Event # 530-0

Name: FXE AES APRON PAVEMENT REHABILITATION

Description: Introduction: This Project is located at 2020 Executive Airport Way, Fort Lauderdale, FL 33309. The scope of work under this contract includes, but is not limited to, milling existing pavement, resurfacing asphalt P-401, applying pavement markings, and implementing erosion control measures. All work must be completed in accordance with current codes, regulations, and the project's drawings and specifications.

Drawing Plans: This Project consists of Drawing, 31 sheets. Drawing plans may be obtained free of charge at the City's online strategic sourcing platform.

Licensing Requirements: Florida Certified General Contractor License or any other State or County License(s), Certification(s) or Registration(s) deemed legally permissible by the City to conduct the nature of the work required in this solicitation.

Sub-contractors: Any sub-contractors employed by the Proposer shall be licensed and insured in accordance with this solicitation. Additionally, it is the Proposer's responsibility for ensuring that any sub-contractors' work meets the requirements of this solicitation at all times.

Pre-Bid Meeting/Site Visit: A non-mandatory Pre-Bid Meeting is scheduled for this Event. Please refer to Meetings or the Invitation to Bid (page ITB-2) for more information.

Buyer: PASCUAL, YESENIA
Status: Pending Open
Event Type: IFB
Currency: USD

Sealed Bid: Yes
Respond To All Lines: Yes
Q & A Allowed: Yes
Number Of Amendments: 0
Display Bid Tabulation: Do Not Display

Event Dates

Preview:
Q & A Open: 10/09/2025 03:01:00 PM
Open: 10/09/2025 03:00:00 PM
Q & A Close: 10/31/2025 05:00:00 PM
Close: 11/12/2025 02:00:00 PM
Dispute Close:

Questions

Question	Response Type	Attachment
Bid Security: Are you aware that this solicitation has a Bid Security requirement? Please see page ITB-3- for more information.	Yes No	

Event # 530-0: FXE AES APRON PAVEMENT REHABILITATION

Question	Response Type	Attachment
Insurance Requirements: Do you meet the insurance requirements of this solicitation? Please upload supporting documentation here. Supporting documentation may include a prior insurance certificate or other evidence listing the insurance companies' name(s) for all coverage required, and the dollar amounts of the coverage - confirming/demonstrating your firm's ability to comply with the insurance requirements of this solicitation.	Yes No	
Licensing Requirements: Do you meet the licensing requirements of this solicitation? Please upload supporting documentation here.	Yes No	
The attached Anti-Human Trafficking Affidavit will be requested by the city from the awarded Bidder.	Yes No	Event 530-Anti-Human Trafficking Affidavit Rv - Sample.pdf
Did you sign and attach all the Required Forms?	Yes No	Event 530- Required Forms.pdf

Meetings

Meeting	Description	Location	Date	Required
Event 530- FXE AES APRON PAVEMENT REHABILITATION PRE-BID	Fort Lauderdale Executive Airport Administration Building Red Tail Conference Room 6000 NW 21st Ave Fort Lauderdale, FL 33309	Red Tail Conference Room	10/16/2025 02:00:00 PM	No

Attachments

Name	Attachment
Event 530-FXE AES APRON Pavement Rehab Solicitation.pdf	Event 530-FXE AES APRON Pavement Rehab Solicitation.pdf
Event 530- General Requirement.pdf	Event 530- General Requirement.pdf
Event 530- AES Pavement Rehab - IFB Technical Specifications.pdf	Event 530- AES Pavement Rehab - IFB Technical Specifications.pdf
Event 530- AES Pavement Rehab - IFB Drawings.pdf	Event 530- AES Pavement Rehab - IFB Drawings.pdf
Event 530- AES Pavement Rehab - SUPPLEMENTAL CONDITIONS.pdf	Event 530- AES Pavement Rehab - SUPPLEMENTAL CONDITIONS.pdf

Event # 530-0: FXE AES APRON PAVEMENT REHABILITATION

Name	Attachment
Event -530- FAA Required Federal Provisions - Non-AIP Contracts.pdf	Event -530- FAA Required Federal Provisions - Non-AIP Contracts.pdf

Contacts

Name	Email Address
YESENIA PASCUAL	ypascual@fortlauderdale.gov

Commodity Codes

Commodity Code	Description
755	ROAD AND HIGHWAY ASPHALT AND CONCRETE HANDLING AND PROCESSIN
755-43	Asphalt and Concrete Scrapers, Profilers, and Milling Machin
905-66	Runway Grooving Services, Airport
909	BUILDING CONSTRUCTION SERVICES, NEW (INCL. MAINTENANCE AND
909-10	Airport Facility Construction
909-11	Airport Facility Maintenance and Repair
913-10	Construction: Airport Roadway, Runway and Taxiway
913-64	Maintenance and Repair: Airport Roadway, Runway and Taxiway
914	CONSTRUCTION SERVICES, TRADE (NEW CONSTRUCTION)
929-15	Asphalt Scarifiers, Milling Machines, Scrapers, etc., Mainte
961-54	Milling Services: Asphalt, Grain, Cottonseed, Vegetable, Woo
968-61	Pavement Marking Services (Including Removal of Markings)

Line Details

Line 1: Contractor Quality Control Program (CQCP)

Description: Contractor Quality Control Program (CQCP) (C-100-14.1).

The Contractor shall establish, provide, and maintain an effective Contractor Quality Control Program (CQCP) that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors.

Item: C-100-14.1 - BASE BID See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1.0000 **Unit of Measure:** LS

Requested Delivery Date: 12/01/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 2: Temporary Air And Water Pollution, Soil Erosion, And Siltati

Description: Temporary Air And Water Pollution, Soil Erosion, And Siltation Control (C-102-5.1A).

This item shall consist of temporary control measures as shown on the plans or as ordered by the Resident Project Representative (RPR) during the life of a contract to control pollution of air and water, soil erosion, and siltation through the use of silt fences, berms, dikes, dams, sediment basins, fiber mats, gravel, mulches, grasses, slope drains, and other erosion control devices or methods.

Item: C-102-5.1A - BASE BID See ITB Specifications

Long Item Description: Temporary Air And Water Pollution, Soil Erosion, And Siltation Control

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1.0000 **Unit of Measure:** LS

Requested Delivery 11/30/2025

Date:

Require Response: Yes

Price Breaks Allowed: No

Allow Alternate Responses: No

Add On Charges Allowed: No

Line 3: Mobilization

Description: Mobilization/Demobilization (C-105-6.1).

This item of work shall consist of, but is not limited to, work and operations necessary for the movement of personnel, equipment, material and supplies to and from the project site for work on the project except as provided in the contract as separate pay items.

Item: C-105-6.1 - BASE BID See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC

Division: DIV

Quantity: 1.0000

Unit of Measure: LS

Requested Delivery Date: 11/30/2025

Require Response: Yes

Price Breaks Allowed: No

Allow Alternate Responses: No

Add On Charges Allowed: No

Line 4: Contractor Staging and Storage

Description: Contractor Staging And Storage (C-105-6.2).

The establishment by the Contractor, if required, of staging areas, temporary offices, temporary fencing and gates, building facilities, safety equipment and first aid supplies, sanitary and other facilities, as required by these Specifications and State and local laws and regulations, the preparation and material cost to establish, maintain and restore to the existing conditions, including stabilization of disturbed earth in accordance with the SWPPP, of the Contractor staging area shall be measured under the “Contractor Staging and Storage” lump sum price and shall be paid as defined in 105-5.

Item: C-105-6.2 - BASE BID See ITB Specifications

Commodity 913-10 Construction: Airport Roadway, Runway and Taxiway

Code:

Manufacturer Code: MFC **Division:** DIV

Quantity: 1.0000 **Unit of Measure:** LS

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 5: Cold Milling, 2" Depth

Description: Cold Milling, 2" Depth (P-101-5.2)

Payment shall be made at contract unit price for the unit of measurement as specified above. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.

The unit of measure for cold milling shall be 2 inches of milling per square yard (square meter). The location and average depth of the cold milling shall be as shown on the plans. If the initial cut does not correct the condition, the Contractor shall re-mill the area and will be paid for the total depth of milling.

Item: P-101-5.2 - BASE BID See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 4,850.0000 **Unit of Measure:** SY

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 6: Concrete Wheelstop Removal

Description: Concrete Wheelstop Removal (P-101-5.3)

The location and number shall be as shown on the plans. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.

Item: P-101-5.3 - BASE BID See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 5.0000 **Unit of Measure:** EA

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 7: Asphalt Surface Course

Description: Asphalt Surface Course (P-401-8.1)

Payment for a lot of asphalt meeting all acceptance criteria as specified in paragraph 401-6.2 shall be made based on results of tests for mat density and air voids. Payment for acceptable lots shall be adjusted according to paragraph 401-8.1c for mat density and air voids; and paragraph 401-6.2c for joint density.

Payment will be made under: Item P-401-8.1 Asphalt Surface Course – per ton

Item: P-401-8.1 - BASE BID See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 530.0000 **Unit of Measure:** TN

Requested 11/30/2025

Delivery Date:

Require Response: Yes

Price Breaks Allowed: No

Allow Alternate Responses: No

Add On Charges Allowed: No

Line 8: Emulsified Asphalt Tack Coat

Description: Emulsified Asphalt Tack Coat (P-603-5.1)

Payment shall be made at the contract lump sum price for emulsified asphalt material. This price shall be full compensation for furnishing all materials, for all preparation, delivery, and application of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under: Item P-603-5.1 Emulsified Asphalt Tack Coat – per lump sum

Item: P-603-5.1 - BASE BID See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC

Division: DIV

Quantity: 1.0000

Unit of Measure: LS

Requested Delivery Date: 11/30/2025

Require Response: Yes

Price Breaks Allowed: No

Allow Alternate Responses: No

Add On Charges Allowed: No

Line 9: Permanent Markings With Glass Beads

Description: Permanent Markings With Glass Beads (P-620-5.2A)

Payment for markings shall be made at the contract price for by the number of square feet of painting. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under: Item P-620-5.2a Permanent Markings with Glass Beads – per square foot

Item: P-620-5.2A - BASE BID See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 460.0000 **Unit of Measure:** SF

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 10: Permanent Markings With No Beads

Description: Permanent Markings with No Beads (P-620-5.2B)

Payment for markings shall be made at the contract price for by the number of square feet of painting. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under: Item P-620-5.2b Permanent Markings with no Beads – per square foot

Item: P-620-5.2B - BASE BID See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 170.0000 **Unit of Measure:** SF

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 11: Desiltation Of Existing Storm Pipe and Structures

Description: Desiltation of Existing Storm Pipe and Structures (D-751-5.1)

Payment will be made at the contract lump sum price for the desiltation of existing structures and pipes as shown on the plans. The price shall be full compensation for all materials, equipment, preparation, all labor and incidentals necessary to complete the work.

Payment will be made under: Item D-751-5.1 Desiltation of Existing Storm Pipe and Structures – per lump sum

Item: D-751-5.1 - BASE BID See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1.0000 **Unit of Measure:** LS

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 12: Concrete Wheelstop

Description: Concrete Wheelstop (520-001)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 520-001 - BASE BID See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 5.0000 **Unit of Measure:** EA

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 13: Painted Pavement Markings, Standard, White, Solid, 6"

Description: Painted Pavement Markings, Standard, White, Solid, 6" (0710-11102)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 0710-11102 - BASE BID See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 180.0000 **Unit of Measure:** LF

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 14: Painted Pavement Markings, Final Surface

Description: Painted Pavement Markings, Final Surface (0710-90)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 0710-90 - BASE BID See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1.0000 **Unit of Measure:** LS

Requested Delivery 11/30/2025

Date:

Require Response: Yes

Price Breaks Allowed: No

Allow Alternate Responses: No

Add On Charges Allowed: No

Line 15: Airport Safety and Maintenance of Traffic

Description: Airport Safety and Maintenance of Traffic (S-102-5.1)

The work specified in this Section consists of airport safety and 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.

Payment will be made under: Item S-102-5.1 Airport Safety and Maintenance of Traffic - per lump sum

Item: S-102-5.1 - BASE BID See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC

Division: DIV

Quantity: 1.0000

Unit of Measure: LS

Requested Delivery Date: 11/30/2025

Require Response: Yes

Price Breaks Allowed: No

Allow Alternate Responses: No

Add On Charges Allowed: No

Line 16: Contractor Quality Control Program (CQCP)

Description: Contractor Quality Control Program (CQCP) (C-100-14.1)

The Contractor shall establish, provide, and maintain an effective Contractor Quality Control Program (CQCP) that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors.

Item: C-100-14.1 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1.0000 **Unit of Measure:** LS

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 17: Temporary Air and Water Pollution, Soil Erosion, and Siltati

Description: Temporary Air and Water Pollution, Soil Erosion, and Siltation Control (C-102-5.1A)

This item shall consist of temporary control measures as shown on the plans or as ordered by the Resident Project Representative (RPR) during the life of a contract to control pollution of air and water, soil erosion, and siltation through the use of silt fences, berms, dikes, dams, sediment basins, fiber mats, gravel, mulches, grasses, slope drains, and other erosion control devices or methods.

Item: C-102-5.1A - ALTERNATE BID #1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1.0000 **Unit of Measure:** LS

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 18: Mobilization

Description: Mobilization (C-105-6.1)

This item of work shall consist of, but is not limited to, work and operations necessary for the movement of personnel, equipment, material and supplies to and from the project site for work on the project except as provided in the contract as separate pay items.

Item: C-105-6.1 - ALTERNATE BID #1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1.0000 **Unit of Measure:** LS

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 19: Pavement Removal

Description: Pavement Removal (P-101-5.1A)

This item shall consist of removal of existing pavement, and other miscellaneous items. The work shall be accomplished in accordance with these specifications and the applicable plans. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.

Item P-101-5.1a Pavement Removal – per square yard

Item: P-101-5.1A - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1,540.0000 **Unit of Measure:** SY

Requested Delivery Date: 11/30/2025

Require Response: Yes
Price Breaks Allowed: No
Allow Alternate Responses: No
Add On Charges Allowed: No

Line 20: Full Depth Asphalt Removal, Including Base and Subbase Mater

Description: Full Depth Asphalt Removal, Including Base and Subbase Material (P-101-5.1B)

This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.

Item P-101-5.1b Full Depth Asphalt Removal, Including Base and Subbase Material – per square yard

Item: P-101-5.1B - ALTERNATE BID # 1 See ITB Specifications
Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway
Manufacturer Code: MFC
Division: DIV
Quantity: 20.0000
Unit of Measure: SY
Requested Delivery Date: 11/30/2025
Require Response: Yes
Price Breaks Allowed: No
Allow Alternate Responses: No
Add On Charges Allowed: No

Line 21: Concrete Wheelstop Removal

Description: Concrete Wheelstop Removal (P-101-5.3)

The location and number shall be as shown on the plans. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.

Item: P-101-5.3 - ALTERNATE BID # 1 See ITB Specifications
Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway
Manufacturer MFC
Division: DIV

Code:

Quantity: 8.0000 **Unit of Measure:** EA

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 22: Desiltation Of Existing Storm Pipe and Structures

Description: Desiltation of Existing Storm Pipe and Structures (D-751-5.1)

Payment will be made at the contract lump sum price for the desiltation of existing structures and pipes as shown on the plans. The price shall be full compensation for all materials, equipment, preparation, all labor and incidentals necessary to complete the work. Payment will be made under: Item D-751-5.1 Desiltation of Existing Storm Pipe and Structures – per lump sum

Item: D-751-5.1 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1.0000 **Unit of Measure:** LS

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 23: Repair Existing Pipe Joint or Replace Brick and Mortar at Pi

Description: Repair Existing Pipe Joint or Replace Brick and Mortar at Pipe Opening (D-751-5.2)

The Contractor shall excavate as necessary to fully expose the pipe entering the structure. Upon exposure, the Contractor shall notify the Engineer for evaluation of the existing condition. Based on the Engineer’s assessment, the Contractor shall either repair the existing pipe joint or remove and replace the brick and mortar surrounding the pipe opening. All work shall be

performed in accordance with the Engineer's direction to ensure structural integrity, proper sealing, and compatibility with adjacent materials.

Payment will be made at the contract lump sum price for the Repair of existing pipe joint or replacing brick and mortar at pipe opening as shown on the plans. The price shall be full compensation for all materials, equipment, preparation, all labor and incidentals necessary to complete the work.

Item: D-751-5.2 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1.0000 **Unit of Measure:** LS

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 24: Embankment

Description: Embankment (0120-6)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 0120-6 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 30.0000 **Unit of Measure:** CY

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On No

Charges Allowed:

Line 25: Type B Stabilization (0160-4-1)

Description: Type B Stabilization (0160-4-1)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 0160-4-1 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 20.0000 **Unit of Measure:** SY

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 26: Optional Base, Base Group 6

Description: Optional Base, Base Group 6 (0285-706)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 0285-706 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 20.0000 **Unit of Measure:** SY

Requested Delivery Date: 11/30/2025

Require Response: Yes
Price Breaks Allowed: No
Allow Alternate Responses: No
Add On Charges Allowed: No

Line 27: Asphalt Concrete Friction Course, Traffic C, FC-12.5, PG 76-

Description: Asphalt Concrete Friction Course, Traffic C, FC-12.5, PG 76-22 (0337-7-83)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 0337-7-83 - ALTERNATE BID # 1 See ITB Specifications
Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway
Manufacturer Code: MFC
Division: DIV
Quantity: 160.0000
Unit of Measure: TN
Requested Delivery Date: 11/30/2025
Require Response: Yes
Price Breaks Allowed: No
Allow Alternate Responses: No
Add On Charges Allowed: No

Line 28: Concrete Wheelstop

Description: Concrete Wheelstop (520-001)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 520-001 - ALTERNATE BID # 1 See ITB Specifications
Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway
Manufacturer Code: MFC
Division: DIV
Quantity: 8.0000
Unit of Measure: EA

Requested Delivery Date: 11/30/2025

Require Response: Yes

Price Breaks Allowed: No

Allow Alternate Responses: No

Add On Charges Allowed: No

Line 29: Loop Detector Inductive, F&I, Type 1

Description: Loop Detector Inductive, F&I, Type 1 (660-1-101)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 660-1-101 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC

Division: DIV

Quantity: 1.0000

Unit of Measure: EA

Requested Delivery Date: 11/30/2025

Require Response: Yes

Price Breaks Allowed: No

Allow Alternate Responses: No

Add On Charges Allowed: No

Line 30: Loop Assembly, F&I, Type E

Description: Loop Assembly, F&I, Type E (660-2-105)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 660-2-105 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer MFC

Division: DIV

Code:

Quantity: 1.0000 **Unit of Measure:** EA

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 31: Painted Pavement Markings, Standard, White, Solid, 6"

Description: Painted Pavement Markings, Standard, White, Solid, 6" (0710-11101)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 0710-11101 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 330.0000 **Unit of Measure:** LF

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 32: Painted Pavement Markings, Standard, White, Solid, 12"

Description: Painted Pavement Markings, Standard, White, Solid, 12" (0710-11123)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 0710-11123 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 150.0000 **Unit of Measure:** LF

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 33: Painted Pavement Markings, Standard, White, Solid For Stop L

Description: Painted Pavement Markings, Standard, White, Solid for Stop Line or Crosswalk, 24" (0710-11125)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 0710-11125 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 20.0000 **Unit of Measure:** LF

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 34: Permanent Painted Pavement Markings, Standard, White, Messag

Description: Permanent Painted Pavement Markings, Standard, White, Message or Symbol (0710-11160)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are

not included in the contract documents Technical Specifications.

Item: 0710-11160 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 7.0000 **Unit of Measure:** EA

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 35: Permanent Painted Pavement Markings, Standard, Yellow, Solid

Description: Permanent Painted Pavement Markings, Standard, Yellow, Solid, 6" (0710-11201)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 0710-11201 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 110.0000 **Unit of Measure:** LF

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 36: Painted Pavement Markings, Standard, Blue, Solid for Parking

Description: Painted Pavement Markings, Standard, Blue, Solid for Parking Lot- Accessible Markings, 6" (0710-11421)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 0710-11421 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 40.0000 **Unit of Measure:** LF

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 37: Painted Pavement Markings, Final Surface

Description: Painted Pavement Markings, Final Surface (0710-90)

*Pay Items Specifications reference is per FDOT Standard Specifications for Road and Bridge Construction (FY 2024-25) and are not included in the contract documents Technical Specifications.

Item: 0710-90 - ALTERNATE BID # 1 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1.0000 **Unit of Measure:** LS

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 38: Temporary Air and Water Pollution, Soil Erosion, and Siltati

Description: Temporary Air and Water Pollution, Soil Erosion, And Siltation Control (C-102-5.1A)

This item shall consist of temporary control measures as shown on the plans or as ordered by the Resident Project Representative (RPR) during the life of a contract to control pollution of air and water, soil erosion, and siltation through the use of silt fences, berms, dikes, dams, sediment basins, fiber mats, gravel, mulches, grasses, slope drains, and other erosion control devices or methods.

Item: C-102-5.1A - ALTERNATE BID # 2 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1.0000 **Unit of Measure:** LS

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

Line 39: Mobilization

Description: Mobilization (C-105-6.1)

This item of work shall consist of, but is not limited to, work and operations necessary for the movement of personnel, equipment, material and supplies to and from the project site for work on the project except as provided in the contract as separate pay items.

Item: C-105-6.1 - ALTERNATE BID # 2 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1.0000 **Unit of Measure:** LS

Requested Delivery 11/30/2025

Date:

Require Response: Yes

Price Breaks Allowed: No

Allow Alternate Responses: No

Add On Charges Allowed: No

Line 40: Stripping

Description: Stripping (P-151-4.1)

This item shall consist of stripping, including the disposal of materials, for all areas within the limits designated on the plans or as required by the Resident Project Representative (RPR).

Payment shall be made at the contract unit price per square yard for stripping. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under: Item P-151-4.1 Stripping – per square yard

Item: P-151-4.1 - ALTERNATE BID # 2 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC

Division: DIV

Quantity: 1,530.0000

Unit of Measure: SY

Requested Delivery Date: 11/30/2025

Require Response: Yes

Price Breaks Allowed: No

Allow Alternate Responses: No

Add On Charges Allowed: No

Line 41: Sodding

Description: Sodding (T-904-5.1)

This item shall consist of placing approved live sod on prepared areas in accordance with this specification at the locations shown on the plans or as directed by the RPR.

This item will be paid for on the basis of the contract unit price per square yard (square meter) for sodding, which price shall be full compensation for all labor, equipment, material, staking, and incidentals necessary to satisfactorily complete the items as

specified.

Payment will be made under: Item T-904-5.1 Sodding – per square yard

Item: T-904-5.1 - ALTERNATE BID # 2 See ITB Specifications

Commodity Code: 913-10 Construction: Airport Roadway, Runway and Taxiway

Manufacturer Code: MFC **Division:** DIV

Quantity: 1,880.0000 **Unit of Measure:** SY

Requested Delivery Date: 11/30/2025

Require Response: Yes **Price Breaks Allowed:** No **Allow Alternate Responses:** No

Add On Charges Allowed: No

CITY OF FORT LAUDERDALE

CONTRACT AND SPECIFICATIONS PACKAGE

BID/EVENT NO. 530

PROJECT NO. P12883

FXE AES APRON PAVEMENT REHABILITATION

Yesenia Pascual
Sr. Procurement Specialist
E-mail: Ypascual@fortlauderdale.gov
Telephone: (954) 828-5257

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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.

Affidavit of Compliance with Foreign Entity Laws
CITB Questionnaire Sheet
CITB Specific References
City of Fort Lauderdale Bid/Proposal Construction Bid Certification Page
Contract Payment Method
Disadvantaged Business Enterprise Preference Certification
E-Verify Statement
Non-Collusion Statement
Non-Discrimination Certification Form
Drug Free Workplace Sworn Statement

INVITATION TO BID

Sealed bids will be received electronically until **2:00 p.m.**, local time, on **Wednesday, November 12, 2025,** and opened online immediately thereafter for **ITB EVENT 530, PROJECT P12883, FXE AES APRON PAVEMENT REHABILITATION.**

Please be advised that effective immediately, and until further notice, all Invitation to Bids, Request for Proposals, Request for Qualifications, and other solicitations led by the City of Fort Lauderdale will be opened electronically via the City's on-line strategic sourcing platform at the date and time indicated on the solicitation. All openings will be held on the City's on-line strategic sourcing platform.

In the event of any conflict or discrepancy between bid price(s) submitted by bidder electronically into the City's online strategic sourcing platform Unit Price field(s), any other forms or attachments (whether part of the City's solicitation documents or documents created and uploaded by the bidder, or another section/field of the System, the online unit price(s) **inputted** electronically into the System by the bidder shall govern.

Anyone requesting assistance or having further inquiry in this matter must contact the Procurement Specialist indicated in the solicitation, via the Question and Answer (Q&A) forum on the City's online strategic sourcing platform before the Last Day for Questions indicated in the Solicitation.

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 Fort Lauderdale Executive Airport, in accordance with the terms, conditions, and specifications contained in this Invitation to Bid (ITB).

This project is located at Fort Lauderdale Executive Airport (FXE), in the City of Fort Lauderdale. The scope of work under this contract includes, but is not limited to, milling existing pavement, resurfacing asphalt P-401, applying pavement markings, and implementing erosion control measures. All work must be completed in accordance with current codes, regulations, and the project's drawings and specifications. Bidders must submit a construction schedule outlining the proposed timeline. The lump sum bid, shall cover all associated costs, including labor, materials, equipment, insurance, bonding, overhead, profit, and any other fixed expenses. Pricing for two bid alternates must also be submitted with the base bid.

THE FOLLOWING IS APPLICABLE TO THIS SOLICITATION IF CHECKED:

☐ **LUMP SUM BID** - City shall pay awarded bidder the Contract Price for the performance of work described in this Invitation for Bid. Payment shall be at the lump sum price stated in this Invitation to Bid and/or resultant contract. This price shall be full compensation for all costs, including overhead and profit, associated with completion of all work in full conformity with the requirements as stated or shown, or both, in the contract documents. The cost of any item of work not covered in this solicitation shall still be provided and the cost borne by the contractor. NO CHANGE ORDERS WILL BE ALLOWED UNLESS IT IS OWNER-DRIVEN AND INITIATED BY THE CITY.

Drawing Plans: This Project consists of Drawings, **thirty-one (31)** sheets. Drawing plans may be obtained **free of charge** at the City's online strategic sourcing platform.

Licensing Requirements: Possession of a State of Florida General Contractor's License is required for this Project.

OR

Any other State or County License(s), Certification(s) or Registration(s) deemed legally permissible by the City to conduct the nature of the work required in this solicitation.

Any sub-contractors employed by the Proposer shall be licensed and insured in accordance with this solicitation. Additionally, it is the Proposer's responsibility for ensuring that any sub-contractors' work meets the requirements of this solicitation at all times.

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

Pre-Bid Conference/Site visit: A pre-bid conference and site visit will be held as follows:

Date: Thursday, October 16, 2025

Time: 2:00 PM (EST)

Location: Fort Lauderdale Executive Airport
Administration Building
Red Tail Conference Room
6000 NW 21st Ave
Fort Lauderdale, FL 33309

While attendance is not mandatory, tours at other times might not be available. It is the sole responsibility of the Contractor to become familiar with the scope of the City's requirements and systems prior to submitting a bid. No variation in price or conditions shall be permitted based upon a claim of ignorance. It is strongly suggested that all Bidders attend the pre-bid meeting and/or site visit.

It will be the sole responsibility of the Bidder to attend the pre-bid/site visit to inspect the City's location(s) facilities systems prior to submitting a bid. 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 Bidder has familiarized themselves with the nature and extent of the work, equipment, materials, and labor required.

If a person decides to appeal any decision made by the board, agency, or commission with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

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

Bid Bonds: Bidders can submit bid bonds **three** different ways.

1) Bidders may **upload** their original executed bid bond on the City's online strategic sourcing platform to accompany their electronic bids and deliver the original, signed and sealed hard copy to the Finance Department, Procurement Services Division, 101 NE 3rd Avenue, Suite 1650, Fort Lauderdale, Florida 33301-1016, **within five (5) business days** after bid opening, with the company name, bid number and title clearly indicated on the envelope.

2) Bidders can **hand deliver** their original, signed and sealed bid bond in a sealed envelope to the Finance Department, Procurement Services Division, 101 NE 3rd Avenue, Suite 1650, Fort Lauderdale, Florida 33301-1016, **before time of bid opening**, with the company name, bid number and title clearly indicated on the envelope.

3) Bidders can **mail** their original, signed and sealed bid bond to the Finance Department, Procurement Services Division, 101 NE 3rd Avenue, Suite 1650, Fort Lauderdale, Florida 33301-1016, **before time of bid opening**, with the company name, bid number and title clearly indicated on the envelope. NOTE: Bond must be received in Procurement and time stamped before bid opening.

It will be the sole responsibility of the bidder to ensure that its 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 THE CITY'S ONLINE STRATEGIC SOURCING PLATFORM.**

Certified Checks, Cashier's Checks and Bank Drafts: These **CANNOT** be submitted via the City's online strategic souring platform, 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, 101 NE 3rd Avenue, Suite 1650, Fort Lauderdale, Florida 33301-1016, with the bid number and title clearly indicated on the envelope.

It is the bidder's sole responsibility to ensure that its bid bond or other bid security is received by the Procurement Services Division before the 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 Q&A platform provided on the City's online strategic sourcing platform. 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. **Bidders 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 bidder 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 – https://www.fortlauderdale.gov/government/departments-a-h/finance/procurement-services
For general inquiries, please call (954) 828-5933.

-END OF SECTION-

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.

QUALIFICATIONS OF BIDDERS – No bid 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.

CONCERNING SUB-CONTRACTORS, SUPPLIERS, AND OTHERS - The amount of work that is sublet by the Bidder shall be limited by the condition that the Bidder shall, with his own organization, perform at least forty percent (40%) of the total dollar amount of the Work to be performed under the Agreement.

PERSONAL INVESTIGATION - 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 or City staff shall relieve the Contractor from any risk or from fulfilling all terms of the contract.

INCONSISTENCIES – Any inconsistency between different provisions of the plans, specifications, bid or contract, or any point requiring explanation must be inquired by the bidder, in writing, at least ten (10) days prior to the time set for opening bids. After bids 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 the City's online strategic sourcing platform. Material changes, if any, to the scope of services or bidding procedures will only be transmitted by written addendum. **It is the bidder's responsibility to verify if addenda have been issued in the City's online strategic sourcing platform.** Failure of any bidder to receive any such addenda or interpretation shall not relieve any bidder from any obligation under its bid as submitted. All addenda so issued shall become a part of the contract document. **Bidder** shall verify in the City's online strategic sourcing platform that it has all addenda before submitting a bid.

LEGAL CONDITIONS - 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.

PUBLIC ENTITY CRIMES - A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not 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.

FORMS OF BIDS - Each bid and its accompanying statements MUST BE SUBMITTED ELECTRONICALLY, IN GOOD ORDER WITH ALL BLANKS COMPLETED, and must show the name of the bidder and a statement as to its contents. In the event of any conflict or discrepancy between bid

price(s) submitted by bidder electronically into the City's online strategic sourcing platform Unit Price field(s), any other forms or attachments (whether part of the City's solicitation documents or documents created and uploaded by the bidder, or another section/field of the System, the online unit price(s) **inputted** electronically into the System by the bidder shall govern.

The bid 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 bid. No bid will be accepted, for any reason whatsoever, which is not submitted to the City as stated above, within the specified time.

INSURANCE - 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.

BID BOND - A certified check, cashier's check or bank officer's check made payable to the City of Fort Lauderdale, or a bid bond in favor of the City of Fort Lauderdale shall accompany each bid as evidence of the good faith and responsibility of the bidder. The amount of the check or bond shall be retained by the City as liquidated damages in the event the bidder whose bid is accepted refuses to or fails to enter into a contract for the execution of the work solicited in this Invitation to Bid.

The bid bond or check shall be a guarantee that the successful bidder will promptly execute a contract satisfactory to the City for the work solicited in this Invitation to Bid and furnish good and sufficient bonds.

Following the full execution of a contract for the work solicited in this Invitation to Bid and the successful bidder's provision of good and sufficient bonds, in the event bid security was provided by check, the amount of the bid security accompanying the successful bidder's bid will be refunded to the successful bidder, or in the event bid security was provided by a bond, the bond accompanying the successful bidder's bid will be returned to the successful bidder. In the event the successful bidder fails to enter into, execute, and deliver a contract and furnish the required bonds within ten (10) days after the City provides notice to the successful bidder to deliver the executed contract and the required bonds, the bid bond shall immediately be payable to the City of Fort Lauderdale, or in the case of a check, the City shall retain the amount of the check, as liquidated damages. The City's retention of such amount shall not be construed as a penalty or forfeiture.

FILLING IN BIDS - All prices must be electronically submitted in the bid pages, and bids must fully cover all items for which prices are asked and no other. 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 bid. In the event of any conflict or discrepancy between bid price(s) submitted by bidder electronically into the City's online strategic sourcing platform Unit Price field(s), any other forms or attachments (whether part of the City's solicitation documents or documents created and uploaded by the bidder, or another section/field of the System, the online unit price(s) **inputted** electronically into the System by the bidder shall govern.

PRICES QUOTED: 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.

BIDS FIRM FOR ACCEPTANCE: 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.

ADDITIONAL ITEMS OR SERVICES: 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.

DELETION OR MODIFICATION OF SERVICES: 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 cost to the City for approval prior to proceeding with the work.

TERMINATION FOR UNAPPROPRIATED FUNDS**:** The obligation of the City for payment to a Contractor is limited to the availability of funds appropriated in a current fiscal period, and continuation of the contract into a subsequent fiscal period is subject to appropriation of funds, unless otherwise authorized by law.

CAUSES FOR REJECTION - No bid will be canvassed, considered or accepted which, in the opinion of the City 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 bid informal.

REJECTION OF BIDS - 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 bids will be rejected, if there is reason to believe that collusion exists among bidders. A bid 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 bids and to waive such technical errors as may be deemed best for the interests of the City.

BID PROTEST PROCEDURE: Any 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: https://www.fortlauderdale.gov/government/departments-a-h/finance/procurement-services/notices-of-intent-to-award

The complete protest ordinance may be found on the City's website at the following link: https://library.municode.com/fl/fort_lauderdale/codes/code_of_ordinances?nodeId=COOR_CH2AD_ARTVFI_DIV2PR_S2-182DIREPRAWINAW

WITHDRAWALS - Any bidder may, without prejudice to himself, withdraw its bid at any time prior to the expiration of the time during which bids 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 bid. After expiration of the period for receiving bids, no bids can be withdrawn, modified, or explained.

CONTRACT - 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 responsive and responsible, 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.

ENFORCEMENT OF SPECIFICATIONS - 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.

DRAWING PLANS - Drawing plans may be obtained **free of charge** from the City's on-line strategic sourcing platform.

SURETY 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 (2024), 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 (2024), 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 hold 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.

AUDIT OF CONTRACTOR'S RECORDS - 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.

PERIODIC ESTIMATE FOR PARTIAL PAYMENT - 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 (2024).

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.

LOCAL BUSINESS PREFERENCE **–** Not Applicable to this Solicitation.

DISADVANTAGED BUSINESS ENTERPRISE PREFERENCE - Section 2-185, Code of Ordinances of the City of Fort Lauderdale, provides for a disadvantaged business preference. In order to be considered for a disadvantaged business preference, a proposer must include a certification from a government agency, as applicable to the disadvantaged business preference class claimed at the time of Bid submittal:

Upon formal request of the City, based on the application of a Disadvantaged Business Preference the Proposer shall within ten (10) calendar days submit the following documentation to the Disadvantaged Business Enterprise Preference Class claimed:

a. Copy of City of Fort Lauderdale current year business tax receipt, or the Tri-County (Broward, Dade, West Palm Beach) current year business tax receipt, or proof of active Sunbiz status and

b. List of the names of all employees of the proposer and evidence of employees' residence within the geographic bounds of the City of Fort Lauderdale or the Tri-County, as the case may be, such as current Florida driver license, residential utility bill (water, electric, telephone, cable television), or other type of similar documentation acceptable to the City.

Failure to comply at time of bid submittal shall result in the Proposer being found ineligible for the Disadvantaged Business Enterprise Preference business preference.

The complete Disadvantaged Business Preference ordinance may be found on the City's website at the following link: https://www.fortlauderdale.gov/home/showpublisheddocument?id=56883

DEBARRED OR SUSPENDED BIDDERS OR PROPOSERS - 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-11-42 & Resolution No. 07-101, Lobbying Activities. Copies of Ordinance No., C-11-42, and Resolution No. 07-101, may be obtained from the City Clerk's Office at 1 East Broward Boulevard, Suite 444, Fort Lauderdale, Florida 33301.

The Ordinance may also be viewed on the City's website at https://www.fortlauderdale.gov/home/showdocument?id=6036.

-END OF SECTION-

GENERAL CONDITIONS

Unless otherwise modified in the Project's 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 bid 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.

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

"Contractor" – shall mean the successful Bidder who has been employed by the City to perform the construction and related 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. In the case of any inconsistency in or between any parts of this Contract, the Project Manager shall determine which shall prevail.

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

"Engineer" - shall include the terms "professional engineer" and "licensed engineer" and means a person who is licensed to engage in the practice of engineering under Florida Statute, Chapter 471. An Engineer may be a City employee or a consultant hired by the City.

"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 a professional designated by the City to manage the Project under the supervision and direction of the Public Works Director or designee.

"Public Works Director" – shall mean the Public Works Director of the City of Fort Lauderdale.

"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 Project Manager.

"Sub-contractor" - 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, field conditions, 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.

Any failure by the Contractor to acquaint itself with all the Site conditions shall not relieve Contractor from responsibility for properly estimating the difficulty or cost thereof under the Contract Documents.

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 Contractor 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. The following requirements shall be met in order for the substitution to be considered:

1. Requests for substitution shall be accompanied by such technical data, as the party making the request desires to submit. The Project Manager will consider reports from

reputable independent testing laboratories, verified experience records from previous users and other written information valid in the circumstances; and

2. 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

3. 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

4. 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.

If a proposed substitution is approved by the Project Manager, 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 – CONSTRUCTION RESOURCES – Contractor shall provide all labor and equipment necessary to complete the installation within a timely manner. Contractor shall provide details as to manpower and equipment to be dedicated to the project in its Work Plan. Contractor is responsible for making arrangements, obtaining and purchasing construction water services if required to complete the work.

GC - 05 - CONTROL OF THE WORK - The Project Manager shall have full control and direction of the Work in all respects. The Project Manager 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 Project Manager may desire respecting the quality of the Work and materials and the manner of conducting the Work. Should the Contractor be 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 Project Manager 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 Project Manager, 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 Project Manager, as will ensure proper inspection. Nothing herein contained shall relieve the Contractor from compliance with any and all City ordinances relating to noise or Work during prohibited hours.

GC - 06 - SUB-CONTRACTOR - The Contractor shall not sublet, in whole or any part of the Work without the written consent and approval of the Project Manager. Within ten (10) days after official notification of starting date, the Contractor must submit in writing, to the Project Manager, a list of all Sub-contractors. No Work shall be done by any sub-contractor until such Sub-contractor has been officially approved by the Project Manager. A sub-contractor not appearing on the original list will not be approved without written request submitted to the Project Manager and approved by the Public Works Director. In all cases, the Contractor shall give his personal attention to the Work of the Sub-contractors and the Sub-contractor is liable to be discharged by the Contractor, at the direction of the Project Manager, for neglect of duty, incompetence or misconduct.

Acceptance of any sub-contractor, other person, or organization by the Project Manager shall not constitute a waiver of any right of Project Manager to reject defective Work or Work not in conformance with the Contract Documents.

Contractor shall be fully responsible for all acts and omissions of its Sub-contractors 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 sub-contractor 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 sub-contractor or other person, or organization, except as may otherwise be required by law.

GC - 07 - QUANTITIES - Contractor recognizes and agrees that the quantities shown on plans and Bid/Price Schedule are estimates only and may vary during actual construction. No change shall 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 Project Manager 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 Public Works Director 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 - 08 - 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 - 09 - PERMITS AND PROTECTION OF PUBLIC – Permits on file with the City and/or those permits to be obtained by the Contractor, 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.

Contractor shall secure all permits and licenses required for completing the Project. Contractor will obtain the necessary State, County, and City construction/work permits if required.

The Contractor shall comply with all applicable Codes, Standards, Specifications, etc. related to all aspects of the Project.

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 to all affected parties prior to proceeding with the Work.

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.

GC - 10 - DISEASE REGULATIONS - The Contractor shall enforce all sanitary regulations and take all precautions against infectious diseases as the Project Manager 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 - 11 - CONTRACTOR TO CHECK PLANS, SPECIFICATIONS, AND DATA - The Contractor shall verify all dimensions, quantities, and details shown on the plans, supplementary drawings, schedules, and shall notify the Project Manager 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 therefrom nor from rectifying such condition at its own expense.

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

GC - 13 - SAFEGUARDING MARKS - The Contractor shall safeguard all points, stakes, grade marks, monuments, and benchmarks made or established on the Work, bear the cost of re-establishing 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 Professional surveyor registered in the State of Florida if disturbed or destroyed during the course of construction.

GC - 14 - RESTROOM FACILITIES - Contractor shall provide portable toilet facilities for employee's use at a location within the Work site to be determined by the City.

GC - 15 - PROGRESS MEETINGS - Weekly Status meetings will be conducted with representatives from the City and the Contractor. Contractor shall budget time to participate in such meetings. A well-run Project should result in short meetings.

GC - 16 - ISSUE RESOLUTION - Should Contractor become engaged in a dispute with a resident or a City employee, the Contractor shall report the situation to the Project Manager immediately. It shall be mandatory that the City participate in any dispute resolution. Failure of Contractor personnel to notify the City shall obligate Contractor to replace the offending employee immediately if requested by the City.

GC - 17 - CITY SECURITY-CONTRACTOR AND SUBCONTRACTOR EMPLOYEE INFORMATION - Prior to commencing work, Contractor shall provide to the City a list of all personnel and sub-contractors on site. The list will include the name, address, birth date and driver's license number for all personnel. All personnel and subcontractors on site will have on their person a company

photo ID during all stages of the construction. Contractor shall provide standard required personal information per current City procedures.

GC - 18 - POST-CONSTRUCTION SURVEY - The Contractor shall provide as-built survey, sealed and signed by a registered surveyor in the State of Florida, as a condition of final payment.

GC – 19 - KEY PERSONNEL - Contractor shall provide as part of the Work Plan, resumes for all key project personnel providing supervision and project management functions. Resumes shall include work history and years of experience performing this type of work.

GC - 20 - EXISTING UTILITY SERVICE - All existing utility service shall be maintained with a minimum of interruption at the expense of the Contractor.

GC - 21 - 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 - 22 - 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 bodily injury and property damage insurance in amounts satisfactory to the Florida East Coast Company. This insurance requirement shall be verified by the contractor with the Florida East Coast Company prior to commencing work, and maintained during the life of the Contract.

GC - 23 - 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 Project Manager 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 - 24 - 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 - 25 - 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 the cost of other parts of the Work.

Should the Contractor fail to abate a dust nuisance the Project Manager may stop the Work until the issue is resolved to the City's satisfaction.

GC - 26 - SITE CLEANUP AND RESTORATION – The Contractor shall remove all debris and unused or discarded materials from the work site daily. Contractor shall clean the work site to remove all directional drilling "Driller's Mud" materials. No "Driller's Mud" residue shall be allowed to remain in the soil or on the surface of the land or vegetation. All debris and drilling materials must be disposed of offsite at an approved location.

The Contractor shall promptly restore all areas disturbed that are outside the Project limits in equal or better condition at no additional cost to the City.

GC - 27 - COURTEOUS BEHAVIOR AND RESPECT FOR RESIDENTS AND PROPERTY – The Contractor and its employees, associates and sub-contractors shall maintain courteous behavior at all times and not engage in yelling, loud music, or other such activities. Contractor's employees shall not leave trash or other discarded items at the Work Site, especially on any private property. In the event complaints arise, Contractor shall immediately remove such offending employees from the project if requested to do so by the Project Manager. Contractor's employees shall not trespass on any private property unless necessary to complete the work but with prior permission from the owner.

Contractor shall notify and obtain permission from the residents 24 hours in advance when planning to work within the resident's property. In addition, Contractor shall notify the resident prior to entering their property to perform work or inspect/investigate the work site. Contractor shall not block residents' driveways unnecessarily. Contractor shall not park equipment on landscaped areas when the vehicle is not needed for the current construction activities. Contractor shall be responsible for repair and/or replacement of all damaged landscaping within 48 hours including repairing vehicle wheel impressions, irrigation systems, lighting systems, structures, or any other items of resident's property. Contractor shall not destroy, damage, remove, or otherwise negatively impact any landscaping within or outside the right-of-way without prior approval from the Project Manager.

GC - 28 - PLACING BARRICADES AND WARNING LIGHTS - The Contractor shall furnish and place, at Contractor's 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 Project Manager 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 - 29 - 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.

All traffic control devices, flashing lights, signs and barricades shall be maintained in working condition at all times and conform to Manual of Uniform Traffic Control Devices (MUTCD), latest edition.

GC - 30 - COORDINATION - The Contractor shall notify all utilities, transportation department, etc., in writing, with a copy to the Project Manager before construction is started and shall coordinate its 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 its Work and dispose of its materials so as to not interfere with the operation of other contractors engaged upon adjacent work, and to join its Work to that of others in a proper manner, and to perform its Work in the proper sequence in relation to that of other contractors as may be directed by the Project Manager.

Each Contractor shall be responsible for any damage done by it or its agents to the work performed by another contractor.

GC - 31 - 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 - 32 - 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 Iran Terrorism Sectors List, created pursuant to Section 215.473, Florida Statutes (2024), as may be amended or revised, and that it does not have business operations in Cuba or Syria, as provided in Section 287.135, Florida Statutes (2024), as may be amended or revised. The Contractor certifies that it is not on the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2024), as may be amended or revised, and that it is not engaged in a boycott of Israel. 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 (2024), as may be amended or revised, or been placed on the Scrutinized Companies with Activities in Sudan List, or been placed on a list created pursuant to Section 215.473, Florida Statutes (2024), as may be amended or revised, relating to scrutinized active business operations in Iran , or been placed on the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2024), as may be amended or revised, 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 (2024), as may be amended or revised.

