 954-828-4963 CITY OF FORT LAUDERDALE PROJECT MANAGER - JOSE CUSTODIO -954-828-5248 FAA REPRESENTATIVE - JOSE RODRIGUEZ - 954-359-5687 AIRPORT ELECTRICAL MAINTENANCE - FRANK CHESSER - 954-828-4955
- 7. ALL EQUIPMENT SHALL BE NEW AND UNUSED, U.L. LISTED AND FAA APPROVED.
- 8. SHOP DRAWINGS SHALL BE SUBMITTED FOR THE FOLLOWING EQUIPMENT: CONNECTORS, LIGHTING ASSEMBLIES, BASE CANS, SPLICE KITS, CONDUITS, CABLES, TRANSFORMERS, AND OTHERS AS REQUESTED.
- 9. ALL EQUIPMENT FURNISHED AND INSTALLED BY THE CONTRACTOR SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE OF ENTIRE PROJECT.
- 10. COORDINATE ALL ELECTRICAL EQUIPMENT, LOCATIONS, AND POWER REQUIREMENTS AND VERIFY ALL OBSTRUCTIONS WITH ALL SUBCONTRACTORS AND EQUIPMENT SUPPLIERS PRIOR TO ANY INSTALLATION.
- 11. AIRFIELD CONDUCTORS SHALL BE FAA APPROVED 5KV L-824 CABLE. GROUND CONDUCTORS SHALL BE 600V, XHHW. COUNTERPOISE SHALL BE BARE SOLID COPPER UNLESS OTHERWISE INDICATED.
- 12. CONDUIT SCHEDULE 40 PVC SHALL BE USED UNDERGROUND AND RGS CONDUIT SHALL BE USED ABOVE GROUND.
- 13. ALL REFERENCES TO A MANUFACTURER ARE GIVEN ON AN "FAA APPROVED ALTERNATE" BASIS.
- 14. TEMPORARY WIRING SHALL ALSO BE REQUIRED TO MAINTAIN THE TAXIWAY EDGE LIGHTING SYSTEM INCLUDING LIGHTED SIGNS IN OPERATING CONDITION AT THE END OF EACH WORK PERIOD. CONTRACTOR SHALL PROVIDE TEMPORARY CABLES DURING CONSTRUCTION FOR TEMPORARY LIGHTS.
- 15. IF TEMPORARY CABLES INSTALLED IN AREAS SUBJECT TO VEHICULAR TRAFFIC, SHALL BE INSTALLED IN RIGID GALVANIZED STEEL FREQUENT INTERVALS TO PREVENT MOVING. ALL COSTS INCIDENTAL TO TEMPORARY WIRING SHALL BE PAID FOR UNDER LINE ITEM 2. ALL COST FOR THE MAINTENANCE OF TRAFFIC (MOT) LIGHTING AND WIRING SHALL BE PAID FOR IN THE LINE ITEM 2.

### NOTES: MULTIPLE SECTION L-868, BASE CAN

- 1. FIXTURES ARE TO BE INSTALLED IN A 4 STEP PROCESS. SEE LIGHT BASE BOTTOM SECTION NOTES FOR STEP 1. STEP 2, 3 & 4 INSTALLATION SEQUENCE SHALL BE AS DETAILED IN NOTES 1 THROUGH
- 2. AFTER THE TOTAL BITUMINOUS PAVEMENT IS INSTALLED, CORE A 4" DIAMETER PILOT HOLE AND LOCATE THE CENTER POINT OF THE STEEL MUD PLATE. CORE 13 DIAMETER HOLE FOR 12" DIAMETER CANS AND 16" DIAMETER HOLE FOR 15" DIAMETER CANS, CENTERING IT ON THE CENTER POINT OF THE STEEL MUD PLATE, REMOVE THE STEEL MUD PLATE AND STEEL COVER, INSTALL L-868 EXTENSION (SPACER, FLANGE RING, DAM RING OR SHIM) AND LIGHT ASSEMBLY. SEAL ANNULAR SPACE AROUND NEW EXTENSION/TOP SECTION TO NEW DAM RING WITH P-606 RIGID CEMENTING COMPOUND AND SEAL AROUND NEW DAM RING TO TOP EDGE OF PAVEMENT RING WITH P-605 FLEXIBLE SEALANT. SEALANT SHALL BE MANUFACTURED BY SYMONS, 3M OR APPROVED EQUAL. CONTRACTOR SHALL APPLY A THIN LAYER OF SELF-LEVELING SILICONE (RTV118) BETWEEN L-868 BASE, SPACERS, AND FLANGE RING.
- 3. THE HEIGHT OF THE L-868 EXTENSION SHALL BE DETERMINED AS FOLLOWS:
  - A. RECORD FINAL ELEVATION OF THE TOP AND AT THE MIDPOINT OF THE 3/4" STEEL COVER AFTER THE BOTTOM SECTION OF THE BASE HAS BEEN INSTALLED
  - B. RECORD FINAL ELEVATION OF THE PAVEMENT DIRECTLY ABOVE THE MIDPOINT OF THE STEEL COVER AFTER THE PAVING IS COMPLETELY INSTALLED.
  - C. THE EDGE OF THE LIGHT FIXTURE SHALL MATCH THE FINISHED PAVEMENT SURFACE TO (+) 0" (-) 1/16" TOLERANCE.
- 4. DO NOT REUSE SHIPPING OR EXISTING BOLTS. CONTRACTOR SHALL PROVIDE AND INSTALL NEW CARBON STEEL COATED BOLTS OF THE PROPER LENGTH AND 2-PIECE LOCKWASHERS SHALL BE FURNISHED WITH THE SPACER RING. INSTALL LIGHT FIXTURE WITH THE NEW CARBON STEEL COATED BOLTS AND LOCKWASHERS AND TORQUE TO MANUFACTURERS INSTRUCTIONS.
- 5. AFTER FIXTURE INSTALLATION, CONTRACTOR SHALL FURNISH AND INSTALL P-605 FLEXIBLE SEALANT IN SPACE AROUND DAM RING AND P-606 RIGID CEMENTING COMPOUND IN SPACE AROUND THE EXTENSIONS AND SPACERS.
- 6. THE CONTRACTOR SHALL CONFORM TO THE CURRENT FAA ADVISORY CIRCULARS, FAA 150/5340-30, LATEST EDITION FOR RUNWAY AND TAXIWAY IN-PAVEMENT LIGHTING SYSTEMS INSTALLATION AND INSTALLATION TOLERANCES AND A/C 850/5370-2 OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION.

**DIAL 811** SUNSHINE STATE ONE CALL OF FLORIDA, INC. **CALL 48 HOURS BEFORE DIGGING** 

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**INSTALLATION DETAILS** 

TYPICAL L-868, L-852T

3/7/2018 6:58 AM

4-137-86

12260-MULTI-PLAN

DRAWING FILE NO.

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**CALL 48 HOURS BEFORE DIGGING** 

FAA FACILITIES 954-356-7212

Page 224 of 246

## CITY OF FORT LAUDERDALE PUBLIC WORKS DEPARTMENT

#### MINORITY BUSINESS ENTERPRISE (MBE) - WOMEN BUSINESS ENTERPRISE (WBE)

#### PRIME CONTRACTOR IDENTIFICATION FORM

In order to assist us in identifying the status of those companies doing business with the City of Fort Lauderdale, this form <u>must be completed and returned</u> with your bid package.

Name of Firm:	
Address of Firm:	
Telephone Number:	
Name of Person Completing Form:	
Title:	
Signature:	
Date:	
City Project Number:	
City Project Description:	
Please check the item(s) which prop	perly identify the status of your firm:
☐ Our firm is not a MBE or WBE	
Our firm is a MBE, as at least economically disadvantaged	51 percent is owned and operated by one or more socially and individuals.
☐ American Indian ☐ Asi	an 🗌 Black 🗎 Hispanic
☐ Our firm is a WBE, as at least	51 percent is owned and operated by one or more women.
☐ American Indian ☐ Asi	an

#### MBE/WBE CONTRACTOR INFORMATION

The City, in a continuing effort, is encouraging the increased participation of minority and womenowned businesses in Public Works Department related contracts. Along those lines, we are requiring that each firm provide documentation detailing their own programs for utilizing minority and women-owned businesses.

Submit this information as a part of this bid package and refer to the checklist, to ensure that all areas of concern are covered. The low responsive bidder may be contacted to schedule a meeting to discuss these objectives. It is our intention to proceed as quickly as possible with this project, so your cooperation in this matter is appreciated.