By submitting a bid or response, the company, principals, or owners certify that it is not listed on the Scrutinized Companies with Activities in Sudan List or listed on the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or is engaged in business operations in Cuba or Syria.

GC - 33 - 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 - 34 - 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 Bidder's response to the Solicitation purporting to require confidentiality of any portion of the Bidder'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 Bidder submits any documents or other information to the City which the Bidder claims is Trade Secret information and exempt from Florida Statutes Chapter 119.07 ("Public Records Laws"), the Bidder shall clearly designate that it is a Trade Secret and that it is asserting that the document or information is exempt. The Bidder 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 Bidder's response to the Solicitation constitutes a Trade Secret. The City's determination of whether an exemption applies shall be final, and the bidder 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. In addition, the bidder agrees to defend, indemnify, and hold harmless the City and the City's officers, employees, and agents, against any loss or damages incurred by any person or entity as a result of the City's treatment of records as exempt from disclosure or confidential. Bids purporting to be subject to copyright protection in full or in part will be rejected. The bidder authorizes the City to publish, copy, and reproduce any and all documents submitted to the City bearing copyright symbols or otherwise purporting to be subject to copyright protection.

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 (2022), TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

Telephone Number: **(954) 828-5002**

Mailing Address: **City Clerk's Office**
1 East Broward Boulevard, Suite 444

Fort Lauderdale, FL 33301

E-mail: **prrcontract@fortlauderdale.gov**

Contractor shall:

1. Keep and maintain public records 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 (2024), 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 Agreement if the Contractor does not transfer the records to the City.

4. Upon completion of the Agreement, 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 Agreement, 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 Agreement, 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.

GC – 35 - ANTI-HUMAN TRAFFICKING, KIDNAPPING, CUSTODY AND RELATED OFFENSES - Bidder, proposer, quoter, or any other respondent to any City solicitation/notice or serving as a City consultant, contractor, vendor or otherwise entering into any contract (including, without limitation, contract renewal, extension, amendment as applicable) with the City affirms and stipulates that it is not in violation of Section 787.06(13) of the 2024 Florida Statutes entitled "Kidnapping; Custody Offenses; Human Trafficking and Related Offenses." The entity (which includes any business entity however formed/ incorporated) intending to provide goods or services by submitting a response to a city solicitation further affirms to the City as a governmental entity defined in Section 287.138(1) of the 2024 Florida Statutes that it does not use coercion for labor or services as defined in Section 787.06 of the 2024 Florida Statutes.

GC – 36 - E-Verify - In accordance with 448.095, Florida Statutes (2024), as may be amended or revised, the Contractor and its subcontractors shall register with and use the E-Verify system to electronically verify the employment eligibility of newly hired employees.

1. The Contractor shall require each of its subcontractors, if any, to provide the Contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien. The Contractor shall maintain a copy of the subcontractor's affidavit for the duration of this Agreement and in accordance with the public records requirements of this Agreement.

2. The City, the Contractor, or any subcontractor who has a good faith belief that a person or entity with which it is contracting has knowingly violated Subsection 448.09(1), Florida Statutes (2024), as may be amended or revised, shall terminate the contract with the person or entity.

3. The City, upon good faith belief that a subcontractor knowingly violated the provisions of Subsection 448.095(5), Florida Statutes (2024), as may be amended or revised, but that the Contractor otherwise complied with Subsection 448.095(5), Florida Statutes (2024), as may be amended or revised, shall promptly notify Contractor and order the Contractor to immediately terminate the contract with the subcontractor, and the Contractor shall comply with such order.

4. A contract terminated under Subparagraph 448.095(5)(c)1. or 2., Florida Statutes (2024), as may be amended or revised, is not a breach of contract and may not be considered as such. If the City terminates this contract under Paragraph 448.095(5)(c), Florida Statutes (2024), as may be amended or revised, the Contractor may not be awarded a public contract for at least one year after the date on which the contract was terminated. The Contractor is liable for any additional costs incurred by the City as a result of termination of this Agreement.

5. Contractor shall include in each of its subcontracts, if any, the requirements set forth in this Section, including this subparagraph, requiring any and all subcontractors, as defined in Subsection 448.095(1)(e), Florida Statutes (2024), as may be amended or revised, to include all of the requirements of this Section in their subcontracts. Contractor shall be responsible for compliance by any and all subcontractors, as defined in Subsection 448.095(1)(e), Florida Statutes (2024), as may be amended or revised, with the requirements of Section 448.095, Florida Statutes (2024), as may be amended or revised.

-END OF SECTION-

SPECIAL CONDITIONS

01. PURPOSE

The City of Fort Lauderdale, Florida (City) is seeking bids from qualified, experienced, and licensed firm(s), hereinafter referred to as the Contractor, Bidder, or Proposer, to provide construction services for the City, in accordance with the terms, conditions, and specifications contained in this Invitation to Bid (ITB).

This project is located at Fort Lauderdale Executive Airport (FXE), in the City of Fort Lauderdale. The scope of work under this contract includes, but is not limited to, milling existing pavement, resurfacing with asphalt P-401, applying pavement markings, and implementing erosion control measures. All work must be completed in accordance with current codes, regulations, and the project's drawings and specifications. Bidders must submit a construction schedule outlining the proposed timeline. The lump sum bid, shall cover all associated costs, including labor, materials, equipment, insurance, bonding, overhead, profit, and any other fixed expenses. Pricing for two bid alternates must also be submitted with the base bid.

02. TRANSACTION FEES

The City uses the City's on-line strategic sourcing platform INFOR, 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 its bid is submitted electronically through the City's on-line strategic sourcing platform, and that any bid security reaches the City of Fort Lauderdale, Procurement Services Division, 101 North East 3rd Avenue, Suite 1650, Fort Lauderdale, Florida 33301-1016, 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 SUBMITTALS WILL NOT BE ACCEPTED. PLEASE SUBMIT YOUR BID RESPONSE ELECTRONICALLY.** In the event of any conflict or discrepancy between bid price(s) submitted by bidder electronically into the City's online strategic sourcing platform Unit Price field(s), any other forms or attachments (whether part of the City's solicitation documents or documents created and uploaded by the bidder, or another section/field of the System, the online unit price(s) **inputted** electronically into the System by the bidder shall govern.

04. INFORMATION OR CLARIFICATION

For information concerning procedures for responding to this solicitation, contact Yesenia Pascual, Sr. Procurement Specialist at (954) 828-5257 or email at Ypascual@fortlauderdale.gov. Such contact shall be for clarification purposes only.

For information concerning technical specifications, please utilize the question / answer feature provided by the City's on-line strategic sourcing platform. 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. Contractors please note: Bids shall be submitted as stated in PART IV – Submittal Requirements. No part of your proposal 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 themselves 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 the City's on-line strategic sourcing platform shall become part of any contract that is created from this ITB.

05. CONTRACT TIME

5.1 The Contractor recognizes that TIME IS OF THE ESSENCE. The Work shall commence within **THIRTY (30)** calendar days of the date of the Notice to Proceed.

5.2 The Work shall be Substantially Completed within **FORTY-SIX (46)** calendar 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 **SIXTY (60)** calendar days after the Contract Time commences to run as provided in the Notice to Proceed.

06. BID SECURITY

A certified check, cashier's check, bank officer's check or bid bond for **Five (5%)** of the bid amount, made payable to the City of Fort Lauderdale, shall accompany each offer.

07. REQUIRED LICENSES/CERTIFICATIONS

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

State of Florida Certified General Contractor

OR

Any other State or County License(s), Certification(s) or Registration(s) deemed legally permissible by the City to conduct the nature of the work required in this solicitation.

Any sub-contractors employed by the Proposer shall be licensed and insured in accordance with this solicitation. Additionally, it is the Proposer's responsibility for ensuring that any sub-contractors' work meets the requirements of this solicitation at all times.

Note: Contractor must have proper licensing and shall submit evidence of same with its bid response.

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 the bid response.

The contractor shall have at least ten (10) years previous construction experience in clearing existing pavement, joint and crack repair, pavement marking, and seal coating in the State of Florida. Bidder shall submit proof of 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, telephone number and e-mail address.

NOTE: REFERENCES SHALL NOT INCLUDE CITY OF FORT LAUDERDALE EMPLOYEES OR WORK PERFORMED FOR THE CITY. THE CITY IS ALSO

INTERESTED IN WORK EXPERIENCE AND REFERENCES FROM ENTITIES 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)*

As a condition precedent to the effectiveness of this Agreement, during the term of this Agreement and during any renewal or extension term of this Agreement, Contractor shall, at its sole expense, provide insurance of such types and with such terms and limits as noted below. Providing proof of and maintaining adequate insurance coverage are material obligations of Contractor. Contractor shall provide the City a certificate of insurance evidencing such coverage. Contractor's insurance coverage shall be primary insurance for all applicable policies, in respect to the City's interests for this Agreement. The limits of coverage under each policy maintained by Contractor shall not be interpreted as limiting Contractor's liability and obligations under this Agreement. All insurance policies shall be through insurers authorized or eligible to write policies in the State of Florida and possess an A.M. Best rating of A-, VII or better, subject to approval by the City's Risk Manager.

The coverages, limits, and/or endorsements required herein protect the interests of the City, and these coverages, limits, and/or endorsements shall in no way be relied upon by Contractor for assessing the extent or determining appropriate types and limits of coverage to protect Contractor against any loss exposures, whether as a result of this Agreement or otherwise. The requirements contained herein, as well as the City's review or acknowledgement, are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by Contractor under this Agreement.

The following insurance policies and coverages are required:

Commercial General Liability
Coverage must be afforded under a Commercial General Liability policy with limits not less than:

- $2,000,000 each occurrence and $2,000,000 aggregate for Bodily Injury, Property Damage, and Personal and Advertising Injury
- $2,000,000 each occurrence and $2,000,000 aggregate for Products and Completed Operations

Policy must include coverage for contractual liability and independent contractors.

The City, a Florida municipality, its officials, employees, and volunteers are to be included as an additional insured with a CG 20 26 04 13 Additional Insured – Designated Person or Organization Endorsement or similar endorsement providing equal or broader Additional Insured Coverage with respect to liability arising out of activities performed by or on behalf of Contractor. The coverage shall contain no special limitation on the scope of protection afforded to the City, its officials, employees, and volunteers.

Pollution and Remediation Legal Liability (Hazardous Materials)
For the purpose of this section, the term "hazardous materials" includes all materials and substances that are designated or defined as hazardous by Florida or federal law or by the rules

or regulations of Florida or any federal agency. If work being performed involves hazardous materials, Contractor shall procure and maintain any or all of the following coverages (which will be specifically addressed upon review of exposure):

Contractors Pollution Liability Coverage
For sudden and gradual occurrences and in an amount not less than $1,000,000 per claim arising out of this Agreement, including but not limited to, all hazardous materials identified under the Agreement.

Business Automobile Liability
Coverage must be afforded for all Owned, Hired, Scheduled, and Non-Owned vehicles for Bodily Injury and Property Damage in an amount not less than $1,000,000 combined single limit each accident.

If Contractor does not own vehicles, Contractor shall maintain coverage for Hired and Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

Workers' Compensation and Employer's Liability
Coverage must be afforded per Chapter 440, Florida Statutes. Any person or entity performing work for or on behalf of the City must provide Workers' Compensation insurance. Exceptions and exemptions will be allowed by the City's Risk Manager, if they are in accordance with Florida Statute.

Contractor waives, and Contractor shall ensure that Contractor's insurance carrier waives, all subrogation rights against the City, its officials, employees, and volunteers for all losses or damages. The City requires the policy to be endorsed with WC 00 03 13 Waiver of our Right to Recover from Others or equivalent.

Contractor must be in compliance with all applicable State and federal workers' compensation laws.

Insurance Certificate Requirements

a. Contractor shall provide the City with valid Certificates of Insurance (binders are unacceptable) no later than ten (10) days prior to the start of work contemplated in this Agreement.
b. Contractor shall provide to the City a Certificate of Insurance having a thirty (30) day notice of cancellation; ten (10) days' notice if cancellation is for nonpayment of premium.
c. In the event that the insurer is unable to accommodate the cancellation notice requirement, it shall be the responsibility of Contractor to provide the proper notice. Such notification will be in writing by registered mail, return receipt requested, and addressed to the certificate holder.
d. In the event the Agreement term or any surviving obligation of Contractor following expiration or early termination of the Agreement goes beyond the expiration date of the insurance policy, Contractor shall provide the City with an updated Certificate of Insurance no later than ten (10) days prior to the expiration of the insurance currently in effect. The City reserves the right to suspend the Agreement until this requirement is met.
e. The Certificate of Insurance shall indicate whether coverage is provided under a claims-made or occurrence form. If any coverage is provided on a claims-made form, the

Certificate of Insurance must show a retroactive date, which shall be the effective date of the initial contract or prior.

f. The City shall be included as an Additional Insured on all liability policies, with the exception of Workers' Compensation.

g. The City shall be granted a Waiver of Subrogation on Contractor's Workers' Compensation insurance policy.

h. The title of the Agreement, Bid/Contract number, or other identifying reference must be listed on the Certificate of Insurance.

The Certificate Holder should read as follows:
City of Fort Lauderdale
c/o Procurement Services Division
401 SE 21st Street
Fort Lauderdale, FL 33316

Contractor has the sole responsibility for all insurance premiums and shall be fully and solely responsible for any costs or expenses as a result of a coverage deductible, co-insurance penalty, or self-insured retention; including any loss not covered because of the application of such deductible, co-insurance penalty, self-insured retention, or coverage exclusion or limitation. Any costs for including the City as an Additional Insured shall be at Contractor's expense.

If Contractor's primary insurance policy/policies do not meet the minimum requirements as set forth in this Agreement, Contractor may provide evidence of an Umbrella/Excess insurance policy to comply with this requirement.

Contractor's insurance coverage shall be primary insurance in respect to the City's interests for this Agreement, its officials, employees, and volunteers. Any insurance or self-insurance maintained by the City shall be non-contributory.

Any exclusion or provision in any insurance policy maintained by Contractor that excludes coverage required in this Agreement shall be deemed unacceptable and shall be considered breach of contract.

All required insurance policies must be maintained until the Agreement work has been accepted by the City, or until this Agreement is terminated, whichever is later. Any lapse in coverage may be considered breach of contract. In addition, Contractor must provide to the City confirmation of coverage renewal via an updated certificate of insurance should any policies expire prior to the expiration of this Agreement. The City reserves the right to review, at any time, coverage forms and limits of Contractor's insurance policies.

Contractor shall provide notice of any and all claims, accidents, and any other occurrences associated with this Agreement to Contractor's insurance company or companies and the City's Risk Management office as soon as practical.

It is Contractor's responsibility to ensure that any and all of Contractor's independent contractors and subcontractors comply with these insurance requirements. All coverages for independent contractors and subcontractors shall be subject to all of the applicable requirements stated herein. Any and all deficiencies are the responsibility of Contractor. The City reserves the right to adjust insurance limits from time to time at its discretion with notice to Contractor.

NOTE: CITY PROJECT NUMBER, PROJECT NAME AND BID NUMBER MUST APPEAR ON EACH CERTIFICATE, AND THE CITY OF FORT LAUDERDALE MUST BE NAMED ON THE CERTIFICATE AS AN "ADDITIONAL INSURED" ON REQUIRED LIABILITY POLICIES.

A Sample Insurance Certificate shall be included with the bid 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.

11. PERFORMANCE AND PAYMENT BOND: 100%

12. CITY PROJECT MANAGER

The Project Manager is hereby designated by the City as Khant Myat, P.E., whose address is 6000 NW 21 Avenue ,Click here to enter text. Floor, Fort Lauderdale, FL 33309, telephone number: (954) 828-5061, and e-mail address is kmyat@fortlauderdale.gov. 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 Dollars ($200.00)** 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 sample Agreement, Article 16, Liquidated Damages)

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/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 $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 shall make payment to the Contractor through utilization of the City's P-Card Program. The City has implemented a Purchasing Card (P-Card) Program utilizing both the 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, Contractor 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. All costs associated with the Contractor's participation in this purchasing program shall be borne by the Contractor. The City reserves the right to revise this program as necessary.

PCI (Payment Card Industry) Compliance

Contractor agrees to comply with all applicable state, federal and international laws, as well as industry best practices, governing the collection, access, use, disclosure, safeguarding and destruction of Protected Information.

Contractor and/or any subcontractor that handles credit card data must be, and remain, PCI compliant under the current standards and will provide documentation confirming compliance upon request by the City of Fort Lauderdale, failure to produce documentation could result in termination of the contract.

15. WORK SCHEDULE (overtime is not applicable):

Regular work hours: 8:00 am to 4:30 pm, Monday through Friday.
City Inspector Hours: 8:00 am to 4:30 pm, Monday through Friday.

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

16. INSPECTION OVERTIME COST: $100/hr.

-END OF SECTION-

CITY OF FORT LAUDERDALE
CONSTRUCTION AGREEMENT

THIS CONSTRUCTION AGREEMENT ("Agreement") made and entered into this _____ day of _____, 2025, by and between the City of Fort Lauderdale, a Florida municipal corporation ("City") and _____, a Florida company/corporation ("Contractor"), ("Party" or collectively "Parties");

WHEREAS, the City desires to retain a contractor for the Project as expressed in its Invitation to Bid No. 530, Project Number P12883, which was opened on _____; and

WHEREAS, the Contractor has expressed its willingness and capability to perform the necessary work to accomplish the Project; and

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 Agreement – 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 Application for Payment – 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 Bid – 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 Bid Documents – Advertisement for Invitation to Bids, the Instructions to Bidders, the Bid Form (with supplemental affidavits and sample 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 Certificate of Substantial Completion - Certificate provided by the City certifying that all Work, excluding the punch list items, has been completed, inspected, and accepted by the City.

SAMPLE CONSTRUCTION AGREEMENT

1.7 Change Order - A written document executed by both Parties ordering a change in the Contract Price or Contract Time or a material change in the Work.

1.8 City – The City of Fort Lauderdale, Florida, including but not limited to its employees, agents, officials, representatives, contractors, subcontractors, and volunteers, with whom the Contractor has entered into the Agreement and for whom the Work is to be provided.

1.9 Contract Documents – 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, 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, 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 Contract Price – The amount established in the bid submittal and award by the City's City Commission, as may be amended by Change Order.

1.11 Contract Time – 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 Contractor – 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 Defective – 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 Agreement.

1.16 Final Completion Date – 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.

SAMPLE CONSTRUCTION AGREEMENT

1.17 Hazardous Materials (HAZMAT) - 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 Hazardous Substance - 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 Hazardous Waste - 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 Holidays - Those designated non-workdays as established by the City Commission of the City of Fort Lauderdale.

1.21 Inspection – 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 Notice of Award - The written notice by City to the Contractor stating that upon compliance by the Contractor with the condition’s precedent enumerated therein, within the time specified that the City will sign and deliver this Agreement.

1.23 Notice to Proceed – A written notice to Contractor authorizing the commencement of the activities identified in the notice or as described in the Contract Documents.

1.24 Plans - The official graphic representations of this Project that are a part of the Contract Documents.

1.25 Premises (otherwise known as Site or Work Site) – means the land, buildings, facilities, etc. upon which the Work is to be performed.

1.26 Project – The construction project described in the Contract Documents, including the

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Work described therein.

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 Punch List - 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 Record Documents - 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 and employed by the Contractor at no cost to the City.

1.31 Substantially Completed Date – A date when written notice is provided by the City to the Contractor stating that the Work is substantially completed. If, at the time of inspection, it is determined the project is substantially completed, the City will also issue a letter of Substantial Completion along with a punch list of incomplete or deficient items to be completed prior to requesting a Final Completion inspection.

1.32 Work – The construction and services required by the Contract Documents, whether completed or partially completed, and includes all labor, materials, equipment, and services provided or to be provided by Contractor to fulfill Contractor's obligations. The Work may constitute the whole or a part of the Project.

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:

FXE AES APRON PAVEMENT REHABILITATION
ITB # 530 PROJECT # P12883

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

PROJECT DESCRIPTION

This project is located at Fort Lauderdale Executive Airport (FXE), in the City of Fort Lauderdale. The scope of work under this contract includes, but is not limited to, milling existing pavement, resurfacing asphalt P-401, applying pavement markings, and implementing erosion control measures. All work must be completed in accordance with

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current codes, regulations, and the project's drawings and specifications. Bidders must submit a construction schedule outlining the proposed timeline. The lump sum bid, shall cover all associated costs, including labor, materials, equipment, insurance, bonding, overhead, profit, and any other fixed expenses. Pricing for two bid alternates must also be submitted with the base bid.

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 all personnel employed. 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 Khant Myat, P.E., whose address is 6000 NW 21ST Avenue, Fort Lauderdale, FL 33309, telephone number: (954) 828-5061, and email address is kmyat@fortlauderdale.gov. 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, include this Agreement and the following documents listed below which comprise the entire Agreement between the City and Contractor, and these documents listed below are hereby incorporated herein, even if they are not attached to this Agreement. The Contract Documents consist of the following:

4.1 This Agreement.

4.2 Exhibits to this Agreement: (Plans sheets [ ] to [ ] inclusive).

4.3 Public Construction Bond, Performance Bond, Payment Bond and Certificates of Insurance.

4.4 Notice of Award and Notice to Proceed.

4.5 General Conditions and Special Conditions.

4.6 Technical Specifications.

4.7 Plans/Drawings.

4.8 Addenda number _____ through _____, inclusive.

4.9 Bid Form and supplement Affidavits and Agreements.

4.10 All applicable provisions of State and Federal Law.

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4.11 Invitation to Bid No.530, Instructions to Bidders, and Bid Bond.

4.12 Contractor's response to the City's Invitation to Bid No. 530, dated _____.

4.13 Schedule of Completion.

4.14 All amendments, modifications and supplements, change orders and work directive changes, issued on or after the Effective Date of the Agreement.

4.15 Any additional documents that are required to be submitted under the Agreement.

4.16 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.

4.17 Foreign Entity Affidavit.

4.18 Kidnapping and Custody Affidavit.

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

a. Approved change orders, addenda or amendments.

b. Specifications and Drawings.

c. Special Conditions.

d. General Conditions.

e. This Agreement dated _____, and any attachments.

f. Invitation to Bid No.530, and the specifications prepared by the City.

g. Contractor's response to the City's Invitation to Bid No. 530, dated _____.

h. Schedule of Values.

i. 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, within five (5) calendar days, and before proceeding with the Work affected shall obtain a written interpretation or clarification from the City.

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

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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 **THIRTY (30)** calendar days of the date of the Notice to Proceed.

5.2 The Work shall be Substantially Completed within **FORTY-SIX (46)** calendar 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 **SIXTY (60)** calendar 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 items 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 for 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 (1st) and the tenth (10th) 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.

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7.3 Prior to Final Completion, progress payments will be made in an amount equal to ninety-five percent (95%) 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 five percent (5%) 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 (2024), as amended or revised, provided, however, complete and error free pay application is submitted.

7.7 The City shall make payment to the Contractor through utilization of the City's Purchasing Card (P-Card) Program. The City has implemented a P-Card Program utilizing the MASTERCARD and VISA networks. Purchases from this contract will be made utilizing the City's P-Card. Contractor will receive payment from the purchasing card in the same manner as other credit card purchases. Accordingly, Contractor 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. All costs associated with the Contractor's participation in this purchasing program shall be borne by the Contractor. The City reserves the right to revise this program as necessary.

7.8 PCI (Payment Card Industry) Compliance

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Contractor agrees to comply with all applicable state, federal and international laws, as well as industry best practices, governing the collection, access, use, disclosure, safeguarding and destruction of Protected Information.

Contractor and/or any subcontractor that handles credit card data must be, and remain, PCI compliant under the current standards and will provide documentation confirming compliance upon request by the City of Fort Lauderdale. Failure to produce documentation could result in termination of the contract.

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, water table condition, moisture conditions and all year-round local weather and climate conditions (past and present), and 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 within the Contract Time as defined in this Agreement.

Furthermore, Contractor warrants and confirms that it 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 on its own, 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 Bid Price and that the Project can be completed for the Bid 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 it deems necessary for the performance of the Work at the Contract Prices, within the Contract Time and in accordance with the other terms and

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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 it 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 Agreement in accordance with Article 17.

8.8.4 Where required and necessary, the Contractor shall, at all times, have a certified "competent person" assigned to the job site. The Contractor shall assign personnel to the job site that have successfully completed training programs related to trench safety, confined space work, and maintenance of traffic (MOT). Personnel certified by the International Municipal Signal Associations with Florida Department of Transportation qualifications are required relative to MOT. Any other certifications that may be required by applicable permitting agencies for the Work shall also be complied with by the Contractor. Failure to pursue the Work with the properly certified supervisory staff may result in notice to stop work or terminate the Agreement 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.

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8.9.2 All materials 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 8 a.m. and 5:00 p.m., Monday through Friday.

Unless approved by the City in advance, the Contractor will not perform 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. For any overtime inspection required by City personnel, 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., Monday through Friday, and any work requiring inspection oversight being performed outside of this timeframe shall be paid for by the Contractor as Inspector overtime at a rate of $100.00 per hour.** 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 itself to indemnify and hold 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 bids. 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 Law and Regulations: The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations applicable to the Work, including Florida Law, the City Code of Ordinances, and any other applicable law. If the Contractor observes that the specifications or plans are in conflict, the Contractor shall give the Project Manager prompt written notice thereof within five (5) calendar days, 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,

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standards, specifications and regulations, and without such notice to the Project Manager, the Contractor shall bear all costs arising therefrom.

8.14 Taxes: 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, and the State of Florida.

8.15 Contractor Use of Premises: 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 its 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 properties and areas 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 accumulation 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 Project Coordination: 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.

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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.
8.16.6 Coordination with and scheduling of all required inspections from all permitting agencies.

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 electronic drawings files. 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 Emergencies: 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

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significant changes in the Work or deviations from the Contract Documents caused thereby.

8.20 Risk of Loss: 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,

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undue, from, to, or about the Premises. This indemnity is intended to be operable under 42 U.S.C. Section 9607, as amended or revised, 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

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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 Weather Emergencies: 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 it 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 purpose, such acts or circumstances shall include, but not be limited to weather conditions affecting performance, floods, epidemics, pandemics, war, act of Governmental Authority, state of emergency, 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 sub-contractors, 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 ninety-six (96) hours after such an

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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 Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assisted Contracts: 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 seq.*).

Additionally, the Contractor assures that it, the sub-recipient or its subcontractors shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Agreement. 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 Agreement, which may result in the termination of this Agreement 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 Contractor under the Contract Documents promptly and shall make payments to the Contractor in accordance with the terms of the agreement herein.

9.2 After the Contractor meets the City's requirements in the Code of Ordinances, and any other applicable law, the City shall provide public rights-of-way and easement, where available, for the installation of conduits, transformers pads and related appurtenances only.

9.3 Technical Clarifications and Interpretations:

9.3.1 The City shall issue 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.

9.3.2 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

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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 data 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.

9.5 Cancellation for Unappropriated Funds**:** The obligation of the City for payment to a Contractor is limited to the availability of funds appropriated in a current fiscal period, and continuation of the Agreement into a subsequent fiscal period is subject to appropriation of funds, unless otherwise authorized by law.

ARTICLE 10 – BONDS AND INSURANCE

10.1 Public Construction and Other Bonds: The Contractor shall furnish Public 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 (2024), 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.

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10.2 Disqualification of Surety: 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 Insurance

As a condition precedent to the effectiveness of this Agreement, during the term of this Agreement and during any renewal or extension term of this Agreement, Contractor shall, at its sole expense, provide insurance of such types and with such terms and limits as noted below. Providing proof of and maintaining adequate insurance coverage are material obligations of Contractor. Contractor shall provide the City a certificate of insurance evidencing such coverage. Contractor's insurance coverage shall be primary insurance for all applicable policies, in respect to the City's interests for this Agreement. The limits of coverage under each policy maintained by Contractor shall not be interpreted as limiting Contractor's liability and obligations under this Agreement. All insurance policies shall be through insurers authorized or eligible to write policies in the State of Florida and possess an A.M. Best rating of A-, VII or better, subject to approval by the City's Risk Manager.

The coverages, limits, and/or endorsements required herein protect the interests of the City, and these coverages, limits, and/or endorsements shall in no way be relied upon by Contractor for assessing the extent or determining appropriate types and limits of coverage to protect Contractor against any loss exposures, whether as a result of this Agreement or otherwise. The requirements contained herein, as well as the City's review or acknowledgement, are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by Contractor under this Agreement.

The following insurance policies and coverages are required:

Commercial General Liability
Coverage must be afforded under a Commercial General Liability policy with limits not less than:

- $2,000,000 each occurrence and $2,000,000 aggregate for Bodily Injury, Property Damage, and Personal and Advertising Injury
- $2,000,000 each occurrence and $2,000,000 aggregate for Products and Completed Operations

Policy must include coverage for contractual liability and independent contractors.

The City, a Florida municipality, its officials, employees, and volunteers are to be included as an additional insured with a CG 20 26 04 13 Additional Insured – Designated Person or Organization Endorsement or similar endorsement providing equal or broader Additional Insured Coverage with respect to liability arising out of activities performed by or on behalf of Contractor. The coverage shall contain no special limitation on the scope of protection afforded to the City, its officials, employees, and volunteers.

Pollution and Remediation Legal Liability (Hazardous Materials)
For the purpose of this section, the term "hazardous materials" includes all materials and substances that are designated or defined as hazardous by Florida or federal law or by the rules or regulations of Florida or any federal agency. If work being performed involves hazardous materials, Contractor shall procure and maintain any or all of the following coverages (which will be specifically addressed upon review of exposure):

Contractors Pollution Liability Coverage

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For sudden and gradual occurrences and in an amount not less than $1,000,000 per claim arising out of this Agreement, including but not limited to, all hazardous materials identified under the Agreement.

Business Automobile Liability
Coverage must be afforded for all Owned, Hired, Scheduled, and Non-Owned vehicles for Bodily Injury and Property Damage in an amount not less than $1,000,000 combined single limit each accident.

If Contractor does not own vehicles, Contractor shall maintain coverage for Hired and Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

Workers' Compensation and Employer's Liability
Coverage must be afforded per Chapter 440, Florida Statutes. Any person or entity performing work for or on behalf of the City must provide Workers' Compensation insurance. Exceptions and exemptions will be allowed by the City's Risk Manager, if they are in accordance with Florida Statute.

Contractor waives, and Contractor shall ensure that Contractor's insurance carrier waives, all subrogation rights against the City, its officials, employees, and volunteers for all losses or damages. The City requires the policy to be endorsed with WC 00 03 13 Waiver of our Right to Recover from Others or equivalent.

Contractor must be in compliance with all applicable State and federal workers' compensation laws.

Insurance Certificate Requirements

i. Contractor shall provide the City with valid Certificates of Insurance (binders are unacceptable) no later than ten (10) days prior to the start of work contemplated in this Agreement.

j. Contractor shall provide to the City a Certificate of Insurance having a thirty (30) day notice of cancellation; ten (10) days' notice if cancellation is for nonpayment of premium.

k. In the event that the insurer is unable to accommodate the cancellation notice requirement, it shall be the responsibility of Contractor to provide the proper notice. Such notification will be in writing by registered mail, return receipt requested, and addressed to the certificate holder.

l. In the event the Agreement term or any surviving obligation of Contractor following expiration or early termination of the Agreement goes beyond the expiration date of the insurance policy, Contractor shall provide the City with an updated Certificate of Insurance no later than ten (10) days prior to the expiration of the insurance currently in effect. The City reserves the right to suspend the Agreement until this requirement is met.

m. The Certificate of Insurance shall indicate whether coverage is provided under a claims-made or occurrence form. If any coverage is provided on a claims-made form, the Certificate of Insurance must show a retroactive date, which shall be the effective date of the initial contract or prior.

n. The City shall be included as an Additional Insured on all liability policies, with the exception of Workers' Compensation.

o. The City shall be granted a Waiver of Subrogation on Contractor's Workers' Compensation insurance policy.

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p. The title of the Agreement, Bid/Contract number, or other identifying reference must be listed on the Certificate of Insurance.

The Certificate Holder should read as follows:
City of Fort Lauderdale
c/o Procurement Services Division
401 SE 21st Street
Fort Lauderdale, FL 33316

Contractor has the sole responsibility for all insurance premiums and shall be fully and solely responsible for any costs or expenses as a result of a coverage deductible, co-insurance penalty, or self-insured retention; including any loss not covered because of the application of such deductible, co-insurance penalty, self-insured retention, or coverage exclusion or limitation. Any costs for including the City as an Additional Insured shall be at Contractor's expense.

If Contractor's primary insurance policy/policies do not meet the minimum requirements as set forth in this Agreement, Contractor may provide evidence of an Umbrella/Excess insurance policy to comply with this requirement.

Contractor's insurance coverage shall be primary insurance in respect to the City's interests for this Agreement, its officials, employees, and volunteers. Any insurance or self-insurance maintained by the City shall be non-contributory.

Any exclusion or provision in any insurance policy maintained by Contractor that excludes coverage required in this Agreement shall be deemed unacceptable and shall be considered breach of contract.

All required insurance policies must be maintained until the Agreement work has been accepted by the City, or until this Agreement is terminated, whichever is later. Any lapse in coverage may be considered breach of contract. In addition, Contractor must provide to the City confirmation of coverage renewal via an updated certificate of insurance should any policies expire prior to the expiration of this Agreement. The City reserves the right to review, at any time, coverage forms and limits of Contractor's insurance policies.

Contractor shall provide notice of any and all claims, accidents, and any other occurrences associated with this Agreement to Contractor's insurance company or companies and the City's Risk Management office as soon as practical.

It is Contractor's responsibility to ensure that any and all of Contractor's independent contractors and subcontractors comply with these insurance requirements. All coverages for independent contractors and subcontractors shall be subject to all of the applicable requirements stated herein. Any and all deficiencies are the responsibility of Contractor. The City reserves the right to adjust insurance limits from time to time at its discretion with notice to Contractor.

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NOTE: CITY PROJECT NUMBER, PROJECT NAME AND BID NUMBER MUST APPEAR ON EACH CERTIFICATE, AND THE CITY OF FORT LAUDERDALE MUST BE NAMED ON THE CERTIFICATE AS AN "ADDITIONAL INSURED" ON REQUIRED LIABILITY POLICIES.

A Sample Insurance Certificate shall be included with the bid to demonstrate the firm's ability to comply with insurance requirements. Provide a previous certificate or other evidence listing

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the insurance companies' names for all required coverage, and the dollar amounts of the coverage.

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

11.1 Warranty: 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 Warranty of Specifications: 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 Warranty of Merchantability: 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 Tests and Inspections: 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 Project Manager 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 Uncovering Work: 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 Paragraphs 11.2.1 be observed by the City or inspected or

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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 it makes a claim therefore as provided in Articles 14 and 15.

11.4 City May Stop the Work: 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 Acceptance of Defective Work, Deductions: 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 Contract's 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.

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11.8 City May Correct Defective Work: If the Contractor fails within a reasonable time after 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 Disclaimer of Liability: 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 Indemnification: 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, agents, volunteers, 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, suppliers, employees or laborers; (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;

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(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 guarantee.

12.2.2 Contractor agrees to indemnify, defend, and hold harmless the City, its representatives, agents, volunteers, employees, and appointed and elected officials 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 trials 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 (2024), as may be amended or revised, 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.

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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 fully executed 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 Cost of the Work: 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 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:

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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 an approved and fully executed 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 Not Included in the Cost of the Work: 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

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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 Basis of Compensation: 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%).

14.4.1.2 No 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 Cost Breakdown Required: 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:

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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.

ARTICLE 15 – CHANGE OF THE CONTRACT TIME

15.1 The Contract Time may only be changed by an approved and fully executed 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 therefore 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, pandemics, act of Governmental Authority, state of emergency, 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 Agreement, 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

16.1 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 Dollars ($200.00)** 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

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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.

16.2 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 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 City's Right to Terminate Contract: 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 makes a general assignment for the benefit of creditors.

17.2.2 If a trustee, receiver, custodian or agent of the Contractor is appointed under applicable law or under Agreement, whose appointment or authority to take

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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.

17.2.3 If Contractor fails to begin the Work within fifteen (15) calendar days after the date set forth in the Notice to Proceed, 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.

17.2.4 If the Contractor repeatedly fails to make prompt payments to subcontractors or for labor, material or equipment.

17.2.5 If the Contractor repeatedly disregards proper safety procedures.

17.2.6 If the Contractor disregards any local, state or federal laws or regulations.

17.2.7 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 notice 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 below in Section 17.5.

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:

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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

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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 Agreement 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 accepted by the City and costs reasonably incurred by Contractor relating to commitments which had become firm prior to the termination. No payment shall be made for profit for work/services which have not been performed or accepted.

17.6 Where the Contractor's service has 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

18.1 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 City Project Manager and Contractor shall be submitted to the City Manager or his designee and Contractor's representative for resolution. Prior to any litigation being commenced, for any disputes which remain unresolved, within sixty (60) days after final completion of the Work, the Parties shall participate in mediation to address all unresolved disputes to a mediator agreed upon by the Parties. Should any objection not be resolved in mediation, the Parties retain all their legal rights and remedies provided under the laws of Florida. Failure by a Party to comply in strict accordance with the requirements of this Article, then said Party specifically waives all of its rights provided hereunder, including its rights and remedies under the laws of Florida.

18.1.1 All non-technical administrative disputes (such as billing and payment) shall be determined by Contract Administrator.

18.1.2 During the pendency of any dispute and after a determination thereof, Contractor 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

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the Work and adhere to the progress schedule. The Work shall not be delayed or postponed pending resolution of any disputes or disagreements.

18.1.3 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:

Khant Myat, P.E.
Project Manager
City of Fort Lauderdale
6000 NW 21st Avenue,
Fort Lauderdale, Florida 33309
Telephone: (954) 828-5061
E-mail: kmyat@fortlauderdale.gov

with copies to:

City Manager
City of Fort Lauderdale
401 SE 21st Street
Fort Lauderdale, FL 33316

and

City Attorney
City of Fort Lauderdale
1 East Broward Blvd, Suite 1605
Fort Lauderdale, FL 33301-1016

To the Contractor:

_____
_____
_____
Telephone: _____
E-mail: _____

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

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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.

20.2 Sovereign Immunity: Nothing contained in this paragraph or elsewhere in this Agreement is in any way intended either to be a waiver of the Sovereign Immunity limitation placed upon the City's liability as set forth in Section 768.28, Florida Statutes (2024), as may be amended or revised, or to extend the City's liability beyond the limits established in said Section 768.28, Florida Statutes (2024), as may be amended or revised; and no claim or award against the City shall include attorney's fees, investigative costs, expert fees, suit costs or pre-judgment interest.

20.3 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; WAIVER OF JURY TRIAL

21.1 The Agreement shall be interpreted and construed in accordance with, and governed by, the laws of the state of Florida. The Parties agree that the exclusive venue for any lawsuit arising from, related to, or in connection with this Agreement shall be in the state courts of the Seventeenth Judicial Circuit in and for Broward County, Florida. If any claims arising from, related to, or in connection with this Agreement must be litigated in federal court, the Parties agree that the exclusive venue for any such lawsuit shall be in the United States District Court or United States Bankruptcy Court for the Southern District of Florida in Broward County. **BY ENTERING INTO THIS AGREEMENT, THE PARTIES HEREBY EXPRESSLY WAIVE ANY AND ALL RIGHTS EITHER PARTY MIGHT HAVE TO A TRIAL BY JURY REGARDING THIS AGREEMENT OR ANY ISSUES RELATED TO THIS AGREEMENT. IF A PARTY FAILS TO WITHDRAW A REQUEST FOR A JURY TRIAL IN A LAWSUIT ARISING OUT OF THIS AGREEMENT AFTER WRITTEN NOTICE BY THE OTHER PARTY OF VIOLATION OF THIS SECTION, THE PARTY MAKING THE REQUEST FOR JURY TRIAL SHALL BE LIABLE FOR THE REASONABLE ATTORNEYS' FEES AND COSTS OF THE OTHER PARTY IN CONTESTING THE REQUEST FOR JURY TRIAL, AND SUCH AMOUNTS SHALL BE AWARDED BY THE COURT.**

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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 as independent contractor 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 <u>Scrutinized Companies</u>

The Contractor certifies that it is not on the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2022), and that it is not engaged in a boycott of Israel. 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 (2022), as may be amended or revised, or been placed on the Scrutinized Companies that Boycott Israel List created

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pursuant to Section 215.4725, Florida Statutes (2022), as may be amended or revised, or is engaged in a boycott of Israel.

22.8 Public Entity Crimes: In accordance with the Public Crimes Act, Section 287.133, Florida Statutes (2024), as may be amended or revised, 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 (2024), as may be amended or revised, 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 Attorney Fees: In the event it becomes necessary for either party herein to seek legal means to enforce the terms of the Agreement, the prevailing Party shall be entitled to its reasonable attorney fees.

22.10 N/A

22.11 Public Records

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES (2024), TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT PRRCONTRACT@FORTLAUDERDALE.GOV, 954-828-5002, CITY CLERK'S OFFICE, 1 EAST BROWARD BOULEVARD, SUITE 444 FORT LAUDERDALE, FLORIDA 33301.

Contractor shall:

1. Keep and maintain public records 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 (2024), 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 Agreement if the Contractor does not transfer the records to the City.

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4. Upon completion of the Agreement, 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 Agreement, 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 Agreement, 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.

22.12 Non-Discrimination

The Contractor shall not discriminate against its employees based on the employee's race, color, religion, gender, gender identity, gender expression, marital status, sexual orientation, national origin, age, disability, or any other protected classification as defined by applicable law.

1. The Contractor certifies and represents that the Contractor offers the same health benefits to the domestic partners of its employees as are offered its employees' spouses or offers its employees the cash equivalent of such health benefits because it is unable to provide health benefits to its employees' domestic partners, and that the Contractor will comply with Section 2-187, Code of Ordinances of the City of Fort Lauderdale, Florida, as may be amended or revised, ("Section 2-187"), during the entire term of this Agreement.

2. The failure of the Contractor to comply with Section 2-187 shall be deemed to be a material breach of this Agreement, entitling the City to pursue any remedy stated below or any remedy provided under applicable law.

3. The City may terminate this Agreement if the Contractor fails to comply with Section 2-187.

4. The City may retain all monies due or to become due until the Contractor complies with Section 2-187.

5. The Contractor may be subject to debarment or suspension proceedings. Such proceedings will be consistent with the procedures in Section 2-183 of the Code of Ordinances of the City of Fort Lauderdale, Florida.

22.13 E-Verify

In accordance with 448.095, Florida Statutes (2024), as may be amended or revised, the Contractor and its subcontractors shall register with and use the E-Verify system to electronically verify the employment eligibility of newly hired employees.

1. The Contractor shall require each of its subcontractors, if any, to provide the Contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien. The Contractor shall maintain a copy of the subcontractor's affidavit for the duration of this Agreement and in accordance with the public records requirements of this Agreement.

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2. The City, the Contractor, or any subcontractor who has a good faith belief that a person or entity with which it is contracting has knowingly violated Subsection 448.09(1), Florida Statutes (2024), as may be amended or revised, shall terminate the contract with the person or entity.

3. The City, upon good faith belief that a subcontractor knowingly violated the provisions of Subsection 448.095(5), Florida Statutes (2024), as may be amended or revised, but that the Contractor otherwise complied with Subsection 448.095(5), Florida Statutes (2024), as may be amended or revised, shall promptly notify Contractor and order the Contractor to immediately terminate the contract with the subcontractor, and the Contractor shall comply with such order.

4. A contract terminated under Subparagraph 448.095(5)(c)1. or 2., Florida Statutes (2024), as may be amended or revised, is not a breach of contract and may not be considered as such. If the City terminates this contract under Paragraph 448.095(5)(c), Florida Statutes (2024), as may be amended or revised, the Contractor may not be awarded a public contract for at least one year after the date on which the contract was terminated. The Contractor is liable for any additional costs incurred by the City as a result of termination of this Agreement.

5. Contractor shall include in each of its subcontracts, if any, the requirements set forth in this Section, including this subparagraph, requiring any and all subcontractors, as defined in Subsection 448.095(1)(e), Florida Statutes (2024), as may be amended or revised, to include all of the requirements of this Section in their subcontracts. Contractor shall be responsible for compliance by any and all subcontractors, as defined in Subsection 448.095(1)(e), Florida Statutes (2024), as may be amended or revised, with the requirements of Section 448.095, Florida Statutes (2024), as may be amended or revised.

22.14 Anti-Human Trafficking:

As a condition precedent to the effectiveness of this Agreement, the Contractor shall provide the City with an affidavit signed by an officer or a representative of the Contractor under penalty of perjury attesting that the Contractor does not use coercion for labor or services as defined in Section 787.06, Florida Statutes (2024), as may be amended or revised.

22.15 Foreign Countries of Concern:

As a condition precedent to the effectiveness of this Agreement, the Contractor shall provide the City with an affidavit signed by an officer or representative of the Contractor under penalty of perjury attesting that the Contractor does not meet any of the criteria in paragraphs (2)(a)-(c) of Section 287.138, Florida Statutes (2024), as may be amended or revised.

22.16 Default:

In the event the Contractor fails to comply with the provisions of this Agreement, the City may declare the Contractor in default and notify it in writing, giving a reasonable time to cure the default, but in no event shall this time period exceed five (5) calendar days unless otherwise agreed to by the parties. In such event, the Contractor shall only be compensated for any services completed as of the date written notice of default is served.

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22.17 Severability:

If any portions of this Agreement shall be held invalid or unenforceable, such invalidity or unenforceability shall not affect any other provisions hereof, and this Agreement shall be construed and enforced as if such provisions had not been included.

ARTICLE 23- FEDERAL AVIATION ADMINISTRATION (FAA) REQUIRED CONTRACT PROVISIONS FOR NON-AIP CONTRACTS

23.1. General Civil Rights Provisions:

In all its activities within the scope of its airport program, the Contractor agrees to comply with pertinent statutes, Executive Orders, and such rules as identified in Title VI List of Pertinent Nondiscrimination Acts and Authorities to ensure that no person shall, on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

The above provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract.