#### CONTRACTOR CHECKLIST

	List Previous City of Fort Lauderdale Contracts
	<u>5</u>
	Number of Employees in your firm
—	Percent ( %) Women
	Percent ( %) Minorities
	Job Classifications of Women and Minorities
	<u>5</u>
	Use of minority and/or women subcontractors on past projects.
	5 <u>6</u>
	Nature of the work subcontracted to minority and/or women-owned firms.
	<u>5</u>
	How are subcontractors notified of available opportunities with your firm?
	<u>5</u>

Anticipated amount to be subcontracted on this project.
5
Anticipated amount to be subcontracted to minority and/or women-owned businesses on this project.
5

### **QUESTIONNAIRE SHEET**

PLEASE PRINT OR TYPE:		
Firm Name:		
President		
Business Address:		
	<u>5</u>	
Telephone:		Fax:
E-Mail Address:		
What was the last project of this n contract value.	ature which you completed? Include the year,	description, and
	<u>5</u>	
have performed work similar to tha	corporations and representatives of those corporations and representatives of those corporations are required by this contract, and which the City elephone numbers and e-mail addresses). Inclue.	may contact as your
How many years has your organiz	ration been in business?	
Have you ever failed to complete	work awarded to you; if so, where and why?	
The name of the qualifying agent f	for the firm and his position is:	
Certificate of Competency Numbe	r of Qualifying Agent:	
Effective Date:	Expiration Date:	
Licensed in:	Engineering Contractor's License	#
(County/State)		

Expiration Date:	

NOTE: To be considered for award of this contract, the bidder must submit a financial statement upon request.

NOTE: Contractor <u>must</u> have proper licensing and shall provide copy of same with his proposal.

### **QUESTIONNAIRE SHEET**

1.	Have you personally inspected the proposed work and have you a complete plan for its performance?
	<u>5</u>
2.	Will you sublet any part of this work? If so, list the portions or specialties of the work that you will.
a)	
b)	
c)	
d)	
e)	
f)	
g)	
3.	What equipment do you own that is available for the work?
4.	What equipment will you purchase for the proposed work?
5.	What equipment will you rent for the proposed work?

31\_

4

#### LOCAL BUSINESS PRICE PREFERENCE CERTIFICATION STATEMENT

The Business identified below certifies that it qualifies for the local business price preference classification as indicated herein, and further certifies and agrees that it will re-affirm its local preference classification annually no later than thirty (30) calendar days prior to the anniversary of the date of a contract awarded pursuant to this ITB. Violation of the foregoing provision may result in contract termination.

(1)	Business Name	is a <b>Class A</b> Business as defined in City of Fort Lauderdale Ordinance No. C-17-26, Sec.2-186. A copy of the City of Fort Lauderdale current year Business Tax Receipt <u>and</u> a complete list of full-time employees and evidence of their addresses shall be provided within 10 calendar days of a formal request by the City.
(2)	Business Name	is a <b>Class B</b> Business as defined in the City of Fort Lauderdale Ordinance No. C-17-26, Sec.2-186. A copy of the Business Tax Receipt or a complete list of full-time employees and evidence of their addresses shall be provided within 10 calendar days of a formal request by the City.
(3)	Business Name	is a <b>Class C</b> Business as defined in the City of Fort Lauderdale Ordinance No. C-17-26, Sec.2-186. A copy of the Broward County Business Tax Receipt shall be provided within 10 calendar days of a formal request by the City.
(4)	Business Name	requests a <b>Conditional Class A</b> classification as defined in the City of Fort Lauderdale Ordinance No. C-17-26, Sec.2-186. Written certification of intent shall be provided within 10 calendar days of a formal request by the City.
(5)	Business Name	requests a <b>Conditional Class B</b> classification as defined in the City of Fort Lauderdale Ordinance No. C-17-26, Sec.2-186. Written certification of intent shall be provided within 10 calendar days of a formal request by the City.
(6)	Business Name	is considered a <b>Class D</b> Business as defined in the City of Fot Lauderdale Ordinance No. C-17-26, Sec.2-186 and does not qualify for Local Preference consideration.
BIDDER'S	S COMPANY:	
AUTHORI COMPAN' PERSON	Y	

3

CAM #18-0276 Exhibit 3 Page 232 of 246

#### **NON-COLLUSION STATEMENT:**

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

- 3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).
- 3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.

<u>NAME</u>	<u>RELATIONSHIPS</u>
-	
	•

In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.

3

CAM #18-0276 Exhibit 3 Page 233 of 246

### CONTRACTOR'S CERTIFICATE OF COMPLIANCE WITH NON-DISCRIMINATION PROVISIONS OF THE CONTRACT

The completed and signed form should be returned with the Contractor's submittal. If not provided with submittal, the Contractor must submit within three business days of City's request. Contractor may be deemed non-responsive for failure to fully comply within stated timeframes.