23.2. Civil Rights-Title VI Assurance:

23.2.1 Title VI Solicitation Notice

The **City of Fort Lauderdale,** in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, [select businesses, or disadvantaged business enterprises or airport concession disadvantaged business enterprises] will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in consideration for an award.

23.2.2 Title VI List of Pertinent Nondiscrimination Acts and Authorities

Insert this list in every contract or agreement, unless the Sponsor has determined and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities. This list can be omitted if the FAA has determined that the contractor or company is already subject to nondiscrimination requirements, which is a rare occurrence.

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

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- Title VI of the Civil Rights Act of 1964 (42 USC § 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 USC § 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 USC § 794 *et seq*.), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27 (Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance);
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq*.) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-259) (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 (42 USC § 12101, et seq) (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) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration’s Nondiscrimination statute (49 USC § 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 (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. 74087 (2005)];
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC § 1681, et seq).

23.2.3. Compliance with Nondiscrimination 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:

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1. 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. Nondiscrimination: The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability 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. Information and Reports: 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 Sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a 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. Sanctions for Noncompliance: In the event of a Contractor's noncompliance with the non-discrimination provisions of this contract, the Sponsor 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. Incorporation of Provisions: 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 Sponsor 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 Sponsor to enter into any litigation to protect the interests of the Sponsor. In addition, the Contractor may request the

SAMPLE CONSTRUCTION AGREEMENT

United States to enter into the litigation to protect the interests of the United States.

23.3. Clause for Construction/ Use/ Access to Real Property Acquired Under the Activity, Facility or Program:

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by City of Fort Lauderdale pursuant to the provisions of the Airport Improvement Program grant assurances.

A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Title VI List of Pertinent Nondiscrimination Acts and Authorities.

B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non-discrimination covenants, City of Fort Lauderdale will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.*

C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, City of Fort Lauderdale will there upon revert to and vest in and become the absolute property of City of Fort Lauderdale and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

23.4. 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. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer 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 (29 CFR Part 1910). The employer 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.

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23.5. Certification Regarding Domestic Preferences for Procurements

The Bidder or Offeror certifies by signing and submitting this bid or proposal that, to the greatest extent practicable, the Bidder or Offeror has provided a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including, but not limited to, iron, aluminum, steel, cement, and other manufactured products) in compliance with 2 CFR § 200.322.

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SAMPLE CONSTRUCTION AGREEMENT

CITY

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

CITY OF FORT LAUDERDALE, a Florida municipal corporation

By: _____
RICKELL WILLIAMS
City Manager

Date: _____

ATTEST:

By: _____
DAVID R. SOLOMAN
City Clerk

Approved as to Legal Form and correctness:
D'Wayne Spence, Acting City Attorney

By: _____
ERIC ABEND
Assistant City Attorney

SAMPLE CONSTRUCTION AGREEMENT

CONTRACTOR

WITNESSES:

CONTRACTOR.,
a Florida company/corporation.

_____ By:_____

_____ Print Name:_____
Print Name

Title:_____

ATTEST:

_____

_____
Print Name

By:_____
Secretary

(CORPORATE SEAL)

STATE OF _____:

COUNTY OF _____:

The foregoing instrument was acknowledged before me by means of ❑ physical presence or ❑ online notarization, this _____ day of _____, 2025, by _____, (NAME OF AUTHORIZED OFFICER) as _____ (TITLE OF AUTHORIZED OFFICER), for _____ (NAME OF COMPANY), a Florida _____(TYPE OF COMPANY).

_____
(Signature of Notary Public - State of Florida)

_____
(Print, Type, or Stamp Commissioned Name of Notary Public)

Personally Known_____ OR Produced Identification_____
Type of Identification Produced: _____

SAMPLE CONSTRUCTION AGREEMENT

GENERAL REQUIREMENTS

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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 FXE AES Apron Pavement Rehabilitation project, City Project P12883.**

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 which 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
2. Work covered by the Contract Documents
3. Phased construction
4. Use of Premises
5. Work restrictions
6. Mobilization

1.4 PROJECT INFORMATION

A. Project Identification: Project 12883

1. Project Location: 6000 NW 21st Avenue, Fort Lauderdale, FL 33309

B. Owner: City of Fort Lauderdale

1. City's Representative: Khant Myat, P.E., Airport Engineer/Project Manager II

1.5 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work is defined by the Contract Documents and consists of the following:

The work to be accomplished under this contract includes, but is not limited to, furnish all materials, labor, and equipment to perform all the work to be accomplished under this contract, includes but not limited to, furnishing all materials, labor, and equipment necessary to complete the following tasks: milling of existing pavement, resurfacing with asphalt P-401, pavement marking, and erosion control. All work shall be performed in compliance with current codes and regulations, as well as in accordance with the drawings provided and specifications. A construction schedule outlining the project timeframe must be submitted. The itemized lump sum price shall include all labor, materials, equipment, insurance, bonding, overhead, profit, and any other fixed costs. The base bid must also include pricing for two bid alternates, which are to be submitted along with the base bid. Project will be constructed under a single prime contract.

a. Division of work: The division of work among it's 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 PHASED CONSTRUCTION

A. The Work shall be conducted in phases, with each phase substantially complete as indicated in the construction plans.

B. Before commencing Work of each phase, submit a schedule showing the sequence, commencement and completion dates for all phases of 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.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

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.
      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

S U P P L E M E N T A L I N S T R U C T I O N S
F O R M I N O R C H A N G E S

C I T Y O F F O R T L A U D E R D A L E

CITY PROJECT NO: #**P** REQUEST NO:

PROJECT: DATE:
OWNER: **City of Fort Lauderdale** CONTRACTOR:
TO: CONTRACT DATED:

The work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Prior to proceeding in accordance with these instructions, indicate your acceptance of these instructions for minor changes to the Work as consistent with the Contract Documents and return a copy to the City.

DESCRIPTION:

ATTACHMENTS:

ENGINEER:

FAXED TO: ( ) Contractor
( ) Site Office
( ) Eng. Insp. (954) 828-5074

CC: Project Inspector
Main File

P R O P O S A L R E Q U E S T

C I T Y O F F O R T L A U D E R D A L E

CITY PROJECT NO: **#P** REQUEST NO:

PROJECT: DATE:
OWNER: **City of Fort Lauderdale** CONTRACTOR:
TO: CONTRACT DATED:

Please submit an itemized quotation for changes in the **CONTRACT SUM** and/or **TIME** incidental to the proposed modifications to the Contract Documents described herein.

THIS IS NOT A CHANGE ORDER NOR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED HEREIN.

DESCRIPTION:

ATTACHMENTS:

ENGINEER:

FAXED TO: ( ) Contractor
( ) Site Office
( ) Eng. Insp. (954) 828-5074

CC: Project Inspector
Main File

R E Q U E S T F O R S U B S T I T U T I O N
C I T Y O F F O R T L A U D E R D A L E

CITY PROJECT NO: #**P** REQUEST NO:

PROJECT: DATE:
OWNER: **City of Fort Lauderdale** CONTRACTOR:
TO: CONTRACT DATED:

NAME AND ADDRESS OF CONTRACTOR:

_____
_____
_____
hereby requests acceptance of the following product or system as an "acceptable substitution".

NAME AND DESCRIPTION OF <u>SPECIFIED PRODUCT</u> OR SYSTEM:

_____
_____
MANUFACTURER:

_____
SPECIFICATION SECTION _____, PAGE(S)_____
PARAGRAPH(S)_____
DRAWING_____ DETAIL NUMBER_____

NAME AND DESCRIPTION OF <u>PROPOSED SUBSTITUTION</u>:

_____
_____
_____
MANUFACTURER:_____
ADDRESS:_____
TELEPHONE:_____
NAME OF VENDOR:_____
NAME AND ADDRESS OF PREVIOUS PROJECT WHERE PROPOSED SUBSTITUTION WAS UTILIZED:

_____
_____
TELEPHONE:_____
REASON FOR PROPOSING SUBSTITUTION: _____
_____
DOES SUBSTITUTION AFFECT OTHER MATERIALS, INSTALLATION OR SYSTEMS?
YES_____ NO_____ IF YES, ATTACHED COMPLETE DATA.
DOES SUBSTITUTION REQUIRE REVISION OR REDESIGN OF ANY COMPONENT OF BUILDING OR ELECTRICAL OR MECHANICAL WORK?
YES_____ NO_____ IF YES, ATTACHED COMPLETE DATA.

THE ATTACHED DATA IS FURNISHED FOR EVALUATION OF THE SUBSTITUTION:
( )CATALOG ( ) DRAWINGS ( ) SAMPLES ( ) TESTS ( ) REPORTS ( ) OTHER

_____

R E Q U E S T F O R S U B S T I T U T I O N

SAVING TO CITY FOR ACCEPTING SUBSTITUTE:
COST OF SPECIFIED ITEM:
_____ DOLLARS
($_____)
COST OF SUBSTITUTION ITEM:
_____ DOLLARS
($_____)

TOTAL SAVINGS (CREDIT) TO CITY FOR ACCEPTING SUBSTITUTE:
_____ DOLLARS
($_____)

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PROPOSED SUBSTITUTION HAS BEEN FULLY CHECKED AND COORDINATED WITH THE CONTRACT DOCUMENTS, THAT THE PROPOSED SUBSTITUTION MEETS OR EXCEEDS THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND THAT ALL INFORMATION IS TRUE AND ACCURATE.

FIRM NAME: _____

BY: _____

DATE SIGNED:_____

PRINT NAME LEGIBLY:_____

FAXED TO:
CC

SECTION 012900
PAYMENT 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 necessary to prepare and process Applications for Payment.

B. Related Sections include the following:

1. Division 01 Section "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
2. Division 01 Section "Unit Prices" for administrative requirements governing use of unit prices.
3. Division 01 Section "Construction Progress Documentation" for administrative 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:

1. 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

A. The General Contractor must meet with the City Representative on or about the 25th of each 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. A copy of the agreed amounts will be signed by the parties 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.

C. Each pay request must be accompanied by a partial release of lien by the General

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:

1. List of subcontractors.
2. Contractor's Construction Schedule (preliminary if not final).
3. 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.
3. 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.~~

~~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 10% 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.
2. 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.

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.
6. 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 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. 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.

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
3. 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. Responsibility for temporary facilities and controls
16. Major equipment deliveries and priorities
17. Working hours
18. Safety and first-aid procedures
19. Security procedures
20. Housekeeping procedures including progress cleaning.
21. Processing of payments or contract.

D. Progress Meetings: Conduct progress meetings at bi-weekly intervals. Coordinate dates of meetings with preparation of payment requests.

1. 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.

2. 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.

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:

1. **City Project Number**
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.**
11. **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.

2. 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.

3. 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

1. 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.

5. 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.

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

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.

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. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.

1. 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.

D. Daily Construction Reports: Submit **one (1)** copy at **weekly** intervals.

E. Field Condition Reports: Submit **one (1)** copy at time of discovery of differing conditions.

1.5 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.

    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:

2. Activity Duration: Define activities so no activity is longer than ten (10) days, unless specifically allowed by Construction Project Manager.

3. 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.

4. 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.

5. 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.

6. 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. 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.

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.

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.
5. Material deliveries.
6. High and low temperatures and general weather conditions.
7. Accidents.
8. Meetings and significant decisions.
9. Unusual events.
10. Orders and requests of authorities having jurisdiction.
11. Change Orders received and implemented.
12. Construction Change Directives received and implemented.
13. Services connected and disconnected.
14. Substantial Completions authorized.

B. 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.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. Scheduling Consultant: Engage a consultant to provide planning, evaluation, and reporting using CPM scheduling.

1. 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.

1. 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.
2. 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 01 Section "Demonstration and Training" for submitting videotapes of demonstration of equipment and training of Owner's personnel.
4. Division 02 Section "Structure Demolition" for photographic documentation before building demolition operations commence.
5. Division 02 Section "Selective Structure Demolition" for photographic documentation before building demolition operations commence.
6. Division 31 Section "Site Clearing" 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.

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. The contractor may have to submit aerial photos for the progress payment request of the project if the City Manager requested.

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.

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.

1. Coordinate submittal schedule with list of subcontracts, and Contractor's construction schedule.
2. Initial Submittal: Submit concurrently with startup construction schedule. List those 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.

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.

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

SECTION 015000
TEMPORARY FACILITIES AND CONTROLS

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 requirements for temporary utilities, support facilities, and security and protection facilities. Contractor to provide temporary trailer, secured per code, to contain permit drawings and as contractor's site office. This temporary facility to be air conditioned.

B. Related Sections include the following:

1. Division 01 Section "Summary" for limitations on utility interruptions and other work restrictions.
2. Division 01 Section "Submittal Procedures" for procedures for submitting copies of implementation and termination schedule and utility reports.
3. Divisions 02 through 16 Sections for temporary heat, ventilation, and humidity requirements for products in those Sections.
4. Division 31 Section "Termite Control" for pest control.

1.3 DEFINITIONS

A. Permanent Enclosure: As determined by Architect, permanent or temporary roofing is complete, insulated, and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

1.4 USE CHARGES

A. General: Cost or use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, City's Representative, Architect, testing agencies, and authorities having jurisdiction.

B. Sewer Service: Pay sewer service use charges for sewer usage by all entities for construction operations.

C. Water Service: Pay water service use charges for water used by all entities for construction operations.

D. Electric Power Service: Pay electric power service use charges for electricity used by all entities for construction operations.

1.5 SUBMITTALS

A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

1.6 QUALITY ASSURANCE

A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.7 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before City's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Pavement: Comply with Division 32 pavement Sections.

B. Chain-Link Fencing: Minimum 0.148-inch, thick, galvanized steel, chain-link fabric fencing; minimum 6 feet high with galvanized steel pipe posts; minimum 2-3/8-inch OD line posts and 2-7/8-inch OD corner and pull posts, with 1-5/8-inch OD top rails.

C. Lumber and Plywood: Comply with requirements in Division 06 Section "Rough Carpentry."

D. Paint: Comply with requirements in Division 09 painting Sections.

2.2 TEMPORARY FACILITIES

A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls, and foundations adequate for normal loading.

B. Common-Use Field Office: Of sufficient size to accommodate needs of construction personnel, including City’s Representative. Keep office clean and orderly. Furnish and equip offices as follows:

1. Furniture required for Project-site documents including file cabinets, plan tables, plan racks, and bookcases.
2. Conference room of sufficient size to accommodate meetings of 10 to 12 individuals. Provide electrical power service and 120-V ac duplex receptacles, with not less than 1 receptacle on each wall. Furnish room with conference table, chairs, and 4-foot-square tack board.
3. Drinking water and private toilet.
4. Coffee machine and supplies.
5. Heating and cooling equipment necessary to maintain a uniform indoor temperature of 68 to 76 deg F.

6. Lighting fixtures capable of maintaining average illumination of 20 fc at desk height.
7. Dedicated telephone line for facsimile machine.
8. Facsimile machine and all supplies, including maintenance and electrical service.
9. Copy machine and all supplies, including maintenance and electrical service.
10. Answering machine on Contractor's telephone line.

C. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.

1. Store combustible materials apart from building.

D. The following additional facilities as required for completion of the work.

1. Construction signs.
2. Contractor's and subcontractor's equipment.
3. Temporary containers for construction waste materials.
4. Temporary barricades, railings and fences.

2.3 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

B. HVAC Equipment: Unless City authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.

1. Use of gasoline-burning space heaters, open-flame heaters, or salamander-type heating units is prohibited.
2. Heating Units: Listed and labeled for type of fuel being consumed, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
3. Permanent HVAC System: If City authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 8 at each return air grille in system and remove at end of construction.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.

B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

A. General: Install temporary service or connect to existing service.

1. Arrange with utility company, City, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.

B. Sewers and Drainage: Provide temporary utilities to remove effluent lawfully.

1. Connect temporary sewers to city system as directed by authorities having jurisdiction.

C. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction.

D. Water Service: Use of City's existing water service facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to City. At Substantial Completion, restore these facilities to condition existing before initial use.

1. Where installations below an outlet might be damaged by spillage or leakage, provide a drip pan of suitable size to minimize water damage. Drain accumulated water promptly from pans.

E. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.

F. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.

G. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.

H. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.

1. Install electric power service, unless otherwise indicated.

I. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

J. Telephone Service: Provide temporary telephone service in common-use facilities for use by all construction personnel. Install at least one telephone line for each field office.

1. Provide additional telephone lines for the following:

a. Provide a dedicated telephone line for each facsimile machine and computer in each field office.
b. Provide one telephone line for City's use.

2. At each telephone, post a list of important telephone numbers.

a. Police and fire departments.
b. Ambulance service.
c. Contractor's home office.
d. Architect.
e. Engineers.
f. City of Fort Lauderdale Construction Manager.
g. Principal subcontractors' field and home offices.

3. Provide superintendent with cellular telephone or portable two-way radio for use when away from field office.

K. Electronic Communication Service: Provide temporary electronic communication service, including electronic mail, in common-use facilities.

1. Provide DSL in primary field office.

3.3 SUPPORT FACILITIES INSTALLATION

A. General: Comply with the following:

1. Provide incombustible construction for offices, shops, and sheds located within construction area or within 30 feet of building lines. Comply with NFPA 241.
2. Maintain support facilities until near Substantial Completion. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to City.

B. Traffic Controls: Comply with requirements of authorities having jurisdiction.

1. Protect existing site improvements to remain including curbs, pavement, and utilities.
2. Maintain access for fire-fighting equipment and access to fire hydrants.

C. Parking: Provide temporary parking areas for construction personnel.

D. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.

1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties nor endanger permanent Work or temporary facilities.

E. Project Identification and Temporary Signs: Provide Project identification and other signs as indicated in contract documents. Install signs where indicated to inform public and individuals seeking entrance to Project. Unauthorized signs are not permitted.

1. Provide temporary, directional signs for construction personnel and visitors.
2. Maintain and touchup signs so they are legible at all times.

F. Waste Disposal Facilities: Comply with requirements specified in Division 01 Section "Construction Waste Management and Disposal." Also comply with all LEED requirements.

G. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 01 Section "Execution" for progress cleaning requirements and LEED requirements.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

1. Comply with work restrictions specified in Division 01 Section "Summary" and all LEED requirements.

B. Temporary Erosion and Sedimentation Control: Comply with requirements specified in Division 31 Section 311000 "Site Clearing."

C. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.

1. Inspect, repair, and maintain erosion- and sedimentation-control measures during construction until permanent vegetation has been established.

D. Stormwater Control: Comply with authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.

E. Tree and Plant Protection: Comply with requirements specified in Division 32 Section "Tree Protection and Trimming."

F. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

G. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Obtain extended warranty for City. Perform control operations lawfully, using environmentally safe materials.

H. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people and animals from easily entering site except by entrance gates.

1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations.

2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Provide City with one set of keys.

I. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.

J. Barricades, Warning Signs, and Lights: Comply with requirements of Florida Building Code

Chapter 33 for erecting structurally adequate barricades, including warning signs and lighting.

K. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.

1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.

L. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by City from fumes and noise.

1. Construct dustproof partitions with gypsum wallboard with joints taped on occupied side, and fire-retardant plywood on construction operations side.

2. Construct dustproof partitions with 2 layers of 3-mil polyethylene sheet on each side. Cover floor with 2 layers of 3-mil polyethylene sheet, extending sheets 18 inches up the sidewalls. Overlap and tape full length of joints. Cover floor with fire-retardant plywood.

   a. Construct vestibule and airlock at each entrance through temporary partition with not less than 48 inches between doors. Maintain water-dampened foot mats in vestibule.

3. Insulate partitions to provide noise protection to occupied areas.
4. Seal joints and perimeter. Equip partitions with dustproof doors and security locks.
5. Protect air-handling equipment.
6. Weather strip openings.
7. Provide walk-off mats at each entrance through temporary partition.

M. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.

1. Prohibit smoking in construction areas.
2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire-protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.

3.5 OPERATION, TERMINATION, AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

B. Maintenance: Maintain facilities in good operating condition until removal.

1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.

C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are property of Contractor. City reserves right to take possession of Project identification signs.
2. Remove temporary paving not intended for or acceptable for integration into permanent paving. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary entrances, as required by authorities having jurisdiction.
3. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 01 Section "Closeout Procedures."

END OF SECTION 015000

SECTION 01590 – PROJECT 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.

Construction Sign Request Form

FXE AES Apron Pavment Rehab PROJECT 12833

Title (Not Bold):

What's Happening?

The pavement at the FXE AES Apron is in poor condition based on FDOT 2023 Pavement Inspection Report. The Pavement will need to be milled and resurface to bring it back to good condition.

Benefits:

The milling and paving will extend the pavement life of the apron to additional 15 years.

Number of Neighbors Benefitted: N/A

Cost: T.B.D

Month and Year of Expected Completion: 12/2026

Contractor: T.B.D

Phone: 954-828-8000

We're Working On:

Pavement markings

Project Manager Signature

Date

Senior Project Manager Signature

Date

END OF SECTION

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.

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 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. 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.
10. 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.
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 Project Manual.

1. 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-11-inch (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

Advancement of Constructio Technology

PUNCH LIST

Project: 12883

From (A/E): _____

_____

Site Visit Date: _____

To (Contractor): _____

A/E Project Number: _____

_____

Contract For: _____

The following items require the attention of the Contractor for completion or correction. This list may not be all-inclusive, and the failure to include any items on this list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

Item Number	Room Number	Location (Area)	Description	Correction/Completion Date	Verification A/E Check

☐ Attachments

Signed by: Date:

Copies: ☐ Owner ☐ Consultants ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ File

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601 Madison Street, Alexandria, VA 22314-1791

Project Number:_12883____ **Project Name:_FXE AES Apron Pavement Rehab_____** **Inspection Date:_____**

Contractor:_____ **Project Manager: Khant Myat, P.E_____** **Inspector:_____**

Item No.	Description of Deficiency	Date Completed		Comments
		Contractor	PM/CI	

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.
11. This is a four part carbonless form: white copy – project file (scanned copy to unifier project file), yellow copy – to superintendent or CQC representative, pink – copy to contractor home office, orange copy – Construction Inspector

TECHNICAL SPECIFICATIONS

Fort Lauderdale Executive Airport

AES APRON PAVEMENT REHABILITATION

City Project No. 12883
FDOT Finance Project No. 543351 (Construction)

FXE FORT LAUDERDALE EXECUTIVE AIRPORT

BID DOCUMENTS

MAY 30, 2025

Prepared For:

City of Fort Lauderdale

Prepared By:

HDR Engineering, Inc.
3230 W. Commercial Blvd. - Suite 400 – Fort Lauderdale, Florida – 33309

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** See "Florida Department of Transportation 2025-2026 Standard Specifications for Road and Bridge Construction" for FDOT specifications referred to in Contract Plans.*

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Section 10 Definition of Terms

When the following terms are used in these specifications, in the contract, or in any documents or other instruments pertaining to construction where these specifications govern, the intent and meaning shall be defined as follows:

Paragraph Number	Term	Definition
10-01	**AASHTO**	The American Association of State Highway and Transportation Officials.
10-02	**Access Road**	The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public roadway.
10-03	**Advertisement**	A public announcement, as required by local law, inviting bids for work to be performed and materials to be furnished.
10-04	**Airport**	Airport means an area of land or water which is used or intended to be used for the landing and takeoff of aircraft; an appurtenant area used or intended to be used for airport buildings or other airport facilities or rights of way; airport buildings and facilities located in any of these areas, and a heliport.
10-05	**Airport Improvement Program (AIP)**	A grant-in-aid program, administered by the Federal Aviation Administration (FAA).
10-06	**Air Operations Area (AOA)**	The term air operations area (AOA) shall mean any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operation area shall include such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.
10-07	**Apron**	Area where aircraft are parked, unloaded or loaded, fueled and/or serviced.
10-08	**ASTM International (ASTM)**	Formerly known as the American Society for Testing and Materials (ASTM).
10-09	**Award**	The Owner's notice to the successful bidder of the acceptance of the submitted bid.
10-10	**Bidder**	Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.
10-11	**Building Area**	An area on the airport to be used, considered, or intended to be used for airport buildings or other airport facilities or rights-of-

Paragraph Number	Term	Definition
		way together with all airport buildings and facilities located thereon.
10-12	**Calendar Day**	Every day shown on the calendar.
10-13	**Certificate of Analysis (COA)**	The COA is the manufacturer's Certificate of Compliance (COC) including all applicable test results required by the specifications.
10-14	**Certificate of Compliance (COC)**	The manufacturer's certification stating that materials or assemblies furnished fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer's authorized representative.
10-15	**Change Order**	A written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for work within the scope of the contract and necessary to complete the project.
10-16	**Contract**	A written agreement between the Owner and the Contractor that establishes the obligations of the parties including but not limited to performance of work, furnishing of labor, equipment and materials and the basis of payment. The awarded contract includes but may not be limited to: Advertisement, Contract form, Proposal, Performance bond, payment bond, General provisions, certifications and representations, Technical Specifications, Plans, Supplemental Provisions, standards incorporated by reference and issued addenda.
10-17	**Contract Item (Pay Item)**	A specific unit of work for which a price is provided in the contract.
10-18	**Contract Time**	The number of calendar days or working days, stated in the proposal, allowed for completion of the contract, including authorized time extensions. If a calendar date of completion is stated in the proposal, in lieu of a number of calendar or working days, the contract shall be completed by that date.
10-19	**Contractor**	The individual, partnership, firm, or corporation primarily liable for the acceptable performance of the work contracted and for the payment of all legal debts pertaining to the work who acts directly or through lawful agents or employees to complete the contract work.
10-20	**Contractors Quality Control (QC) Facilities**	The Contractor's QC facilities in accordance with the Contractor Quality Control Program (CQCP).
10-21	**Contractor Quality Control Program (CQCP)**	Details the methods and procedures that will be taken to assure that all materials and completed construction required by the contract conform to contract plans, technical specifications and

Paragraph Number	Term	Definition
		other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors.
10-22	**Control Strip**	A demonstration by the Contractor that the materials, equipment, and construction processes results in a product meeting the requirements of the specification.
10-23	**Construction Safety and Phasing Plan (CSPP)**	The overall plan for safety and phasing of a construction project developed by the airport operator, or developed by the airport operator's consultant and approved by the airport operator. It is included in the invitation for bids and becomes part of the project specifications.
10-24	**Drainage System**	The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.
10-25	**Engineer**	The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for engineering, inspection, and/or observation of the contract work and acting directly or through an authorized representative.
10-26	**Equipment**	All machinery, together with the necessary supplies for upkeep and maintenance; and all tools and apparatus necessary for the proper construction and acceptable completion of the work.
10-27	**Extra Work**	An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Owner's Engineer or Resident Project Representative (RPR) to be necessary to complete the work within the intended scope of the contract as previously modified.
10-28	**FAA**	The Federal Aviation Administration. When used to designate a person, FAA shall mean the Administrator or their duly authorized representative.
10-29	**Federal Specifications**	The federal specifications and standards, commercial item descriptions, and supplements, amendments, and indices prepared and issued by the General Services Administration.
10-30	**Force Account**	**a.** Contract Force Account - A method of payment that addresses extra work performed by the Contractor on a time and material basis. **b.** Owner Force Account - Work performed for the project by the Owner's employees.
10-31	**Intention of Terms**	Whenever, in these specifications or on the plans, the words "directed," "required," "permitted," "ordered," "designated," "prescribed," or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Engineer and/or Resident

Paragraph Number	Term	Definition
		Project Representative (RPR) is intended; and similarly, the words "approved," "acceptable," "satisfactory," or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Engineer and/or RPR, subject in each case to the final determination of the Owner. Any reference to a specific requirement of a numbered paragraph of the contract specifications or a cited standard shall be interpreted to include all general requirements of the entire section, specification item, or cited standard that may be pertinent to such specific reference.
10-32	**Lighting**	A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing at, taking off from, or taxiing on the airport surface.
10-33	**Major and Minor Contract Items**	A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 20% of the total amount of the award contract. All other items shall be considered minor contract items.
10-34	**Materials**	Any substance specified for use in the construction of the contract work.
10-35	**Modification of Standards (MOS)**	Any deviation from standard specifications applicable to material and construction methods in accordance with FAA Order 5300.1.
10-36	**Notice to Proceed (NTP)**	A written notice to the Contractor to begin the actual contract work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the contract time begins.
10-37	**Owner**	The term "Owner" shall mean the party of the first part or the contracting agency signatory to the contract. Where the term "Owner" is capitalized in this document, it shall mean airport Sponsor only. The Owner for this project is City of Fort Lauderdale.
10-38	**Passenger Facility Charge (PFC)**	Per 14 Code of Federal Regulations (CFR) Part 158 and 49 United States Code (USC) § 40117, a PFC is a charge imposed by a public agency on passengers enplaned at a commercial service airport it controls.
10-39	**Pavement Structure**	The combined surface course, base course(s), and subbase course(s), if any, considered as a single unit.
10-40	**Payment bond**	The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will pay in full all bills and accounts for materials and labor used in the construction of the work.

Paragraph Number	Term	Definition
10-41	**Performance bond**	The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will complete the work in accordance with the terms of the contract.
10-42	**Plans**	The official drawings or exact reproductions which show the location, character, dimensions and details of the airport and the work to be done and which are to be considered as a part of the contract, supplementary to the specifications. Plans may also be referred to as 'contract drawings.'
10-43	**Project**	The agreed scope of work for accomplishing specific airport development with respect to a particular airport.
10-44	**Proposal**	The written offer of the bidder (when submitted on the approved proposal form) to perform the contemplated work and furnish the necessary materials in accordance with the provisions of the plans and specifications.
10-45	**Proposal guaranty**	The security furnished with a proposal to guarantee that the bidder will enter into a contract if their own proposal is accepted by the Owner.
10-46	**Quality Assurance (QA)**	Owner's responsibility to assure that construction work completed complies with specifications for payment.
10-47	**Quality Control (QC)**	Contractor's responsibility to control material(s) and construction processes to complete construction in accordance with project specifications.
10-48	**Quality Assurance (QA) Inspector**	An authorized representative of the Engineer and/or Resident Project Representative (RPR) assigned to make all necessary inspections, observations, tests, and/or observation of tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.
10-49	**Quality Assurance (QA) Laboratory**	The official quality assurance testing laboratories of the Owner or such other laboratories as may be designated by the Engineer or RPR. May also be referred to as Engineer's, Owner's, or QA Laboratory.
10-50	**Resident Project Representative (RPR)**	The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for all necessary inspections, observations, tests, and/or observations of tests of the contract work performed or being performed, or of the materials furnished or being furnished by the Contractor, and acting directly or through an authorized representative.
10-51	**Runway**	The area on the airport prepared for the landing and takeoff of aircraft.

Paragraph Number	Term	Definition
10-52	**Runway Safety Area (RSA)**	A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft. See the construction safety and phasing plan (CSPP) for limits of the RSA.
10-53	**Safety Plan Compliance Document (SPCD)**	Details how the Contractor will comply with the CSPP.
10-54	**Specifications**	A part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials or testing which are cited in the contract specifications by reference shall have the same force and effect as if included in the contract physically.
10-55	**Sponsor**	A Sponsor is defined in 49 USC § 47102(24) as a public agency that submits to the FAA for an AIP grant; or a private Owner of a public-use airport that submits to the FAA an application for an AIP grant for the airport.
10-56	**Structures**	Airport facilities such as bridges; culverts; catch basins, inlets, retaining walls, cribbing; storm and sanitary sewer lines; water lines; underdrains; electrical ducts, manholes, handholes, lighting fixtures and bases; transformers; navigational aids; buildings; vaults; and, other manmade features of the airport that may be encountered in the work and not otherwise classified herein.
10-57	**Subgrade**	The soil that forms the pavement foundation.
10-58	**Superintendent**	The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the RPR, and who shall supervise and direct the construction.
10-59	**Supplemental Agreement**	A written agreement between the Contractor and the Owner that establishes the basis of payment and contract time adjustment, if any, for the work affected by the supplemental agreement. A supplemental agreement is required if: (1) in scope work would increase or decrease the total amount of the awarded contract by more than 25%: (2) in scope work would increase or decrease the total of any major contract item by more than 25%; (3) work that is not within the scope of the originally awarded contract; or (4) adding or deleting of a major contract item.
10-60	**Surety**	The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds that are furnished to the Owner by the Contractor.
10-61	**Taxilane**	A taxiway designed for low speed movement of aircraft between aircraft parking areas and terminal areas.
10-62	**Taxiway**	The portion of the air operations area of an airport that has been designated by competent airport authority for movement of

Paragraph Number	Term	Definition
		aircraft to and from the airport's runways, aircraft parking areas, and terminal areas.
10-63	**Taxiway/Taxilane Safety Area (TSA)**	A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an aircraft. See the construction safety and phasing plan (CSPP) for limits of the TSA.
10-64	**Work**	The furnishing of all labor, materials, tools, equipment, and incidentals necessary or convenient to the Contractor's performance of all duties and obligations imposed by the contract, plans, and specifications.
10-65	**Working day**	A working day shall be any day other than a legal holiday, Saturday, or Sunday on which the normal working forces of the Contractor may proceed with regular work for at least six (6) hours toward completion of the contract. When work is suspended for causes beyond the Contractor's control, it will not be counted as a working day. Saturdays, Sundays and holidays on which the Contractor's forces engage in regular work will be considered as working days.
10-66	**Owner Defined terms**	***Advisory Circular (AC) - A document issued by the FAA containing informational material and guidance. When referred to in the drawings (plans) and specifications, advisory circulars shall have the same force as supplemental specifications.*** ***Certification - When "certification" is used to describe that which is to be submitted for approval from the Contractor, jointly with a supplier or by himself for his own materials, whether manufactured or purchased by the Contractor, will be construed to mean compliance in individual or completed form with the drawings (plans), specifications and/or intent of the design.*** ***Awarded Contract - The written agreement between the Owner and Contractor, covering the work to be performed. The awarded Contract shall include, but is not limited to: The Advertisement; The Contract Form; The Proposal; The Performance Bond and Payment Bond; any required insurance certificates; The General Provisions; The General Requirements, The Special Provisions; The Specifications; Standard Forms; The Drawings (Plans), any addenda issued to bidders, Change Orders, Terms and Conditions, and agreements which are required to complete the construction of the work in an acceptable manner, including authorized extensions thereof, all of which constitute one instrument.*** ***Special Provisions - The specific clauses setting forth conditions or requirements peculiar to the project under consideration.*** ***Subcontractor - The pre-qualified (where required) individual, partnership or corporation, or a combination thereof,***

Paragraph Number	Term	Definition
		undertaking the execution of a part of the work under the terms of the Contract, by virtue of an agreement with the contractor approved by the Owner.

END OF SECTION 10

Section 20 Proposal Requirements and Conditions

20-01 Advertisement (Notice to Bidders). See Advertisement for Bid.

20-02 Qualification of bidders. Each bidder shall submit evidence of competency and evidence of financial responsibility to perform the work to the Owner at the time of bid opening.

Evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, and a list of equipment and a list of key personnel that would be available for the work.

Unless otherwise specified, a bidder may submit evidence that they are prequalified with the State Highway Division and are on the current "bidder's list" of the state in which the proposed work is located. Evidence of State Highway Division prequalification may be submitted as evidence of financial responsibility in lieu of the certified statements or reports specified above.

20-03 Contents of proposal forms. The Owner's proposal forms state the location and description of the proposed construction; the place, date, and time of opening of the proposals; and the estimated quantities of the various items of work to be performed and materials to be furnished for which unit bid prices are asked. The proposal form states the time in which the work must be completed, and the amount of the proposal guaranty that must accompany the proposal. The Owner will accept only those Proposals properly executed on physical forms or electronic forms provided by the Owner. Bidder actions that may cause the Owner to deem a proposal irregular are given in paragraph 20-09 *Irregular proposals*.

Mobilization is limited to 10 percent of the total project cost. Any amount in excess of 10 % will be moved to the last Line Item as deemed necessary and created by Procurement Services. However, the total bid amount will not change. The 10% ceiling on Mobilization/Demobilization is not responsiveness, just an instruction on the amount the CITY will pay for Mobilization/Demobilization. Payment for mobilization will be made at the lump sum price named in the Item Response Form. The amount in excess of 10% will be paid on the last payment application submitted by contractor.

A prebid conference is optional on this project to discuss as a minimum, the following items: material requirements; submittals; Quality Control/Quality Assurance requirements; the construction safety and phasing plan including airport access and staging areas; and unique airfield paving construction requirements. **See Notice to Bidders.**

20-04 Issuance of proposal forms. The Owner reserves the right to refuse to issue a proposal form to a prospective bidder if the bidder is in default for any of the following reasons:

a. Failure to comply with any prequalification regulations of the Owner, if such regulations are cited, or otherwise included, in the proposal as a requirement for bidding.

b. Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force with the Owner at the time the Owner issues the proposal to a prospective bidder.

c. Documented record of Contractor default under previous contracts with the Owner.

d. Documented record of unsatisfactory work on previous contracts with the Owner.

20-05 Interpretation of estimated proposal quantities. An estimate of quantities of work to be done and materials to be furnished under these specifications is given in the proposal. It is the result of careful calculations and is believed to be correct. It is given only as a basis for comparison of proposals and the award of the contract. The Owner does not expressly, or by implication, agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. ***The Contractor shall verify all quantities as noted in the plans prior to ordering material or equipment. No additional compensation shall be made for stored materials, re-stocking fees or other fees associated with errors in quantity calculations.*** It is understood that the quantities may be increased or decreased as provided in the Section 40, paragraph 40-02, Alteration of Work and Quantities, without in any way invalidating the unit bid prices.

20-06 Examination of plans, specifications, and site. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. Bidders shall satisfy themselves to the character, quality, and quantities of work to be performed, materials to be furnished, and to the requirements of the proposed contract. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and is satisfied to the conditions to be encountered in performing the work and the requirements of the proposed contract, plans, and specifications.

Boring logs and other records of subsurface investigations and tests are available for inspection of bidders. It is understood and agreed that such subsurface information, whether included in the plans, specifications, or otherwise made available to the bidder, was obtained and is intended for the Owner's design and estimating purposes only. Such information has been made available for the convenience of all bidders. It is further understood and agreed that each bidder is solely responsible for all assumptions, deductions, or conclusions which the bidder may make or obtain from their own examination of the boring logs and other records of subsurface investigations and tests that are furnished by the Owner.

20-07 Preparation of proposal. The bidder shall submit their proposal on the forms furnished by the Owner. All blank spaces in the proposal forms, unless explicitly stated otherwise, must be correctly filled in where indicated for each and every item for which a quantity is given. The bidder shall state the price (written in ink or typed) both in words and numerals which they propose for each pay item furnished in the proposal. In case of conflict between words and numerals, the words, unless obviously incorrect, shall govern.

All bids shall besubmitted electronically on the City's procurement website.

20-08 Responsive and responsible bidder. A responsive bid conforms to all significant terms and conditions contained in the Owner's invitation for bid. It is the Owner's responsibility to decide if the exceptions taken by a bidder to the solicitation are material or not and the extent of deviation it is willing to accept.

A responsible bidder has the ability to perform successfully under the terms and conditions of a proposed procurement, as defined in 2 CFR § 200.318(h). This includes such matters as Contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

20-09 Irregular proposals. Proposals shall be considered irregular for the following reasons:

a. If the proposal is on a form other than that furnished by the Owner, or if the Owner's form is altered, or if any part of the proposal form is detached.

b. If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind that make the proposal incomplete, indefinite, or otherwise ambiguous.

c. If the proposal does not contain a unit price for each pay item listed in the proposal, except in the case of authorized alternate pay items, for which the bidder is not required to furnish a unit price.

d. If the proposal contains unit prices that are obviously unbalanced.

e. If the proposal is not accompanied by the proposal guaranty specified by the Owner.

f. If the applicable Disadvantaged Business Enterprise information is incomplete.

The Owner reserves the right to reject any irregular proposal and the right to waive technicalities if such waiver is in the best interest of the Owner and conforms to local laws and ordinances pertaining to the letting of construction contracts.

20-10 Bid guarantee. Each separate proposal shall be accompanied by a bid bond, certified check, or other specified acceptable collateral, in the amount specified in the proposal form. Such bond, check, or collateral, shall be made payable to the Owner.

20-11 Delivery of proposal. All bids shall besubmitted electronically on the City's procurement website.

20-12 Withdrawal or revision of proposals. A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided that the bidder's request for withdrawal is received by the Owner in writing **or** by email before the time specified for opening bids. Revised proposals must be received at the place specified in the advertisement before the time specified for opening all bids.

20-13 Public opening of proposals. Proposals shall be opened, and read, publicly at the time and place specified in the advertisement. Bidders, their authorized agents, and other interested persons are invited to attend. Proposals that have been withdrawn (by written or telegraphic request) or received after the time specified for opening bids shall be returned to the bidder unopened.

20-14 Disqualification of bidders. A bidder shall be considered disqualified for any of the following reasons:

a. Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.

b. Evidence of collusion among bidders. Bidders participating in such collusion shall be disqualified as bidders for any future work of the Owner until any such participating bidder has been reinstated by the Owner as a qualified bidder.

c. If the bidder is considered to be in "default" for any reason specified in paragraph 20-04, *Issuance of Proposal Forms,* of this section.

20-15 Discrepancies and Omissions. A Bidder who discovers discrepancies or omissions with the project bid documents shall immediately notify the Owner's Engineer of the matter. A bidder that has doubt as to the true meaning of a project requirement may submit to the Owner's Engineer a written request for interpretation no later than **10 working** days prior to bid opening.

Any interpretation of the project bid documents by the Owner's Engineer will be by written addendum issued by the Owner. The Owner will not consider any instructions, clarifications or interpretations of the bidding documents in any manner other than written addendum.

END OF SECTION 20

Section 30 Award and Execution of Contract

30-01 Consideration of proposals. After the proposals are publicly opened and read, they will be compared on the basis of the summation of the products obtained by multiplying the estimated quantities shown in the proposal by the unit bid prices. If a bidder's proposal contains a discrepancy between unit bid prices written in words and unit bid prices written in numbers, the unit bid price written in words shall govern.

Until the award of a contract is made, the Owner reserves the right to reject a bidder's proposal for any of the following reasons:

a. If the proposal is irregular as specified in Section 20, paragraph 20-09, *Irregular Proposals*.

b. If the bidder is disqualified for any of the reasons specified Section 20, paragraph 20-14, *Disqualification of Bidders*.

In addition, until the award of a contract is made, the Owner reserves the right to reject any or all proposals, waive technicalities, if such waiver is in the best interest of the Owner and is in conformance with applicable state and local laws or regulations pertaining to the letting of construction contracts; advertise for new proposals; or proceed with the work otherwise. All such actions shall promote the Owner's best interests.

30-02 Award of contract. The award of a contract, if it is to be awarded, shall be made within **120** calendar days of the date specified for publicly opening proposals, unless otherwise specified herein.

If the Owner elects to proceed with an award of contract, the Owner will make award to the responsible bidder whose bid, conforming with all the material terms and conditions of the bid documents, is the lowest in price.

30-03 Cancellation of award. The Owner reserves the right to cancel the award without liability to the bidder, except return of proposal guaranty, at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with paragraph 30-07 *Approval of Contract*.

30-04 Return of proposal guaranty. All proposal guaranties, except those of the two lowest bidders, will be returned immediately after the Owner has made a comparison of bids as specified in the paragraph 30-01, *Consideration of Proposals.* Proposal guaranties of the two lowest bidders will be retained by the Owner until such time as an award is made, at which time, the unsuccessful bidder's proposal guaranty will be returned. The successful bidder's proposal guaranty will be returned as soon as the Owner receives the contract bonds as specified in paragraph 30-05, *Requirements of Contract Bonds.*

30-05 Requirements of contract bonds. At the time of the execution of the contract, the successful bidder shall furnish the Owner a surety bond or bonds that have been fully executed by the bidder and the surety guaranteeing the performance of the work and the payment of all legal debts that may be incurred by reason of the Contractor's performance of the work. The surety and the form of the bond or bonds shall be acceptable to the Owner. Unless otherwise specified in this subsection, the surety bond or bonds shall be in a sum equal to the full amount of the contract.

30-06 Execution of contract. The successful bidder shall sign (execute) the necessary agreements for entering into the contract and return the signed contract to the Owner, along with the fully executed surety bond or bonds specified in paragraph 30-05, *Requirements of Contract Bonds*, of this section, within 10 calendar days from the date mailed or otherwise delivered to the successful bidder.

30-07 Approval of contract. Upon receipt of the contract and contract bond or bonds that have been executed by the successful bidder, the Owner shall complete the execution of the contract in accordance with local laws or ordinances, and return the fully executed contract to the Contractor. Delivery of the fully executed contract to the Contractor shall constitute the Owner's approval to be bound by the successful bidder's proposal and the terms of the contract.

30-08 Failure to execute contract. Failure of the successful bidder to execute the contract and furnish an acceptable surety bond or bonds within the period specified in paragraph 30-06, *Execution of Contract*, of this section shall be just cause for cancellation of the award and forfeiture of the proposal guaranty, not as a penalty, but as liquidated damages to the Owner.

END OF SECTION 30

Section 40 Scope of Work

40-01 Intent of contract. The intent of the contract is to provide for construction and completion, in every detail, of the work described. It is further intended that the Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the plans, specifications, and terms of the contract.

40-02 Alteration of work and quantities. The Owner reserves the right to make such changes in quantities and work as may be necessary or desirable to complete, in a satisfactory manner, the original intended work. Unless otherwise specified in the Contract, the Owner's Engineer or RPR shall be and is hereby authorized to make, in writing, such in-scope alterations in the work and variation of quantities as may be necessary to complete the work, provided such action does not represent a significant change in the character of the work.

For purpose of this section, a significant change in character of work means: any change that is outside the current contract scope of work; any change (increase or decrease) in the total contract cost by more than 10%; or any change in the total cost of a major contract item by more than 10%.

Work alterations and quantity variances that do not meet the definition of significant change in character of work shall not invalidate the contract nor release the surety. Contractor agrees to accept payment for such work alterations and quantity variances in accordance with Section 90, paragraph 90-03, *Compensation for Altered Quantities*.

Should the value of altered work or quantity variance meet the criteria for significant change in character of work, such altered work and quantity variance shall be covered by a supplemental agreement. Supplemental agreements shall also require consent of the Contractor's surety and separate performance and payment bonds. If the Owner and the Contractor are unable to agree on a unit adjustment for any contract item that requires a supplemental agreement, the Owner reserves the right to terminate the contract with respect to the item and make other arrangements for its completion.

40-03 Omitted items. The Owner, the Owner's Engineer or the RPR may provide written notice to the Contractor to omit from the work any contract item that does not meet the definition of major contract item. Major contract items may be omitted by a supplemental agreement. Such omission of contract items shall not invalidate any other contract provision or requirement.

Should a contract item be omitted or otherwise ordered to be non-performed, the Contractor shall be paid for all work performed toward completion of such item prior to the date of the order to omit such item. Payment for work performed shall be in accordance with Section 90, paragraph 90-04, *Payment for Omitted Items*.

40-04 Extra work. Should acceptable completion of the contract require the Contractor to perform an item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, Owner may issue a Change Order to cover the necessary extra work. Change orders for extra work shall contain agreed unit prices for performing the change order work in accordance with the requirements specified in the order, and shall contain any adjustment to the contract time that, in the RPR's opinion, is necessary for completion of the extra work.

When determined by the RPR to be in the Owner's best interest, the RPR may order the Contractor to proceed with extra work as provided in Section 90, paragraph 90-05, *Payment for Extra Work*. Extra work that is necessary for acceptable completion of the project, but is not within the general scope of the work

covered by the original contract shall be covered by a supplemental agreement as defined in Section 10, paragraph 10-59, *Supplemental Agreement*.

If extra work is essential to maintaining the project critical path, RPR may order the Contractor to commence the extra work under a Time and Material contract method. Once sufficient detail is available to establish the level of effort necessary for the extra work, the Owner shall initiate a change order or supplemental agreement to cover the extra work.

Any claim for payment of extra work that is not covered by written agreement (change order or supplemental agreement) shall be rejected by the Owner.

40-05 Maintenance of traffic. It is the explicit intention of the contract that the safety of aircraft, as well as the Contractor's equipment and personnel, is the most important consideration. The Contractor shall maintain traffic in the manner detailed in the Construction Safety and Phasing Plan (CSPP).

a. It is understood and agreed that the Contractor shall provide for the free and unobstructed movement of aircraft in the air operations areas (AOAs) of the airport with respect to their own operations and the operations of all subcontractors as specified in Section 80, paragraph 80-04, *Limitation of Operations*. It is further understood and agreed that the Contractor shall provide for the uninterrupted operation of visual and electronic signals (including power supplies thereto) used in the guidance of aircraft while operating to, from, and upon the airport as specified in Section 70, paragraph 70-15, *Contractor's Responsibility for Utility Service and Facilities of Others*.

b. With respect to their own operations and the operations of all subcontractors, the Contractor shall provide marking, lighting, and other acceptable means of identifying personnel, equipment, vehicles, storage areas, and any work area or condition that may be hazardous to the operation of aircraft, fire-rescue equipment, or maintenance vehicles at the airport in accordance with the construction safety and phasing plan (CSPP) and the safety plan compliance document (SPCD).

c. When the contract requires the maintenance of an existing road, street, or highway during the Contractor's performance of work that is otherwise provided for in the contract, plans, and specifications, the Contractor shall keep the road, street, or highway open to all traffic and shall provide maintenance as may be required to accommodate traffic. The Contractor, at their expense, shall be responsible for the repair to equal or better than preconstruction conditions of any damage caused by the Contractor's equipment and personnel. The Contractor shall furnish, erect, and maintain barricades, warning signs, flag person, and other traffic control devices in reasonable conformity with the Manual on Uniform Traffic Control Devices (MUTCD) (http://mutcd.fhwa.dot.gov/), unless otherwise specified. The Contractor shall also construct and maintain in a safe condition any temporary connections necessary for ingress to and egress from abutting property or intersecting roads, streets or highways.

40-06 Removal of existing structures. All existing structures encountered within the established lines, grades, or grading sections shall be removed by the Contractor, unless such existing structures are otherwise specified to be relocated, adjusted up or down, salvaged, abandoned in place, reused in the work or to remain in place. The cost of removing such existing structures shall not be measured or paid for directly, but shall be included in the various contract items.

Should the Contractor encounter an existing structure (above or below ground) in the work for which the disposition is not indicated on the plans, the Resident Project Representative (RPR) shall be notified prior to disturbing such structure. The disposition of existing structures so encountered shall be immediately determined by the RPR in accordance with the provisions of the contract.

Except as provided in Section 40, paragraph 40-07, *Rights in and Use of Materials Found in the Work*, it is intended that all existing materials or structures that may be encountered (within the lines, grades, or grading sections established for completion of the work) shall be used in the work as otherwise provided for in the contract and shall remain the property of the Owner when so used in the work.

40-07 Rights in and use of materials found in the work. Should the Contractor encounter any material such as (but not restricted to) sand, stone, gravel, slag, or concrete slabs within the established lines, grades, or grading sections, the use of which is intended by the terms of the contract to be embankment, the Contractor may at their own option either:

a. Use such material in another contract item, providing such use is approved by the RPR and is in conformance with the contract specifications applicable to such use; or,

b. Remove such material from the site, upon written approval of the RPR; or

c. Use such material for the Contractor's own temporary construction on site; or,

d. Use such material as intended by the terms of the contract.

Should the Contractor wish to exercise option a., b., or c., the Contractor shall request the RPR's approval in advance of such use.

Should the RPR approve the Contractor's request to exercise option a., b., or c., the Contractor shall be paid for the excavation or removal of such material at the applicable contract price. The Contractor shall replace, at their expense, such removed or excavated material with an agreed equal volume of material that is acceptable for use in constructing embankment, backfills, or otherwise to the extent that such replacement material is needed to complete the contract work. The Contractor shall not be charged for use of such material used in the work or removed from the site.

Should the RPR approve the Contractor's exercise of option a., the Contractor shall be paid, at the applicable contract price, for furnishing and installing such material in accordance with requirements of the contract item in which the material is used.

It is understood and agreed that the Contractor shall make no claim for delays by reason of their own exercise of option a., b., or c.

The Contractor shall not excavate, remove, or otherwise disturb any material, structure, or part of a structure which is located outside the lines, grades, or grading sections established for the work, except where such excavation or removal is provided for in the contract, plans, or specifications.

40-08 Final cleanup. Upon completion of the work and before acceptance and final payment will be made, the Contractor shall remove from the site all machinery, equipment, surplus and discarded materials, rubbish, temporary structures, and stumps or portions of trees. The Contractor shall cut all brush and woods within the limits indicated and shall leave the site in a neat and presentable condition. Material cleared from the site and deposited on adjacent property will not be considered as having been disposed of satisfactorily, unless the Contractor has obtained the written permission of the property Owner.

END OF SECTION 40

Section 50 Control of Work

50-01 Authority of the Resident Project Representative (RPR). The RPR has final authority regarding the interpretation of project specification requirements. The RPR shall determine acceptability of the quality of materials furnished, method of performance of work performed, and the manner and rate of performance of the work. The RPR does not have the authority to accept work that does not conform to specification requirements.

50-02 Conformity with plans and specifications. All work and all materials furnished shall be in reasonably close conformity with the lines, grades, grading sections, cross-sections, dimensions, material requirements, and testing requirements that are specified (including specified tolerances) in the contract, plans, or specifications.

If the RPR finds the materials furnished, work performed, or the finished product not within reasonably close conformity with the plans and specifications, but that the portion of the work affected will, in their opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, the RPR will advise the Owner of their determination that the affected work be accepted and remain in place. The RPR will document the determination and recommend to the Owner a basis of acceptance that will provide for an adjustment in the contract price for the affected portion of the work. Changes in the contract price must be covered by contract change order or supplemental agreement as applicable.

If the RPR finds the materials furnished, work performed, or the finished product are not in reasonably close conformity with the plans and specifications and have resulted in an unacceptable finished product, the affected work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor in accordance with the RPR's written orders.

The term "reasonably close conformity" shall not be construed as waiving the Contractor's responsibility to complete the work in accordance with the contract, plans, and specifications. The term shall not be construed as waiving the RPR's responsibility to insist on strict compliance with the requirements of the contract, plans, and specifications during the Contractor's execution of the work, when, in the RPR's opinion, such compliance is essential to provide an acceptable finished portion of the work.

The term "reasonably close conformity" is also intended to provide the RPR with the authority, after consultation with the Sponsor and FAA, to use sound engineering judgment in their determinations to accept work that is not in strict conformity, but will provide a finished product equal to or better than that required by the requirements of the contract, plans and specifications.

The RPR will not be responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction or the safety precautions incident thereto.

50-03 Coordination of contract, plans, and specifications. The contract, plans, specifications, and all referenced standards cited are essential parts of the contract requirements. If electronic files are provided and used on the project and there is a conflict between the electronic files and hard copy plans, the hard copy plans shall govern. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, calculated dimensions will govern over scaled dimensions; contract technical specifications shall govern over contract general provisions, plans, cited standards for materials or testing, and cited advisory circulars (ACs); contract general provisions shall govern over plans, cited standards for materials or testing, and cited ACs; plans shall govern over cited standards for materials or testing and cited ACs. If

any paragraphs contained in the Special Provisions conflict with General Provisions or Technical Specifications, the Special Provisions shall govern.

From time to time, discrepancies within cited testing standards occur due to the timing of the change, edits, and/or replacement of the standards. If the Contractor discovers any apparent discrepancy within standard test methods, the Contractor shall immediately ask the RPR for an interpretation and decision, and such decision shall be final.

The Contractor shall not take advantage of any apparent error or omission on the plans or specifications. In the event the Contractor discovers any apparent error or discrepancy, Contractor shall immediately notify the Owner or the designated representative in writing requesting their written interpretation and decision.

50-04 List of Special Provisions. Special Provisions and Contract Forms are provided in the Project Manual.

50-05 Cooperation of Contractor. The Contractor shall be supplied with **five** hard copies or an electronic PDF of the plans and specifications. The Contractor shall have available on the construction site at all times one hardcopy each of the plans and specifications. Additional hard copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.

The Contractor shall give constant attention to the work to facilitate the progress thereof, and shall cooperate with the RPR and their inspectors and with other Contractors in every way possible. The Contractor shall have a competent superintendent on the work at all times who is fully authorized as their agent on the work. The superintendent shall be capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the RPR or their authorized representative.

50-06 Cooperation between Contractors. The Owner reserves the right to contract for and perform other or additional work on or near the work covered by this contract.

When separate contracts are let within the limits of any one project, each Contractor shall conduct the work not to interfere with or hinder the progress of completion of the work being performed by other Contractors. Contractors working on the same project shall cooperate with each other as directed.

Each Contractor involved shall assume all liability, financial or otherwise, in connection with their own contract and shall protect and hold harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced because of the presence and operations of other Contractors working within the limits of the same project.

The Contractor shall arrange their work and shall place and dispose of the materials being used to not interfere with the operations of the other Contractors within the limits of the same project. The Contractor shall join their work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

50-07 Construction layout and stakes. The Engineer/RPR shall establish necessary horizontal and vertical control. The establishment of Survey Control and/or reestablishment of survey control shall be by a State Licensed Land Surveyor. Contractor is responsible for preserving integrity of horizontal and vertical controls established by Engineer/RPR. In case of negligence on the part of the Contractor or their employees, resulting in the destruction of any horizontal and vertical control, the resulting costs will be deducted as a liquidated damage against the Contractor.

Prior to the start of construction, the Contractor will check all control points for horizontal and vertical accuracy and certify in writing to the RPR that the Contractor concurs with survey control established for the project. All lines, grades and measurements from control points necessary for the proper execution

and control of the work on this project will be provided to the RPR. The Contractor is responsible to establish all layout required for the construction of the project.

Copies of survey notes will be provided to the RPR for each area of construction and for each placement of material as specified to allow the RPR to make periodic checks for conformance with plan grades, alignments and grade tolerances required by the applicable material specifications. Surveys will be provided to the RPR prior to commencing work items that cover or disturb the survey staking. Survey(s) and notes shall be provided in the following format(s): **Refer to S-101 for project survey requirements.**

Laser, GPS, String line, or other automatic control shall be checked with temporary control as necessary. In the case of error, on the part of the Contractor, their surveyor, employees or subcontractors, resulting in established grades, alignment or grade tolerances that do not concur with those specified or shown on the plans, the Contractor is solely responsible for correction, removal, replacement and all associated costs at no additional cost to the Owner.

Construction Staking and Layout includes but is not limited to:

a. Clearing and Grubbing perimeter staking

b. Rough Grade slope stakes at 100-foot (30-m) stations

c. Drainage Swales slope stakes and flow line blue tops at 50-foot (15-m) stations

Subgrade blue tops at 25-foot (7.5-m) stations and 25-foot (7.5-m) offset distance (maximum) for the following section locations:

a. Runway – minimum five (5) per station

b. Taxiways – minimum three (3) per station

c. Holding apron areas – minimum three (3) per station

d. Roadways – minimum three (3) per station

Base Course blue tops at 25-foot (7.5-m) stations and 25-foot (7.5-m) offset distance (maximum) for the following section locations:

a. Runway – minimum five (5) per station

b. Taxiways – minimum three (3) per station

c. Holding apron areas – minimum three (3) per station

Pavement areas:

a. Edge of Pavement hubs and tacks (for stringline by Contractor) at 100-foot (30-m) stations.

b. Between Lifts at 25-foot (7.5-m) stations for the following section locations:

(1) Runways – each paving lane width

(2) Taxiways – each paving lane width

(3) Holding areas – each paving lane width

c. After finish paving operations at 50-foot (15-m) stations:

(1) All paved areas – Edge of each paving lane prior to next paving lot

d. Shoulder and safety area blue tops at 50-foot (15-m) stations and at all break points with maximum of 50-foot (15-m) offsets.

e. Fence lines at 100-foot (30-m) stations minimum.

f. Electrical and Communications System locations, lines and grades including but not limited to duct runs, connections, fixtures, signs, lights, Visual Approach Slope Indicators (VASIs), Precision Approach Path Indicators (PAPIs), Runway End Identifier Lighting (REIL), Wind Cones, Distance Markers (signs), pull boxes and manholes.

g. Drain lines, cut stakes and alignment on 25-foot (7.5-m) stations, inlet and manholes.

h. Painting and Striping layout (pinned with 1.5 inch PK nails) marked for paint Contractor. (All nails shall be removed after painting).

i. Laser, or other automatic control devices, shall be checked with temporary control point or grade hub at a minimum of once per 400 feet (120 m) per pass (that is, paving lane).

The establishment of Survey Control and/or reestablishment of survey control shall be by a State Licensed Land Surveyor.

Controls and stakes disturbed or suspect of having been disturbed shall be checked and/or reset as directed by the RPR without additional cost to the Owner.

No direct payment will be made, unless otherwise specified in contract documents, for this labor, materials, or other expenses. The cost shall be included in the price of the bid for the various items of the Contract.

50-08 Authority and duties of Quality Assurance (QA) inspectors. QA inspectors shall be authorized to inspect all work done and all material furnished. Such QA inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. QA inspectors are not authorized to revoke, alter, or waive any provision of the contract. QA inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

QA Inspectors are authorized to notify the Contractor or their representatives of any failure of the work or materials to conform to the requirements of the contract, plans, or specifications and to reject such nonconforming materials in question until such issues can be referred to the RPR for a decision.

50-09 Inspection of the work. All materials and each part or detail of the work shall be subject to inspection. The RPR shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

If the RPR requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be at the Contractor's expense.

Provide advance written notice to the RPR of work the Contractor plans to perform each week and each day. Any work done or materials used without written notice and allowing opportunity for inspection by the RPR may be ordered removed and replaced at the Contractor's expense.

Should the contract work include relocation, adjustment, or any other modification to existing facilities, not the property of the (contract) Owner, authorized representatives of the Owners of such facilities shall have the right to inspect such work. Such inspection shall in no sense make any facility owner a party to the contract, and shall in no way interfere with the rights of the parties to this contract.

50-10 Removal of unacceptable and unauthorized work. All work that does not conform to the requirements of the contract, plans, and specifications will be considered unacceptable, unless otherwise

determined acceptable by the RPR as provided in paragraph 50-02, *Conformity with Plans and Specifications*.

Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner in accordance with the provisions of Section 70, paragraph 70-14, *Contractor's Responsibility for Work*.

No removal work made under provision of this paragraph shall be done without lines and grades having been established by the RPR. Work done contrary to the instructions of the RPR, work done beyond the lines shown on the plans or as established by the RPR, except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.

Upon failure on the part of the Contractor to comply with any order of the RPR made under the provisions of this subsection, the RPR will have authority to cause unacceptable work to be remedied or removed and replaced; and unauthorized work to be removed and recover the resulting costs as a liquidated damage against the Contractor.

50-11 Load restrictions. The Contractor shall comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the work. A special permit will not relieve the Contractor of liability for damage that may result from the moving of material or equipment.

The operation of equipment of such weight or so loaded as to cause damage to structures or to any other type of construction will not be permitted. Hauling of materials over the base course or surface course under construction shall be limited as directed. No loads will be permitted on a concrete pavement, base, or structure before the expiration of the curing period. The Contractor, at their own expense, shall be responsible for the repair to equal or better than preconstruction conditions of any damage caused by the Contractor's equipment and personnel.

50-12 Maintenance during construction. The Contractor shall maintain the work during construction and until the work is accepted. Maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces so that the work is maintained in satisfactory condition at all times.

In the case of a contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

All costs of maintenance work during construction and before the project is accepted shall be included in the unit prices bid on the various contract items, and the Contractor will not be paid an additional amount for such work.

50-13 Failure to maintain the work. Should the Contractor at any time fail to maintain the work as provided in paragraph 50-12, *Maintenance during Construction*, the RPR shall immediately notify the Contractor of such noncompliance. Such notification shall specify a reasonable time within which the Contractor shall be required to remedy such unsatisfactory maintenance condition. The time specified will give due consideration to the exigency that exists.

Should the Contractor fail to respond to the RPR's notification, the Owner may suspend any work necessary for the Owner to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the Owner, shall be recovered as a liquidated damage against the Contractor.

50-14 Partial acceptance. If at any time during the execution of the project the Contractor substantially completes a usable unit or portion of the work, the occupancy of which will benefit the Owner, the Contractor may request the RPR to make final inspection of that unit. If the RPR finds upon inspection

that the unit has been satisfactorily completed in compliance with the contract, the RPR may accept it as being complete, and the Contractor may be relieved of further responsibility for that unit. Such partial acceptance and beneficial occupancy by the Owner shall not void or alter any provision of the contract.

50-15 Final acceptance. Upon due notice from the Contractor of presumptive completion of the entire project, the RPR and Owner will make an inspection. If all construction provided for and contemplated by the contract is found to be complete in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection. The RPR shall notify the Contractor in writing of final acceptance as of the date of the final inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the RPR will notify the Contractor and the Contractor (***punch list items)*** shall correct the unsatisfactory work***. The punch list items shall be corrected by the Contractor within 30 calendar days and prior to any request for final inspection or acceptance.*** Upon correction of the work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In such event, the RPR will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

50-16 Claims for adjustment and disputes. If for any reason the Contractor deems that additional compensation is due for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, the Contractor shall notify the RPR in writing of their intention to claim such additional compensation before the Contractor begins the work on which the Contractor bases the claim. If such notification is not given or the RPR is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the RPR has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within 10 calendar days, submit a written claim to the RPR who will present it to the Owner for consideration in accordance with local laws or ordinances.

Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final payment based on differences in measurements or computations.

~~**50-17 Value Engineering Cost Proposal.**~~

~~The provisions of this paragraph will apply only to contracts awarded to the lowest bidder pursuant to competitive bidding.~~

~~On projects with original contract amounts in excess of $100,000, the Contractor may submit to the RPR, in writing, proposals for modifying the plans, specifications or other requirements of the contract for the sole purpose of reducing the cost of construction. The value engineering cost proposal shall not impair, in any manner, the essential functions or characteristics of the project, including but not limited to service life, economy of operation, ease of maintenance, desired appearance, design and safety standards. This provision shall not apply unless the proposal submitted is specifically identified by the Contractor as being presented for consideration as a value engineering proposal.~~

~~Not eligible for value engineering cost proposals are changes in the basic design of a pavement type, runway and taxiway lighting, visual aids, hydraulic capacity of drainage facilities, or changes in grade or alignment that reduce the geometric standards of the project.~~

~~As a minimum, the following information shall be submitted by the Contractor with each proposal:~~

~~a. A description of both existing contract requirements for performing the work and the proposed changes, with a discussion of the comparative advantages and disadvantages of each.~~

~~b. An itemization of the contract requirements that must be changed if the proposal is adopted.~~

~~c. A detailed estimate of the cost of performing the work under the existing contract and under the proposed changes.~~

~~d. A statement of the time by which a change order adopting the proposal must be issued.~~

~~e. A statement of the effect adoption of the proposal will have on the time for completion of the contract.~~

~~f. The contract items of work affected by the proposed changes, including any quantity variation attributable to them.~~

~~The Contractor may withdraw, in whole or in part, any value engineering cost proposal not accepted by the RPR, within the period specified in the proposal. The provisions of this subsection shall not be construed to require the RPR to consider any value engineering cost proposal that may be submitted.~~

~~The Contractor shall continue to perform the work in accordance with the requirements of the contract until a change order incorporating the value engineering cost proposal has been issued. If a change order has not been issued by the date upon which the Contractor's value engineering cost proposal specifies that a decision should be made, or such other date as the Contractor may subsequently have requested in writing, such value engineering cost proposal shall be deemed rejected.~~

~~The RPR shall be the sole judge of the acceptability of a value engineering cost proposal and of the estimated net savings from the adoption of all or any part of such proposal. In determining the estimated net savings, the RPR may disregard the contract bid prices if, in the RPR's judgment such prices do not represent a fair measure of the value of the work to be performed or deleted.~~

~~The Owner may require the Contractor to share in the Owner's costs of investigating a value engineering cost proposal submitted by the Contractor as a condition of considering such proposal. Where such a condition is imposed, the Contractor shall acknowledge acceptance of it in writing. Such acceptance shall constitute full authority for the Owner to deduct the cost of investigating a value engineering cost proposal from amounts payable to the Contractor under the contract.~~

~~If the Contractor's value engineering cost proposal is accepted in whole or in part, such acceptance will be by a contract change order that shall specifically state that it is executed pursuant to this paragraph. Such change order shall incorporate the changes in the plans and specifications which are necessary to permit the value engineering cost proposal or such part of it as has been accepted and shall include any conditions upon which the RPR's approval is based. The change order shall also set forth the estimated net savings attributable to the value engineering cost proposal. The net savings shall be determined as the difference in costs between the original contract costs for the involved work items and the costs occurring as a result of the proposed change. The change order shall also establish the net savings agreed upon and shall provide for adjustment in the contract price that will divide the net savings equally between the Contractor and the Owner.~~

~~The Contractor's 50% share of the net savings shall constitute full compensation to the Contractor for the value engineering cost proposal and the performance of the work.~~

~~Acceptance of the value engineering cost proposal and performance of the work shall not extend the time of completion of the contract unless specifically provided for in the contract change order.~~

50-18 RETEST OF WORK. When as provided for in the Contract documents, the Owner performs sampling tests of the work and the tests show a failure to meet the requirements of the Contract documents, the expense of retesting, after reworking or substitution by the Contractor will be at the expense of the Contractor and such costs will be deducted from the payments otherwise due to the Contractor.

50-19 CORRECTION OF WORK AFTER FINAL PAYMENT. Neither the final certificate, nor payment, nor any provision in the Contract documents shall relieve the Contractor of responsibility for faulty materials or workmanship and, unless otherwise specified, he shall remedy any defect due thereto and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from date of final acceptance. The Owner shall give notice of observed defects with reasonable promptness. Wherever the word "acceptance" occurs, it shall be understood to mean final acceptance.

50-20 WARRANTY AND GUARANTEE. The Contractor warrants to the Owner that all materials furnished under this Contract shall be new unless otherwise specified and that all Work, including without limitation all materials, will be of good quality, free from faults and defects and in conformance with contract requirements. Any work not so conforming to these standards may be considered defective.

If, within one year after the date of final acceptance of the Work, or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract, any of the Work is found to be defective or not in accordance with Contract requirements, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so.

The obligations of the Contractor in this paragraph entitled WARRANTY AND GUARANTEE shall be in addition to and not in limitation of any obligations imposed upon him by special guarantees required by the contract or otherwise prescribed by law.

END OF SECTION 50

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Section 60 Control of Materials

60-01 Source of supply and quality requirements. The materials used in the work shall conform to the requirements of the contract, plans, and specifications. Unless otherwise specified, such materials that are manufactured or processed shall be new (as compared to used or reprocessed).

In order to expedite the inspection and testing of materials, the Contractor shall furnish documentation to the RPR as to the origin, composition, and manufacture of all materials to be used in the work. Documentation shall be furnished promptly after execution of the contract but, in all cases, prior to delivery of such materials.

~~*Contractor shall supply steel and manufactured products that conform to the Buy American provisions established under 49 USC Section 50101 as follows: "Steel products must be 100% U.S. domestic product. Preference shall be given to products that are 100% manufactured and assembled in the U.S. Manufactured products not meeting the 100% U.S. domestic preference may only be used on the project if the FAA has officially granted a permissible waiver to Buy American Preferences. Submittals for all manufactured products must include certification of compliance with Buy American requirements as established under 49 USC Section 50101. Submittal must include sufficient information to confirm compliance or submittal will be returned with no action."*~~

At the RPR's option, materials may be approved at the source of supply before delivery. If it is found after trial that sources of supply for previously approved materials do not produce specified products, the Contractor shall furnish materials from other sources.

The Contractor shall furnish airport lighting equipment that meets the requirements of the specifications; and is listed in AC 150/5345-53, *Airport Lighting Equipment Certification Program* and *Addendum*, that is in effect on the date of advertisement.

60-02 Samples, tests, and cited specifications. All materials used in the work shall be inspected, tested, and approved by the RPR before incorporation in the work unless otherwise designated. Any work in which untested materials are used without approval or written permission of the RPR shall be performed at the Contractor's risk. Materials found to be unacceptable and unauthorized will not be paid for and, if directed by the RPR, shall be removed at the Contractor's expense.

Unless otherwise designated, quality assurance tests will be made by and at the expense of the Owner in accordance with the cited standard methods of ASTM, American Association of State Highway and Transportation Officials (AASHTO), federal specifications, Commercial Item Descriptions, and all other cited methods, which are current on the date of advertisement for bids.

The testing organizations performing on-site quality assurance field tests shall have copies of all referenced standards on the construction site for use by all technicians and other personnel. Unless otherwise designated, samples for quality assurance will be taken by a qualified representative of the RPR. All materials being used are subject to inspection, test, or rejection at any time prior to or during incorporation into the work. Copies of all tests will be furnished to the Contractor's representative at their request after review and approval of the RPR. In the event that any tests show a failure to meet the requirements of the Contract Documents, the expense of retesting, after substitution or modification, shall be paid by the Contractor. *The Contractor shall furnish the required samples without charge and shall give sufficient notification of the placing of orders for materials to permit testing.*

A copy of all Contractor QC test data shall be provided to the RPR daily, along with printed reports, in an approved format, on a weekly basis. After completion of the project, and prior to final payment, the Contractor shall submit a final report to the RPR showing all test data reports, plus an analysis of all results showing ranges, averages, and corrective action taken on all failing tests.

The Contractor shall employ a Quality Control (QC) testing organization to perform all Contractor required QC tests in accordance with Item C-100 Contractor Quality Control Program (CQCP). *The final quality control report, signed and sealed by an engineer registered in Florida, shall be delivered in hard copy*.

60-03 Certification of compliance/analysis (COC/COA). The RPR may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by manufacturer's COC stating that such materials or assemblies fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer. Each lot of such materials or assemblies delivered to the work must be accompanied by a certificate of compliance in which the lot is clearly identified. The COA is the manufacturer's COC and includes all applicable test results. *Certification alone will not relieve the Contractor from his responsibility to provide materials that comply fully with the provisions of these specifications and that acceptable to the Engineer*.

Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and if found not to be in conformity with contract requirements will be subject to rejection whether in place or not.

The form and distribution of certificates of compliance shall be as approved by the RPR.

When a material or assembly is specified by "brand name or equal" and the Contractor elects to furnish the specified "or equal," the Contractor shall be required to furnish the manufacturer's certificate of compliance for each lot of such material or assembly delivered to the work. Such certificate of compliance shall clearly identify each lot delivered and shall certify as to:

a. Conformance to the specified performance, testing, quality or dimensional requirements; and,

b. Suitability of the material or assembly for the use intended in the contract work.

The RPR shall be the sole judge as to whether the proposed "or equal" is suitable for use in the work.

The RPR reserves the right to refuse permission for use of materials or assemblies on the basis of certificates of compliance.

60-04 Plant inspection. The RPR or their authorized representative may inspect, at its source, any specified material or assembly to be used in the work. Manufacturing plants may be inspected from time to time for the purpose of determining compliance with specified manufacturing methods or materials to be used in the work and to obtain samples required for acceptance of the material or assembly.

Should the RPR conduct plant inspections, the following conditions shall exist:

a. The RPR shall have the cooperation and assistance of the Contractor and the producer with whom the Contractor has contracted for materials.

b. The RPR shall have full entry at all reasonable times to such parts of the plant that concern the manufacture or production of the materials being furnished.

c. If required by the RPR, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Place office or working space in a convenient location with respect to the plant.

It is understood and agreed that the Owner shall have the right to retest any material that has been tested and approved at the source of supply after it has been delivered to the site. The RPR shall have the right to

reject only material which, when retested, does not meet the requirements of the contract, plans, or specifications.

60-05 Engineer/ Resident Project Representative (RPR) field office. An Engineer/RPR field office is not required.

60-06 Storage of materials. Materials shall be stored to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the RPR. Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free and unobstructed movement of aircraft. Unless otherwise shown on the plans and/or CSPP, the storage of materials and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the RPR. Private property shall not be used for storage purposes without written permission of the Owner or lessee of such property. The Contractor shall make all arrangements and bear all expenses for the storage of materials on private property. Upon request, the Contractor shall furnish the RPR a copy of the property Owner's permission.

All storage sites on private or airport property shall be restored to their original condition by the Contractor at their expense, except as otherwise agreed to (in writing) by the Owner or lessee of the property.

60-07 Unacceptable materials. Any material or assembly that does not conform to the requirements of the contract, plans, or specifications shall be considered unacceptable and shall be rejected. The Contractor shall remove any rejected material or assembly from the site of the work, unless otherwise instructed by the RPR.

Rejected material or assembly, the defects of which have been corrected by the Contractor, shall not be returned to the site of the work until such time as the RPR has approved its use in the work.

60-08 Owner furnished materials. The Contractor shall furnish all materials required to complete the work, except those specified, if any, to be furnished by the Owner. Owner-furnished materials shall be made available to the Contractor at the location specified.

All costs of handling, transportation from the specified location to the site of work, storage, and installing Owner-furnished materials shall be included in the unit price bid for the contract item in which such Owner-furnished material is used.

After any Owner-furnished material has been delivered to the location specified, the Contractor shall be responsible for any demurrage, damage, loss, or other deficiencies that may occur during the Contractor's handling, storage, or use of such Owner-furnished material. The Owner will deduct from any monies due or to become due the Contractor any cost incurred by the Owner in making good such loss due to the Contractor's handling, storage, or use of Owner-furnished materials.

END OF SECTION 60

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Section 70 Legal Regulations and Responsibility to Public

70-01 Laws to be observed. The Contractor shall keep fully informed of all federal and state laws, all local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and all their officers, agents, or servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or the Contractor's employees.

70-02 Permits, licenses, and taxes. The Contractor shall procure all permits and licenses, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful execution of the work.

70-03 Patented devices, materials, and processes. If the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, the Contractor shall provide for such use by suitable legal agreement with the Patentee or Owner. The Contractor and the surety shall indemnify and hold harmless the Owner, any third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the Owner for any costs, expenses, and damages which it may be obliged to pay by reason of an infringement, at any time during the execution or after the completion of the work.

70-04 Restoration of surfaces disturbed by others. The Owner reserves the right to authorize the construction, reconstruction, or maintenance of any public or private utility service, FAA or National Oceanic and Atmospheric Administration (NOAA) facility, or a utility service of another government agency at any time during the progress of the work. To the extent that such construction, reconstruction, or maintenance has been coordinated with the Owner, such authorized work (by others) must be shown on the plans and is indicated as follows:

Except as listed above, the Contractor shall not permit any individual, firm, or corporation to excavate or otherwise disturb such utility services or facilities located within the limits of the work without the written permission of the RPR.

Should the Owner of public or private utility service, FAA, or NOAA facility, or a utility service of another government agency be authorized to construct, reconstruct, or maintain such utility service or facility during the progress of the work, the Contractor shall cooperate with such Owners by arranging and performing the work in this contract to facilitate such construction, reconstruction or maintenance by others whether or not such work by others is listed above. When ordered as extra work by the RPR, the Contractor shall make all necessary repairs to the work which are due to such authorized work by others, unless otherwise provided for in the contract, plans, or specifications. It is understood and agreed that the Contractor shall not be entitled to make any claim for damages due to such authorized work by others or for any delay to the work resulting from such authorized work.

70-05 Federal Participation. The United States Government has agreed to reimburse the Owner for some portion of the contract costs. The contract work is subject to the inspection and approval of duly authorized representatives of the FAA Administrator. No requirement of this contract shall be construed as making the United States a party to the contract nor will any such requirement interfere, in any way, with the rights of either party to the contract.

70-06 Sanitary, health, and safety provisions. The Contractor's worksite and facilities shall comply with applicable federal, state, and local requirements for health, safety and sanitary provisions.

70-07 Public convenience and safety. The Contractor shall control their operations and those of their subcontractors and all suppliers, to assure the least inconvenience to the traveling public. Under all circumstances, safety shall be the most important consideration.

The Contractor shall maintain the free and unobstructed movement of aircraft and vehicular traffic with respect to their own operations and those of their own subcontractors and all suppliers in accordance with Section 40, paragraph 40-05, *Maintenance of Traffic*, and shall limit such operations for the convenience and safety of the traveling public as specified in Section 80, paragraph 80-04, *Limitation of Operations*.

The Contractor shall remove or control debris and rubbish resulting from its work operations at frequent intervals, and upon the order of the RPR. If the RPR determines the existence of Contractor debris in the work site represents a hazard to airport operations and the Contractor is unable to respond in a prompt and reasonable manner, the RPR reserves the right to assign the task of debris removal to a third party and recover the resulting costs as a liquidated damage against the Contractor.

70-08 Construction Safety and Phasing Plan (CSPP). *Not used*.

70-09 Use of explosives. The use of explosives is not permitted on this project.

70-10 Protection and restoration of property and landscape. The Contractor shall be responsible for the preservation of all public and private property, and shall protect carefully from disturbance or damage all land monuments and property markers until the Engineer/RPR has witnessed or otherwise referenced their location and shall not move them until directed.

The Contractor shall be responsible for all damage or injury to property of any character, during the execution of the work, resulting from any act, omission, neglect, or misconduct in manner or method of executing the work, or at any time due to defective work or materials, and said responsibility shall not be released until the project has been completed and accepted.

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the non-execution thereof by the Contractor, the Contractor shall restore, at their expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, or otherwise restoring as may be directed, or the Contractor shall make good such damage or injury in an acceptable manner.

Work that is to remain in place which is damaged or defaced by reasons of work performed under this Contract, shall be restored at no additional cost to the Owner.

Items removed, indicated to be salvaged for Owner or reused in new work, which are damaged beyond repair, shall be replaced with equal new materials under this Contract at no additional cost to the Owner.

Existing pavement or other existing work not specified for removal which is temporarily removed, damaged or in any way disturbed or altered by work under this Contract shall be repaired, patched, or replaced to the complete satisfaction of the RPR at no additional cost to the Owner.

Where it is necessary to cut, alter, remove, or temporarily remove and replace existing property or equipment, the cost shall be included in the Contract price for the item creating such work.

70-11 Responsibility for damage claims. The Contractor shall indemnify and hold harmless the Engineer/RPR and the Owner and their officers, agents, and employees from all suits, actions, or claims, of any character, brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or

because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act," or any other law, ordinance, order, or decree. Money due the Contractor under and by virtue of their own contract considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, their own surety may be held until such suits, actions, or claims for injuries or damages shall have been settled and suitable evidence to that effect furnished to the Owner, except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he or she is adequately protected by public liability and property damage insurance.

70-12 Third party beneficiary clause. It is specifically agreed between the parties executing the contract that it is not intended by any of the provisions of any part of the contract to create for the public or any member thereof, a third-party beneficiary or to authorize anyone not a party to the contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the contract.

70-13 Opening sections of the work to traffic. If it is necessary for the Contractor to complete portions of the contract work for the beneficial occupancy of the Owner prior to completion of the entire contract, such "phasing" of the work must be specified below and indicated on the approved Construction Safety and Phasing Plan (CSPP) and the project plans. When so specified, the Contractor shall complete such portions of the work on or before the date specified or as otherwise specified.

The Contractor shall follow the schedule of work in the Construction Safety and Phasing Plan.

Upon completion of any portion of work listed above, such portion shall be accepted by the Owner in accordance with Section 50, paragraph 50-14, *Partial Acceptance*.

No portion of the work may be opened by the Contractor until directed by the Owner in writing. Should it become necessary to open a portion of the work to traffic on a temporary or intermittent basis, such openings shall be made when, in the opinion of the RPR, such portion of the work is in an acceptable condition to support the intended traffic. Temporary or intermittent openings are considered to be inherent in the work and shall not constitute either acceptance of the portion of the work so opened or a waiver of any provision of the contract. Any damage to the portion of the work so opened that is not attributable to traffic which is permitted by the Owner shall be repaired by the Contractor at their expense.

The Contractor shall make their own estimate of the inherent difficulties involved in completing the work under the conditions herein described and shall not claim any added compensation by reason of delay or increased cost due to opening a portion of the contract work.

The Contractor must conform to safety standards contained AC 150/5370-2 and the approved CSPP.

Contractor shall refer to the plans, specifications, and the approved CSPP to identify barricade requirements, temporary and/or permanent markings, airfield lighting, guidance signs and other safety requirements prior to opening up sections of work to traffic.

70-14 Contractor's responsibility for work. Until the RPR's final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with Section 50, paragraph 50-14, *Partial Acceptance*, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part due to the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God such as earthquake, tidal wave, tornado, hurricane or other cataclysmic phenomenon of nature, or acts of the public enemy or of government authorities.

If the work is suspended for any cause whatever, the Contractor shall be responsible for the work and shall take such precautions necessary to prevent damage to the work. The Contractor shall provide for normal drainage and shall erect necessary temporary structures, signs, or other facilities at their own expense. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established planting, seeding, and sodding furnished under the contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

70-15 Contractor's responsibility for utility service and facilities of others. As provided in paragraph 70-04, *Restoration of Surfaces Disturbed by Others*, the Contractor shall cooperate with the owner of any public or private utility service, FAA or NOAA, or a utility service of another government agency that may be authorized by the Owner to construct, reconstruct or maintain such utility services or facilities during the progress of the work. In addition, the Contractor shall control their operations to prevent the unscheduled interruption of such utility services and facilities.

To the extent that such public or private utility services, FAA, or NOAA facilities, or utility services of another governmental agency are known to exist within the limits of the contract work, the approximate locations have been indicated on the plans and/or in the contract documents.

It is understood and agreed that the Owner does not guarantee the accuracy or the completeness of the location information relating to existing utility services, facilities, or structures that may be shown on the plans or encountered in the work. Any inaccuracy or omission in such information shall not relieve the Contractor of the responsibility to protect such existing features from damage or unscheduled interruption of service.

It is further understood and agreed that the Contractor shall, upon execution of the contract, notify the Owners of all utility services or other facilities of their plan of operations. Such notification shall be in writing addressed to "The Person to Contact" as provided in this paragraph and paragraph 70-04, *Restoration of Surfaces Disturbed By Others*. A copy of each notification shall be given to the RPR.

In addition to the general written notification provided, it shall be the responsibility of the Contractor to keep such individual Owners advised of changes in their plan of operations that would affect such Owners.

Prior to beginning the work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such Owner of their plan of operation. If, in the Contractor's opinion, the Owner's assistance is needed to locate the utility service or facility or the presence of a representative of the Owner is desirable to observe the work, such advice should be included in the notification. Such notification shall be given by the most expeditious means to reach the utility owner's "Person to Contact" no later than two normal business days prior to the Contractor's commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the RPR.

The Contractor's failure to give the two days' notice shall be cause for the Owner to suspend the Contractor's operations in the general vicinity of a utility service or facility.

Where the outside limits of an underground utility service have been located and staked on the ground, the Contractor shall be required to use hand excavation methods within 3 feet (1 m) of such outside limits at such points as may be required to ensure protection from damage due to the Contractor's operations.

Should the Contractor damage or interrupt the operation of a utility service or facility by accident or otherwise, the Contractor shall immediately notify the proper authority and the RPR and shall take all reasonable measures to prevent further damage or interruption of service. The Contractor, in such events, shall cooperate with the utility service or facility owner and the RPR continuously until such damage has been repaired and service restored to the satisfaction of the utility or facility owner.

The Contractor shall bear all costs of damage and restoration of service to any utility service or facility due to their operations whether due to negligence or accident. The Owner reserves the right to deduct such costs from any monies due or which may become due the Contractor, or their own surety.

70-15.1 FAA facilities and cable runs. The Contractor is hereby advised that the construction limits of the project include existing facilities and buried cable runs that are owned, operated and maintained by the FAA. The Contractor, during the execution of the project work, shall comply with the following:

a. The Contractor shall permit FAA maintenance personnel the right of access to the project work site for purposes of inspecting and maintaining all existing FAA owned facilities.

b. The Contractor shall provide notice to the FAA Air Traffic Organization (ATO)/Technical Operations/System Support Center (SSC) Point-of-Contact through the airport **RPR** a minimum of seven (7) calendar days prior to commencement of construction activities in order to permit sufficient time to locate and mark existing buried cables and to schedule any required facility outages.

c. If execution of the project work requires a facility outage, the Contractor shall contact the FAA Point-of-Contact a minimum of 72 hours prior to the time of the required outage.

d. Any damage to FAA cables, access roads, or FAA facilities during construction caused by the Contractor's equipment or personnel whether by negligence or accident will require the Contractor to repair or replace the damaged cables, access road, or FAA facilities to FAA requirements. The Contractor shall not bear the cost to repair damage to underground facilities or utilities improperly located by the FAA.

Any displaced or relocated FAA facility or cables due to construction will require a signed and executed reimbursable agreement between the Owner and the FAA Tech Ops Division.

The splicing of cables is not be an acceptable form of repair for certain projects. If any FAA cables are damaged, the Contractor shall replace the cables in their entirety.

e. If the project work requires the cutting or splicing of FAA owned cables, the FAA Point-of-Contact shall be contacted a minimum of 72 hours prior to the time the cable work commences. The FAA reserves the right to have a FAA representative on site to observe the splicing of the cables as a condition of acceptance. All cable splices are to be accomplished in accordance with FAA specifications and require approval by the FAA Point-of-Contact as a condition of acceptance by the Owner. The Contractor is hereby advised that FAA restricts the location of where splices may be installed. If a cable splice is required in a location that is not permitted by FAA, the Contractor shall furnish and install a sufficient length of new cable that eliminates the need for any splice.

70-16 Furnishing rights-of-way. The Owner will be responsible for furnishing all rights-of-way upon which the work is to be constructed in advance of the Contractor's operations.

70-17 Personal liability of public officials. In carrying out any of the contract provisions or in exercising any power or authority granted by this contract, there shall be no liability upon the Engineer, RPR, their authorized representatives, or any officials of the Owner either personally or as an official of the Owner. It is understood that in such matters they act solely as agents and representatives of the Owner.

70-18 No waiver of legal rights. Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of final acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or stopped from recovering from the Contractor or their surety, or both, such overpayment as may be sustained, or by failure on the part of the Contractor to fulfill their obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty.

70-19 Environmental protection. The Contractor shall comply with all federal, state, and local laws and regulations controlling pollution of the environment. The Contractor shall take necessary precautions to prevent pollution of streams, lakes, ponds, and reservoirs with fuels, oils, asphalts, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

In the event of conflict between Federal, State or local laws, codes, ordinances, rules and regulations concerning pollution control, the most restrictive applicable ones shall apply.

The Contractor shall pay special attention to the pollution control requirements of the several specifications. Work items, which may cause excessive pollution and shall be closely controlled by the Contractor, are:

a) Clearing, grubbing, burning or other disposal.

b) Stripping, excavation, and embankment.

c) Drainage and ditching.

d) Aggregate production, handling and placing.

e) Cement, lime or other stabilization.

f) Concrete and bituminous materials handling, production and paving.

g) Seeding, fertilizing, mulching and use of herbicides or insecticides.

h) Contractor's own housekeeping items; haul roads; sanitary facilities; water supply; equipment fueling, servicing and cleaning; job clean up and disposal.

When the Contractor submits his tentative progress schedule in accordance with PROSECUTION and PROGRESS, Section 80, he shall also submit for acceptance of the Owner, his schedules for accomplishment of temporary and permanent erosion control work, as are applicable for clearing, grading, structures at water courses, construction, and paving, and his proposed methods of erosion control on haul roads and borrow pits and his plan for disposal of waste materials. No work shall be started until the erosion control schedules and methods of operations have been accepted by the Owner.

All bituminous and Portland cement concrete proportioning plants shall meet state requirements.

The following listed stipulations shall apply to this Contract unless more restrictive ones are specified by the plans, special provisions, laws, codes, ordinances, etc. Cost of pollution control shall be incidental to the appropriate work items unless otherwise specified.

1. Control of Water Pollution and Siltation.

(a) All work of water pollution and siltation control is subject to inspection by the local and/or state governmental enforcing agent.

(b) All applicable regulations of fish and wildlife agencies and statutes relating to the prevention and abatement of pollution shall be complied with in the performance of the Contract.