Pursuant to City Ordinance Sec. 2-17(a)(i)(ii), bidders must certify compliance with the Non-Discrimination provision of the ordinance.

(a) Contractors doing business with the City shall not discriminate against their employees based on the employee's race, color, religion, gender (including identity or expression), marital status, sexual orientation, national origin, age, disability or any other protected classification as defined by applicable law.

<u>Contracts.</u> Every Contract exceeding \$100,000, or otherwise exempt from this section shall contain language that obligates the Contractor to comply with the applicable provisions of this section.

The Contract shall include provisions for the following:

- The Contractor certifies and represents that it will comply with this section during the entire term of the contract.
- (ii) The failure of the Contractor to comply with this section shall be deemed to be a material breach of the contract, entitling the City to pursue any remedy stated below or any remedy provided under applicable law.

Authorized Signature	Print Name and Title
Date	

### **CONTRACT PAYMENT METHOD**

The City of Fort Lauderdale has implemented a Procurement Card (P-Card) program which changes how payments are remitted to its vendors. The City is transitioning from traditional paper checks to credit card payments via MasterCard or Visa as part of this program.

This allows you as a vendor of the City of Fort Lauderdale, to receive your payment fast and safely. No more waiting for checks to be printed and mailed.

In accordance with Article 7, item 7.6 of the contract, payments on this contract will be made utilizing the City's P-Card. Accordingly, bidders must presently have the ability to accept these credit cards or take whatever steps necessary to implement acceptance of a card before the start of the contract term, or contract award by the City.

Please indicate with which credit card you prefer to be paid:

☐Master Card	
□Visa Card	
Company Name: Signature: Print Name Title:	

#### CONSTRUCTION BID CERTIFICATION

authority from the department of state, in accord	dance with Florida Statute §607.1501 (vis			iiporation, yt	ou may be	e required to obtain a ce	rtificate of
Company: (Legal Registration)							
Address:							
City:	State:	Zip:					
Telephone No. FAX No.	Email:						
Does your firm qualify for MBE or WBE status: N	MBE I WBE I						
If a corporation, state the name of the President business under the trade name.	, Secretary and Resident Agent. If a part	nership, state the name	es of all partners. If a	trade name,	state the	names of the individua	ls who do
Name	Title	Name			Title		
Name	Title	Name			Name		
ADDENDUM ACKNOWLEDGEMENT - Bidder ack	Addendum No. Date Received	Addendum No.	Date Received	Addendu		Date Received	reference
in the space provided below all variances contra							
contained in the below space, it is hereby implie	, ,	oes not, by virtue of su with this competitive s	ubmitting a variance,	necessarily	accept a	any variances. If no sta	tement is
	ed that your response is in full compliance	oes not, by virtue of su with this competitive s	ubmitting a variance,	necessarily	accept a	any variances. If no sta	tement is
contained in the below space, it is hereby implie	ed that your response is in full compliance must also click the "Take Exception" button that also click the "Take Exception" button that all required permits and licenses from material, equipment and supplies, and ted if awarded a contract. The below sign soever. Furthermore, the undersigned gmitting or attempting to submit a bid, that ising out of this competitive solicitation programment of the properties of the submit and the submit a	oes not, by virtue of su with this competitive so h.  In the appropriate agence or sustain all the expensiatory has not divulged a uarantees the truth and t in no event shall the press, including but not	ubmitting a variance, olicitation. If you do n library sites, and that his firm i see incurred in doing the to, discussed, or com d accuracy of all state City's liability for bod limited to public adve	necessarily ot have vari	accept a ances, sir d to do bus forth in str id with oth answers indirect, ir id confere	any variances. If no stamply mark N/A. If submodern siness in the State of Frict accordance with the per bidders, and has no contained in this bid. Incidental, consequential ences, site visits, evaluation	tement is itting your orida. The bid plans t colluded The below special or tions, oral
contained in the below space, it is hereby implie response electronically through BIDSYNC your management of the below signatory affirms that he has or will obtain an acontract documents at the unit prices indicated with any other bidder or parties to this bid what signatory also hereby agrees, by virtue of subrexemplary damages, expenses, or lost profits are presentations, or award proceedings exceed the	ed that your response is in full compliance must also click the "Take Exception" button that also click the "Take Exception" button that all required permits and licenses from material, equipment and supplies, and ted if awarded a contract. The below sign soever. Furthermore, the undersigned gmitting or attempting to submit a bid, that ising out of this competitive solicitation programment of the properties of the submit and the submit a	oes not, by virtue of su with this competitive so h.  In the appropriate agence or sustain all the expensiatory has not divulged a uarantees the truth and t in no event shall the press, including but not	ubmitting a variance, olicitation. If you do n library sites, and that his firm i see incurred in doing the to, discussed, or com d accuracy of all state City's liability for bod limited to public adve	necessarily ot have vari	accept a ances, sir d to do bus forth in str id with oth answers indirect, ir id confere	any variances. If no stamply mark N/A. If submodern siness in the State of Frict accordance with the per bidders, and has no contained in this bid. Incidental, consequential ences, site visits, evaluation	tement is itting your orida. The bid plans t colluded The below special or tions, oral
contained in the below space, it is hereby implie response electronically through BIDSYNC you member that the has or will obselow signatory agrees to furnish all labor, tools and contract documents at the unit prices indica with any other bidder or parties to this bid what signatory also hereby agrees, by virtue of subrexemplary damages, expenses, or lost profits are presentations, or award proceedings exceed the protest ordinance contained in this competitive states.	ed that your response is in full compliance must also click the "Take Exception" button that also click the "Take Exception" button that all required permits and licenses from material, equipment and supplies, and ted if awarded a contract. The below sign soever. Furthermore, the undersigned gmitting or attempting to submit a bid, that ising out of this competitive solicitation programment of the properties of the submit and the submit a	oes not, by virtue of su with this competitive so h.  In the appropriate agence or sustain all the expensiatory has not divulged a uarantees the truth and t in no event shall the press, including but not	ubmitting a variance, olicitation. If you do n library sites, and that his firm i see incurred in doing the to, discussed, or com d accuracy of all state City's liability for bod limited to public adve	necessarily ot have vari	accept a ances, sir d to do bus forth in str id with oth answers indirect, ir id confere	any variances. If no stamply mark N/A. If submark N/A. If subm	tement is itting your orida. The bid plans t colluded The below special or tions, oral