(c) Construction operations shall be conducted in such manner as to reduce erosion to the practicable minimum and to prevent damaging siltation of water courses, streams, lakes or reservoirs. The surface area of erodible land, either on or off the airport site, exposed to the elements by clearing, grubbing or grading operations, including gravel pits, waste or disposal areas and haul roads, at any one time, for this Contract, shall be subject to approval of the Owner and the duration of such exposure prior to final trimming and finishing of the areas shall

be held to the minimum practical. The Owner shall have full authority to order the suspension of grading and other operations pending adequate and proper performance of finishing and maintenance work or to restrict the trimming of erodible land exposed to the elements.

(d) Materials used for permanent erosion control measures shall meet the requirements of the applicable specifications. Gravel or stone, consisting of durable particles of rock and containing only negligible quantities of fines, shall be used for construction pads, haul roads and temporary roads in or across streams.

(e) Where called for on the plans, a stilling basin shall be constructed to prevent siltation in the stream from construction operations.

(f) The disturbance of lands and waters that are outside the limits of construction as staked is prohibited, except as found necessary and approved by the Owner.70-20 Archaeological and historical findings.

(g) The Contractor shall conduct his work in such manner as to prevent the entry of fuels, oils, bituminous materials, chemicals, sewage or other harmful materials into streams, rivers, lakes or reservoirs.

(h) Water from aggregate washing or other operations containing sediment shall be treated by filtration, by use of a settling basin or other means to reduce the sediment content to a level acceptable to the local and/or state governmental enforcing agent.

(i) All waterways shall be cleared as soon as practicable of falsework, piling, debris or other obstructions placed during construction operations and not a part of the finished work. Care shall be taken during construction and removal of such barriers to minimize the muddying of a stream.

(j) The Contractor shall care for the temporary erosion and siltation control measures during the period that the temporary measures are required and for the permanent erosion control measures until the Contract has been completed and accepted. Such care shall consist of the repair of areas damaged by erosion, wind, fire or other causes.

(k) Permanent and temporary erosion control work that is damaged due to the Contractor's operations or where the work required is attributed to the Contractor's negligence, carelessness, or failure to install permanent controls at the proper time, shall be repaired at the Contractor's expense.

2. Control of Other Air Pollutants.

(a) Grading areas shall be kept at proper moisture conditions.

(b) Sand or dust blows shall be temporarily mulched, with or without seeding, or otherwise controlled with stabilizing agents.

(c) Temporary roads, haul roads, traffic or work areas shall be stabilized with dust palliative, penetration asphalt, or wood chips or other approved measures to prevent dust pollution.

(d) Cements, fertilizers, chemicals, volatiles, etc., shall be stored in proper containers or with proper coverings to prevent accidental discharge into the air.

(e) Aggregate bins, cement bins, and dry material batch trucks shall be properly covered to prevent loss of material to the air.

(f) Drilling, grinding and sand blasting apparatus shall be equipped with water, chemical, or vacuum dust controlling systems.

(g) Applications of chemicals and bitumens shall be held to recommended rates.

(h) Bituminous mixing plants shall be equipped with dust collectors as noted in the specifications.

(i) Quarrying, batching, and mixing operations and the transfer of materials between trucks, bins, or stockpiles shall be properly controlled to minimize dust diffusion.

(j) When necessary, certain operations shall be delayed until proper wind or climatic conditions exist to dissipate or inhibit potential pollutants to the satisfaction of the Owner.

70-20 Archaeological and historical findings. Unless otherwise specified in this subsection, the Contractor is advised that the site of the work is not within any property, district, or site, and does not contain any building, structure, or object listed in the current National Register of Historic Places published by the United States Department of Interior.

Should the Contractor encounter, during their operations, any building, part of a building, structure, or object that is incongruous with its surroundings, the Contractor shall immediately cease operations in that location and notify the RPR. The RPR will immediately investigate the Contractor's finding and the Owner will direct the Contractor to either resume operations or to suspend operations as directed.

Should the Owner order suspension of the Contractor's operations in order to protect an archaeological or historical finding, or order the Contractor to perform extra work, such shall be covered by an appropriate contract change order or supplemental agreement as provided in Section 40, paragraph 40-04, *Extra Work,* and Section 90, paragraph 90-05, *Payment for Extra Work*. If appropriate, the contract change order or supplemental agreement shall include an extension of contract time in accordance with Section 80, paragraph 80-07, *Determination and Extension of Contract Time*.

70-21 Insurance Requirements. Insurance requirements are to be in accordance with the Contractor's contract with the Owner.

END OF SECTION 70

Section 80 Execution and Progress

80-01 Subletting of contract. The Owner will not recognize any subcontractor on the work. The Contractor shall at all times when work is in progress be represented either in person, by a qualified superintendent, or by other designated, qualified representative who is duly authorized to receive and execute orders of the Resident Project Representative (RPR).

The Contractor shall perform, with his organization, an amount of work equal to at least 40 percent of the total contract cost.

Should the Contractor elect to assign their contract, said assignment shall be concurred in by the surety, shall be presented for the consideration and approval of the Owner, and shall be consummated only on the written approval of the Owner.

The Contractor shall provide copies of all subcontracts to the RPR 14 days prior to being utilized on the project. As a minimum, the information shall include the following:

- Subcontractor's legal company name.
- Subcontractor's legal company address, including County name.
- Principal contact person's name, telephone and fax number.
- Complete narrative description, and dollar value of the work to be performed by the subcontractor.
- Copies of required insurance certificates in accordance with the specifications.
- Minority/ non-minority status.

80-02 Notice to proceed (NTP). The Owners notice to proceed will state the date on which contract time commences. The Contractor is expected to commence project operations within **30** days of the NTP date. The Contractor shall notify the RPR at least **24 hours** in advance of the time contract operations begins. The Contractor shall not commence any actual operations prior to the date on which the notice to proceed is issued by the Owner.

80-03 Execution and progress. Unless otherwise specified, the Contractor shall submit their coordinated construction schedule showing all work activities for the RPR's review and acceptance at least **10 days** prior to the start of work. The Contractor's progress schedule, once accepted by the RPR, will represent the Contractor's baseline plan to accomplish the project in accordance with the terms and conditions of the Contract. The RPR will compare actual Contractor progress against the baseline schedule to determine that status of the Contractor's performance. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the proposal.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the RPR's request, submit a revised schedule for completion of the work within the contract time and modify their operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the execution of the work be discontinued for any reason, the Contractor shall notify the RPR at least **24 hours** in advance of resuming operations.

The Contractor shall not commence any actual construction prior to the date on which the NTP is issued by the Owner.

The project schedule shall be prepared as a network diagram in Critical Path Method (CPM), Program Evaluation and Review Technique (PERT), or other format, or as otherwise specified. It shall include information on the sequence of work activities, milestone dates, and activity duration. The schedule shall show all work items identified in the project proposal for each work area and shall include the project start date and end date.

The Contractor shall maintain the work schedule and provide an update and analysis of the progress schedule on a ***Bi-***monthly basis, or as otherwise specified in the contract. Submission of the work schedule shall not relieve the Contractor of overall responsibility for scheduling, sequencing, and coordinating all work to comply with the requirements of the contract.

80-04 Limitation of operations. The Contractor shall control their operations and the operations of their subcontractors and all suppliers to provide for the free and unobstructed movement of aircraft in the air operations areas (AOA) of the airport.

When the work requires the Contractor to conduct their operations within an AOA of the airport, the work shall be coordinated with airport operations (through the RPR) at least **48 hours** prior to commencement of such work. The Contractor shall not close an AOA until so authorized by the RPR and until the necessary temporary marking, signage and associated lighting is in place as provided in Section 70, paragraph 70-08, *Construction Safety and Phasing Plan (CSPP)*.

When the contract work requires the Contractor to work within an AOA of the airport on an intermittent basis (intermittent opening and closing of the AOA), the Contractor shall maintain constant communications as specified; immediately obey all instructions to vacate the AOA; and immediately obey all instructions to resume work in such AOA. Failure to maintain the specified communications or to obey instructions shall be cause for suspension of the Contractor's operations in the AOA until satisfactory conditions are provided. The areas of the AOA identified in the Construction Safety Phasing Plan (CSPP) and as listed below, cannot be closed to operating aircraft to permit the Contractor's operations on a continuous basis and will therefore be closed to aircraft operations intermittently as ***indicated on the plans*** ~~follows:~~

The Contractor shall be required to conform to safety standards contained in AC 150/5370-2, Operational Safety on Airports During Construction and the approved CSPP.

80-04.1 Operational safety on airport during construction. All Contractors' operations shall be conducted in accordance with the approved project Construction Safety and Phasing Plan (CSPP) and the Safety Plan Compliance Document (SPCD) and the provisions set forth within the current version of AC 150/5370-2, Operational Safety on Airports During Construction. The CSPP included within the contract documents conveys minimum requirements for operational safety on the airport during construction activities. The Contractor shall prepare and submit a SPCD that details how it proposes to comply with the requirements presented within the CSPP.

The Contractor shall implement all necessary safety plan measures prior to commencement of any work activity. The Contractor shall conduct routine checks to assure compliance with the safety plan measures.

The Contractor is responsible to the Owner for the conduct of all subcontractors it employs on the project. The Contractor shall assure that all subcontractors are made aware of the requirements of the CSPP and SPCD and that they implement and maintain all necessary measures.

No deviation or modifications may be made to the approved CSPP and SPCD unless approved in writing by the Owner. The necessary coordination actions to review Contractor proposed modifications to an approved CSPP or approved SPCD can require a significant amount of time.

80-05 Character of workers, methods, and equipment. The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by the contract, plans, and specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily.

Any person employed by the Contractor or by any subcontractor who violates any operational regulations or operational safety requirements and, in the opinion of the RPR, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the RPR, be removed immediately by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the RPR.

Should the Contractor fail to remove such person or persons, or fail to furnish suitable and sufficient personnel for the proper execution of the work, the RPR may suspend the work by written notice until compliance with such orders.

All equipment that is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the work shall not cause injury to previously completed work, adjacent property, or existing airport facilities due to its use.

When the methods and equipment to be used by the Contractor in accomplishing the work are not prescribed in the contract, the Contractor is free to use any methods or equipment that will accomplish the work in conformity with the requirements of the contract, plans, and specifications.

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless otherwise authorized by the RPR. If the Contractor desires to use a method or type of equipment other than specified in the contract, the Contractor may request authority from the RPR to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing work in conformity with contract requirements. If, after trial use of the substituted methods or equipment, the RPR determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of specified quality, or take such other corrective action as the RPR may direct. No change will be made in basis of payment for the contract items involved nor in contract time as a result of authorizing a change in methods or equipment under this paragraph.

80-06 Temporary suspension of the work. The Owner shall have the authority to suspend the work wholly, or in part, for such period or periods the Owner may deem necessary, due to unsuitable weather, or other conditions considered unfavorable for the execution of the work, or for such time necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.

In the event that the Contractor is ordered by the Owner, in writing, to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the written order to suspend work to the effective date of the written order to resume the work. Claims for such compensation shall be filed with the RPR within the time period stated in the RPR's order to resume work. The Contractor shall submit with their own claim information substantiating the amount shown on the claim. The RPR will forward the Contractor's claim to the Owner for

consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather or for any other delay provided for in the contract, plans, or specifications.

If it becomes necessary to suspend work for an indefinite period, the Contractor shall store all materials in such manner that they will not become an obstruction nor become damaged in any way. The Contractor shall take every precaution to prevent damage or deterioration of the work performed and provide for normal drainage of the work. The Contractor shall erect temporary structures where necessary to provide for traffic on, to, or from the airport.

80-07 Determination and extension of contract time. The number of calendar days shall be stated in the proposal and contract and shall be known as the Contract Time.

If the contract time requires extension for reasons beyond the Contractor's control, it shall be adjusted as follows:

80-07.1 Contract time based on calendar days. Contract Time based on calendar days shall consist of the number of calendar days stated in the contract counting from the effective date of the Notice to Proceed and including all Saturdays, Sundays, holidays, and non-work days. All calendar days elapsing between the effective dates of the Owner's orders to suspend and resume all work, due to causes not the fault of the Contractor, shall be excluded.

At the time of final payment, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in the contract time shall not consider either cost of work or the extension of contract time that has been covered by a change order or supplemental agreement. Charges against the contract time will cease as of the date of final acceptance.

80-08 Failure to complete on time. For each calendar day or working day, as specified in the contract, that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in paragraph 80-07, *Determination and Extension of Contract Time*) the sum specified in the contract and proposal as liquidated damages (LD) will be deducted from any money due or to become due the Contractor or their own surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in their contract.

~~The maximum construction time allowed for Schedules Phase 1,1A, and 2 will be the sum of the time allowed for individual schedules but not more than days.~~ Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a wavier on the part of the Owner of any of its rights under the contract. **Liquidated damages will be assessed as provided in the Contractor's contract with the Owner.**

80-09 Default and termination of contract. The Contractor shall be considered in default of their contract and such default will be considered as cause for the Owner to terminate the contract for any of the following reasons, if the Contractor:

a. Fails to begin the work under the contract within the time specified in the Notice to Proceed, or

b. Fails to perform the work or fails to provide sufficient workers, equipment and/or materials to assure completion of work in accordance with the terms of the contract, or

c. Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or

d. Discontinues the execution of the work, or

e. Fails to resume work which has been discontinued within a reasonable time after notice to do so, or

f. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or

g. Allows any final judgment to stand against the Contractor unsatisfied for a period of 10 days, or

h. Makes an assignment for the benefit of creditors, or

i. For any other cause whatsoever, fails to carry on the work in an acceptable manner.

Should the Owner consider the Contractor in default of the contract for any reason above, the Owner shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If the Contractor or surety, within a period of 10 days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the RPR of the facts of such delay, neglect, or default and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the execution of the work out of the hands of the Contractor. The Owner may appropriate or use any or all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof, or use such other methods as in the opinion of the RPR will be required for the completion of said contract in an acceptable manner.

All costs and charges incurred by the Owner, together with the cost of completing the work under contract, will be deducted from any monies due or which may become due the Contractor. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

80-10 Termination for national emergencies. The Owner shall terminate the contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction contract as a direct result of an Executive Order of the President with respect to the execution of war or in the interest of national defense.

When the contract, or any portion thereof, is terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits shall be considered.

Reimbursement for organization of the work, and other overhead expenses, (when not otherwise included in the contract) and moving equipment and materials to and from the job will be considered, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials, obtained or ordered by the Contractor for the work and that are not incorporated in the work shall, at the option of the Contractor, be purchased from the Contractor at actual cost as shown by receipted bills and actual cost records at such points of delivery as may be designated by the RPR.

Termination of the contract or a portion thereof shall neither relieve the Contractor of their responsibilities for the completed work nor shall it relieve their surety of its obligation for and concerning any just claim arising out of the work performed.

80-11 Work area, storage area and sequence of operations. The Contractor shall obtain approval from the RPR prior to beginning any work in all areas of the airport. No operating runway, taxiway, or air operations area (AOA) shall be crossed, entered, or obstructed while it is operational. The Contractor shall plan and coordinate work in accordance with the approved CSPP and SPCD.

END OF SECTION 80

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Section 90 Measurement and Payment

90-01 Measurement of quantities. All work completed under the contract will be measured by the RPR, or their authorized representatives, using United States Customary Units of Measurement**.**

The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.

Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures (or leave-outs) having an area of 9 square feet (0.8 square meters) or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the RPR.

Unless otherwise specified, all contract items which are measured by the linear foot such as electrical ducts, conduits, pipe culverts, underdrains, and similar items shall be measured parallel to the base or foundation upon which such items are placed.

The term "lump sum" when used as an item of payment will mean complete payment for the work described in the contract. When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

When requested by the Contractor and approved by the RPR in writing, material specified to be measured by the cubic yard (cubic meter) may be weighed, and such weights will be converted to cubic yards (cubic meters) for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the RPR and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

Measurement and Payment Terms

Term	Description
Excavation and Embankment Volume	In computing volumes of excavation, the average end area method will be used unless otherwise specified.
Measurement and Proportion by Weight	The term "ton" will mean the short ton consisting of 2,000 pounds (907 km) avoirdupois. All materials that are measured or proportioned by weights shall be weighed on accurate, independently certified scales by competent, qualified personnel at locations designated by the RPR. If material is shipped by rail, the car weight may be accepted provided that only the actual weight of material is paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as the RPR directs, and each truck shall bear a plainly legible identification mark.
Measurement by Volume	Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable for the materials hauled, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles

Term	Description
	shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.
Asphalt Material	Asphalt materials will be measured by the gallon or ton. When measured by volume, such volumes will be measured at 60°F (16°C) or will be corrected to the volume at 60°F (16°C) using ASTM D1250 for asphalts. Net certified scale weights or weights based on certified volumes in the case of rail shipments will be used as a basis of measurement, subject to correction when asphalt material has been lost from the car or the distributor, wasted, or otherwise not incorporated in the work. When asphalt materials are shipped by truck or transport, net certified weights by volume, subject to correction for loss or foaming, will be used for computing quantities.
Cement	Cement will be measured by the ton (kg) or hundredweight (km).
Structure	Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.
Timber	Timber will be measured by the thousand feet board measure (MFBM) actually incorporated in the structure. Measurement will be based on nominal widths and thicknesses and the extreme length of each piece.
Plates and Sheets	The thickness of plates and galvanized sheet used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing will be specified and measured in decimal fraction of inch.
Miscellaneous Items	When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gauge, unit weight, section dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.
Scales	Scales must be tested for accuracy and serviced before use. Scales for weighing materials which are required to be proportioned or measured and paid for by weight shall be furnished, erected, and maintained by the Contractor, or be certified permanently installed commercial scales. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end. Scales shall be accurate within 0.5% of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the RPR before beginning work and at such other times as requested. The intervals shall be uniform in spacing throughout the graduated or marked length of the beam or dial and shall not exceed 0.1% of the nominal rated capacity of the scale, but not less than one pound (454 grams). The use of spring balances will not be permitted. In the event inspection reveals the scales have been “overweighing” (indicating more than correct weight) they will be immediately adjusted. All materials received subsequent to the last previous correct weighting-accuracy test will be reduced by the percentage of error in excess of 0.5%. In the event inspection reveals the scales have been under-weighing (indicating less than correct weight), they shall be immediately adjusted. No additional payment to the Contractor will be allowed for materials previously weighed and recorded. Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and the RPR can safely and conveniently view them.

Term	Description
	Scale installations shall have available ten standard 50-pound (2.3 km) weights for testing the weighing equipment or suitable weights and devices for other approved equipment. All costs in connection with furnishing, installing, certifying, testing, and maintaining scales; for furnishing check weights and scale house; and for all other items specified in this subsection, for the weighing of materials for proportioning or payment, shall be included in the unit contract prices for the various items of the project.
Rental Equipment	Rental of equipment will be measured by time in hours of actual working time and necessary traveling time of the equipment within the limits of the work. Special equipment ordered in connection with extra work will be measured as agreed in the change order or supplemental agreement authorizing such work as provided in paragraph 90-05 *Payment for Extra Work*.
Pay Quantities	When the estimated quantities for a specific portion of the work are designated as the pay quantities in the contract, they shall be the final quantities for which payment for such specific portion of the work will be made, unless the dimensions of said portions of the work shown on the plans are revised by the RPR. If revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the authorized changes in the dimensions.

90-02 Scope of payment. The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials, for performing all work under the contract in a complete and acceptable manner, and for all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the execution thereof, subject to the provisions of Section 70, paragraph 70-18, *No Waiver of Legal Rights*.

When the "basis of payment" subsection of a technical specification requires that the contract price (price bid) include compensation for certain work or material essential to the item, this same work or material will not also be measured for payment under any other contract item which may appear elsewhere in the contract, plans, or specifications.

90-03 Compensation for altered quantities. When the accepted quantities of work vary from the quantities in the proposal, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract price for the accepted quantities of work actually completed and accepted. No allowance, except as provided for in Section 40, paragraph 40-02, *Alteration of Work and Quantities*, will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor which results directly from such alterations or indirectly from their own unbalanced allocation of overhead and profit among the contract items, or from any other cause.

90-04 Payment for omitted items. As specified in Section 40, paragraph 40-03, *Omitted Items*, the RPR shall have the right to omit from the work (order nonperformance) any contract item, except major contract items, in the best interest of the Owner.

Should the RPR omit or order nonperformance of a contract item or portion of such item from the work, the Contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the RPR's order to omit or non-perform such contract item.

Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the RPR's order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the Owner.

In addition to the reimbursement hereinbefore provided, the Contractor shall be reimbursed for all actual costs incurred for the purpose of performing the omitted contract item prior to the date of the RPR's order. Such additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature the amount of such costs.

90-05 Payment for extra work. Extra work, performed in accordance with Section 40, paragraph 40-04, *Extra Work*, will be paid for at the contract prices or agreed prices specified in the change order or supplemental agreement authorizing the extra work.

90-06 Partial payments. Partial payments will be made to the Contractor at least once each month as the work progresses. Said payments will be based upon estimates, prepared by the RPR, of the value of the work performed and materials complete and in place, in accordance with the contract, plans, and specifications. Such partial payments may also include the delivered actual cost of those materials stockpiled and stored in accordance with paragraph 90-07, *Payment for Materials on Hand*. No partial payment will be made when the amount due to the Contractor since the last estimate amounts to less than five hundred dollars.

a. From the total of the amount determined to be payable on a partial payment, Ten (10%) percent of such total amount will be deducted and retained by the Owner for protection of the Owner's interests. Unless otherwise instructed by the Owner, the amount retained by the Owner will be in effect until the final payment is made except as follows:

(1) Contractor may request release of retainage on work that has been partially accepted by the Owner in accordance with Section 50-14. Contractor must provide a certified invoice to the RPR that supports the value of retainage held by the Owner for partially accepted work.

(2) In lieu of retainage, the Contractor may exercise at its option the establishment of an escrow account per paragraph 90-08.

b. The Contractor is required to pay all subcontractors for satisfactory performance of their contracts no later than 30 days after the Contractor has received a partial payment. Contractor must provide the Owner evidence of prompt and full payment of retainage held by the prime Contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the Owner. When the Owner has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.

c. When at least 95% of the work has been completed to the satisfaction of the RPR, the RPR shall, at the Owner's discretion and with the consent of the surety, prepare estimates of both the contract value and the cost of the remaining work to be done. The Owner may retain an amount not less than twice the contract value or estimated cost, whichever is greater, of the work remaining to be done. The remainder, less all previous payments and deductions, will then be certified for payment to the Contractor.

It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders or supplemental agreements, except when such excess quantities have been determined by the RPR to be a part of the final quantity for the item of work in question.

No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in paragraph 90-09, *Acceptance and Final Payment*.

The Contractor shall deliver to the Owner a complete release of all claims for labor and material arising out of this contract before the final payment is made. If any subcontractor or supplier fails to furnish such a release in full, the Contractor may furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any potential lien or other such claim. The bond or collateral shall include all costs, expenses, and attorney fees the Owner may be compelled to pay in discharging any such lien or claim.

90-07 Payment for materials on hand. Partial payments may be made to the extent of the delivered cost of materials to be incorporated in the work, provided that such materials meet the requirements of the contract, plans, and specifications and are delivered to acceptable sites on the airport property or at other sites in the vicinity that are acceptable to the Owner. Such delivered costs of stored or stockpiled materials may be included in the next partial payment after the following conditions are met:

a. The material has been stored or stockpiled in a manner acceptable to the RPR at or on an approved site.

b. The Contractor has furnished the RPR with acceptable evidence of the quantity and quality of such stored or stockpiled materials.

c. The Contractor has furnished the RPR with satisfactory evidence that the material and transportation costs have been paid.

d. The Contractor has furnished the Owner legal title (free of liens or encumbrances of any kind) to the material stored or stockpiled.

e. The Contractor has furnished the Owner evidence that the material stored or stockpiled is insured against loss by damage to or disappearance of such materials at any time prior to use in the work.

It is understood and agreed that the transfer of title and the Owner's payment for such stored or stockpiled materials shall in no way relieve the Contractor of their responsibility for furnishing and placing such materials in accordance with the requirements of the contract, plans, and specifications.

In no case will the amount of partial payments for materials on hand exceed the contract price for such materials or the contract price for the contract item in which the material is intended to be used.

No partial payment will be made for stored or stockpiled living or perishable plant materials.

The Contractor shall bear all costs associated with the partial payment of stored or stockpiled materials in accordance with the provisions of this paragraph.

90-08 Payment of withheld funds. At the Contractor's option, if an Owner withholds retainage in accordance with the methods described in paragraph 90-06 *Partial Payments*, the Contractor may request that the Owner deposit the retainage into an escrow account. The Owner's deposit of retainage into an escrow account is subject to the following conditions:

a. The Contractor shall bear all expenses of establishing and maintaining an escrow account and escrow agreement acceptable to the Owner.

b. The Contractor shall deposit to and maintain in such escrow only those securities or bank certificates of deposit as are acceptable to the Owner and having a value not less than the retainage that would otherwise be withheld from partial payment.

c. The Contractor shall enter into an escrow agreement satisfactory to the Owner.

d. The Contractor shall obtain the written consent of the surety to such agreement.

90-09 Acceptance and final payment. When the contract work has been accepted in accordance with the requirements of Section 50, paragraph 50-15, *Final Acceptance*, the RPR will prepare the final estimate of the items of work actually performed. The Contractor shall approve the RPR's final estimate or advise the RPR of the Contractor's objections to the final estimate which are based on disputes in measurements or computations of the final quantities to be paid under the contract as amended by change order or supplemental agreement. The Contractor and the RPR shall resolve all disputes (if any) in the measurement and computation of final quantities to be paid within 30 calendar days of the Contractor's receipt of the RPR's final estimate. If, after such 30-day period, a dispute still exists, the Contractor may approve the RPR's estimate under protest of the quantities in dispute, and such disputed quantities shall be considered by the Owner as a claim in accordance with Section 50, paragraph 50-16, *Claims for Adjustment and Disputes*.

After the Contractor has approved, or approved under protest, the RPR's final estimate, and after the RPR's receipt of the project closeout documentation required in paragraph 90-11, *Contractor Final Project Documentation*, final payment will be processed based on the entire sum, or the undisputed sum in case of approval under protest, determined to be due the Contractor less all previous payments and all amounts to be deducted under the provisions of the contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

If the Contractor has filed a claim for additional compensation under the provisions of Section 50, paragraph 50-16, *Claims for Adjustments and Disputes,* or under the provisions of this paragraph, such claims will be considered by the Owner in accordance with local laws or ordinances. Upon final adjudication of such claims, any additional payment determined to be due the Contractor will be paid pursuant to a supplemental final estimate.

90-10 Construction warranty.

a. In addition to any other warranties in this contract, the Contractor warrants that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, workmanship, or design furnished, or performed by the Contractor or any subcontractor or supplier at any tier.

b. This warranty shall continue for a period of one year from the date of final acceptance of the work, except as noted. If the Owner takes possession of any part of the work before final acceptance, this warranty shall continue for a period of one year from the date the Owner takes possession.

c. The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Owner real or personal property, when that damage is the result of the Contractor's failure to conform to contract requirements; or any defect of equipment, material, workmanship, or design furnished by the Contractor.

d. The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for one year from the date of repair or replacement.

e. The Owner will notify the Contractor, in writing, within seven (7) days after the discovery of any failure, defect, or damage.

f. If the Contractor fails to remedy any failure, defect, or damage within 14 days after receipt of notice, the Owner shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

g. With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall: (1) Obtain all warranties that would be given in normal commercial practice; (2) Require all warranties to be executed,

in writing, for the benefit of the Owner, as directed by the Owner, and (3) Enforce all warranties for the benefit of the Owner.

h. This warranty shall not limit the Owner's rights with respect to latent defects, gross mistakes, or fraud.

90-11 Contractor Final Project Documentation. Approval of final payment to the Contractor is contingent upon completion and submittal of the items listed below. The final payment will not be approved until the RPR approves the Contractor's final submittal. The Contractor shall:

a. Provide two (2) copies of all manufacturers warranties specified for materials, equipment, and installations.

b. Provide weekly payroll records (not previously received) from the general Contractor and all subcontractors.

c. Complete final cleanup in accordance with Section 40, paragraph 40-08, *Final Cleanup*.

d. Complete all punch list items identified during the Final Inspection.

e. Provide complete release of all claims for labor and material arising out of the Contract.

f. Provide a certified statement signed by the subcontractors, indicating actual amounts paid to the Disadvantaged Business Enterprise (DBE) subcontractors and/or suppliers associated with the project.

g. When applicable per state requirements, return copies of sales tax completion forms.

h. Manufacturer's certifications for all items incorporated in the work.

i. All required record drawings, as-built drawings or as-constructed drawings.

j. Project Operation and Maintenance (O&M) Manual(s).

k. Security for Construction Warranty.

l. Equipment commissioning documentation submitted, if required.

END OF SECTION 90

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Item C-100 Contractor Quality Control Program (CQCP)

100-1 General. Quality is more than test results. Quality is the combination of proper materials, testing, workmanship, equipment, inspection, and documentation of the project. Establishing and maintaining a culture of quality is key to achieving a quality project. The Contractor shall establish, provide, and maintain an effective Contractor Quality Control Program (CQCP) that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors. Although guidelines are established and certain minimum requirements are specified here and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.

The Contractor shall establish a CQCP that will:

a. Provide qualified personnel to develop and implement the CQCP.

b. Provide for the production of acceptable quality materials.

c. Provide sufficient information to assure that the specification requirements can be met.

d. Document the CQCP process.

The Contractor shall not begin any construction or production of materials to be incorporated into the completed work until the CQCP has been reviewed and approved by the Resident Project Representative (RPR). No partial payment will be made for materials subject to specific quality control (QC) requirements until the CQCP has been reviewed and approved.

The QC requirements contained in this section and elsewhere in the contract technical specifications are in addition to and separate from the quality assurance (QA) testing requirements. QA testing requirements are the responsibility of the RPR or Contractor as specified in the specifications.

A Quality Control (QC)/Quality Assurance (QA) workshop with the Engineer, Resident Project Representative (RPR), Contractor, subcontractors, testing laboratories, and Owner's representative must be held prior to start of construction. The QC/QA workshop will be facilitated by the Contractor. The Contractor shall coordinate with the Airport and the RPR on time and location of the QC/QA workshop. Items to be addressed, at a minimum, will include:

a. Review of the CQCP including submittals, QC Testing, Action & Suspension Limits for Production, Corrective Action Plans, Distribution of QC reports, and Control Charts.

b. Discussion of the QA program.

c. Discussion of the QC and QA Organization and authority including coordination and information exchange between QC and QA.

d. Establish regular meetings to discuss control of materials, methods and testing.

e. Establishment of the overall QC culture.

100-2 Description of program.

a. General description. The Contractor shall establish a CQCP to perform QC inspection and testing of all items of work required by the technical specifications, including those performed by subcontractors.

The CQCP shall ensure conformance to applicable specifications and plans with respect to materials, off-site fabrication, workmanship, construction, finish, and functional performance. The CQCP shall be effective for control of all construction work performed under this Contract and shall specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of QC.

b. Contractor Quality Control Program (CQCP). The Contractor shall describe the CQCP in a written document that shall be reviewed and approved by the RPR prior to the start of any production, construction, or off-site fabrication. The written CQCP shall be submitted to the RPR for review and approval at least **10** calendar days before the CQCP Workshop. The Contractor's CQCP and QC testing laboratory must be approved in writing by the RPR prior to the Notice to Proceed (NTP).

The CQCP shall be organized to address, as a minimum, the following:

1. QC organization and resumes of key staff
2. Project progress schedule
3. Submittals schedule
4. Inspection requirements
5. QC testing plan
6. Documentation of QC activities and distribution of QC reports
7. Requirements for corrective action when QC and/or QA acceptance criteria are not met
8. Material quality and construction means and methods. Address all elements applicable to the project that affect the quality of the pavement structure including subgrade, subbase, base, and surface course. Some elements that must be addressed include, but is not limited to mix design, aggregate grading, stockpile management, mixing and transporting, placing and finishing, quality control testing and inspection, smoothness, laydown plan, equipment, and temperature management plan.

The Contractor must add any additional elements to the CQCP that is necessary to adequately control all production and/or construction processes required by this contract.

100-3 CQCP organization. The CQCP shall be implemented by the establishment of a QC organization. An organizational chart shall be developed to show all QC personnel, their authority, and how these personnel integrate with other management/production and construction functions and personnel.

The organizational chart shall identify all QC staff by name and function, and shall indicate the total staff required to implement all elements of the CQCP, including inspection and testing for each item of work. If necessary, different technicians can be used for specific inspection and testing functions for different items of work. If an outside organization or independent testing laboratory is used for implementation of all or part of the CQCP, the personnel assigned shall be subject to the qualification requirements of paragraphs 100-03a and 100-03b. The organizational chart shall indicate which personnel are Contractor employees and which are provided by an outside organization.

The QC organization shall, as a minimum, consist of the following personnel:

a. Program Administrator. The Contractor Quality Control Program Administrator (CQCPA) must be a full-time employee of the Contractor, or a consultant engaged by the Contractor. The CQCPA must have a minimum of five (5) years of experience in QC pavement construction with prior QC experience on a project of comparable size and scope as the contract.

Included in the five (5) years of paving/QC experience, the CQCPA must meet at least one of the following requirements:

(1) Professional Engineer with one (1) year of airport paving experience.

(2) Engineer-in-training with two (2) years of airport paving experience.

(3) National Institute for Certification in Engineering Technologies (NICET) Civil Engineering Technology Level IV with three (3) years of airport paving experience ***or Florida Department of Transportation equivalent certification.***

(4) An individual with four (4) years of airport paving experience, with a Bachelor of Science Degree in Civil Engineering, Civil Engineering Technology or Construction.

The CQCPA must have full authority to institute any and all actions necessary for the successful implementation of the CQCP to ensure compliance with the contract plans and technical specifications. The CQCPA authority must include the ability to immediately stop production until materials and/or processes are in compliance with contract specifications. The CQCPA must report directly to a principal officer of the construction firm. The CQCPA may supervise the Quality Control Program on more than one project provided that person can be at the job site within two (2) hours after being notified of a problem.

b. QC technicians. A sufficient number of QC technicians necessary to adequately implement the CQCP must be provided. These personnel must be either Engineers, engineering technicians, or experienced craftsman with qualifications in the appropriate field equivalent to NICET Level II in Civil Engineering Technology or higher, and shall have a minimum of two (2) years of experience in their area of expertise.

The QC technicians must report directly to the CQCPA and shall perform the following functions:

(1) Inspection of all materials, construction, plant, and equipment for conformance to the technical specifications, and as required by paragraph 100-6.

(2) Performance of all QC tests as required by the technical specifications and paragraph100-8.

(3) Performance of tests for the RPR when required by the technical specifications.

Certification at an equivalent level of qualification and experience by a state or nationally recognized organization will be acceptable in lieu of NICET certification.

c. Staffing levels. The Contractor shall provide sufficient qualified QC personnel to monitor each work activity at all times. Where material is being produced in a plant for incorporation into the work, separate plant and field technicians shall be provided at each plant and field placement location. The scheduling and coordinating of all inspection and testing must match the type and pace of work activity. The CQCP shall state where different technicians will be required for different work elements.

100-4 Project progress schedule. Critical QC activities must be shown on the project schedule as required by Section 80, paragraph 80-03, *Execution and Progress*.

100-5 Submittals schedule. The Contractor shall submit a detailed listing of all submittals (for example, mix designs, material certifications) and shop drawings required by the technical specifications. The listing can be developed in a spreadsheet format and shall include as a minimum:

a. Specification item number

b. Item description

c. Description of submittal

d. Specification paragraph requiring submittal

e. Scheduled date of submittal

100-6 Inspection requirements. QC inspection functions shall be organized to provide inspections for all definable features of work, as detailed below. All inspections shall be documented by the Contractor as specified by paragraph 100-9.

Inspections shall be performed as needed to ensure continuing compliance with contract requirements until completion of the particular feature of work. Inspections shall include the following minimum requirements:

a. During plant operation for material production, QC test results and periodic inspections shall be used to ensure the quality of aggregates and other mix components, and to adjust and control mix proportioning to meet the approved mix design and other requirements of the technical specifications. All equipment used in proportioning and mixing shall be inspected to ensure its proper operating condition. The CQCP shall detail how these and other QC functions will be accomplished and used.

b. During field operations, QC test results and periodic inspections shall be used to ensure the quality of all materials and workmanship. All equipment used in placing, finishing, and compacting shall be inspected to ensure its proper operating condition and to ensure that all such operations are in conformance to the technical specifications and are within the plan dimensions, lines, grades, and tolerances specified. The CQCP shall document how these and other QC functions will be accomplished and used.

100-7 Contractor QC testing facility.

a. For projects that include Item P-401, Item P-403, and Item P-404, the Contractor shall ensure facilities, including all necessary equipment, materials, and current reference standards, are provided that meet requirements in the following paragraphs of ASTM D3666, *Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials*:

- 8.1.3 Equipment Calibration and Checks;
- 8.1.9 Equipment Calibration, Standardization, and Check Records;
- 8.1.12 Test Methods and Procedures

b. For projects that include P-501, the Contractor shall ensure facilities, including all necessary equipment, materials, and current reference standards, are provided that meet requirements in the following paragraphs of ASTM C1077, Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation:

- 7 Test Methods and Procedures
- 8 Facilities, Equipment, and Supplemental Procedures

100-8 QC testing plan. As a part of the overall CQCP, the Contractor shall implement a QC testing plan, as required by the technical specifications. The testing plan shall include the minimum tests and test frequencies required by each technical specification Item, as well as any additional QC tests that the Contractor deems necessary to adequately control production and/or construction processes.

The QC testing plan can be developed in a spreadsheet fashion and shall, as a minimum, include the following:

a. Specification item number (e.g., P-401)

b. Item description (e.g., Hot Mix Asphalt Pavements)

c. Test type (e.g., gradation, grade, asphalt content)

d. Test standard (e.g., ASTM or American Association of State Highway and Transportation Officials (AASHTO) test number, as applicable)

e. Test frequency (e.g., as required by technical specifications or minimum frequency when requirements are not stated)

f. Responsibility (e.g., plant technician)

g. Control requirements (e.g., target, permissible deviations)

The QC testing plan shall contain a statistically-based procedure of random sampling for acquiring test samples in accordance with ASTM D3665. The RPR shall be provided the opportunity to witness QC sampling and testing.

All QC test results shall be documented by the Contractor as required by paragraph 100-9.

100-9 Documentation. The Contractor shall maintain current QC records of all inspections and tests performed. These records shall include factual evidence that the required QC inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken.

These records must cover both conforming and defective or deficient features, and must include a statement that all supplies and materials incorporated in the work are in full compliance with the terms of the contract. Legible copies of these records shall be furnished to the RPR daily. The records shall cover all work placed subsequent to the previously furnished records and shall be verified and signed by the CQCPA.

Contractor QC records required for the contract shall include, but are not necessarily limited to, the following records:

a. Daily inspection reports. Each Contractor QC technician shall maintain a daily log of all inspections performed for both Contractor and subcontractor operations. These technician's daily reports shall provide factual evidence that continuous QC inspections have been performed and shall, as a minimum, include the following:

(1) Technical specification item number and description
(2) Compliance with approved submittals
(3) Proper storage of materials and equipment
(4) Proper operation of all equipment
(5) Adherence to plans and technical specifications
(6) Summary of any necessary corrective actions
(7) Safety inspection.
(8) Photographs and/or video

The daily inspection reports shall identify all QC inspections and QC tests conducted, results of inspections, location and nature of defects found, causes for rejection, and remedial or corrective actions taken or proposed.

The daily inspection reports shall be signed by the responsible QC technician and the CQCPA. The RPR shall be provided at least one copy of each daily inspection report on the work day following the day of record. When QC inspection and test results are recorded and transmitted electronically, the results must be archived.

b. Daily test reports. The Contractor shall be responsible for establishing a system that will record all QC test results. Daily test reports shall document the following information:

(1) Technical specification item number and description

(2) Test designation
(3) Location
(4) Date of test
(5) Control requirements
(6) Test results
(7) Causes for rejection
(8) Recommended remedial actions
(9) Retests

Test results from each day's work period shall be submitted to the RPR prior to the start of the next day's work period. When required by the technical specifications, the Contractor shall maintain statistical QC charts. When QC daily test results are recorded and transmitted electronically, the results must be archived.

100-10 Corrective action requirements. The CQCP shall indicate the appropriate action to be taken when a process is deemed, or believed, to be out of control (out of tolerance) and detail what action will be taken to bring the process into control. The requirements for corrective action shall include both general requirements for operation of the CQCP as a whole, and for individual items of work contained in the technical specifications.

The CQCP shall detail how the results of QC inspections and tests will be used for determining the need for corrective action and shall contain clear rules to gauge when a process is out of control and the type of correction to be taken to regain process control.

When applicable or required by the technical specifications, the Contractor shall establish and use statistical QC charts for individual QC tests. The requirements for corrective action shall be linked to the control charts.

100-11 Inspection and/or observations by the RPR. All items of material and equipment are subject to inspection and/or observation by the RPR at the point of production, manufacture or shipment to determine if the Contractor, producer, manufacturer or shipper maintains an adequate QC system in conformance with the requirements detailed here and the applicable technical specifications and plans. In addition, all items of materials, equipment and work in place shall be subject to inspection and/or observation by the RPR at the site for the same purpose.

Inspection and/or observations by the RPR does not relieve the Contractor of performing QC inspections of either on-site or off-site Contractor's or subcontractor's work.

100-12 Noncompliance.

a. The Resident Project Representative (RPR) will provide written notice to the Contractor of any noncompliance with their CQCP. After receipt of such notice, the Contractor must take corrective action.

b. When QC activities do not comply with either the CQCP or the contract provisions or when the Contractor fails to properly operate and maintain an effective CQCP, and no effective corrective actions have been taken after notification of non-compliance, the RPR will recommend the Owner take the following actions:

(1) Order the Contractor to replace ineffective or unqualified QC personnel or subcontractors and/or

(2) Order the Contractor to stop operations until appropriate corrective actions are taken.

METHOD OF MEASUREMENT

100-13 Basis of measurement and payment. Contractor Quality Control Program (CQCP) is for the personnel, tests, facilities and documentation required to implement the CQCP. The CQCP will be paid as a lump sum with the following schedule of partial payments:

a. With first pay request, 25% with approval of CQCP and completion of the Quality Control (QC)/Quality Assurance (QA) workshop.

b. When 25% or more of the original contract is earned, an additional 25%.

c. When 50% or more of the original contract is earned, an additional 20%.

d. When 75% or more of the original contract is earned, an additional 20%

e. After final inspection and acceptance of project, the final 10%.

BASIS OF PAYMENT

100-14 Payment will be made under:

Item C-100-14.1 Contractor Quality Control Program (CQCP) – per lump Sum

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

National Institute for Certification in Engineering Technologies (NICET)

ASTM International (ASTM)

ASTM C1077	Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation
ASTM D3665	Standard Practice for Random Sampling of Construction Materials
ASTM D3666	Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials

END OF ITEM C-100

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Item C-102 Temporary Air and Water Pollution, Soil Erosion, and Siltation Control

DESCRIPTION

102-1. This item shall consist of temporary control measures as shown on the plans or as ordered by the Resident Project Representative (RPR) during the life of a contract to control pollution of air and water, soil erosion, and siltation through the use of silt fences, berms, dikes, dams, sediment basins, fiber mats, gravel, mulches, grasses, slope drains, and other erosion control devices or methods.

Temporary erosion control shall be in accordance with the approved erosion control plan; the approved Construction Safety and Phasing Plan (CSPP) and AC 150/5370-2, *Operational Safety on Airports During Construction*. The temporary erosion control measures contained herein shall be coordinated with the permanent erosion control measures specified as part of this contract to the extent practical to assure economical, effective, and continuous erosion control throughout the construction period.

Temporary control may include work outside the construction limits such as borrow pit operations, equipment and material storage sites, waste areas, and temporary plant sites.

Temporary control measures shall be designed, installed and maintained to minimize the creation of wildlife attractants that have the potential to attract hazardous wildlife on or near public-use airports.

MATERIALS

102-2.1 Grass. Grass that will not compete with the grasses sown later for permanent cover per Item T-901shall be a quick-growing species (such as ryegrass, Italian ryegrass, or cereal grasses) suitable to the area providing a temporary cover. Selected grass species shall not create a wildlife attractant.

102-2.2 Mulches. Mulches may be hay, straw, fiber mats, netting, bark, wood chips, or other suitable material reasonably clean and free of noxious weeds and deleterious materials per Item T-908. Mulches shall not create a wildlife attractant.

102-2.3 Fertilizer. Fertilizer shall be a standard commercial grade and shall conform to all federal and state regulations and to the standards of the Association of Official Agricultural Chemists.

102-2.4 Slope drains. Slope drains may be constructed of pipe, fiber mats, rubble, concrete, asphalt, or other materials that will adequately control erosion.

102-2.5 Silt fence. Silt fence shall consist of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life. Silt fence shall meet the requirements of ASTM D6461.

102-2.6 Other. All other materials shall meet commercial grade standards and shall be approved by the RPR before being incorporated into the project.

CONSTRUCTION REQUIREMENTS

102-3.1 General. In the event of conflict between these requirements and pollution control laws, rules, or regulations of other federal, state, or local agencies, the more restrictive laws, rules, or regulations shall apply.

The RPR shall be responsible for assuring compliance to the extent that construction practices, construction operations, and construction work are involved.

102-3.2 Schedule. Prior to the start of construction, the Contractor shall submit schedules in accordance with the approved Construction Safety and Phasing Plan (CSPP) and the plans for accomplishment of temporary and permanent erosion control work for clearing and grubbing; grading; construction; paving; and structures at watercourses. The Contractor shall also submit a proposed method of erosion and dust control on haul roads and borrow pits and a plan for disposal of waste materials. Work shall not be started until the erosion control schedules and methods of operation for the applicable construction have been accepted by the RPR.

102-3.3 Construction details. The Contractor will be required to incorporate all permanent erosion control features into the project at the earliest practicable time as outlined in the plans and approved CSPP. Except where future construction operations will damage slopes, the Contractor shall perform the permanent seeding and mulching and other specified slope protection work in stages, as soon as substantial areas of exposed slopes can be made available. Temporary erosion and pollution control measures will be used to correct conditions that develop during construction that were not foreseen during the design stage; that are needed prior to installation of permanent control features; or that are needed temporarily to control erosion that develops during normal construction practices, but are not associated with permanent control features on the project.

Where erosion may be a problem, schedule and perform clearing and grubbing operations so that grading operations and permanent erosion control features can follow immediately if project conditions permit. Temporary erosion control measures are required if permanent measures cannot immediately follow grading operations. The RPR shall limit the area of clearing and grubbing, excavation, borrow, and embankment operations in progress, commensurate with the Contractor's capability and progress in keeping the finish grading, mulching, seeding, and other such permanent control measures current with the accepted schedule. If seasonal limitations make such coordination unrealistic, temporary erosion control measures shall be taken immediately to the extent feasible and justified as directed by the RPR.

The Contractor shall provide immediate permanent or temporary pollution control measures to minimize contamination of adjacent streams or other watercourses, lakes, ponds, or other areas of water impoundment as directed by the RPR. If temporary erosion and pollution control measures are required due to the Contractor's negligence, carelessness, or failure to install permanent controls as a part of the work as scheduled or directed by the RPR, the work shall be performed by the Contractor and the cost shall be incidental to this item.

The RPR may increase or decrease the area of erodible earth material that can be exposed at any time based on an analysis of project conditions.

The erosion control features installed by the Contractor shall be maintained by the Contractor during the construction period.

Provide temporary structures whenever construction equipment must cross watercourses at frequent intervals. Pollutants such as fuels, lubricants, bitumen, raw sewage, wash water from concrete mixing operations, and other harmful materials shall not be discharged into any waterways, impoundments or into natural or manmade channels.

The Contractor shall be responsible for providing temporary measures as needed to adequately control dust during construction. Dust, as discussed herein, may be from blowing soil, Portland cement, dry grass, or other such materials.

Required methods of controlling dust and other air pollutants will include but are not limited to:

- *Exposing the minimum area of erodible earth.*

- *Using water sprinkler trucks.*
- *Using covered haul trucks. This method is required for trucks hauling borrow excavation on any roadway.*
- *Using dust palliatives or penetration asphalt on haul roads.*
- *Using plastic sheet coverings.*

Dust control at an operational airfield is of the utmost importance because excessive dust can restrict sight distance and damage aircraft engines. The Owner reserves the right to shut down or restrict construction operations when excessive dust, as determined by the RPR, could impact air navigation or airfield operations. Such a restriction or shutdown may not be used as the basis for additional costs or contract time.

The cost of temporary measures to control dust shall be incidental to the Contract and no separate payment will be made for these measures. Contractor shall periodically inspect the pollution control features at the intervals stated in the approved Pollution Control Plan, and immediately after each rainfall and at least daily during prolonged rainfall. Contractor will immediately correct any deficiencies. Review the location of pollution control features for effectiveness. If deficiencies exist, correct as directed by Engineer.

There shall be no additional or separate compensation paid to Contractor for such work.

Remove sediment deposits when the deposit reaches approximately 1/3 of the volume capacity of the sediment control feature, or as required. Remove all sediment deposits when the sediment control feature is removed. Grade and dress area to restore to preconstruction condition or finish grade as called for on the plans.

In compliance with General Provision Section 50, Contractor shall continuously maintain permanent and temporary pollution control features. Maintenance shall include periodic watering and mowing of grassed areas. There shall be no additional or separate compensation paid to Contractor for such work. If construction is suspended Contractor shall inspect, maintain and operate temporary and permanent pollution control features during such suspension. If suspension is part of the project phasing and sequencing plan, or if the suspension is requested by Contractor, there shall be no additional or separate compensation paid to Contractor to inspect, maintain and operate the pollution control facilities.

102-3.4 Installation, maintenance and removal of silt fence. Silt fences shall extend a minimum of 16 inches (41 cm) and a maximum of 34 inches (86 cm) above the ground surface. Posts shall be set no more than 10 feet (3 m) on center. Filter fabric shall be cut from a continuous roll to the length required minimizing joints where possible. When joints are necessary, the fabric shall be spliced at a support post with a minimum 12-inch (300-mm) overlap and securely sealed. A trench shall be excavated approximately 4 inches (100 mm) deep by 4 inches (100 mm) wide on the upslope side of the silt fence. The trench shall be backfilled and the soil compacted over the silt fence fabric. The Contractor shall remove and dispose of silt that accumulates during construction and prior to establishment of permanent erosion control. The fence shall be maintained in good working condition until permanent erosion control is established. Silt fence shall be removed upon approval of the RPR.

102-3.5 Additional Requirements. *Additional construction requirements as given in Section 104-1 thru 104-8 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition, must be followed.*

In compliance with Florida Department of Environmental Protection (FDEP) Document 62-621.300(4)(a), F.A.C., contractor shall provide Engineer and Owner with copies approved permit documentation obtained for any discharges to surface waters under the National Pollutant Discharge

Elimination System (NPDES) as required. Copies of SWPPP report and daily reports shall be provided to Engineer and Owner. Daily reports shall be provided on a weekly basis or as directed by Engineer.

METHOD OF MEASUREMENT

102-4.1 Temporary erosion and pollution control work required will be performed as scheduled or directed by the RPR. Completed and accepted work will be *paid as lump sum.*

102-4.2 Control work performed for protection of construction areas outside the construction limits, such as borrow and waste areas, haul roads, equipment and material storage sites, and temporary plant sites, will not be measured and paid for directly but shall be considered as a subsidiary obligation of the Contractor.

BASIS OF PAYMENT

102-5.1 Accepted quantities of temporary water pollution, soil erosion, and siltation control work ordered by the RPR and measured as provided in paragraph 102-4.1 will be paid for under:

Item C-102-5.1 Temporary Air and Water Pollution, Soil Erosion, and Siltation Control - per lump sum

Where other directed work falls within the specifications for a work item that has a contract price, the units of work shall be measured and paid for at the contract unit price bid for the various items.

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Advisory Circulars (AC)

AC 150/5200-33 *Hazardous Wildlife Attractants on or Near Airports*

AC 150/5370-2 *Operational Safety on Airports During Construction*

ASTM International (ASTM)

ASTM D6461 *Standard Specification for Silt Fence Materials*

United States Department of Agriculture (USDA)

FAA/USDA Wildlife Hazard Management at Airports, A Manual for Airport Personnel

END OF ITEM C-102

Item C-105 Mobilization

105-1 Description. This item of work shall consist of, but is not limited to, work and operations necessary for the movement of personnel, equipment, material and supplies to and from the project site for work on the project except as provided in the contract as separate pay items.

105-1.2 The costs for the establishment by the Contractor, if required, of staging areas, temporary offices, temporary fencing and gates, building facilities, all utilities, security elements, temporary access roads, safety equipment and first aid supplies, sanitary and other facilities, as required by these Contract Documents, any Federal, State and local laws and regulations. The preparation, submittal and approval of initial project schedule, construction sequencing plan, shop drawings, submittals, and the cost to maintain and restore project elements to preconstruction condition, including sodding.

105-1.3 The costs, if required, of bonds and any required insurance and other preconstruction expense necessary for the start of the work, excluding the cost of construction materials, shall be included in this Item.

105-1.4 This item of work will also include, if required, any other item or items of work shown, implied or required for the completion of the project that are not directly paid for under other pay items.

105-1.5 All costs, if required, associated with the required meetings and coordination with the Owner, and Owner's Representative, in addition, all costs associated with the Contractor badging shall be included in this item.

105-1.6 DEMOBILIZATION. *The Contractor shall completely de-mobilize all equipment, vehicles, materials, offices, and waste within 30 days of final acceptance. Remaining retainage will not be released until all deficient work is corrected and the Contractor has completely demobilized from the project site.*

105-2 Mobilization limit. Mobilization shall be limited to **10** percent of the total project cost.

105-3 Posted notices. Prior to commencement of construction activities, the Contractor must post the following documents in a prominent and accessible place where they may be easily viewed by all employees of the prime Contractor and by all employees of subcontractors engaged by the prime Contractor: Equal Employment Opportunity (EEO) Poster "Equal Employment Opportunity is the Law" in accordance with the Office of Federal Contract Compliance Programs Executive Order 11246, as amended; Davis Bacon Wage Poster (WH 1321) - DOL "Notice to All Employees" Poster; and Applicable Davis-Bacon Wage Rate Determination. These notices must remain posted until final acceptance of the work by the Owner.

105-4 Engineer/RPR field office. An Engineer/RPR field office is not required.

METHOD OF MEASUREMENT

105-5 Basis of measurement and payment. Based upon the contract lump sum price for "Mobilization" partial payments will be allowed as follows:

a. With first pay request, 25%.

b. When 25% or more of the original contract is earned, an additional 25%.

c. When 50% or more of the original contract is earned, an additional 40%.

d. After Final Inspection, Staging area clean-up and delivery of all Project Closeout materials as required by Section 90, paragraph 90-11, *Contractor Final Project Documentation*, the final 10%.

105-5.2 Contractor Staging and Storage Area. *The establishment by the Contractor, if required, of staging areas, temporary offices, temporary fencing and gates, building facilities, safety equipment and first aid supplies, sanitary and other facilities, as required by these Specifications and State and local laws and regulations, the preparation and material cost to establish, maintain and restore to the existing conditions, including stabilization of disturbed earth in accordance with the SWPPP, of the Contractor staging area shall be measured under the "Contractor Staging and Storage" lump sum price and shall be paid as defined in 105-5.*

BASIS OF PAYMENT

105-6 Payment will be made under:

Item C-105-6.1	Mobilization – per lump sum
Item C-105-6.2	Contractor Staging and Storage – per lump sum

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Office of Federal Contract Compliance Programs (OFCCP)

Executive Order 11246, as amended

EEOC-P/E-1 – Equal Employment Opportunity is the Law Poster

United States Department of Labor, Wage and Hour Division (WHD)

WH 1321 – Employee Rights under the Davis-Bacon Act Poster

END OF ITEM C-105

Item C-110 Method of Estimating Percentage of Material Within Specification Limits (PWL)

110-1 General. When the specifications provide for acceptance of material based on the method of estimating percentage of material within specification limits (PWL), the PWL will be determined in accordance with this section. All test results for a lot will be analyzed statistically to determine the total estimated percent of the lot that is within specification limits. The PWL is computed using the sample average (X) and sample standard deviation (S_n) of the specified number (n) of sublots for the lot and the specification tolerance limits, L for lower and U for upper, for the particular acceptance parameter. From these values, the respective Quality index, Q_L for Lower Quality Index and/or Q_U for Upper Quality Index, is computed and the PWL for the lot for the specified n is determined from Table 1. All specification limits specified in the technical sections shall be absolute values. Test results used in the calculations shall be to the significant figure given in the test procedure.

There is some degree of uncertainty (risk) in the measurement for acceptance because only a small fraction of production material (the population) is sampled and tested. This uncertainty exists because all portions of the production material have the same probability to be randomly sampled. The Contractor's risk is the probability that material produced at the acceptable quality level is rejected or subjected to a pay adjustment. The Owner's risk is the probability that material produced at the rejectable quality level is accepted.

It is the intent of this section to inform the Contractor that, in order to consistently offset the Contractor's risk for material evaluated, production quality (using population average and population standard deviation) must be maintained at the acceptable quality specified or higher. In all cases, it is the responsibility of the Contractor to produce at quality levels that will meet the specified acceptance criteria when sampled and tested at the frequencies specified.

110-2 Method for computing PWL. The computational sequence for computing PWL is as follows:

a. Divide the lot into n sublots in accordance with the acceptance requirements of the specification.

b. Locate the random sampling position within the sublot in accordance with the requirements of the specification.

c. Make a measurement at each location, or take a test portion and make the measurement on the test portion in accordance with the testing requirements of the specification.

d. Find the sample average (X) for all sublot test values within the lot by using the following formula:

$$\mathbf{X = (x_1 + x_2 + x_3 + \ldots x_n) / n}$$

Where: X = Sample average of all sublot test values within a lot

$x_1, x_2, \ldots x_n$ = Individual sublot test values

n = Number of sublot test values

e. Find the sample standard deviation (S_n) by use of the following formula:

$$\mathbf{S_n = [(d_1^2 + d_2^2 + d_3^2 + \ldots d_n^2)/(n-1)]^{1/2}}$$

Where: S_n = Sample standard deviation of the number of sublot test values in the set

$d_1, d_2, \ldots d_n$ = Deviations of the individual sublot test values $x_1, x_2, \ldots$ from the average value X

that is: $d_1 = (x_1 - X)$, $d_2 = (x_2 - X) \ldots d_n = (x_n - X)$

n = Number of sublot test values

f. For single sided specification limits (i.e., L only), compute the Lower Quality Index Q_L by use of the following formula:

$$\mathbf{Q_L = (X - L) / S_n}$$

Where: L = specification lower tolerance limit

Estimate the percentage of material within limits (PWL) by entering Table 1 with Q_L, using the column appropriate to the total number (n) of measurements. If the value of Q_L falls between values shown on the table, use the next higher value of PWL.

g. For double-sided specification limits (i.e., L and U), compute the Quality Indexes Q_L and Q_U by use of the following formulas:

$$\mathbf{Q_L = (X - L) / S_n}$$
and
$$\mathbf{Q_U = (U - X) / S_n}$$

Where: L and U = specification lower and upper tolerance limits

Estimate the percentage of material between the lower (L) and upper (U) tolerance limits (PWL) by entering Table 1 separately with Q_L and Q_U, using the column appropriate to the total number (n) of measurements, and determining the percent of material above P_L and percent of material below P_U for each tolerance limit. If the values of Q_L fall between values shown on the table, use the next higher value of P_L or P_U. Determine the PWL by use of the following formula:

$$\mathbf{PWL = (P_U + P_L) - 100}$$

Where: P_L = percent within lower specification limit

P_U = percent within upper specification limit

EXAMPLE OF PWL CALCULATION

Project: Example Project

Test Item: Item P-401, Lot A.

A. PWL Determination for Mat Density.

1. Density of four random cores taken from Lot A.

A-1 = 96.60

A-2 = 97.55

A-3 = 99.30

A-4 = 98.35

n = 4

2. Calculate average density for the lot.

$X = (x_1 + x_2 + x_3 + . . . x_n) / n$
$X = (96.60 + 97.55 + 99.30 + 98.35) / 4$
$X = 97.95\%$ density

3. Calculate the standard deviation for the lot.

$S_n = [((96.60 - 97.95)^2 + (97.55 - 97.95)^2 + (99.30 - 97.95)^2 + (98.35 - 97.95)^2)) / (4 - 1)]^{1/2}$
$S_n = [(1.82 + 0.16 + 1.82 + 0.16) / 3]^{1/2}$
$S_n = 1.15$

4. Calculate the Lower Quality Index Q_L for the lot. (L=96.3)

$Q_L = (X - L) / S_n$
$Q_L = (97.95 - 96.30) / 1.15$
$Q_L = 1.4348$

5. Determine PWL by entering Table 1 with $Q_L = 1.44$ and n= 4.

PWL = 98

B. PWL Determination for Air Voids.

1. Air Voids of four random samples taken from Lot A.

A-1 = 5.00
A-2 = 3.74
A-3 = 2.30
A-4 = 3.25

2. Calculate the average air voids for the lot.

$X = (x_1 + x_2 + x_3 . . . n) / n$
$X = (5.00 + 3.74 + 2.30 + 3.25) / 4$
$X = 3.57\%$

3. Calculate the standard deviation S_n for the lot.

$S_n = [((3.57 - 5.00)^2 + (3.57 - 3.74)^2 + (3.57 - 2.30)^2 + (3.57 - 3.25)^2) / (4 - 1)]^{1/2}$
$S_n = [(2.04 + 0.03 + 1.62 + 0.10) / 3]^{1/2}$
$S_n = 1.12$

4. Calculate the Lower Quality Index Q_L for the lot. (L= 2.0)

$Q_L = (X - L) / S_n$
$Q_L = (3.57 - 2.00) / 1.12$
$Q_L = 1.3992$

5. Determine P_L by entering Table 1 with $Q_L = 1.41$ and n = 4.

$P_L = 97$

6. Calculate the Upper Quality Index Q_U for the lot. (U= 5.0)

$Q_U = (U - X) / S_n$
$Q_U = (5.00 - 3.57) / 1.12$

$Q_U = 1.2702$

7. Determine P_U by entering Table 1 with $Q_U = 1.29$ and n = 4.

$P_U = 93$

8. Calculate Air Voids PWL

$PWL = (P_L + P_U) - 100$

$PWL = (97 + 93) - 100 = 90$

EXAMPLE OF OUTLIER CALCULATION (REFERENCE ASTM E178)

Project: Example Project

Test Item: Item P-401, Lot A.

A. Outlier Determination for Mat Density.

1. Density of four random cores taken from Lot A arranged in descending order.

A-3 = 99.30

A-4 = 98.35

A-2 = 97.55

A-1 = 96.60

2. From ASTM E178, Table 1, for n=4 an upper 5% significance level, the critical value for test criterion = 1.463.

3. Use average density, standard deviation, and test criterion value to evaluate density measurements.

a. For measurements greater than the average:

If (measurement - average)/(standard deviation) is less than test criterion, then the measurement is not considered an outlier.

For A-3, check if (99.30 - 97.95) / 1.15 is greater than 1.463.

Since 1.174 is less than 1.463, the value is not an outlier.

b. For measurements less than the average:

If (average - measurement)/(standard deviation) is less than test criterion, then the measurement is not considered an outlier.

For A-1, check if (97.95 - 96.60) / 1.15 is greater than 1.463.

Since 1.435 is less than 1.463, the value is not an outlier.

Note: In this example, a measurement would be considered an outlier if the density were:

Greater than (97.95 + 1.463 × 1.15) = 99.63%

OR

less than (97.95 - 1.463 × 1.15) = 96.27%.

Table 1. Table for Estimating Percent of Lot Within Limits (PWL)

Percent Within Limits (P_L and P_U)	Positive Values of Q (Q_L and Q_U)							
	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10
99	1.1541	1.4700	1.6714	1.8008	1.8888	1.9520	1.9994	2.0362
98	1.1524	1.4400	1.6016	1.6982	1.7612	1.8053	1.8379	1.8630
97	1.1496	1.4100	1.5427	1.6181	1.6661	1.6993	1.7235	1.7420
96	1.1456	1.3800	1.4897	1.5497	1.5871	1.6127	1.6313	1.6454
95	1.1405	1.3500	1.4407	1.4887	1.5181	1.5381	1.5525	1.5635
94	1.1342	1.3200	1.3946	1.4329	1.4561	1.4717	1.4829	1.4914
93	1.1269	1.2900	1.3508	1.3810	1.3991	1.4112	1.4199	1.4265
92	1.1184	1.2600	1.3088	1.3323	1.3461	1.3554	1.3620	1.3670
91	1.1089	1.2300	1.2683	1.2860	1.2964	1.3032	1.3081	1.3118
90	1.0982	1.2000	1.2290	1.2419	1.2492	1.2541	1.2576	1.2602
89	1.0864	1.1700	1.1909	1.1995	1.2043	1.2075	1.2098	1.2115
88	1.0736	1.1400	1.1537	1.1587	1.1613	1.1630	1.1643	1.1653
87	1.0597	1.1100	1.1173	1.1192	1.1199	1.1204	1.1208	1.1212
86	1.0448	1.0800	1.0817	1.0808	1.0800	1.0794	1.0791	1.0789
85	1.0288	1.0500	1.0467	1.0435	1.0413	1.0399	1.0389	1.0382
84	1.0119	1.0200	1.0124	1.0071	1.0037	1.0015	1.0000	0.9990
83	0.9939	0.9900	0.9785	0.9715	0.9671	0.9643	0.9624	0.9610
82	0.9749	0.9600	0.9452	0.9367	0.9315	0.9281	0.9258	0.9241
81	0.9550	0.9300	0.9123	0.9025	0.8966	0.8928	0.8901	0.8882
80	0.9342	0.9000	0.8799	0.8690	0.8625	0.8583	0.8554	0.8533
79	0.9124	0.8700	0.8478	0.8360	0.8291	0.8245	0.8214	0.8192
78	0.8897	0.8400	0.8160	0.8036	0.7962	0.7915	0.7882	0.7858
77	0.8662	0.8100	0.7846	0.7716	0.7640	0.7590	0.7556	0.7531
76	0.8417	0.7800	0.7535	0.7401	0.7322	0.7271	0.7236	0.7211
75	0.8165	0.7500	0.7226	0.7089	0.7009	0.6958	0.6922	0.6896
74	0.7904	0.7200	0.6921	0.6781	0.6701	0.6649	0.6613	0.6587
73	0.7636	0.6900	0.6617	0.6477	0.6396	0.6344	0.6308	0.6282
72	0.7360	0.6600	0.6316	0.6176	0.6095	0.6044	0.6008	0.5982
71	0.7077	0.6300	0.6016	0.5878	0.5798	0.5747	0.5712	0.5686
70	0.6787	0.6000	0.5719	0.5582	0.5504	0.5454	0.5419	0.5394
69	0.6490	0.5700	0.5423	0.5290	0.5213	0.5164	0.5130	0.5105
68	0.6187	0.5400	0.5129	0.4999	0.4924	0.4877	0.4844	0.4820
67	0.5878	0.5100	0.4836	0.4710	0.4638	0.4592	0.4560	0.4537
66	0.5563	0.4800	0.4545	0.4424	0.4355	0.4310	0.4280	0.4257
65	0.5242	0.4500	0.4255	0.4139	0.4073	0.4030	0.4001	0.3980
64	0.4916	0.4200	0.3967	0.3856	0.3793	0.3753	0.3725	0.3705
63	0.4586	0.3900	0.3679	0.3575	0.3515	0.3477	0.3451	0.3432
62	0.4251	0.3600	0.3392	0.3295	0.3239	0.3203	0.3179	0.3161
61	0.3911	0.3300	0.3107	0.3016	0.2964	0.2931	0.2908	0.2892
60	0.3568	0.3000	0.2822	0.2738	0.2691	0.2660	0.2639	0.2624
59	0.3222	0.2700	0.2537	0.2461	0.2418	0.2391	0.2372	0.2358
58	0.2872	0.2400	0.2254	0.2186	0.2147	0.2122	0.2105	0.2093
57	0.2519	0.2100	0.1971	0.1911	0.1877	0.1855	0.1840	0.1829
56	0.2164	0.1800	0.1688	0.1636	0.1607	0.1588	0.1575	0.1566
55	0.1806	0.1500	0.1406	0.1363	0.1338	0.1322	0.1312	0.1304
54	0.1447	0.1200	0.1125	0.1090	0.1070	0.1057	0.1049	0.1042
53	0.1087	0.0900	0.0843	0.0817	0.0802	0.0793	0.0786	0.0781
52	0.0725	0.0600	0.0562	0.0544	0.0534	0.0528	0.0524	0.0521
51	0.0363	0.0300	0.0281	0.0272	0.0267	0.0264	0.0262	0.0260
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Percent Within Limits (P_L and P_U)	Negative Values of Q (Q_L and Q_U)							
	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10
49	-0.0363	-0.0300	-0.0281	-0.0272	-0.0267	-0.0264	-0.0262	-0.0260
48	-0.0725	-0.0600	-0.0562	-0.0544	-0.0534	-0.0528	-0.0524	-0.0521
47	-0.1087	-0.0900	-0.0843	-0.0817	-0.0802	-0.0793	-0.0786	-0.0781
46	-0.1447	-0.1200	-0.1125	-0.1090	-0.1070	-0.1057	-0.1049	-0.1042
45	-0.1806	-0.1500	-0.1406	-0.1363	-0.1338	-0.1322	-0.1312	-0.1304
44	-0.2164	-0.1800	-0.1688	-0.1636	-0.1607	-0.1588	-0.1575	-0.1566
43	-0.2519	-0.2100	-0.1971	-0.1911	-0.1877	-0.1855	-0.1840	-0.1829
42	-0.2872	-0.2400	-0.2254	-0.2186	-0.2147	-0.2122	-0.2105	-0.2093
41	-0.3222	-0.2700	-0.2537	-0.2461	-0.2418	-0.2391	-0.2372	-0.2358
40	-0.3568	-0.3000	-0.2822	-0.2738	-0.2691	-0.2660	-0.2639	-0.2624
39	-0.3911	-0.3300	-0.3107	-0.3016	-0.2964	-0.2931	-0.2908	-0.2892
38	-0.4251	-0.3600	-0.3392	-0.3295	-0.3239	-0.3203	-0.3179	-0.3161
37	-0.4586	-0.3900	-0.3679	-0.3575	-0.3515	-0.3477	-0.3451	-0.3432
36	-0.4916	-0.4200	-0.3967	-0.3856	-0.3793	-0.3753	-0.3725	-0.3705
35	-0.5242	-0.4500	-0.4255	-0.4139	-0.4073	-0.4030	-0.4001	-0.3980
34	-0.5563	-0.4800	-0.4545	-0.4424	-0.4355	-0.4310	-0.4280	-0.4257
33	-0.5878	-0.5100	-0.4836	-0.4710	-0.4638	-0.4592	-0.4560	-0.4537
32	-0.6187	-0.5400	-0.5129	-0.4999	-0.4924	-0.4877	-0.4844	-0.4820
31	-0.6490	-0.5700	-0.5423	-0.5290	-0.5213	-0.5164	-0.5130	-0.5105
30	-0.6787	-0.6000	-0.5719	-0.5582	-0.5504	-0.5454	-0.5419	-0.5394
29	-0.7077	-0.6300	-0.6016	-0.5878	-0.5798	-0.5747	-0.5712	-0.5686
28	-0.7360	-0.6600	-0.6316	-0.6176	-0.6095	-0.6044	-0.6008	-0.5982
27	-0.7636	-0.6900	-0.6617	-0.6477	-0.6396	-0.6344	-0.6308	-0.6282
26	-0.7904	-0.7200	-0.6921	-0.6781	-0.6701	-0.6649	-0.6613	-0.6587
25	-0.8165	-0.7500	-0.7226	-0.7089	-0.7009	-0.6958	-0.6922	-0.6896
24	-0.8417	-0.7800	-0.7535	-0.7401	-0.7322	-0.7271	-0.7236	-0.7211
23	-0.8662	-0.8100	-0.7846	-0.7716	-0.7640	-0.7590	-0.7556	-0.7531
22	-0.8897	-0.8400	-0.8160	-0.8036	-0.7962	-0.7915	-0.7882	-0.7858
21	-0.9124	-0.8700	-0.8478	-0.8360	-0.8291	-0.8245	-0.8214	-0.8192
20	-0.9342	-0.9000	-0.8799	-0.8690	-0.8625	-0.8583	-0.8554	-0.8533
19	-0.9550	-0.9300	-0.9123	-0.9025	-0.8966	-0.8928	-0.8901	-0.8882
18	-0.9749	-0.9600	-0.9452	-0.9367	-0.9315	-0.9281	-0.9258	-0.9241
17	-0.9939	-0.9900	-0.9785	-0.9715	-0.9671	-0.9643	-0.9624	-0.9610
16	-1.0119	-1.0200	-1.0124	-1.0071	-1.0037	-1.0015	-1.0000	-0.9990
15	-1.0288	-1.0500	-1.0467	-1.0435	-1.0413	-1.0399	-1.0389	-1.0382
14	-1.0448	-1.0800	-1.0817	-1.0808	-1.0800	-1.0794	-1.0791	-1.0789
13	-1.0597	-1.1100	-1.1173	-1.1192	-1.1199	-1.1204	-1.1208	-1.1212
12	-1.0736	-1.1400	-1.1537	-1.1587	-1.1613	-1.1630	-1.1643	-1.1653
11	-1.0864	-1.1700	-1.1909	-1.1995	-1.2043	-1.2075	-1.2098	-1.2115
10	-1.0982	-1.2000	-1.2290	-1.2419	-1.2492	-1.2541	-1.2576	-1.2602
9	-1.1089	-1.2300	-1.2683	-1.2860	-1.2964	-1.3032	-1.3081	-1.3118
8	-1.1184	-1.2600	-1.3088	-1.3323	-1.3461	-1.3554	-1.3620	-1.3670
7	-1.1269	-1.2900	-1.3508	-1.3810	-1.3991	-1.4112	-1.4199	-1.4265
6	-1.1342	-1.3200	-1.3946	-1.4329	-1.4561	-1.4717	-1.4829	-1.4914
5	-1.1405	-1.3500	-1.4407	-1.4887	-1.5181	-1.5381	-1.5525	-1.5635
4	-1.1456	-1.3800	-1.4897	-1.5497	-1.5871	-1.6127	-1.6313	-1.6454
3	-1.1496	-1.4100	-1.5427	-1.6181	-1.6661	-1.6993	-1.7235	-1.7420
2	-1.1524	-1.4400	-1.6016	-1.6982	-1.7612	-1.8053	-1.8379	-1.8630
1	-1.1541	-1.4700	-1.6714	-1.8008	-1.8888	-1.9520	-1.9994	-2.0362

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM E178 Standard Practice for Dealing with Outlying Observations

END OF ITEM C-110

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Item P-101 Preparation/Removal of Existing Pavements

DESCRIPTION

101-1 This item shall consist of preparation of existing pavement surfaces for overlay, surface treatments, removal of existing pavement, and other miscellaneous items. The work shall be accomplished in accordance with these specifications and the applicable plans.

EQUIPMENT AND MATERIALS

101-2 All equipment and materials shall be specified here and in the following paragraphs or approved by the Resident Project Representative (RPR). The equipment shall not cause damage to the pavement to remain in place.

CONSTRUCTION

101-3.1 Removal of existing pavement.

The Contractor's removal operation shall be controlled to not damage adjacent pavement structure, and base material, cables, utility ducts, pipelines, or drainage structures which are to remain under the pavement.

~~**a. Concrete pavement removal.** Full depth saw cuts shall be made perpendicular to the slab surface. The Contractor shall saw through the full depth of the slab including any dowels at the joint, removing the pavement and installing new dowels as shown on the plans and per the specifications. Where the perimeter of the removal limits is not located on the joint and there are no dowels present, the perimeter shall be saw cut the full depth of the pavement. The pavement inside the saw cut shall be removed by methods which will not cause distress in the pavement which is to remain in place. If the material is to be wasted on the airport site, it shall be reduced to a maximum size of [___]. Concrete slabs that are damaged by under breaking shall be repaired or removed and replaced as directed by the RPR.~~

~~The edge of existing concrete pavement against which new pavement abuts shall be protected from damage at all times. Spall and underbreak repair shall be in accordance with the plans. Any underlaying material that is to remain in place, shall be recompacted and/or replaced as shown on the plans. Adjacent areas damaged during repair shall be repaired or replaced at the Contractor's expense.~~

b. Asphalt pavement removal. Asphalt pavement to be removed shall be cut to the full depth of the asphalt pavement around the perimeter of the area to be removed. ~~If the material is to be [wasted on the airport site] [incorporated into embankment], it shall be [broken to a maximum size of [___] inches (mm).] [meet the following gradation: [___].~~

c. Repair or removal of Base, Subbase, and/or Subgrade. All failed material including surface, base course, subbase course, and subgrade shall be removed and repaired as shown on the plans or as directed by the RPR. Materials and methods of construction shall comply with the applicable sections of these specifications. Any damage caused by Contractor's removal process shall be repaired at the Contractor's expense.

101-3.2 Preparation of joints and cracks prior to overlay/surface treatment. Remove all vegetation and debris from cracks to a minimum depth of 1 inch (25 mm). If extensive vegetation exists, treat the

specific area with a concentrated solution of a water-based herbicide approved by the RPR. Fill all cracks greater than 1/4 inch (6 mm) wide) with a crack sealant per ASTM D6690. The crack sealant, preparation, and application shall be compatible with the surface treatment/overlay to be used. To minimize contamination of the asphalt with the crack sealant, underfill the crack sealant a minimum of 1/8 inch (3 mm), not to exceed ¼ inch (6 mm). Any excess joint or crack sealer shall be removed from the pavement surface.

~~**101-3.3 Removal of Foreign Substances/contaminates prior to [overlay] [seal coat] [remarking].** Removal of foreign substances/contaminates from existing pavement that will affect the bond of the new treatment shall consist of removal of rubber, fuel spills, oil, crack sealer, at least 90% of paint, and other foreign substances from the surface of the pavement. Areas that require removal are designated on the plans and as directed by the RPR in the field during construction.~~

~~[Chemicals] [high-pressure water] [heater scarifier (asphaltic concrete only)] [cold milling] [rotary grinding] [sandblasting] may be used. If chemicals are used, they shall comply with the state's environmental protection regulations. Removal methods used shall not cause major damage to the pavement, or to any structure or utility within or adjacent to the work area. Major damage is defined as changing the properties of the pavement, removal of asphalt causing the aggregate to ravel, or removing pavement over 1/8 inch (3 mm) deep. If it is deemed by the RPR that damage to the existing pavement is caused by operational error, such as permitting the application method to dwell in one location for too long, the Contractor shall repair the damaged area without compensation and as directed by the RPR.~~

~~Removal of foreign substances shall not proceed until approved by the RPR. Water used for high-pressure water equipment shall be provided by the Contractor at the Contractor's expense. No material shall be deposited on the pavement shoulders. All wastes shall be disposed of in areas indicated in this specification or shown on the plans.~~

~~**101-3.4 Concrete spall or failed asphaltic concrete pavement repair.**~~

~~**a. Repair of concrete spalls in areas to be overlaid with asphalt.** The Contractor shall repair all spalled concrete as shown on the plans or as directed by the RPR. The perimeter of the repair shall be saw cut a minimum of 2 inches (50 mm) outside the affected area and 2 inches (50 mm) deep. The deteriorated material shall be removed to a depth where the existing material is firm or cannot be easily removed with a geologist pick. The removed area shall be filled with asphalt mixture with aggregate sized appropriately for the depth of the patch. The material shall be compacted with equipment approved by the RPR until the material is dense and no movement or marks are visible. The material shall not be placed in lifts over 4 inches (100 mm) in depth. This method of repair applies only to pavement to be overlaid.~~

~~**b. Asphalt pavement repair.** The Contractor shall repair all spalled concrete as shown on the plans or as directed by the RPR. The failed areas shall be removed as specified in paragraph 101-3.1b. All failed material including surface, base course, subbase course, and subgrade shall be removed. Materials and methods of construction shall comply with the applicable sections of these specifications.~~

101-3.5 Cold milling. Milling shall be performed with a power-operated milling machine or grinder, capable of producing a uniform finished surface. The milling machine or grinder shall operate without tearing or gouging the underlaying surface. The milling machine or grinder shall be equipped with grade and slope controls, and a positive means of dust control. All millings shall be removed and disposed off Airport property. If the Contractor mills or grinds deeper or wider than the plans specify, the Contractor shall replace the material removed with new material at the Contractor's Expense.

a. Patching. The milling machine shall be capable of cutting a vertical edge without chipping or spalling the edges of the remaining pavement and it shall have a positive method of controlling the depth of cut. The RPR shall layout the area to be milled with a straightedge in increments of 1-foot (30 cm) widths. The area to be milled shall cover only the failed area. Any excessive area that is milled because

the Contractor doesn't have the appropriate milling machine, or areas that are damaged because of his negligence, shall be repaired by the Contractor at the Contractor's Expense.

b. Profiling, grade correction, or surface correction. The milling machine shall have a minimum width of 7 feet and it shall be equipped with electronic grade control devices that will cut the surface to the grade specified. The tolerances shall be maintained within +0 inch and -1/4 inch (+0 mm and -6mm) of the specified grade. The machine must cut vertical edges and have a positive method of dust control. The machine must have the ability to remove the millings or cuttings from the pavement and load them into a truck. All millings shall be removed and disposed of off the airport.

c. Clean-up. The Contractor shall sweep the milled surface daily and immediately after the milling until all residual materials are removed from the pavement surface. Prior to paving, the Contractor shall wet down the milled pavement and thoroughly sweep and/or blow the surface to remove loose residual material. Waste materials shall be collected and removed from the pavement surface and adjacent areas by sweeping or vacuuming. Waste materials shall be removed and disposed off Airport property.

~~**101-3.6. Preparation of asphalt pavement surfaces prior to surface treatment.** Existing asphalt pavements to be treated with a surface treatment shall be prepared as follows:~~

~~**a.** Patch asphalt pavement surfaces that have been softened by petroleum derivatives or have failed due to any other cause. Remove damaged pavement to the full depth of the damage and replace with new asphalt pavement similar to that of the existing pavement in accordance with paragraph 101-3.4b.~~

~~**b.** Repair joints and cracks in accordance with paragraph 101-3.2.~~

~~**c.** Remove oil or grease that has not penetrated the asphalt pavement by scrubbing with a detergent and washing thoroughly with clean water. After cleaning, treat these areas with an oil spot primer. **[___]**~~

~~**d.** Clean pavement surface immediately prior to placing the surface treatment so that it is free of dust, dirt, grease, vegetation, oil or any type of objectionable surface film.~~

101-3.7 Maintenance. The Contractor shall perform all maintenance work necessary to keep the pavement in a satisfactory condition until the full section is complete and accepted by the RPR. The surface shall be kept clean and free from foreign material. The pavement shall be properly drained at all times. If cleaning is necessary or if the pavement becomes disturbed, any work repairs necessary shall be performed at the Contractor's expense.

~~**101-3.8 Preparation of Joints in Rigid Pavement prior to resealing.** Prior to application of sealant material, clean and dry the joints of all scale, dirt, dust, old sealant, curing compound, moisture and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method used cleans the joint and does not damage the joint.~~

~~**101-3.8.1 Removal of Existing Joint Sealant**. All existing joint sealants will be removed by plowing or use of hand tools. Any remaining sealant and or debris will be removed by use of wire brushes or other tools as necessary. Resaw joints removing no more than 1/16 inch (2 mm) from each joint face. Immediately after sawing, flush out joint with water and other tools as necessary to completely remove the slurry.~~

101-3.8.2 Cleaning prior to sealing. Immediately before sealing, joints shall be cleaned by removing any remaining laitance and other foreign material. Allow sufficient time to dry out joints prior to sealing. Joint surfaces will be surface-dry prior to installation of sealant.

101-3.8.3 Joint sealant. Joint material and installation will be in accordance with Item P-605.

101-3.9 Preparation of Cracks in Flexible Pavement prior to sealing. Prior to application of sealant material, clean and dry the joints of all scale, dirt, dust, old sealant, curing compound, moisture and other

foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method used cleans the cracks and does not damage the pavement.

101-3.9.1 Preparation of Crack. Widen crack with router by removing a minimum of 1/16 inch (2 mm) from each side of crack. Immediately before sealing, cracks will be blown out with a hot air lance combined with oil and water-free compressed air.

101-3.9.2 Removal of Existing Crack Sealant. Existing sealants will be removed by routing. Following routing any remaining debris will be removed by use of a hot lance combined with oil and water-free compressed air.

101-3.9.3 Crack Sealant. Crack sealant material and installation will be in accordance with Item P-605.

101-3.9.4 Removal of Pipe and other Buried Structures.

a. **Removal of Existing Pipe Material.** Not used.

b. **Removal of Inlets/Manholes.** Not used.

METHOD OF MEASUREMENT

101-4.1 Pavement removal. The unit of measurement for pavement removal shall be the number of square yards (square meters) removed by the Contractor. Any pavement removed outside the limits of removal because the pavement was damaged by negligence on the part of the Contractor shall not be included in the measurement for payment. No direct measurement or payment shall be made for saw cutting. Saw cutting shall be incidental to pavement removal. Dowel bar installation shall be incidental to pavement removal.

101-4.2 Cold milling. The unit of measure for cold milling shall be 2 inches of milling per square yard (square meter). The location and average depth of the cold milling shall be as shown on the plans. If the initial cut does not correct the condition, the Contractor shall re-mill the area and will be paid for the total depth of milling.

101-4.3 Concrete Wheelstop Removal. The unit of measure for concrete wheelstop removal shall be per each. The location and number shall be as shown on the plans.

BASIS OF PAYMENT

101-5.1 Payment. Payment shall be made at contract unit price for the unit of measurement as specified above. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.

Item P-101-5.1a	Pavement Removal – per square yard
Item P-101-5.1b	Full Depth Asphalt Removal, Including Base and Subbase Material – per square yard
Item P-101-5.2	Cold Milling, 2” Depth – per square yard
Item P-101-5.3	Concrete Wheelstop Removal – per each

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Advisory Circulars (AC)

AC 150/5380-6	Guidelines and Procedures for Maintenance of Airport Pavements.

ASTM International (ASTM)

ASTM D6690	Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements

END OF ITEM P-101

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Item P-151 Clearing and Grubbing

DESCRIPTION

151-1.1 This item shall consist of *stripping*, including the disposal of materials, for all areas within the limits designated on the plans or as required by the Resident Project Representative (RPR).

a. Clearing . Not used.

b. Clearing and grubbing. Not used.

c. Tree Removal. Not used.

d. Stripping. *Stripping shall consist of the removal of existing turf where trees and brush are not present.*

CONSTRUCTION METHODS

151-2.1 General. The areas denoted on the plans to be ***stripped*** shall be staked on the ground by the Contractor as indicated on the plans.

Perform stripping as most appropriate within the following areas:

a) All areas where excavation is to be done, including borrow pits, lateral ditches, right-of-way ditches, etc.

b) All areas where airfield pavements will be constructed

c) All areas where roadway embankments will be constructed.

d) All areas where structures will be constructed, including pipe culverts

e) Other areas as designated in the plans or required by the RPR.

The removal of existing structures and utilities required to permit orderly progress of work shall be accomplished by local agencies, unless otherwise shown on the plans. Whenever a telephone pole, pipeline, conduit, sewer, roadway, or other utility is encountered and must be removed or relocated, the Contractor shall advise the RPR who will notify the proper local authority or owner to secure prompt action.

151-2.1.1 Disposal. All materials removed by clearing or by clearing and grubbing shall be disposed of outside the Airport's limits at the Contractor's responsibility, except when otherwise directed by the RPR. As far as practicable, waste concrete and masonry shall be placed on slopes of embankments or channels. When embankments are constructed of such material, this material shall be placed in accordance with requirements for formation of embankments. Any broken concrete or masonry that cannot be used in construction and all other materials not considered suitable for use elsewhere, shall be disposed of by the Contractor. In no case, shall any discarded materials be left in windrows or piles adjacent to or within the airport limits. The manner and location of disposal of materials shall be subject to the approval of the RPR and shall not create an unsightly or objectionable view. When the Contractor is required to locate a disposal area outside the airport property limits, the Contractor shall obtain and file with the RPR permission in writing from the property owner for the use of private property for this purpose.

151-2.1.2 Blasting. Blasting shall not be allowed.

151-2.2 Clearing. Not used.

151-2.3 Clearing and grubbing. Not used.

151-2.2 Stripping. *Stripping shall be conducted in the locations shown on the plans where maintained turf exists. Stripping shall consist of blading the area indicated on the plans to a depth as required to remove all organic material present. In order to minimize embankment required do not remove more material than as required to remove organics. Strippings shall be stockpiled separately from suitable excavation and used as topsoil beneath new sod. Strippings used as topsoil shall be spread to a depth of two (2) inches. All excess strippings shall be legally disposed of off-site.*

151-2.3 Protection of Property Remaining in Place. *Protect and do not displace property obstructions which are to remain in place, such as buildings, sewers, drains, water or gas pipes, conduits, poles, walls, posts, bridges, etc.*

151-2.4 Demolition of Pavements and Structures. *Pavements and structures called for removal on the plans or as found in the project area shall be demolished in accordance with Specification P-101. Should the Contractor encounter an existing structure (above or below ground) in the work for which the disposition is not indicated on the plans, the RPR shall be notified prior to disturbing such structure. The disposition of existing structures so encountered shall be immediately determined by the RPR in accordance with the provisions of the contract. The Contractor shall not excavate, remove, or otherwise disturb any material, structure, or part of a structure which is located outside the lines, grades, or grading sections established for the work, except where such excavation or removal is provided for in the contract, plans, or specifications.*

151-2.5 Hazardous Materials. *If hazardous materials are encountered during stripping, Contractor shall cease operations immediately in the area and notify the RPR. Handle, transport, and dispose of hazardous materials in accordance with all Local, State, and Federal requirements. The Contractor shall accept responsibility for the collection, sampling, classification, packaging, labeling, accumulation time, storage, manifesting, transportation, treatment and disposal of hazardous waste, both solid and liquid. Separate all solid and liquid waste and collect all liquids used at hygiene stations and handle as hazardous material/waste. Obtain written approval from the RPR for all hazardous materials/waste stabilization methods before implementation. Obtain an EPA/FDEP Hazardous Waste Identification Number (EPA/FDEP ID Number) before transporting and/or disposal of any hazardous materials/waste. Transport all hazardous materials/waste in accordance with applicable 40 CFR 263 Standards. Provide a copy of all completed Hazardous Materials/Waste manifest/bills of lading to the RPR within 21 days or each shipment. Furnish two copies of Certification of Compliance from the firm actually removing and disposing of the hazardous materials/waste stipulating, the hazardous materials/waste has been handled, transported, and disposed of in accordance with this Specification. The Certification of Compliance shall be attested to by a person having legal authority to bind the company.*

METHOD OF MEASUREMENT

151-3.1 *The quantities of stripping as shown by the limits on the plans shall be the number of square yards of land specifically stripped.*

BASIS OF PAYMENT

151-4.1 *Payment shall be made at the contract unit price per square yard for stripping. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.*

Payment will be made under:

Item P-151-4.1 *Stripping – per square yard*

END OF ITEM P-151

Item P-401 Asphalt Mix Pavement

DESCRIPTION

401-1.1 This item shall consist of pavement courses composed of mineral aggregate and asphalt binder mixed in a central mixing plant and placed on a prepared base or stabilized course in accordance with these specifications and shall conform to the lines, grades, thicknesses, and typical cross-sections shown on the plans. Each course shall be constructed to the depth, typical section, and elevation required by the plans and shall be rolled, finished, and approved before the placement of the next course.