Date:

Date:



## ITB NO. 12029-683 FORT LAUDERDALE EXECUTIVE AIRPORT SOUTH PERIMETER LOOP ROAD (P12260)

#### **ADDENDUM NO. 1**

ISSUED: January 10, 2018

This Addendum is being issued to provide the following information. It is hereby made a part of the Plans and Specifications and shall be included with all contract documents.

Acknowledge receipt of this Addendum by inserting its number and date on the CITB Construction Bid Certification Page.

Replace the Special Conditions Page 3, with the attached. Bid Allowances have been added. Changes are bold and in red.

Maureen Rewis, MBA		
Procurement Specialist II		
0 N		
Company Name:		
	(please print)	
Bidder's Signature:		
-		
Date:		
Date:		

#### SPECIALS CONDITIONS (continued)

PROJECT 12260

Note: Contractor <u>must</u> have proper licensing and be able to provide evidence of same, if requested, at time of award.

#### 08. SPECIFIC EXPERIENCE REQUIRED

The following expertise is required to be considered for this contract. Specific references attesting to this expertise must be submitted with bid.

The contractor shall have at least five (5) years previous construction experience in the State of Florida. Bidder shall submit proof of construction experience for a minimum of three (3) projects of similar scope and scale (or larger) and shall, for each project listed, identify location; dates of construction; project name and overall scope; scope of work that was self-performed by Contractor; and client's name, address,

NOTE: REFERENCES SHOULD NOT INCLUDE CITY OF FORT LAUDERDALE EMPLOYEES OR WORK PERFORMED FOR THE CITY. THE CITY IS INTERESTED IN WORK EXPERIENCE AND REFERENCES OTHER THAN THE CITY OF FORT LAUDERDALE.

By signing this bid solicitation, contractor is affirming that this expertise will be provided for this contract at no additional charge.

#### 09. BID ALLOWANCE:

Allowance for permits: Payments will be made to the contractor based on the actual cost of permits upon submission of paid permit receipts. The City shall not pay for other costs related to obtaining or securing permits.

The amount indicated is intended to be sufficient to cover the entire project. If the City Permit fees exceed the allowance indicated, the City will reimburse the contractor the actual amount of City Permit Fees required for project completion.

Allowance	\$
Materials	10,000
Labor	10,000
TOTAL	20,000

Note: The City will add this allowance to your bid.