MATERIALS

401-2.1 Aggregate. Aggregates shall consist of crushed stone, crushed gravel, crushed slag, screenings, natural sand, and mineral filler, as required. The aggregates should have no known history of detrimental pavement staining due to ferrous sulfides, such as pyrite. Coarse aggregate is the material retained on the No. 4 (4.75 mm) sieve. Fine aggregate is the material passing the No. 4 (4.75 mm) sieve.

a. Coarse aggregate. Coarse aggregate shall consist of sound, tough, durable particles, free from films of matter that would prevent thorough coating and bonding with the asphalt material and free from organic matter and other deleterious substances. Coarse aggregate material requirements are given in the table below.

Coarse Aggregate Material Requirements

Material Test	Requirement	Standard
Resistance to Degradation	Loss: 40% maximum	ASTM C131
Soundness of Aggregates by Use of Sodium Sulfate **or** Magnesium Sulfate	Loss after 5 cycles: 12% maximum using Sodium sulfate - or - 18% maximum using magnesium sulfate	ASTM C88
Clay lumps and friable particles	1.0 % maximum	ASTM C142
Percentage of Fractured Particles	Minimum 75% by weight of particles with at least two fractured faces and 85% with at least one fractured face[1]	ASTM D5821
Flat, Elongated, or Flat and Elongated Particles	8% maximum, by weight, of flat, elongated, or flat and elongated particles at 5:1 [2]	ASTM D4791

[1] The area of each face shall be equal to at least 75% of the smallest mid-sectional area of the piece. When two fractured faces are contiguous, the angle between the planes of fractures shall be at least 30 degrees to count as two fractured faces.

[2] A flat particle is one having a ratio of width to thickness greater than five (5); an elongated particle is one having a ratio of length to width greater than five (5).

[3] Only required if slag is specified.

b. Fine aggregate. Fine aggregate shall consist of clean, sound, tough, durable, angular shaped particles produced by crushing stone, slag, or gravel and shall be free from coatings of clay, silt, or other objectionable matter. Natural (non-manufactured) sand may be used to obtain the gradation of the fine aggregate blend or to improve the workability of the mix. Fine aggregate material requirements are listed in the table below.

Fine Aggregate Material Requirements

Material Test	Requirement	Standard
Liquid limit	25 maximum	ASTM D4318
Plasticity Index	4 maximum	ASTM D4318
Soundness of Aggregates by Use of Sodium Sulfate **or** Magnesium Sulfate	Loss after 5 cycles: 10% maximum using Sodium sulfate - or - 15% maximum using magnesium sulfate	ASTM C88
Clay lumps and friable particles	1.0% maximum	ASTM C142
Sand equivalent	45 minimum	ASTM D2419
Natural Sand	0% to 15% maximum by weight of total aggregate	ASTM D1073

c. Sampling. ASTM D75 shall be used in sampling coarse and fine aggregate.

401-2.2 Mineral filler. Mineral filler (baghouse fines) may be added in addition to material naturally present in the aggregate. Mineral filler shall meet the requirements of ASTM D242.

Mineral Filler Requirements

Material Test	Requirement	Standard
Plasticity Index	4 maximum	ASTM D4318

401-2.3 Asphalt binder. Asphalt binder shall conform to ASTM D6373 Performance Grade (PG) 76-22.

Asphalt Binder PG Plus Test Requirements

Material Test	Requirement	Standard
Elastic Recovery	75% minimum	ASTM D6084[1]

[1] Follow procedure B on RTFO aged binder.

401-2.4 Anti-stripping agent. Any anti-stripping agent or additive (anti-strip) shall be heat stable and shall not change the asphalt binder grade beyond specifications. Anti-strip shall be an approved material of the Department of Transportation of the State in which the project is located.

COMPOSITION

401-3.1 Composition of mixture(s). The asphalt mix shall be composed of a mixture of aggregates, filler and anti-strip agent if required, and asphalt binder. The aggregate fractions shall be sized, handled in separate size groups, and combined in such proportions that the resulting mixture meets the grading requirements of the job mix formula (JMF).

401-3.2 Job mix formula (JMF) laboratory. The laboratory used to develop the JMF shall possess a current certificate of accreditation, listing D3666 from a national accrediting authority and all test methods required for developing the JMF; and be listed on the accrediting authority's website. A copy of the laboratory's current accreditation and accredited test methods shall be submitted to the Resident Project Representative (RPR) prior to start of construction.

401-3.3 Job mix formula (JMF). No asphalt mixture shall be placed until an acceptable mix design has been submitted to the RPR for review and accepted in writing. The RPR's review shall not relieve the Contractor of the responsibility to select and proportion the materials to comply with this section.

When the project requires asphalt mixtures of differing aggregate gradations and/or binders, a separate JMF shall be submitted for each mix. Add anti-stripping agent to meet tensile strength requirements.

The JMF shall be prepared by an accredited laboratory that meets the requirements of paragraph 401-3.2. The asphalt mixture shall be designed using procedures contained in Asphalt Institute MS-2 Mix Design Manual, 7th Edition**.** Samples shall be prepared and compacted using the gyratory compactor in accordance with ASTM D6925.

Should a change in sources of materials be made, a new JMF must be submitted to the RPR for review and accepted in writing before the new material is used. After the initial production JMF has been approved by the RPR and a new or modified JMF is required for whatever reason, the subsequent cost of the new or modified JMF, including a new control strip when required by the RPR, will be borne by the Contractor.

The RPR may request samples at any time for testing, prior to and during production, to verify the quality of the materials and to ensure conformance with the applicable specifications.

The JMF shall be submitted in writing by the Contractor at least 30 days prior to the start of paving operations. The JMF shall be developed within the same construction season using aggregates proposed for project use.

The JMF shall be dated, and stamped or sealed by the responsible professional Engineer of the laboratory and shall include the following items as a minimum:

- Manufacturer's Certificate of Analysis (COA) for the asphalt binder used in the JMF in accordance with paragraph 401-2.3. Certificate of asphalt performance grade is with modifier already added, if used and must indicate compliance with ASTM D6373. For plant modified asphalt binder, certified test report indicating grade certification of modified asphalt binder.
- Manufacturer's Certificate of Analysis (COA) for the anti-stripping agent if used in the JMF in accordance with paragraph 401-2.4.
- Certified material test reports for the course and fine aggregate and mineral filler in accordance with paragraphs 401-2.1.
- Percent passing each sieve size for individual gradation of each aggregate cold feed and/or hot bin; percent by weight of each cold feed and/or hot bin used; and the total combined gradation in the JMF.
- Specific Gravity and absorption of each coarse and fine aggregate.
- Percent natural sand.
- Percent fractured faces.
- Percent by weight of flat particles, elongated particles, and flat and elongated particles (and criteria).
- Percent of asphalt.
- Number of blows or gyrations
- Laboratory mixing and compaction temperatures.
- Supplier-recommended field mixing and compaction temperatures.

- Plot of the combined gradation on a 0.45 power gradation curve.
- Graphical plots of air voids, voids in the mineral aggregate (VMA), and unit weight versus asphalt content. To achieve minimum VMA during production, the mix design needs to account for material breakdown during production.
- Tensile Strength Ratio (TSR).
- Type and amount of Anti-strip agent when used.
- Asphalt Pavement Analyzer (APA) results.
- Date the JMF was developed. Mix designs that are not dated or which are from a prior construction season shall not be accepted.

Table 1. Asphalt Design Criteria

Test Property	Value	Test Method
Number of blows or gyrations	75	
Air voids (%)	3.5	ASTM D3203
Percent voids in mineral aggregate (VMA), minimum	See Table 2	ASTM D6995
Tensile Strength Ratio (TSR)[1]	not less than 80 at a saturation of 70-80%	ASTM D4867
Asphalt Pavement Analyzer (APA)[2,3]	Less than 10 mm @ 4000 passes	AASHTO T340 at 250 psi hose pressure at 64°C test temperature

[1] Test specimens for TSR shall be compacted at 7 ± 1.0 % air voids. In areas subject to freeze-thaw, use freeze-thaw conditioning in lieu of moisture conditioning per ASTM D4867.

[2] AASHTO T340 at 100 psi hose pressure at 64°C test temperature may be used in the interim. If this method is used the required Value shall be less than 5 mm @ 8000 passes

[3] Where APA not available , use Hamburg Wheel test (AASHTO T-324) 10mm @ 20,000 passes at 50°C.

The mineral aggregate shall be of such size that the percentage composition by weight, as determined by laboratory sieves, will conform to the gradation or gradations specified in Table 2 when tested in accordance with ASTM C136 and ASTM C117.

The gradations in Table 2 represent the limits that shall determine the suitability of aggregate for use from the sources of supply; be well graded from coarse to fine and shall not vary from the low limit on one sieve to the high limit on the adjacent sieve, or vice versa.

Table 2. Aggregate - Asphalt Pavements

Sieve Size	Percentage by Weight Passing Sieve
1 inch (25.0 mm)	--
3/4 inch (19.0 mm)	**100**
1/2 inch (12.5 mm)	**90-100**
3/8 inch (9.5 mm)	**72-88**
No. 4 (4.75 mm)	**53-73**
No. 8 (2.36 mm)	**38-60**
No. 16 (1.18 mm)	**26-48**
No. 30 (600 µm)	**18-38**
No. 50 (300 µm)	**11-27**
No. 100 (150 µm)	**6-18**
No. 200 (75 µm)	**3-6**
Minimum Voids in Mineral Aggregate (VMA)[1]	**15.0**
Asphalt Percent:	
Stone or gravel	**5.0-7.5**
Slag	**6.5-9.5**
Recommended Minimum Construction Lift Thickness	**2 inch**

[1]To achieve minimum VMA during production, the mix design needs to account for material breakdown during production.

The aggregate gradations shown are based on aggregates of uniform specific gravity. The percentages passing the various sieves shall be corrected when aggregates of varying specific gravities are used, as indicated in the Asphalt Institute MS-2 Mix Design Manual, 7th Edition.

401-3.4 Reclaimed asphalt pavement (RAP). RAP shall not be used.

401-3.5 Control Strip. A control strip is not required.

CONSTRUCTION METHODS

401-4.1 Weather limitations. The asphalt shall not be placed upon a wet surface or when the surface temperature of the underlying course is less than specified in Table 4. The temperature requirements may be waived by the RPR, if requested; however, all other requirements including compaction shall be met.

Table 4. Surface Temperature Limitations of Underlying Course

Mat Thickness	Base Temperature (Minimum)	
	°F	°C
3 inches (7.5 cm) or greater	40 [1]	4
Greater than 2 inches (50 mm) but less than 3 inches (7.5 cm)	45	7

401-4.2 Asphalt plant. Plants used for the preparation of asphalt shall conform to the requirements of American Association of State Highway and Transportation Officials (AASHTO) M156 including the following items.

a. Inspection of plant. The RPR, or RPR's authorized representative, shall have access, at all times, to all areas of the plant for checking adequacy of equipment; inspecting operation of the plant: verifying weights, proportions, and material properties; and checking the temperatures maintained in the preparation of the mixtures.

b. Storage bins and surge bins. The asphalt mixture stored in storage and/or surge bins shall meet the same requirements as asphalt mixture loaded directly into trucks. Asphalt mixture shall not be stored in storage and/or surge bins for a period greater than twelve (12) hours. If the RPR determines there is an excessive heat loss, segregation, or oxidation of the asphalt mixture due to temporary storage, temporary storage shall not be allowed.

401-4.3 Aggregate stockpile management. Aggregate stockpiles shall be constructed in a manner that prevents segregation and intermixing of deleterious materials. Aggregates from different sources shall be stockpiled, weighed and batched separately at the asphalt batch plant. Aggregates that have become segregated or mixed with earth or foreign material shall not be used.

A continuous supply of materials shall be provided to the work to ensure continuous placement.

401-4.4 Hauling equipment. Trucks used for hauling asphalt shall have tight, clean, and smooth metal beds. To prevent the asphalt from sticking to the truck beds, the truck beds shall be lightly coated with a minimum amount of paraffin oil, lime solution, or other material approved by the RPR. Petroleum products shall not be used for coating truck beds. Each truck shall have a suitable cover to protect the mixture from adverse weather. When necessary, to ensure that the mixture will be delivered to the site at the specified temperature, truck beds shall be insulated or heated and covers shall be securely fastened.

401-4.4.1 Material transfer vehicle (MTV). Material transfer vehicles used to transfer the material from the hauling equipment to the paver, shall use a self-propelled, material transfer vehicle with a swing conveyor that can deliver material to the paver without making contact with the paver. The MTV shall be able to move back and forth between the hauling equipment and the paver providing material transfer to the paver, while allowing the paver to operate at a constant speed. The Material Transfer Vehicle will have remixing and storage capability to prevent physical and thermal segregation.

401-4.5 Asphalt pavers. Asphalt pavers shall be self-propelled with an activated heated screed, capable of spreading and finishing courses of asphalt that will meet the specified thickness, smoothness, and grade. The paver shall have sufficient power to propel itself and the hauling equipment without adversely affecting the finished surface. The asphalt paver shall be equipped with a control system capable of automatically maintaining the specified screed grade and elevation.

If the spreading and finishing equipment in use leaves tracks or indented areas, or produces other blemishes in the pavement that are not satisfactorily corrected by the scheduled operations, the use of such equipment shall be discontinued.

The paver shall be capable of paving to a minimum width specified in paragraph 401-4.12.

401-4.6 Rollers. The number, type, and weight of rollers shall be sufficient to compact the asphalt to the required density while it is still in a workable condition without crushing of the aggregate, depressions or other damage to the pavement surface. Rollers shall be in good condition, clean, and capable of operating at slow speeds to avoid displacement of the asphalt. All rollers shall be specifically designed and suitable for compacting asphalt concrete and shall be properly used. Rollers that impair the stability of any layer of a pavement structure or underlying soils shall not be used.

401-4.7 Density device. The Contractor shall have on site a density gauge during all paving operations in order to assist in the determination of the optimum rolling pattern, type of roller and frequencies, as well as to monitor the effect of the rolling operations during production paving. The Contractor shall supply a qualified technician during all paving operations to calibrate the gauge and obtain accurate density readings for all new asphalt. These densities shall be supplied to the RPR upon request at any time during construction. No separate payment will be made for supplying the density gauge and technician.

401-4.8 Preparation of asphalt binder. The asphalt binder shall be heated in a manner that will avoid local overheating and provide a continuous supply of the asphalt binder to the mixer at a uniform temperature. The temperature of unmodified asphalt binder delivered to the mixer shall be sufficient to provide a suitable viscosity for adequate coating of the aggregate particles, but shall not exceed 325°F (160°C) when added to the aggregate. The temperature of modified asphalt binder shall be no more than 350°F (175°C) when added to the aggregate.

401-4.9 Preparation of mineral aggregate. The aggregate for the asphalt shall be heated and dried. The maximum temperature and rate of heating shall be such that no damage occurs to the aggregates. The temperature of the aggregate and mineral filler shall not exceed 350°F (175°C) when the asphalt binder is added. Particular care shall be taken that aggregates high in calcium or magnesium content are not damaged by overheating. The temperature shall not be lower than is required to obtain complete coating and uniform distribution on the aggregate particles and to provide a mixture of satisfactory workability.

401-4.10 Preparation of Asphalt mixture. The aggregates and the asphalt binder shall be weighed or metered and mixed in the amount specified by the JMF. The combined materials shall be mixed until the aggregate obtains a uniform coating of asphalt binder and is thoroughly distributed throughout the mixture. Wet mixing time shall be the shortest time that will produce a satisfactory mixture, but not less than 25 seconds for batch plants. The wet mixing time for all plants shall be established by the Contractor, based on the procedure for determining the percentage of coated particles described in ASTM D2489, for each individual plant and for each type of aggregate used. The wet mixing time will be set to achieve 95% of coated particles. For continuous mix plants, the minimum mixing time shall be determined by dividing the weight of its contents at operating level by the weight of the mixture delivered per second by the mixer. The moisture content of all asphalt upon discharge shall not exceed 0.5%.

401-4.11 Application of Prime and Tack Coat. Immediately before placing the asphalt mixture, the underlying course shall be cleaned of all dust and debris.

A tack coat shall be applied in accordance with Item P-603 to all vertical and horizontal asphalt and concrete surfaces prior to placement of the first and each subsequent lift of asphalt mixture.

401-4.12 Laydown plan, transporting, placing, and finishing. Prior to the placement of the asphalt, the Contractor shall prepare a laydown plan with the sequence of paving lanes and width to minimize the number of cold joints; the location of any temporary ramps; laydown temperature; and estimated time of completion for each portion of the work (milling, paving, rolling, cooling, etc.). The laydown plan and any modifications shall be approved by the RPR.

Deliveries shall be scheduled so that placing and compacting of asphalt is uniform with minimum stopping and starting of the paver. Hauling over freshly placed material shall not be permitted until the material has been compacted, as specified, and allowed to cool to approximately ambient temperature. The Contractor, at their expense, shall be responsible for repair of any damage to the pavement caused by hauling operations.

Contractor shall survey each lift of asphalt surface course and certify to RPR that every lot of each lift meets the grade tolerances of paragraph 401-6.2d before the next lift can be placed.

Edges of existing asphalt pavement abutting the new work shall be saw cut and the cut off material and laitance removed. Apply a tack coat in accordance with P-603 before new asphalt material is placed against it.

The speed of the paver shall be regulated to eliminate pulling and tearing of the asphalt mat. Placement of the asphalt mix shall begin along the centerline of a crowned section or on the high side of areas with a one way slope unless shown otherwise on the laydown plan as accepted by the RPR. The asphalt mix shall be placed in consecutive adjacent lanes having a minimum width of 12 feet except where edge lanes require less width to complete the area. Additional screed sections attached to widen the paver to meet the minimum lane width requirements must include additional auger sections to move the asphalt mixture uniformly along the screed extension.

The longitudinal joint in one course shall offset the longitudinal joint in the course immediately below by at least one foot (30 cm); however, the joint in the surface top course shall be at the centerline of crowned pavements. Transverse joints in one course shall be offset by at least 10 feet (3 m) from transverse joints in the previous course. Transverse joints in adjacent lanes shall be offset a minimum of 10 feet (3 m).On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the asphalt may be spread and luted by hand tools.

The RPR may at any time, reject any batch of asphalt, on the truck or placed in the mat, which is rendered unfit for use due to contamination, segregation, incomplete coating of aggregate, or overheated asphalt mixture. Such rejection may be based on only visual inspection or temperature measurements. In the event of such rejection, the Contractor may take a representative sample of the rejected material in the presence of the RPR, and if it can be demonstrated in the laboratory, in the presence of the RPR, that such material was erroneously rejected, payment will be made for the material at the contract unit price.

Areas of segregation in the surface course, as determined by the RPR, shall be removed and replaced at the Contractor's expense. The area shall be removed by saw cutting and milling a minimum of the construction lift thickness as specified in paragraph 401-3.3, Table 2 for the approved mix design. The area to be removed and replaced shall be a minimum width of the paver and a minimum of 10 feet (3 m) long.

401-4.13 Compaction of asphalt mixture. After placing, the asphalt mixture shall be thoroughly and uniformly compacted by self-propelled rollers. The surface shall be compacted as soon as possible when the asphalt has attained sufficient stability so that the rolling does not cause undue displacement, cracking or shoving. The sequence of rolling operations and the type of rollers used shall be at the discretion of the Contractor. The speed of the roller shall, at all times, be sufficiently slow to avoid displacement of the hot mixture and be effective in compaction. Any surface defects and/or displacement occurring as a result of the roller, or from any other cause, shall be corrected at the Contractor's expense.

Sufficient rollers shall be furnished to handle the output of the plant. Rolling shall continue until the surface is of uniform texture, true to grade and cross-section, and the required field density is obtained. To prevent adhesion of the asphalt to the roller, the wheels shall be equipped with a scraper and kept moistened with water as necessary.

In areas not accessible to the roller, the mixture shall be thoroughly compacted with approved power tampers.

Any asphalt that becomes loose and broken, mixed with dirt, contains check-cracking, or in any way defective shall be removed and replaced with fresh hot mixture and immediately compacted to conform to the surrounding area. This work shall be done at the Contractor's expense. Skin patching shall not be allowed.

401-4.14 Joints. The formation of all joints shall be made to ensure a continuous bond between the courses and obtain the required density. All joints shall have the same texture as other sections of the course and meet the requirements for smoothness and grade.

The roller shall not pass over the unprotected end of the freshly laid asphalt except when necessary to form a transverse joint. When necessary to form a transverse joint, it shall be made by means of placing a bulkhead or by tapering the course. The tapered edge shall be cut back to its full depth and width on a straight line to expose a vertical face prior to placing the adjacent lane. In both methods, all contact surfaces shall be coated with an asphalt tack coat before placing any fresh asphalt against the joint.

Longitudinal joints which have been left exposed for more than four (4) hours; the surface temperature has cooled to less than 175°F (80°C); or are irregular, damaged, uncompacted or otherwise defective shall be cut back with a cutting wheel or pavement saw a maximum of 3 inches (75 mm) to expose a clean, sound, uniform vertical surface for the full depth of the course. All cutback material and any laitance produced from cutting joints shall be removed from the project. Asphalt tack coat in accordance with P-603 shall be applied to the clean, dry joint prior to placing any additional fresh asphalt against the joint. The cost of this work shall be considered incidental to the cost of the asphalt.

401-4.15 Saw-cut grooving. Saw-cut grooving is not required.

401-4.16 Diamond grinding. Diamond grinding shall be completed prior to pavement grooving. Diamond grinding shall be accomplished by sawing with saw blades impregnated with industrial diamond abrasive.

Diamond grinding shall be performed with a machine designed specifically for diamond grinding capable of cutting a path at least 3 feet (0.9 m) wide. The saw blades shall be 1/8-inch (3-mm) wide with a sufficient number of blades to create grooves between 0.090 and 0.130 inches (2 and 3.5 mm) wide; and peaks and ridges approximately 1/32 inch (1 mm) higher than the bottom of the grinding cut. The actual number of blades will be determined by the Contractor and depend on the hardness of the aggregate. Equipment or grinding procedures that cause ravels, aggregate fractures, spalls or disturbance to the pavement will not be permitted. Contractor shall demonstrate to the RPR that the grinding equipment will produce satisfactory results prior to making corrections to surfaces. Grinding will be tapered in all directions to provide smooth transitions to areas not requiring grinding. The slurry resulting from the grinding operation shall be continuously removed and the pavement left in a clean condition. The Contractor shall apply a surface treatment per P-608 to all areas that have been subject to grinding.

401-4.17 Nighttime paving requirements. The Contractor shall provide adequate lighting during any nighttime construction. A lighting plan shall be submitted by the Contractor and approved by the RPR prior to the start of any nighttime work. All work shall be in accordance with the approved CSPP and lighting plan.

The lighting plan will address the following items:

a. All paving machines, rollers, distribution trucks and other vehicles required by the Contractor for his operations shall be equipped with artificial illumination sufficient to safely complete the work.

b. Minimum illumination level shall be twenty (20) horizontal foot-candles and maintained in the following areas:

> ***(1) An area of 30 feet (9 m) wide by 30 feet (9 m) long immediately behind the paving machines during the operations of the machines.***
>
> ***(2) An area 15 feet (4.5 m) wide by 30 feet (9 m) long immediately in front and back of all rolling equipment, during operation of the equipment.***
>
> ***(3) An area 15 feet (4.5 m) wide by 15 feet (4.5 m) long at any point where an area is being tack coated prior to the placement of pavement.***

c. As partial fulfillment of the above requirements, the Contractor shall furnish and use, complete artificial lighting units with a minimum capacity of 3,000 watt electric beam lights, affixed to all equipment in such a way to direct illumination on the area under construction.

d. A lighting plan must be submitted by the Contractor and approved by the Engineer prior to the start of any nighttime work.

If the Contractor places any out of specification mix in the project work area, the Contractor is required to remove it at its own expense, to the satisfaction of the RPR. If the Contractor has to continue placing non-payment HMA, as directed by the RPR, to make the surfaces safe for aircraft operations, the Contractor shall do so to the satisfaction of the RPR. It is the Contractor's responsibility to leave the facilities to be paved in a safe condition ready for aircraft operations. No consideration for extended closure time of the area being paved will be given. As a first order of work for the next paving shift, the Contractor shall remove all out of specification material and replace with approved material to the satisfaction of the Engineer. When the above situations occur, there will be no consideration given for additional construction time or payment for extra costs.

CONTRACTOR QUALITY CONTROL (CQC)

401-5.1 General. The Contractor shall develop a Contractor Quality Control Program (CQCP) in accordance with Item C-100. No partial payment will be made for materials without an approved CQCP.

401-5.2 Contractor quality control (QC) facilities. The Contractor shall provide or contract for testing facilities in accordance with Item C-100. The RPR shall be permitted unrestricted access to inspect the Contractor's QC facilities and witness QC activities. The RPR will advise the Contractor in writing of any noted deficiencies concerning the QC facility, equipment, supplies, or testing personnel and procedures. When the deficiencies are serious enough to be adversely affecting the test results, the incorporation of the materials into the work shall be suspended immediately and will not be permitted to resume until the deficiencies are satisfactorily corrected.

401-5.3 Contractor QC testing. The Contractor shall perform all QC tests necessary to control the production and construction processes applicable to these specifications and as set forth in the approved CQCP. The testing program shall include, but not necessarily be limited to, tests for the control of asphalt content, aggregate gradation, temperatures, aggregate moisture, field compaction, and surface smoothness. A QC Testing Plan shall be developed as part of the CQCP.

a. Asphalt content. A minimum of two tests shall be performed per day in accordance with ASTM D6307 or ASTM D2172 for determination of asphalt content. When using ASTM D6307, the correction factor shall be determined as part of the first test performed at the beginning of plant production; and as part of every tenth test performed thereafter. The asphalt content for the day will be determined by averaging the test results.

b. Gradation. Aggregate gradations shall be determined a minimum of twice per day from mechanical analysis of extracted aggregate in accordance with ASTM D5444, ASTM C136, and ASTM C117.

c. Moisture content of aggregate. The moisture content of aggregate used for production shall be determined a minimum of once per day in accordance with ASTM C566.

d. Moisture content of asphalt. The moisture content shall be determined once per day in accordance with AASHTO T329 or ASTM D1461.

e. Temperatures. Temperatures shall be checked, at least four times per day, at necessary locations to determine the temperatures of the dryer, the asphalt binder in the storage tank, the asphalt at the plant, and the asphalt at the job site.

f. In-place density monitoring. The Contractor shall conduct any necessary testing to ensure that the specified density is being achieved. A nuclear gauge may be used to monitor the pavement density in accordance with ASTM D2950.

g. Smoothness for Contractor Quality Control.

The Contractor shall perform smoothness testing in transverse and longitudinal directions daily to verify that the construction processes are producing pavement with variances less than ¼ inch in 12 feet, identifying areas that may pond water which could lead to hydroplaning of aircraft. If the smoothness criteria is not met, appropriate changes and corrections to the construction process shall be made by the Contractor before construction continues

The Contractor may use a 12-foot (3.7 m) "straightedge, a rolling inclinometer meeting the requirements of ASTM E2133 or rolling external reference device that can simulate a 12-foot (3.7m) straightedge approved by the RPR. Straight-edge testing shall start with one-half the length of the straightedge at the edge of pavement section being tested and then moved ahead one-half the length of the straightedge for each successive measurement. Testing shall be continuous across all joints. The surface irregularity shall be determined by placing the freestanding (unleveled) straightedge on the pavement surface and allowing it to rest upon the two highest spots covered by its length, and measuring the maximum gap between the straightedge and the pavement surface in the area between the two high points. If the rolling inclinometer or external reference device is used, the data may be evaluated using either the FAA profile program, ProFAA, or FHWA ProVal, using the 12-foot straightedge simulation function.

Smoothness readings shall not be made across grade changes or cross slope transitions. The transition between new and existing pavement shall be evaluated separately for conformance with the plans.

(1) Transverse measurements. Transverse measurements shall be taken for each day's production placed. Transverse measurements shall be taken perpendicular to the pavement centerline each 50 feet (15 m) or more often as determined by the RPR. The joint between lanes shall be tested separately to facilitate smoothness between lanes.

(2) Longitudinal measurements. Longitudinal measurements shall be taken for each day's production placed. Longitudinal tests shall be parallel to the centerline of paving; at the center of paving lanes when widths of paving lanes are less than 20 feet (6 m); and at the third points of paving lanes when widths of paving lanes are 20 ft (6 m) or greater. When placement abuts previously placed material the first measurement shall start with one half the length of the straight edge on the previously placed material.

Deviations on the final surface course in either the transverse or longitudinal direction that will trap water greater than 1/4 inch (6 mm) shall be corrected with diamond grinding per paragraph 401-4.16 or by removing and replacing the surface course to full depth. Grinding shall be tapered in all directions to provide smooth transitions to areas not requiring grinding. All areas in which diamond grinding has been performed shall be subject to the final pavement thickness tolerances specified in paragraph 401-6.1d(3). Areas that have been ground shall be sealed with a surface treatment in accordance with Item P-608. To avoid the surface treatment creating any conflict with runway or taxiway markings, it may be necessary to seal a larger area.

Control charts shall be kept to show area of each day's placement and the percentage of corrective grinding required. Corrections to production and placement shall be initiated when corrective grinding is required. If the Contractor's machines and/or methods produce significant areas that need corrective actions in excess of 10 percent of a day's production, production shall be stopped until corrective measures are implemented by the Contractor.

h. Grade. Grade shall be evaluated daily to allow adjustments to paving operations when grade measurements do not meet specifications. As a minimum, grade shall be evaluated prior to and after the placement of the first lift and after placement of the surface lift.

Measurements will be taken at appropriate gradelines (as a minimum at center and edges of paving lane) and longitudinal spacing as shown on cross-sections and plans. The final surface of the pavement will not vary from the gradeline elevations and cross-sections shown on the plans by more than 1/2 inch (12 mm) vertically. The documentation will be provided by the Contractor to the RPR by the end of the following working day.

Areas with humps or depressions that exceed grade or smoothness criteria and that retain water on the surface must be ground off provided the course thickness after grinding is not more than 1/2 inch (12 mm) less than the thickness specified on the plans. Grinding shall be in accordance with paragraph 401-4.16.

The Contractor shall repair low areas or areas that cannot be corrected by grinding by removal of deficient areas to the depth of the final course plus ½ inch and replacing with new material. Skin patching is not allowed.

401-5.4 Sampling. When directed by the RPR, the Contractor shall sample and test any material that appears inconsistent with similar material being sampled, unless such material is voluntarily removed and replaced or deficiencies corrected by the Contractor. All sampling shall be in accordance with standard procedures specified.

401-5.5 Control charts. The Contractor shall maintain linear control charts for both individual measurements and range (i.e. difference between highest and lowest measurements) for aggregate gradation, asphalt content, and VMA. The VMA for each day will be calculated and monitored by the QC laboratory.

Control charts shall be posted in a location satisfactory to the RPR and kept current. As a minimum, the control charts shall identify the project number, the contract item number, the test number, each test parameter, the Action and Suspension Limits applicable to each test parameter, and the Contractor's test results. The Contractor shall use the control charts as part of a process control system for identifying potential problems and assignable causes before they occur. If the Contractor's projected data during production indicates a problem and the Contractor is not taking satisfactory corrective action, the RPR may suspend production or acceptance of the material.

a. Individual measurements. Control charts for individual measurements shall be established to maintain process control within tolerance for aggregate gradation, asphalt content, and VMA. The control charts shall use the job mix formula target values as indicators of central tendency for the following test parameters with associated Action and Suspension Limits:

Control Chart Limits for Individual Measurements

Sieve	Action Limit	Suspension Limit
3/4 inch (19.0 mm)	±6%	±9%
1/2 inch (12.5 mm)	±6%	±9%
3/8 inch (9.5 mm)	±6%	±9%
No. 4 (4.75 mm)	±6%	±9%
No. 16 (1.18 mm)	±5%	±7.5%
No. 50 (300 µm)	±3%	±4.5%
No. 200 (75 µm)	±2%	±3%
Asphalt Content	±0.45%	±0.70%
Minimum VMA	-0.5%	-1.0%

b. Range. Control charts shall be established to control gradation process variability. The range shall be plotted as the difference between the two test results for each control parameter. The Suspension Limits specified below are based on a sample size of n = 2. Should the Contractor elect to perform more than two tests per lot, the Suspension Limits shall be adjusted by multiplying the Suspension Limit by 1.18 for n = 3 and by 1.27 for n = 4.

Control Chart Limits Based on Range

Sieve	Suspension Limit
1/2 inch (12.5 mm)	11%
3/8 inch (9.5 mm)	11%
No. 4 (4.75 mm)	11%
No. 16 (1.18 mm)	9%
No. 50 (300 µm)	6%
No. 200 (75 µm)	3.5%
Asphalt Content	0.8%

c. Corrective Action. The CQCP shall indicate that appropriate action shall be taken when the process is believed to be out of tolerance. The Plan shall contain rules to gauge when a process is out of control and detail what action will be taken to bring the process into control. As a minimum, a process shall be deemed out of control and production stopped and corrective action taken, if:

(1) One point falls outside the Suspension Limit line for individual measurements or range; or

(2) Two points in a row fall outside the Action Limit line for individual measurements.

401-5.6 QC reports. The Contractor shall maintain records and shall submit reports of QC activities daily, in accordance with Item C-100.

MATERIAL ACCEPTANCE

401-6.1 Acceptance sampling and testing. Unless otherwise specified, all acceptance sampling and testing necessary to determine conformance with the requirements specified in this section will be performed by the RPR at no cost to the Contractor except that coring as required in this section shall be completed and paid for by the Contractor.

a. Quality assurance (QA) testing laboratory. The QA testing laboratory performing these acceptance tests will be accredited in accordance with ASTM D3666. The QA laboratory accreditation will be current and listed on the accrediting authority's website. All test methods required for acceptance sampling and testing will be listed on the lab accreditation.

b. Lot size. A standard lot will be equal to one day's production divided into approximately equal sublots of between 400 to 600 tons. When only one or two sublots are produced in a day's production, the sublots will be combined with the production lot from the previous or next day.

Where more than one plant is simultaneously producing asphalt for the job, the lot sizes will apply separately for each plant.

c. Asphalt air voids. Plant-produced asphalt will be tested for air voids on a sublot basis.

(1) Sampling. Material from each sublot shall be sampled in accordance with ASTM D3665. Samples shall be taken from material deposited into trucks at the plant or at the job site in accordance with ASTM D979. The sample of asphalt may be put in a covered metal tin and placed in an oven for not less than 30 minutes nor more than 60 minutes to maintain the material at or above the compaction temperature as specified in the JMF.

(2) Testing. Air voids will be determined for each sublot in accordance with ASTM D3203 for a set of three compacted specimens prepared in accordance with ASTM D6925.

d. In-place asphalt mat and joint density. Each sublot will be tested for in-place mat and joint density as a percentage of the theoretical maximum density (TMD).

(1) Sampling. The Contractor will cut minimum 5 inch (125 mm) diameter samples in accordance with ASTM D5361. The Contractor shall furnish all tools, labor, and materials for cleaning, and filling the cored pavement. Laitance produced by the coring operation shall be removed immediately after coring, and core holes shall be filled within one day after sampling in a manner acceptable to the RPR.

(2) Bond. Each lift of asphalt shall be bonded to the underlying layer. If cores reveal that the surface is not bonded, additional cores shall be taken as directed by the RPR to determine the extent of unbonded areas. Unbonded areas shall be removed by milling and replaced at no additional cost as directed by the RPR.

(3) Thickness. Thickness of each lift of surface course will be evaluated by the RPR for compliance to the requirements shown on the plans after any necessary corrections for grade. Measurements of thickness will be made using the cores extracted for each sublot for density measurement. The maximum allowable deficiency at any point will not be more than 1/4 inch (6 mm) less than the thickness indicated for the lift. Average thickness of lift, or combined lifts, will not be less than the indicated thickness. Where the thickness tolerances are not met, the lot or sublot shall be corrected by the Contractor at his expense by removing the deficient area and replacing with new pavement. The Contractor, at his expense, may take additional cores as approved by the RPR to circumscribe the deficient area.

(4) Mat density. One core shall be taken from each sublot. Core locations will be determined by the RPR in accordance with ASTM D3665. Cores for mat density shall not be taken closer than one foot (30 cm) from a transverse or longitudinal joint. The bulk specific gravity of each cored sample will be determined in accordance with ASTM D2726. The percent compaction (density) of each sample will be determined by dividing the bulk specific gravity of each sublot sample by the TMD for that sublot.

(5) Joint density. One core centered over the longitudinal joint shall be taken for each sublot that has a longitudinal joint. Core locations will be determined by the RPR in accordance with ASTM D3665. The bulk specific gravity of each core sample will be determined in accordance with ASTM D2726. The percent compaction (density) of each sample will be determined by dividing the bulk specific gravity of

each joint density sample by the average TMD for the lot. The TMD used to determine the joint density at joints formed between lots will be the lower of the average TMD values from the adjacent lots.

401-6.2 Acceptance criteria.

a. General. Acceptance will be based on the implementation of the Contractor Quality Control Program (CQCP) and the following characteristics of the asphalt and completed pavements: air voids, mat density, joint density, and grade**.**

b. Air Voids and Mat density. Acceptance of each lot of plant produced material for mat density and air voids will be based on the percentage of material within specification limits (PWL). If the PWL of the lot equals or exceeds 90%, the lot will be acceptable. Acceptance and payment will be determined in accordance with paragraph 401-8.1.

c. Joint density. Acceptance of each lot of plant produced asphalt for joint density will be based on the PWL. If the PWL of the lot is equal to or exceeds 90%, the lot will be considered acceptable. If the PWL is less than 90%, the Contractor shall evaluate the reason and act accordingly. If the PWL is less than 80%, the Contractor shall cease operations and until the reason for poor compaction has been determined. If the PWL is less than 71%, the pay factor for the lot used to complete the joint will be reduced by five (5) percentage points. This lot pay factor reduction will be incorporated and evaluated in accordance with paragraph 401-8.1.

d. Grade. The final finished surface of the pavement shall be surveyed to verify that the grade elevations and cross-sections shown on the plans do not deviate more than 1/2 inch (12 mm) vertically.

~~Cross-sections of the pavement shall be taken at a minimum [50-foot (15-m)] longitudinal spacing, at all longitudinal grade breaks, and at start and end of each lane placed. Minimum cross-section grade points shall include grade at centerline, [± 10 feet of centerline], and edge of [runway] [taxiway] pavement.~~

The survey and documentation shall be stamped and signed by a licensed surveyor. Payment for sublots that do not meet grade for over 25% of the sublot shall not be more than 95%.

e. Profilograph roughness for QA Acceptance. Not used.

401-6.3 Percentage of material within specification limits (PWL). The PWL will be determined in accordance with procedures specified in Item C-110. The specification tolerance limits (L) for lower and (U) for upper are contained in Table 5.

Table 5. Acceptance Limits for Air Voids and Density

Test Property	Pavements Specification Tolerance Limits	
	L	**U**
Air Voids Total Mix (%)	2.0	5.0
Surface Course Mat Density (%)	92.8	-
Base Course Mat Density (%)	92.0	-
Joint density (%)	90.5	--

a. Outliers. All individual tests for mat density and air voids will be checked for outliers (test criterion) in accordance with ASTM E178, at a significance level of 5%. Outliers will be discarded, and the PWL will be determined using the remaining test values. The criteria in Table 5 is based on

production processes which have a variability with the following standard deviations: Surface Course Mat Density (%), 1.30; Base Course Mat Density (%), 1.55; Joint Density (%), 1.55.

The Contractor should note that (1) 90 PWL is achieved when consistently producing a surface course with an average mat density of at least 94.5% with 1.30% or less variability, (2) 90 PWL is achieved when consistently producing a base course with an average mat density of at least 94.0% with 1.55% or less variability, and (3) 90 PWL is achieved when consistently producing joints with an average joint density of at least 92.5% with 1.55% or less variability.

401-6.4 Resampling pavement for mat density.

a. General. Resampling of a lot of pavement will only be allowed for mat density, and then, only if the Contractor requests same, in writing, within 48 hours after receiving the written test results from the RPR. A retest will consist of all the sampling and testing procedures contained in paragraphs 401-6.1d and 401-6.2b. Only one resampling per lot will be permitted.

(1) A redefined PWL will be calculated for the resampled lot. The number of tests used to calculate the redefined PWL will include the initial tests made for that lot plus the retests.

(2) The cost for resampling and retesting shall be borne by the Contractor.

b. Payment for resampled lots. The redefined PWL for a resampled lot will be used to calculate the payment for that lot in accordance with Table 6.

c. Outliers. Check for outliers in accordance with ASTM E178, at a significance level of 5%.

METHOD OF MEASUREMENT

401-7.1 Measurement. Asphalt shall be measured by the number of tons of asphalt used in the accepted work. Batch weights or truck scale weights will be used to determine the basis for the tonnage.

BASIS OF PAYMENT

401-8.1 Payment. Payment for a lot of asphalt meeting all acceptance criteria as specified in paragraph 401-6.2 shall be made based on results of tests for mat density and air voids. Payment for acceptable lots shall be adjusted according to paragraph 401-8.1c for mat density and air voids; and paragraph 401-6.2c for joint density, subject to the limitation that:

a. The total project payment for plant mix asphalt pavement shall not exceed **100%** percent of the product of the contract unit price and the total number of tons (kg) of asphalt used in the accepted work.

b. The price shall be compensation for furnishing all materials, for all preparation, mixing, and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

c. Basis of adjusted payment. The pay factor for each individual lot shall be calculated in accordance with Table 6. A pay factor shall be calculated for both mat density and air voids. The lot pay factor shall be the higher of the two values when calculations for both mat density and air voids are 100% or higher. The lot pay factor shall be the product of the two values when only one of the calculations for either mat density or air voids is 100% or higher. The lot pay factor shall be the lower of the two values when calculations for both mat density and air voids are less than 100%. If PWL for joint density is less than 71% then the lot pay factor shall be reduced by 5% but be no higher than 95%.

For each lot accepted, the adjusted contract unit price shall be the product of the lot pay factor for the lot and the contract unit price. Payment shall be subject to the total project payment limitation specified in

paragraph 401-8.1a. Payment in excess of 100% for accepted lots of asphalt shall be used to offset payment for accepted lots of asphalt pavement that achieve a lot pay factor less than 100%.

Payment for sublots which do not meet grade in accordance with paragraph 401-6.2d after correction for over 25% of the sublot shall be reduced by 5%.

Table 6. Price adjustment schedule[1]

Percentage of material within specification limits (PWL)	Lot pay factor (percent of contract unit price)
96 – 100	106
90 – 95	PWL + 10
75 – 89	0.5 PWL + 55
55 – 74	1.4 PWL – 12
Below 55	Reject [2]

[1] Although it is theoretically possible to achieve a pay factor of 106% for each lot, actual payment above 100% shall be subject to the total project payment limitation specified in paragraph 401-8.1a.

[2] The lot shall be removed and replaced. However, the RPR may decide to allow the rejected lot to remain. In that case, if the RPR and Contractor agree in writing that the lot shall not be removed, it shall be paid for at 50% of the contract unit price and the total project payment shall be reduced by the amount withheld for the rejected lot.

d. Profilograph Roughness. Not used.

401-8.1 Payment.

Payment will be made under:

Item P-401-8.1 Asphalt Surface Course – per ton

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM C29	Standard Test Method for Bulk Density (“Unit Weight”) and Voids in Aggregate
ASTM C88	Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
ASTM C117	Standard Test Method for Materials Finer than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C127	Standard Test Method for Density, Relative Density (Specific Gravity) and Absorption of Coarse Aggregate
ASTM C131	Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C136	Standard Test Method for Sieve or Screen Analysis of Fine and Coarse Aggregates

ASTM C142	Standard Test Method for Clay Lumps and Friable Particles in Aggregates
ASTM C566	Standard Test Method for Total Evaporable Moisture Content of Aggregate by Drying
ASTM D75	Standard Practice for Sampling Aggregates
ASTM D242	Standard Specification for Mineral Filler for Bituminous Paving Mixtures
ASTM D946	Standard Specification for Penetration-Graded Asphalt Cement for Use in Pavement Construction
ASTM D979	Standard Practice for Sampling Asphalt Paving Mixtures
ASTM D1073	Standard Specification for Fine Aggregate for Asphalt Paving Mixtures
ASTM D1188	Standard Test Method for Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Coated Samples
ASTM D2172	Standard Test Method for Quantitative Extraction of Bitumen from Asphalt Paving Mixtures
ASTM D1461	Standard Test Method for Moisture or Volatile Distillates in Asphalt Paving Mixtures
ASTM D2041	Standard Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
ASTM D2419	Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate
ASTM D2489	Standard Practice for Estimating Degree of Particle Coating of Bituminous-Aggregate Mixtures
ASTM D2726	Standard Test Method for Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures
ASTM D2950	Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods
ASTM D3203	Standard Test Method for Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
ASTM D3381	Standard Specification for Viscosity-Graded Asphalt Cement for Use in Pavement Construction
ASTM D3665	Standard Practice for Random Sampling of Construction Materials
ASTM D3666	Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials
ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4552	Standard Practice for Classifying Hot-Mix Recycling Agents
ASTM D4791	Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate

ASTM D4867	Standard Test Method for Effect of Moisture on Asphalt Concrete Paving Mixtures
ASTM D5361	Standard Practice for Sampling Compacted Asphalt Mixtures for Laboratory Testing
ASTM D5444	Standard Test Method for Mechanical Size Analysis of Extracted Aggregate
ASTM D5821	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
ASTM D6084	Standard Test Method for Elastic Recovery of Bituminous Materials by Ductilometer
ASTM D6307	Standard Test Method for Asphalt Content of Hot Mix Asphalt by Ignition Method
ASTM D6373	Standard Specification for Performance Graded Asphalt Binder
ASTM D6752	Standard Test Method for Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Automatic Vacuum Sealing Method
ASTM D6925	Standard Test Method for Preparation and Determination of the Relative Density of Hot Mix Asphalt (HMA) Specimens by Means of the SuperPave Gyratory Compactor.
ASTM D6926	Standard Practice for Preparation of Bituminous Specimens Using Marshall Apparatus
ASTM D6927	Standard Test Method for Marshall Stability and Flow of Bituminous Mixtures
ASTM D6995	Standard Test Method for Determining Field VMA based on the Maximum Specific Gravity of the Mix (Gmm)
ASTM E11	Standard Specification for Woven Wire Test Sieve Cloth and Test Sieves
ASTM E178	Standard Practice for Dealing with Outlying Observations
ASTM E1274	Standard Test Method for Measuring Pavement Roughness Using a Profilograph
ASTM E950	Standard Test Method for Measuring the Longitudinal Profile of Traveled Surfaces with an Accelerometer Established Inertial Profiling Reference
ASTM E2133	Standard Test Method for Using a Rolling Inclinometer to Measure Longitudinal and Transverse Profiles of a Traveled Surface

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO M156	Standard Specification for Requirements for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures.
AASHTO T329	Standard Method of Test for Moisture Content of Hot Mix Asphalt (HMA) by Oven Method
AASHTO T324	Standard Method of Test for Hamburg Wheel-Track Testing of Compacted Asphalt Mixtures

AASHTO T 340 Standard Method of Test for Determining the Rutting Susceptibility of Hot Mix Asphalt (APA) Using the Asphalt Pavement Analyzer (APA)

Asphalt Institute (AI)

Asphalt Institute Handbook MS-26, Asphalt Binder

Asphalt Institute MS-2 Mix Design Manual, 7th Edition

AI State Binder Specification Database

Federal Highway Administration (FHWA)

Long Term Pavement Performance Binder Program

Advisory Circulars (AC)

AC 150/5320-6 Airport Pavement Design and Evaluation

FAA Orders

5300.1 Modifications to Agency Airport Design, Construction, and Equipment Standards

Software

FAARFIELD

END OF ITEM P-401

Item P-603 Emulsified Asphalt Tack Coat

DESCRIPTION

603-1.1 This item shall consist of preparing and treating an asphalt or concrete surface with asphalt material in accordance with these specifications and in reasonably close conformity to the lines shown on the plans.