#### **10. INSURANCE REQUIREMENTS** (See Article 10, Bonds and Insurance, of the Contract for details)

#### 10.1 General Information

Contractor shall provide and shall require all of its sub-contractors to provide, pay for, and maintain in force at all times during the term of the Agreement, such insurance, including Property Insurance (Builder's Risk), Commercial General Liability Insurance, Business Automobile Liability Insurance, Workers' Compensation Insurance, Employer's Liability Insurance, and Umbrella/Excess Liability, as stated below, as well as Professional Liability insurance in the amount of \$1,000,000 for any Architectural and/or Engineering requirements associated with the fulfillment of the contract if required. Such policy or policies shall be issued by companies authorized to do business in the State of Florida and having agents upon whom service of process may be made in the State of Florida. A <u>Sample Insurance Certificate</u> shall be included with the proposal to demonstrate the firm's ability to comply with insurance requirements. Provide a previous certificate or other evidence listing the insurance companies' names for all required coverage, and the dollar amounts of the coverage.

SC-3 (ADDENDUM 1)



#### ITB NO. 12029-673

Fort Lauderdale Executive Airport South Perimeter Loop Road (P12260)

#### ADDENDUM NO. 3

ISSUED: January 19, 2018

This Addendum is being issued to provide the following information. It is hereby made a part of the Plans and Specifications and shall be included with all contract documents.

Acknowledge receipt of this Addendum by inserting its number and date on the CITB Construction Bid Certification Page.

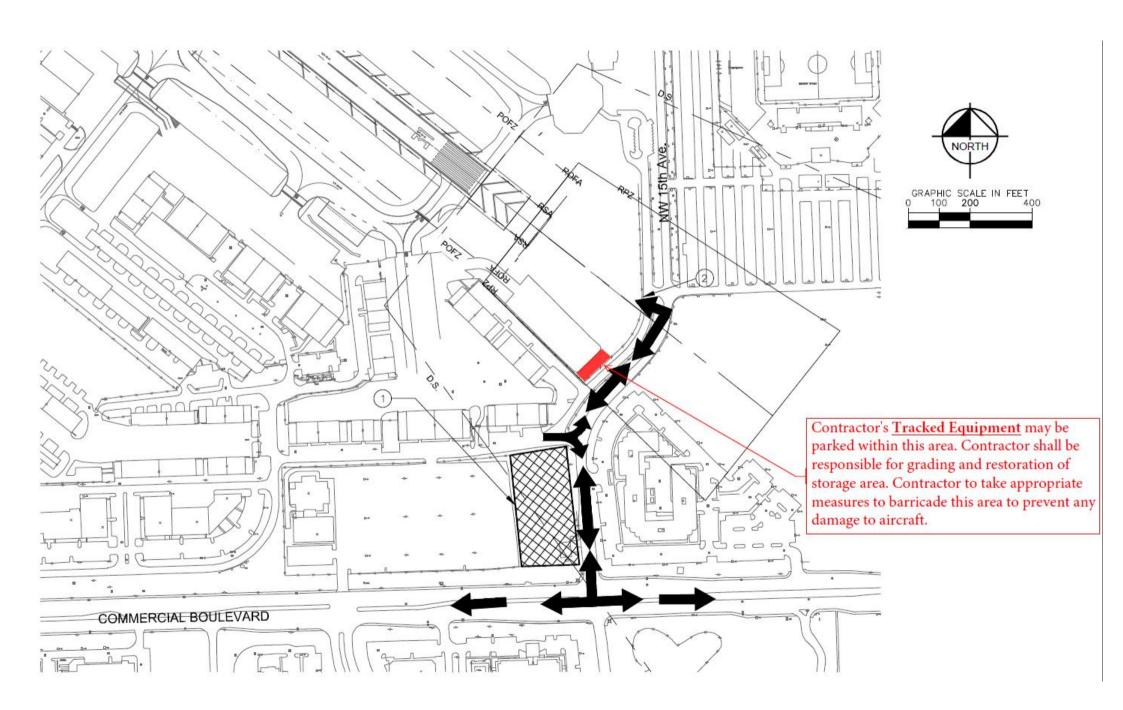
#### 1. New information and item added:

To answer question 4, we had to make a revision to sheet C01 to include an additional bid item (24) for "Embankment in Place".

#### 2. Staging Area:

Staging area for <u>tracked equipment</u> has been provided. Contractor shall be responsible for grading and restoration of storage area. Contractor most take appropriate measures to barricade this area to prevent any damage to aircraft.

Fausto Wargas Procurement Specialist I		
Company Name:	(please print)	
Bidder's Signature:		
Date:		



<b>1</b>	10	9	<b>∞</b>	7	City of F	ort Lauderd	ale 4	ω	N	_	Π	Bid 12029-683
Ron Richards	Stark	day Bolano	PAUL EMALANS ESTIMATER	Brian Miliography	Daniel Sanchez	Jose Custodio, Project Manager	Nick Slagle, Acting Airport Operations Supervisor	Spencer Thornton, Asst. Airport Manager	Carlton M. Harrison, Asst. Airport Manager	Fernando Blanco, Airport Engineer/ PM II	NAME & TITLE	
ga	Snc	E	R	BM	P	ZNI	3/	B		#	INITIALS	
OF DE JEWS MENT	Op Oboscolvent	mbe construction	FLORIDA BLACKTOR, INC.	WARBIED, INC.	General Asphalt	City of Fort Lauderdale	City of Fort Lauderdale	City of Fort Lauderdale	City of Fort Lauderdale	City of Fort Lauderdale	REPRESENTING	Per-cons
PACIN SPRINGS AVE	PALA SPALLES	Fort Landerdale,	1287 W. ATLANTIC BLVO PENIANO BEACH, FC 33069	16325 NW 276" TER HOMESTERD, FL 33031	4850 NW 72nd Ave. Miami, FL 33166	100 North Andrews Ave Fort Lauderdale, FL 33301	6000 NW 21 Ave Fort Lauderdale, FL 33309	6000 NW 21 Ave Fort Lauderdale, FL 33309	6000 NW 21 Ave Fort Lauderdale, FL 33309	100 North Andrews Ave Fort Lauderdale, FL 33301	ADDRESS	FXE South Perimeter Loop Project Number: 12260 BID No: 12029-683 Per-construction Meeting 1/11/2018
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### ITB NO. 12029-683 FORT LAUDERDALE EXECUTIVE AIRPORT SOUTH PERIMETER LOOP ROAD (P12260)

#### ADDENDUM NO. 4

ISSUED: January 25, 2018

This Addendum is being issued to provide the following information. It is hereby made a part of the Plans and Specifications and shall be included with all contract documents.

Acknowledge receipt of this Addendum by inserting its number and date on the CITB Construction Bid Certification Page.

- 1. The Bid Opening Date has been extended to TUESDAY, JANUARY 30, 2018;
- 2. Line Item 07, Unclassified Excavation: Quantity has been revised to 510 cy, to correspond with Addendum 3;
- 3. Line Item 23, Concrete Easement: Quantity has been revised to 120 If.

Maureen Rewis, MBA		
Procurement Specialist II		
Company Name		
Company Name:		
	(please print)	
Bidder's Signature:		
-		
Date:		
Date:		



## ITB NO. 12029-683 FORT LAUDERDALE EXECUTIVE AIRPORT SOUTH PERIMETER LOOP ROAD (P12260)

#### ADDENDUM NO. 5

ISSUED: January 26, 2018

This Addendum is being issued to provide the following information. It is hereby made a part of the Plans and Specifications and shall be included with all contract documents.

Acknowledge receipt of this Addendum by inserting its number and date on the CITB Construction Bid Certification Page.

#### FOR CLARIFICATION PURPOSES ONLY:

### The diameter of the Fiber Optic Duct is 2 inches

Maureen Rewis, MBA		
Procurement Specialist II		
Company Name:		
	(please print)	
D: 1. 1. 0:		
Bidder's Signature:		
Date:		

## Question and Answers for Bid #12029-683 - Fort Lauderdale Executive Airport South Perimeter Loop Road (P12260)

#### **Overall Bid Questions**

#### Question 1

What is budget for project? (Submitted: Dec 21, 2017 8:57:46 AM EST)

#### Answer

- Approximately \$250,000. (Answered: Dec 28, 2017 10:11:20 AM EST)

#### Ouestion 2

All equipment must be mobilized and de-mobilized each day to the work zone? (Submitted: Jan 11, 2018 4:11:42 PM EST)

#### **Answer**

- Yes, as stated on General Note 15, Construction Equipment shall be parked only within the Contractor Staging and Storage Area outside established hours of construction.  $\tilde{A}f\hat{A}\xi\tilde{A}$ ,  $\hat{A}\in\tilde{A}$ 

#### Question 3

The airport will provide a lighted "X" for the contractors use at no charge? (Submitted: Jan 11, 2018 4:12:41 PM EST)

#### **Answer**

- The lighted X Closure Marker shall be provided by the Contractor, as stated on Bid Item 12029-683-01-22. (Answered: Jan 12, 2018 3:54:50 PM EST)

#### Question 4

The cross section cumulative volumes shown on the plans provide for

509 cy of excavation and 2309 cy of fill. The bid item for unclassified excavation provides for 1801 cy. Should the bid form be revised to reflect the cross section cut volume (509 cy) and a line item added for borrow excavation (net volume 1800 cy)? (Submitted: Jan 11, 2018 4:25:30 PM EST)

#### Answei

- We had to make a revision to sheet C01 to include an additional bid item (24) for â€ÂœEmbankment in Place. (Answered: Jan 19, 2018 2:18:12 PM EST)

#### Question 5

Are temporary gates required for access to the construction zone (recessed 20' from the roadway) or is the current double gate sufficient for the project? (Submitted: Jan 11, 2018 4:33:47 PM EST)

#### Answei

- As shown on â€ÂœTemporary Security Double Swing Gateâ€Â Detail on Sheet C03, Contractor shall provide a temporary double swing access gate, recessed 20â€Â™ from roadway. (Answered: Jan 12, 2018 3:54:50 PM EST)

#### Question 6

The geotechnical report suggests a 95% maximum density for the 12" stabilized subgrade, however the typical section on the plans indicates 100% maximum density. A 100% max. density is extremely difficult to consistently achieve. Can the density be relaxed to the geotechnical report suggestion (or meet in the middle) to allow for field encountered conditions? (Submitted: Jan 12, 2018 7:59:39 AM EST)

#### Answer

- A 95% of the Modified Proctor maximum dry density can be used as suggested in the Geotechnical Report. (Answered: Jan 12, 2018 3:54:50 PM EST)

#### Question 7

Has any further consideration been given to requirements of moving the equipment in and out of the work area on a daily basis if set back requirements can be met? (If so, please advise where an acceptable area might be available-even if located in a retention area?) (Submitted: Jan 16, 2018 10:47:38 AM EST)

#### Answer

- Please refer to addendum 3 for revision. Doc ADDENDUM 3 - P12260 Tracked Equipment - Staging Area (Answered: Jan 19, 2018 2:18:12 PM EST)

#### **Ouestion 8**

The typical section (on sheet C0·5) provides for topsoil only adjacent to the edge of pavement (6 ft per detail). Is a 2" topsoil blanket required under all of the areas to receive sod or only as shown in the typical section? (Submitted: Jan 17, 2018 10:54:03 AM EST)

#### **Answer**

- 2â€Â of topsoil is required in all areas that are called on the plans to receive sod. (Answered: Jan 17, 2018 2:25:14 PM EST)

#### Question 9

Please confirm work hours from 10:00PM to 6:00AM as detailed on the plans and that any inspection outside of those hours would require overtime costs per Specification 15 & 16 on Page SC·7. (Submitted: Jan 17, 2018 4:28:49 PM EST)

#### Answer

- Yes, as shown in sheet C04 work hours are from 10:00 PM to 6:00 AM and any inspection outside of those hours will require overtime costs. (Answered: Jan 18, 2018 2:48:54 PM EST)

#### **Question 10**

Is Builder's Risk Insurance required for this work? If so, we cannot include in our sample COI as required in section 10.7 on page SC-6 because we cannot procure Builder's Risk until after project is rewarded. (Submitted: Jan 17, 2018 4:32:55 PM EST)

#### Answer

- Yes, You can read on the document "sample" of insurance certificate, it could be a previous certificate. (Answered: Jan 18, 2018 2:48:54 PM EST)

#### **Question 11**

Please confirm areas where asphalt is removed are to be sodded at grade that is left after asphalt removal. (Submitted: Jan 17, 2018 4:34:28 PM EST)

#### **Answer**

- Areas where existing asphalt is being removed and are located outside of the proposed road embankments are to be sodded at grade that is left after asphalt removals. See sheet C·04. (Answered: Jan 18, 2018 2:48:54 PM EST)

#### **Question 12**

Are light plants for nightwork to be supplied by owner? (Submitted: Jan 17, 2018 4:35:25 PM EST)

#### Answer

- All equipment and materials to perform the work shall be supplied by the Contractor, including light plants and lighted X closure marker equipment. (Answered: Jan 18, 2018 2:48:54 PM EST)