MATERIALS

603-2.1 Asphalt materials. The asphalt material shall be an emulsified asphalt as specified in ASTM D3628 as an asphalt application for tack coat appropriate to local conditions. The emulsified asphalt shall not be diluted. The Contractor shall provide a copy of the manufacturer's Certificate of Analysis (COA) for the asphalt material to the Resident Project Representative (RPR) before the asphalt material is applied for review and acceptance. The furnishing of COA for the asphalt material shall not be interpreted as a basis for final acceptance. The manufacturer's COA may be subject to verification by testing the material delivered for use on the project.

CONSTRUCTION METHODS

603-3.1 Weather limitations. The tack coat shall be applied only when the existing surface is dry and the atmospheric temperature is 50°F (10°C) or above; the temperature has not been below 35°F (2°C) for the 12 hours prior to application; and when the weather is not foggy or rainy. The temperature requirements may be waived when directed by the RPR.

603-3.2 Equipment. The Contractor shall provide equipment for heating and applying the emulsified asphalt material. The emulsion shall be applied with a manufacturer-approved computer rate-controlled asphalt distributor. The equipment shall be in good working order and contain no contaminants or diluents in the tank. Spray bar tips must be clean, free of burrs, and of a size to maintain an even distribution of the emulsion. Any type of tip or pressure source is suitable that will maintain predetermined flow rates and constant pressure during the application process with application speeds under eight (8) miles per hour (13 km per hour) or seven (700) feet per minute (213 m per minute).

The equipment will be tested under pressure for leaks and to ensure proper set-up before use to verify truck set-up (via a test-shot area), including but not limited to, nozzle tip size appropriate for application, spray-bar height and pressure and pump speed, evidence of triple-overlap spray pattern, lack of leaks, and any other factors relevant to ensure the truck is in good working order before use.

The distributor truck shall be equipped with a minimum 12-foot (3.7-m) spreader spray bar with individual nozzle control with computer-controlled application rates. The distributor truck shall have an easily accessible thermometer that constantly monitors the temperature of the emulsion, and have an operable mechanical tank gauge that can be used to cross-check the computer accuracy. If the distributor is not equipped with an operable quick shutoff valve, the prime operations shall be started and stopped on building paper.

The distributor truck shall be equipped to effectively heat and mix the material to the required temperature prior to application as required. Heating and mixing shall be done in accordance with the manufacturer's recommendations. Do not overheat or over mix the material.

The distributor shall be equipped with a hand sprayer.

Asphalt distributors must be calibrated annually in accordance with ASTM D2995. The Contractor must furnish a current calibration certification for the asphalt distributor truck from any State or other agency as approved by the RPR.

A power broom and/or power blower suitable for cleaning the surfaces to which the asphalt tack coat is to be applied shall be provided.

603-3.3 Application of emulsified asphalt material. The emulsified asphalt shall not be diluted. Immediately before applying the emulsified asphalt tack coat, the full width of surface to be treated shall be swept with a power broom and/or power blower to remove all loose dirt and other objectionable material.

The emulsified asphalt material shall be uniformly applied with an asphalt distributor at the rates appropriate for the conditions and surface specified in the table below. The type of asphalt material and application rate shall be approved by the RPR prior to application.

Emulsified Asphalt

Surface Type	Residual Rate, gal/SY (L/square meter)	Emulsion Application Bar Rate, gal/SY (L/square meter)
New asphalt	0.02-0.05 (0.09-0.23)	0.03-0.07 (0.13-0.32)
Existing asphalt	0.04-0.07 (0.18-0.32)	0.06-0.11 (0.27-0.50)
Milled Surface	0.04-0.08 (0.18-0.36)	.0.06-0.12 (0.27-0.54)
Concrete	0.03-0.05 (0.13-0.23)	0.05-0.08 (0.23-0.36)

After application of the tack coat, the surface shall be allowed to cure without being disturbed for the period of time necessary to permit drying and setting of the tack coat. This period shall be determined by the RPR. The Contractor shall protect the tack coat and maintain the surface until the next course has been placed. When the tack coat has been disturbed by the Contractor, tack coat shall be reapplied at the Contractor's expense.

603-3.4 Freight and waybills The Contractor shall submit waybills and delivery tickets, during progress of the work. Before the final statement is allowed, file with the RPR certified waybills and certified delivery tickets for all emulsified asphalt materials used in the construction of the pavement covered by the contract. Do not remove emulsified asphalt material from storage until the initial outage and temperature measurements have been taken. The delivery or storage units will not be released until the final outage has been taken.

METHOD OF MEASUREMENT

603-4.1 The emulsified asphalt material for tack coat shall be measured by the gallon. Volume shall be corrected to the volume at 60°F (16°C) in accordance with ASTM D1250. The emulsified asphalt material paid for will be the measured quantities used in the accepted work, provided that the measured quantities are not 10% over the specified application rate. Any amount of emulsified asphalt material more than 10% over the specified application rate for each application will be deducted from the

measured quantities, except for irregular areas where hand spraying of the emulsified asphalt material is necessary. Water added to emulsified asphalt will not be measured for payment.

BASIS OF PAYMENT

603.5-1 Payment shall be made at the contract lump sum price for emulsified asphalt material. This price shall be full compensation for furnishing all materials, for all preparation, delivery, and application of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-603-5.1	Emulsified Asphalt Tack Coat – per lump sum

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM D1250	Standard Guide for Use of the Petroleum Measurement Tables
ASTM D2995	Standard Practice for Estimating Application Rate and Residual Application Rate of Bituminous Distributors
ASTM D3628	Standard Practice for Selection and Use of Emulsified Asphalts

END ITEM P-603

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Item P-605 Joint Sealants for Pavements

DESCRIPTION

605-1.1 This item shall consist of providing and installing a resilient and adhesive joint sealing material capable of effectively sealing joints in pavement; joints between different types of pavements; and cracks in existing pavement.

MATERIALS

605-2.1 Joint sealants. Joint sealant materials shall meet the requirements of ASTM D6690 Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.

Each lot or batch of sealant shall be delivered to the jobsite in the manufacturer's original sealed container. Each container shall be marked with the manufacturer's name, batch or lot number, *shelf life, storage instructions, mixing instructions,* the safe heating temperature, and shall be accompanied by the manufacturer's certification stating that the sealant meets the requirements of this specification.

605-2.2 Backer rod. The material furnished shall be a compressible, non-shrinking, non-staining, non-absorbing material that is non-reactive with the joint sealant in accordance with ASTM D5249. The backer-rod material shall be 25% ± 5 % larger in diameter than the nominal width of the joint.

605-2.3 Bond breaking tapes. *Bond breaking tapes shall not be used in this project.* ~~Provide a bond breaking tape or separating material that is a flexible, non-shrinkable, non-absorbing, non-staining, and non-reacting adhesive-backed tape. The material shall have a melting point at least 5°F (3°C) greater than the pouring temperature of the sealant being used when tested in accordance with ASTM D789. The bond breaker tape shall be approximately 1/8 inch (3 mm) wider than the nominal width of the joint and shall not bond to the joint sealant.~~

CONSTRUCTION METHODS

605-3.1 Time of application. Joints shall be sealed as soon after completion of the curing period as feasible and before the pavement is opened to traffic, including construction equipment. The pavement temperature shall be 50°F (10°C) and rising at the time of application of the poured joint sealing material. Do not apply sealant if moisture is observed in the joint.

605-3.2 Equipment. Machines, tools, and equipment used in the performance of the work required by this section shall be approved before the work is started and maintained in satisfactory condition at all times. Submit a list of proposed equipment to be used in performance of construction work including descriptive data, 14 days prior to use on the project.

All equipment necessary for the proper construction of this work shall be on the project and in good working condition. The equipment shall be as recommended by the manufacturer of the sealer and approved by the Consultant before construction is permitted to start.

The equipment for cleaning joint openings shall consist of hand brooms or wire brushes, air compressors, sand blasters, and, if necessary, joint cleaning and grooving machines as are necessary to produce a satisfactory clean and dry joint, similar equipment shall be provided for cleaning joints previously sealed.

The sealant shall be installed by the use of an air powered pump. The nozzle of the applicator shall have a built in tooling device to force the top of the sealant against each side of the joint face and recess the bead the required 1/4-inch below the top of the joint. The nozzle of the applicator and tooling device shall be 1/8-inch narrower than the joint to be sealed to allow for easy movement and proper tooling. The installation equipment shall consist of an extrusion pump to transfer the material from the container to the joint and an air compressor capable of delivering at 60 CFM at 100 PSI. The extrusion pump shall have a minimum output ratio capacity of 35:1. All seals, hoses, and packings shall be coated with Teflon or equal coatings to prevent moisture and air permeation. Hose shall be kept to a minimum diameter of 3/4-inch. The installation systems shall be capable of delivery of sufficient material to seal 50 feet per minute of 1/2-inch wide joints.

The foam cell rod shall be installed with a roller device specifically designed for the installation. The device shall install the cell rod to the depths shown on the plans or as directed by the Consultant.

605-3.3 Preparation of joints. Pavement joints for application of material in this specification must be dry, clean of all scale, dirt, dust, curing compound, and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method cleans the joint and does not damage the joint.

a. Sawing. All joints shall be sawed in accordance with specifications and plan details. Immediately after sawing the joint, the resulting slurry shall be completely removed from joint and adjacent area by flushing with a jet of water, and by use of other tools as necessary.

b. Sealing. Immediately before sealing, the joints shall be thoroughly cleaned of all remaining laitance, curing compound, filler, protrusions of hardened concrete, old sealant and other foreign material from the sides and upper edges of the joint space to be sealed. Cleaning shall be accomplished by *wet sawing and* sandblasting as specified in paragraph 605-3.2. The newly exposed concrete joint faces and the pavement surface extending a minimum of 1/2 inch (12 mm) from the joint edge shall be sandblasted clean. Sandblasting shall be accomplished in a minimum of two passes. One pass per joint face with the nozzle held at an angle directly toward the joint face and not more than 3 inches (75 mm) from it. After final cleaning and immediately prior to sealing, blow out the joints with compressed air and leave them completely free of debris and water. The joint faces shall be surface dry when the seal is applied.

c. Backer Rod. When the joint opening is of a greater depth than indicated for the sealant depth, plug or seal off the lower portion of the joint opening using a backer rod in accordance with paragraph 605-2.2 to prevent the entrance of the sealant below the specified depth. Take care to ensure that the backer rod is placed at the specified depth and is not stretched or twisted during installation.

d. Bond-breaking tape. *Bond breaking tape shall not be used in this project.* ~~Where inserts or filler materials contain bitumen, or the depth of the joint opening does not allow for the use of a backup material, insert a bond-separating tape breaker in accordance with paragraph 605-2.3 to prevent incompatibility with the filler materials and three-sided adhesion of the sealant. Securely bond the tape to the bottom of the joint opening so it will not float up into the new sealant.~~

605-3.4 Installation of sealants. Joints shall be inspected for proper width, depth, alignment, and preparation, and shall be approved by the RPR before sealing is allowed. Sealants shall be installed in accordance with the following requirements:

Immediately preceding, but not more than 50 feet (15 m) ahead of the joint sealing operations, perform a final cleaning with compressed air. Fill the joints from the bottom up to 1/8 inch ±1/16 inch (2 mm) below the top of pavement surface; or bottom of groove for grooved pavement. Remove and discard

excess or spilled sealant from the pavement by approved methods. Install the sealant in such a manner as to prevent the formation of voids and entrapped air. In no case shall gravity methods or pouring pots be used to install the sealant material. Traffic shall not be permitted over newly sealed pavement until authorized by the RPR. When a primer is recommended by the manufacturer, apply it evenly to the joint faces in accordance with the manufacturer's instructions. Check the joints frequently to ensure that the newly installed sealant is cured to a tack-free condition within the time specified.

605-3.5 Inspection. The Contractor shall inspect the joint sealant for proper rate of cure and set, bonding to the joint walls, cohesive separation within the sealant, reversion to liquid, entrapped air and voids. Sealants exhibiting any of these deficiencies at any time prior to the final acceptance of the project shall be removed from the joint, wasted, and replaced as specified at no additional cost to the airport.

605-3.6 Clean-up. Upon completion of the project, remove all unused materials from the site and leave the pavement in a clean condition.

METHOD OF MEASUREMENT

605-4.1 ~~Joint sealing material shall be measured by the [gallon (liter)] [pound (kg)] [linear foot (meter)] of sealant in place, completed, and accepted.~~ *No measurement will be made for direct payment of any joint sealant as the cost of the joint sealant shall be considered subsidiary to the items requiring the joint sealant.*

BASIS OF PAYMENT

605-5.1 ~~Payment for joint sealing material shall be made at the contract unit price per [gallon (liter)] [pound (kg)] [linear foot (meter)]. The price shall be full compensation for furnishing all materials, for all preparation, delivering, and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.~~ *No separate payment will be made for this item. All joint sealing filler shall be incidental to the items requiring joint sealing filler*.

~~Payment will be made under:~~

~~Item P-605-5.1~~	~~Joint Sealing Filler, [per gallon (liter)] [per pound (kg)] [per linear foot (meter)]~~

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM D789	Standard Test Method for Determination of Relative Viscosity of Polyamide (PA)
ASTM D5249	Standard Specification for Backer Material for Use with Cold- and Hot-Applied Joint Sealants in Portland-Cement Concrete and Asphalt Joints
ASTM D6690	Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt

Advisory Circulars (AC)

AC 150/5340-30 Design and Installation Details for Airport Visual Aids

END ITEM P-605

Item P-610 Concrete for Miscellaneous Structures

DESCRIPTION

610-1.1 This item shall consist of concrete and reinforcement, as shown on the plans, prepared and constructed in accordance with these specifications. This specification shall be used for all concrete other than airfield pavement which are cast-in-place.

MATERIALS

610-2.1 General. Only approved materials, conforming to the requirements of these specifications, shall be used in the work. Materials may be subject to inspection and tests at any time during their preparation or use. The source of all materials shall be approved by the Resident Project Representative (RPR) before delivery or use in the work. Representative preliminary samples of the materials shall be submitted by the Contractor, when required, for examination and test. Materials shall be stored and handled to ensure preservation of their quality and fitness for use and shall be located to facilitate prompt inspection. All equipment for handling and transporting materials and concrete must be clean before any material or concrete is placed in them.

The use of pit-run aggregates shall not be permitted unless the pit-run aggregate has been screened and washed, and all fine and coarse aggregates stored separately and kept clean. The mixing of different aggregates from different sources in one storage stockpile or alternating batches of different aggregates shall not be permitted.

a. Reactivity. Fine aggregate and coarse aggregates to be used in all concrete shall have been tested separately within six months of the project in accordance with ASTM C1260. Test results shall be submitted to the RPR. The aggregate shall be considered innocuous if the expansion of test specimens, tested in accordance with ASTM C1260, does not exceed 0.08% at 14 days (16 days from casting). If the expansion either or both test specimen is greater than 0.08% at 14 days, but less than 0.20%, a minimum of 25% of Type F fly ash, or between 40% and 55% of slag cement shall be used in the concrete mix.

If the expansion is greater than 0.20%, the aggregates shall not be used, and test results for other aggregates must be submitted for evaluation; or aggregates that meet P-501 reactivity test requirements may be utilized.

610-2.2 Coarse aggregate. The coarse aggregate for concrete shall meet the requirements of ASTM C33 and the requirements of Table 4, Class Designation 5S; and the grading requirements shown below, as required for the project.

Coarse Aggregate Grading Requirements

Maximum Aggregate Size	ASTM C33, Table 3 Grading Requirements (Size No.)
1 1/2 inch (37.5 mm)	467 or 4 and 67
1 inch (25 mm)	57
¾ inch (19 mm)	67
½ inch (12.5 mm)	7

610-2.2.1 Coarse Aggregate susceptibility to durability (D) cracking. Not used.

610-2.3 Fine aggregate. The fine aggregate for concrete shall meet all fine aggregate requirements of ASTM C33.

610-2.4 Cement. Cement shall conform to the requirements of **ASTM C150 Type II or III**.

610-2.5 Cementitious materials.

~~**a. Fly ash.** Fly ash shall meet the requirements of ASTM C618, with the exception of loss of ignition, where the maximum shall be less than 6%. Fly ash shall have a Calcium Oxide (CaO) content of less than [15%] and a total available alkali content less than 3% per ASTM C311. Fly ash produced in furnace operations using liming materials or soda ash (sodium carbonate) as an additive shall not be acceptable. The Contractor shall furnish the previous three most recent, consecutive ASTM C618 reports for each source of fly ash proposed in the concrete mix, and shall furnish each additional report as they become available during the project. The reports can be used for acceptance or the material may be tested independently by the RPR.~~

~~**b. Slag cement (ground granulated blast furnace (GGBF)).** Slag cement shall conform to ASTM C989, Grade 100 or Grade 120. Slag cement shall be used only at a rate between 25% and 55% of the total cementitious material by mass.~~

610-2.6 Water. Water used in mixing or curing shall be from potable water sources. Other sources shall be tested in accordance with ASTM C1602 prior to use.

610-2.7 Admixtures. The Contractor shall submit certificates indicating that the material to be furnished meets all of the requirements indicated below. In addition, the RPR may require the Contractor to submit complete test data from an approved laboratory showing that the material to be furnished meets all of the requirements of the cited specifications. Subsequent tests may be made of samples taken by the RPR from the supply of the material being furnished or proposed for use on the work to determine whether the admixture is uniform in quality with that approved.

a. Air-entraining admixtures. Air-entraining admixtures shall meet the requirements of ASTM C260 and shall consistently entrain the air content in the specified ranges under field conditions. The air-entrainment agent and any water reducer admixture shall be compatible.

b. Water-reducing admixtures. Water-reducing admixture shall meet the requirements of ASTM C494, Type A, B, or D. ASTM C494, Type F and G high range water reducing admixtures and ASTM C1017 flowable admixtures shall not be used.

c. Other chemical admixtures. The use of set retarding, and set-accelerating admixtures shall be approved by the RPR. Retarding shall meet the requirements of ASTM C494, Type A, B, or D and set-accelerating shall meet the requirements of ASTM C494, Type C. Calcium chloride and admixtures containing calcium chloride shall not be used.

610-2.8 Premolded joint material. Premolded joint material for expansion joints shall meet the requirements of ASTM ASTM D1751**.**

610-2.9 Joint filler. The filler for joints shall meet the requirements of Item P-605, unless otherwise specified.

610-2.10 Steel reinforcement. Reinforcing shall consist of Grade 60 conforming to the requirements of ASTM A615 and ASTM A1064, *if necessary*.

610-2.11 Materials for curing concrete. Curing materials shall conform to one of the following specifications.

Waterproof paper	**ASTM C171**
Clear or white Polyethylene Sheeting	**ASTM C171**
White-pigmented Liquid Membrane-Forming Compound, Type 2, Class B	**ASTM C309**

CONSTRUCTION METHODS

610-3.1 General. The Contractor shall furnish all labor, materials, and services necessary for, and incidental to, the completion of all work as shown on the drawings and specified here. All machinery and equipment used by the Contractor on the work, shall be of sufficient size to meet the requirements of the work. All work shall be subject to the inspection and approval of the RPR.

610-3.2 Concrete Mixture. The concrete shall develop a compressive strength of 4000 psi for Type II, and a minimum 5000 psi for Type III in 28 days as determined by test cylinders made in accordance with ASTM C31 and tested in accordance with ASTM C39. *Type III concrete shall have a minimum 5 hour compressive strength of 2500 psi.* The concrete shall contain not less than 470 pounds of cementitious material per cubic yard (280 kg per cubic meter). The water cementitious ratio shall not exceed 0.45 by weight. The air content of the concrete shall be 5% +/- 1.2% as determined by ASTM C231 and shall have a slump of not more than 4 inches (100 mm) as determined by ASTM C143.

610-3.3 Mixing. Concrete may be mixed at the construction site, at a central point, or wholly or in part in truck mixers. The concrete shall be mixed and delivered in accordance with the requirements of ASTM C94 or ASTM C685.

The concrete shall be mixed only in quantities required for immediate use. Concrete shall not be mixed while the air temperature is below 40°F (4°C) without the RPRs approval. If approval is granted for mixing under such conditions, aggregates or water, or both, shall be heated and the concrete shall be placed at a temperature not less than 50°F (10°C) nor more than 100°F (38°C). The Contractor shall be held responsible for any defective work, resulting from freezing or injury in any manner during placing and curing, and shall replace such work at his expense.

Retempering of concrete by adding water or any other material is not permitted.

The rate of delivery of concrete to the job shall be sufficient to allow uninterrupted placement of the concrete.

610-3.4 Forms. Concrete shall not be placed until all the forms and reinforcements have been inspected and approved by the RPR. Forms shall be of suitable material and shall be of the type, size, shape, quality, and strength to build the structure as shown on the plans. The forms shall be true to line and grade and shall be mortar-tight and sufficiently rigid to prevent displacement and sagging between supports. The surfaces of forms shall be smooth and free from irregularities, dents, sags, and holes. The Contractor shall be responsible for their adequacy.

The internal form ties shall be arranged so no metal will show in the concrete surface or discolor the surface when exposed to weathering when the forms are removed. All forms shall be wetted with water or with a non-staining mineral oil, which shall be applied immediately before the concrete is placed. Forms shall be constructed so they can be removed without injuring the concrete or concrete surface.

610-3.5 Placing reinforcement. All reinforcement shall be accurately placed, as shown on the plans, and shall be firmly held in position during concrete placement. Bars shall be fastened together at intersections. The reinforcement shall be supported by approved metal chairs. Shop drawings, lists, and bending details shall be supplied by the Contractor when required.

610-3.6 Embedded items. Before placing concrete, all embedded items shall be firmly and securely fastened in place as indicated. All embedded items shall be clean and free from coating, rust, scale, oil, or any foreign matter. The concrete shall be spaded and consolidated around and against embedded items. The embedding of wood shall not be allowed.

610-3.7 Concrete Consistency. The Contractor shall monitor the consistency of the concrete delivered to the project site; collect each batch ticket; check temperature; and perform slump tests on each truck at the project site in accordance with ASTM C143.

610-3.8 Placing concrete. All concrete shall be placed during daylight hours, unless otherwise approved. The concrete shall not be placed until the depth and condition of foundations, the adequacy of forms and falsework, and the placing of the steel reinforcing have been approved by the RPR. Concrete shall be placed as soon as practical after mixing, but in no case later than one (1) hour after water has been added to the mix. The method and manner of placing shall avoid segregation and displacement of the reinforcement. Troughs, pipes, and chutes shall be used as an aid in placing concrete when necessary. The concrete shall not be dropped from a height of more than 5 feet (1.5 m). Concrete shall be deposited as nearly as practical in its final position to avoid segregation due to rehandling or flowing. Do not subject concrete to procedures which cause segregation. Concrete shall be placed on clean, damp surfaces, free from running water, or on a properly consolidated soil foundation.

610-3.9 Vibration. Vibration shall follow the guidelines in American Concrete Institute (ACI) Committee 309R, Guide for Consolidation of Concrete.

610-3.10 Joints. Joints shall be constructed as indicated on the plans.

610-3.11 Finishing. All exposed concrete surfaces shall be true, smooth, and free from open or rough areas, depressions, or projections. All concrete horizontal plane surfaces shall be brought flush to the proper elevation with the finished top surface struck-off with a straightedge and floated.

610-3.12 Curing and protection. All concrete shall be properly cured in accordance with the recommendations in American Concrete Institute (ACI) 308R, Guide to External Curing of Concrete. The concrete shall be protected from damage until project acceptance.

610-3.13 Cold weather placing. When concrete is placed at temperatures below 40°F (4°C), follow the cold weather concreting recommendations found in ACI 306R, Cold Weather Concreting.

610-3.14 Hot weather placing. When concrete is placed in hot weather greater than 85ºF (30 ºC), follow the hot weather concreting recommendations found in ACI 305R, Hot Weather Concreting.

QUALITY ASSURANCE (QA)

610-4.1 Quality Assurance sampling and testing. Concrete for each day's placement will be accepted on the basis of the compressive strength specified in paragraph 610-3.2. The RPR will sample the concrete in accordance with ASTM C172; test the slump in accordance with ASTM C143; test air content in accordance with ASTM C231 make and cure compressive strength specimens in accordance with ASTM C31; and test in accordance with ASTM C39. The QA testing agency will meet the requirements of ASTM C1077.

The Contractor shall provide adequate facilities for the initial curing of cylinders.

610-4.2 Defective work. Any defective work that cannot be satisfactorily repaired as determined by the RPR, shall be removed and replaced at the Contractor's expense. Defective work includes, but is not limited to, uneven dimensions, honeycombing and other voids on the surface or edges of the concrete.

METHOD OF MEASUREMENT

610-5.1 Concrete shall be considered incidental and no separate measurement shall be made.

BASIS OF PAYMENT

610-6.1 Concrete shall be considered incidental and no separate payment shall be made. ~~This price shall be full compensation for furnishing all materials including reinforcement and embedded items and for all preparation, delivery, installation, and curing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.~~

~~Payment will be made under:~~

~~Item P-610-6.1~~	~~Concrete, [per cubic yards (cubic meters)] [per square yards (square meters)] [lump sum] [incidental to other work items]~~

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM A184	Standard Specification for Welded Deformed Steel Bar Mats for Concrete Reinforcement
ASTM A615	Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
ASTM A704	Standard Specification for Welded Steel Plain Bar or Rod Mats for Concrete Reinforcement
ASTM A706	Standard Specification for Low-Alloy Steel Deformed and Plain Bars for Concrete Reinforcement
ASTM A775	Standard Specification for Epoxy-Coated Steel Reinforcing Bars
ASTM A884	Standard Specification for Epoxy-Coated Steel Wire and Welded Wire Reinforcement
ASTM A934	Standard Specification for Epoxy-Coated Prefabricated Steel Reinforcing Bars
ASTM A1064	Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete
ASTM C31	Standard Practice for Making and Curing Concrete Test Specimens in the Field
ASTM C33	Standard Specification for Concrete Aggregates
ASTM C39	Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
ASTM C94	Standard Specification for Ready-Mixed Concrete
ASTM C136	Standard Test Method for Sieve or Screen Analysis of Fine and Coarse Aggregates

ASTM C114	Standard Test Methods for Chemical Analysis of Hydraulic Cement
ASTM C136	Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM C143	Standard Test Method for Slump of Hydraulic-Cement Concrete
ASTM C150	Standard Specification for Portland Cement
ASTM C171	Standard Specification for Sheet Materials for Curing Concrete
ASTM C172	Standard Practice for Sampling Freshly Mixed Concrete
ASTM C231	Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C260	Standard Specification for Air-Entraining Admixtures for Concrete
ASTM C309	Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
ASTM C311	Standard Test Methods for Sampling and Testing Fly Ash or Natural Pozzolans for Use in Portland-Cement Concrete
ASTM C494	Standard Specification for Chemical Admixtures for Concrete
ASTM C618	Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete
ASTM C666	Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing
ASTM C685	Standard Specification for Concrete Made by Volumetric Batching and Continuous Mixing
ASTM C989	Standard Specification for Slag Cement for Use in Concrete and Mortars
ASTM C1017	Standard Specification for Chemical Admixtures for Use in Producing Flowing Concrete
ASTM C1077	Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation
ASTM C1157	Standard Performance Specification for Hydraulic Cement
ASTM C1260	Standard Test Method for Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)
ASTM C1365	Standard Test Method for Determination of the Proportion of Phases in Portland Cement and Portland-Cement Clinker Using X-Ray Powder Diffraction Analysis
ASTM C1602	Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete
ASTM D1751	Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Asphalt Types)
ASTM D1752	Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction

American Concrete Institute (ACI)

ACI 305R	Hot Weather Concreting
ACI 306R	Cold Weather Concreting
ACI 308R	Guide to External Curing of Concrete
ACI 309R	Guide for Consolidation of Concrete

END OF ITEM P-610

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Item P-620 Runway and Taxiway Marking

DESCRIPTION

620-1.1 This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR). The terms "paint" and "marking material" as well as "painting" and "application of markings" are interchangeable throughout this specification.

MATERIALS

620-2.1 Materials acceptance. The Contractor shall furnish manufacturer's certified test reports, for materials shipped to the project. The certified test reports shall include a statement that the materials meet the specification requirements. This certification along with a copy of the paint manufacturer's surface preparation; marking materials, including adhesion, flow promoting and/or floatation additive; and application requirements must be submitted and approved by the Resident Project Representative (RPR) prior to the initial application of markings. The reports can be used for material acceptance or the RPR may perform verification testing. The reports shall not be interpreted as a basis for payment. The Contractor shall notify the RPR upon arrival of a shipment of materials to the site. All material shall arrive in sealed containers that are easily quantifiable for inspection by the RPR.

620-2.2 Marking materials.

Table 1. Marking Materials

Paint[1]				**Glass Beads[2]**	
Type	**Color**	**Fed Std. 595 Number**	**Application Rate Maximum**	**Type**	**Application Rate Minimum**
Waterborne Type II	White	37925	115 ft^2/gal	III	10 lb/gal
~~Waterborne Type II~~	~~Red~~	~~31136~~	~~115 ft^2/gal~~	~~I~~	~~7 lb/gal~~
Waterborne Type II	Yellow	33538 or 33655	115 ft^2/gal	III	10 lb/gal
Waterborne Type II	Black	37038	115 ft^2/gal	III	-
First Layer Temporary Waterborne Type II	All	N/A	230 ft^2/gal	No beads	No beads

[1] See paragraph 620-2.2a

[2] See paragraph 620-2.2b

a. Paint. Paint shall be waterborne in accordance with the requirements of this paragraph. Paint colors shall comply with Federal Standard No. 595.

> **Waterborne**. Paint shall meet the requirements of Federal Specification TT-P-1952F, Type II. The non-volatile portion of the vehicle for all paint types shall be composed of a 100% acrylic polymer as determined by infrared spectral analysis.

b. Reflective media. Glass beads for white and yellow paint shall meet the requirements for Federal Specification TT-B-1325D Type III.

~~Glass beads for red and pink paint shall meet the requirements for Type I, Gradation A.~~

Glass beads shall be treated with all compatible coupling agents recommended by the manufacturers of the paint and reflective media to ensure adhesion and embedment.

Glass beads shall not be used in black and green paint.

Type III glass beads shall not be used in red and pink paint.

CONSTRUCTION METHODS

620-3.1 Weather limitations. Painting shall only be performed when the surface is dry, and the ambient temperature and the pavement surface temperature meet the manufacturer's recommendations in accordance with paragraph 620-2.1. Painting operations shall be discontinued when the ambient or surface temperatures does not meet the manufacturer's recommendations. Markings shall not be applied when the wind speed exceeds 10 mph unless windscreens are used to shroud the material guns. Markings shall not be applied when weather conditions are forecasts to not be within the manufacturers' recommendations for application and dry time.

620-3.2 Equipment. Equipment shall include the apparatus necessary to properly clean the existing surface, a mechanical marking machine, a bead dispensing machine, and such auxiliary hand-painting equipment as may be necessary to satisfactorily complete the job.

The mechanical marker shall be an atomizing spray-type or airless type marking machine with automatic glass bead dispensers suitable for application of traffic paint. It shall produce an even and uniform film thickness and appearance of both paint and glass beads at the required coverage and shall apply markings of uniform cross-sections and clear-cut edges without running or spattering and without over spray. The marking equipment for both paint and beads shall be calibrated daily.

620-3.3 Preparation of surfaces. Immediately before application of the paint, the surface shall be dry and free from dirt, grease, oil, laitance, or other contaminates that would reduce the bond between the paint and the pavement. Use of any chemicals or impact abrasives during surface preparation shall be approved in advance by the RPR. After the cleaning operations, sweeping, blowing, or rinsing with pressurized water shall be performed to ensure the surface is clean and free of grit or other debris left from the cleaning process.

a. Preparation of new pavement surfaces. The area to be painted shall be cleaned by broom, blower, water blasting, or by other methods approved by the RPR to remove all contaminants, including PCC curing compounds, minimizing damage to the pavement surface.

b. Preparation of pavement to remove existing markings. Existing pavement markings shall be removed by rotary grinding, water blasting, or by other methods approved by the RPR minimizing damage to the pavement surface. The removal area may need to be larger than the area of the markings to eliminate ghost markings. After removal of markings on asphalt pavements, apply a fog seal or seal coat to 'block out' the removal area to eliminate 'ghost' markings.

c. Preparation of pavement markings prior to remarking. Prior to remarking existing markings, loose existing markings must be removed minimizing damage to the pavement surface, with a method approved by the RPR. After removal, the surface shall be cleaned of all residue or debris.

Prior to the application of markings, the Contractor shall certify in writing that the surface is dry and free from dirt, grease, oil, laitance, or other foreign material that would prevent the bond of the paint to the pavement or existing markings. This certification along with a copy of the paint manufactures application and surface preparation requirements must be submitted to the RPR prior to the initial application of markings.

620-3.4 Layout of markings. The proposed markings shall be laid out in advance of the paint application. The locations of markings to receive glass beads shall be shown on the plans.

620-3.5 Application. A period of 30 days shall elapse between placement of surface course or seal coat and application of the permanent paint markings. Paint shall be applied at the locations and to the dimensions and spacing shown on the plans. Paint shall not be applied until the layout and condition of the surface has been approved by the RPR.

The edges of the markings shall not vary from a straight line more than 1/2 inch (12 mm) in 50 feet (15 m), and marking dimensions and spacing shall be within the following tolerances:

Marking Dimensions and Spacing Tolerance

Dimension and Spacing	Tolerance
36 inch (910 mm) or less	±1/2 inch (12 mm)
greater than 36 inch to 6 feet (910 mm to 1.85 m)	±1 inch (25 mm)
greater than 6 feet to 60 feet (1.85 m to 18.3 m)	±2 inch (50 mm)
greater than 60 feet (18.3 m)	±3 inch (76 mm)

The paint shall be mixed in accordance with the manufacturer's instructions and applied to the pavement with a marking machine at the rate shown in Table 1. The addition of thinner will not be permitted.

Glass beads shall be distributed upon the marked areas at the locations shown on the plans to receive glass beads immediately after application of the paint. A dispenser shall be furnished that is properly designed for attachment to the marking machine and suitable for dispensing glass beads. Glass beads shall be applied at the rate shown in Table 1. Glass beads shall not be applied to black paint or green paint. Glass beads shall adhere to the cured paint or all marking operations shall cease until corrections are made. Different bead types shall not be mixed. Regular monitoring of glass bead embedment and distribution should be performed.

620-3.6 Application--preformed thermoplastic airport pavement markings.

Preformed thermoplastic pavement markings not used.

620-3.7 Control strip. Prior to the full application of airfield markings, the Contractor shall prepare a control strip in the presence of the RPR. The Contractor shall demonstrate the surface preparation method and all striping equipment to be used on the project. The marking equipment must achieve the prescribed application rate of paint and population of glass beads (per Table 1) that are properly embedded and evenly distributed across the full width of the marking. Prior to acceptance of the control strip, markings must be evaluated during darkness to ensure a uniform appearance.

620-3.8 Retro-reflectance. [Reflectance shall be measured with a portable retro-reflectometer meeting ASTM E1710 (or equivalent). A total of 6 reading shall be taken over a 6 square foot area with 3

readings taken from each direction. The average shall be equal to or above the minimum levels of all readings which are within 30% of each other.

Minimum Retro-Reflectance Values

Material	Retro-reflectance mcd/m^2/lux		
	White	**Yellow**	~~**Red**~~
Initial Type I	300	175	~~35~~
Initial Type III	600	300	~~35~~
Initial Thermoplastic	225	100	~~35~~
All materials, remark when less than[1]	100	75	~~10~~

[1] 'Prior to remarking determine if removal of contaminants on markings will restore retro-reflectance

620-3.9 Protection and cleanup. After application of the markings, all markings shall be protected from damage until dry. All surfaces shall be protected from excess moisture and/or rain and from disfiguration by spatter, splashes, spillage, or drippings. The Contractor shall remove from the work area all debris, waste, loose reflective media, and by-products generated by the surface preparation and application operations to the satisfaction of the RPR. The Contractor shall dispose of these wastes in strict compliance with all applicable state, local, and federal environmental statutes and regulations.

Any excess paint and/or beads outside the limits of markings, including splatters, splashes, spillage, or drippings of paint shall be removed. Any existing markings to remain that are damaged from Contractor's operations shall be re-painted at the Contractor's Expense.

METHOD OF MEASUREMENT

620-4.1 *No separate measurement shall be made for surface preparation*. ~~The quantity of surface preparation shall be.measured by the number of square feet (square meters) for each type of surface preparation specified in paragraph 620-3.3. Surface preparation for new pavement surfaces shall be measured for the first and only application of the black permanent markings and for the temporary (first layer) white/yellow/red markings as classified under P-620-3.3a. Surface preparation for the second application of the white/yellow/red permanent markings with reflective media and pavement marking refreshing shall be as classified under P-620-3.3c.~~

620-4.2 The quantity of markings shall be paid for shall be measured by the number of square feet (square meters) of painting.

620-4.3 No separate measurement shall be made for reflective media. ~~The quantity of reflective media shall be paid for by the number of pounds of reflective media.~~

620-4.4 The quantity of temporary markings to be paid for shall be the number of square feet of painting performed in accordance with the specifications and accepted by the RPR. Temporary marking includes surface preparation, *and* application ~~and complete removal~~ of the temporary marking.

620-4.5 *The quantity of waterborne marking removal to be paid for shall be the number of square feet of markings removed.*

BASIS OF PAYMENT

620-5.1 This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item complete in place and accepted by the RPR in accordance with these specifications.

620-5.1a *No separate payment shall be made for surface preparation, and shall be considered incidental to markings.* ~~Payment for surface preparation of new pavement surfaces shall be made at the contract price for the number of square feet for the surface preparation specified in paragraph 620-3.3a.~~

620-5.1b *No separate payment shall be made for surface preparation, and shall be considered incidental to markings.* ~~Payment for surface preparation of pavement markings prior to remarking shall be made at the contract price for the number of square feet for the surface preparation specified in paragraph 620-3.3c.~~

620-5.2 Payment for markings shall be made at the contract price for by the number of square feet of painting. *This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.*

620-5.3 Payment for temporary markings shall be made at the contract price for the number of square feet of painting. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

620-5.4 *Payment for pavement marking removal shall be made at the contract price for the number of square feet of removed painting. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.*

Payment will be made under:

Item P-620-5.2a	Permanent Markings with Glass Beads – per square foot
Item P-620-5.2b	Permanent Markings with no Beads – per square foot

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM D476	Standard Classification for Dry Pigmentary Titanium Dioxide Products
ASTM D968	Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive
ASTM D1652	Standard Test Method for Epoxy Content of Epoxy Resins
ASTM D2074	Standard Test Method for Total, Primary, Secondary, and Tertiary Amine Values of Fatty Amines by Alternative Indicator Method
ASTM D2240	Standard Test Method for Rubber Property - Durometer Hardness
ASTM D7585	Standard Practice for Evaluating Retroreflective Pavement Markings Using Portable Hand-Operated Instruments
ASTM E303	Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester

ASTM E1710	Standard Test Method for Measurement of Retroreflective Pavement Marking Materials with CEN-Prescribed Geometry Using a Portable Retroreflectometer
ASTM E2302	Standard Test Method for Measurement of the Luminance Coefficient Under Diffuse Illumination of Pavement Marking Materials Using a Portable Reflectometer
ASTM G154	Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials

Code of Federal Regulations (CFR)

40 CFR Part 60, Appendix A-7, Method 24
Determination of volatile matter content, water content, density, volume solids, and weight solids of surface coatings

29 CFR Part 1910.1200 Hazard Communication

Federal Specifications (FED SPEC)

FED SPEC TT-B-1325D	Beads (Glass Spheres) Retro-Reflective
FED SPEC TT-P-1952F	Paint, Traffic and Airfield Marking, Waterborne
FED STD 595	Colors used in Government Procurement

Commercial Item Description

A-A-2886B	Paint, Traffic, Solvent Based

Advisory Circulars (AC)

AC 150/5340-1	Standards for Airport Markings
AC 150/5320-12	Measurement, Construction, and Maintenance of Skid Resistant Airport Pavement Surfaces

END OF ITEM P-620

Item D-751 Manholes, Catch Basins, Inlets and Inspection Holes

DESCRIPTION

751-1.1 This item shall consist of construction of manholes, catch basins, inlets, and inspection holes, in accordance with these specifications, at the specified locations and conforming to the lines, grades, and dimensions shown on the plans or required by the RPR.

MATERIALS

751-2.1 Brick. The brick shall conform to the requirements of ASTM C32, Grade MS.

751-2.2 Mortar. Mortar shall consist of one part Portland cement and two parts sand. The cement shall conform to the requirements of ASTM C150, Type I. The sand shall conform to the requirements of ASTM C144.

751-2.3 Concrete. Plain and reinforced concrete used in structures, connections of pipes with structures, and the support of structures or frames shall conform to the requirements of Item P-610.

751-2.4 Precast concrete pipe manhole rings. Precast concrete pipe manhole rings shall conform to the requirements of ASTM C478. Unless otherwise specified, the risers and offset cone sections shall have an inside diameter of not less than 36 inches (90 cm) nor more than 48 inches (120 cm). There shall be a gasket between individual sections and sections cemented together with mortar on the inside of the manhole. Gaskets shall conform to the requirements of ASTM C443.

751-2.5 Corrugated metal. Corrugated metal shall conform to the requirements of American Association of State Highway and Transportation Officials (AASHTO) M36.

751-2.6 Frames, covers, and grates. The castings shall conform to one of the following requirements:

a. ASTM A48, Class 35B: Gray iron castings

b. ASTM A47: Malleable iron castings

c. ASTM A27: Steel castings

d. ASTM A283, Grade D: Structural steel for grates and frames

e. ASTM A536, Grade 65-45-12: Ductile iron castings

f. ASTM A897: Austempered ductile iron castings

All castings or structural steel units shall conform to the dimensions shown on the plans and shall be designed to support the loadings, aircraft gear configuration and/or direct loading, specified.

Each frame and cover or grate unit shall be provided with fastening members to prevent it from being dislodged by traffic but which will allow easy removal for access to the structure.

All castings shall be thoroughly cleaned. After fabrication, structural steel units shall be galvanized to meet the requirements of ASTM A123.

751-2.7 Steps. The steps or ladder bars shall be gray or malleable cast iron or galvanized steel. The steps shall be the size, length, and shape shown on the plans and those steps that are not galvanized shall be given a coat of asphalt paint, when directed.

751-2.8 Precast inlet structures. Manufactured in accordance with and conforming to ASTM C913.

CONSTRUCTION METHODS

751-3.1 Unclassified excavation.

a. The Contractor shall excavate for structures and footings to the lines and grades or elevations, shown on the plans, or as staked by the RPR. The excavation shall be of sufficient size to permit the placing of the full width and length of the structure or structure footings shown. The elevations of the bottoms of footings, as shown on the plans, shall be considered as approximately only; and the RPR may direct, in writing, changes in dimensions or elevations of footings necessary for a satisfactory foundation.

b. Boulders, logs, or any other objectionable material encountered in excavation shall be removed. All rock or other hard foundation material shall be cleaned of all loose material and cut to a firm surface either level, stepped, or serrated, as directed by the RPR. All seams or crevices shall be cleaned out and grouted. All loose and disintegrated rock and thin strata shall be removed. Where concrete will rest on a surface other than rock, the bottom of the excavation shall not be disturbed and excavation to final grade shall not be made until immediately before the concrete or reinforcing is placed.

c. The Contractor shall do all bracing, sheathing, or shoring necessary to implement and protect the excavation and the structure as required for safety or conformance to governing laws. The cost of bracing, sheathing, or shoring shall be included in the unit price bid for the structure.

d. All bracing, sheathing, or shoring involved in the construction of this item shall be removed by the Contractor after the completion of the structure. Removal shall not disturb or damage finished masonry. The cost of removal shall be included in the unit price bid for the structure.

e. After excavation is completed for each structure, the Contractor shall notify the RPR. No concrete or reinforcing steel shall be placed until the RPR has approved the depth of the excavation and the character of the foundation material.

~~**751-3.2 Brick structures.**~~

~~**a. Foundations.** A prepared foundation shall be placed for all brick structures after the foundation excavation is completed and accepted. Unless otherwise specified, the base shall consist of reinforced concrete mixed, prepared, and placed in accordance with the requirements of Item P-610.~~

~~**b. Laying brick.** All brick shall be clean and thoroughly wet before laying so that they will not absorb any appreciable amount of additional water at the time they are laid. All brick shall be laid in freshly made mortar. Mortar not used within 45 minutes after water has been added shall be discarded. Retempering of mortar shall not be permitted. An ample layer of mortar shall be spread on the beds and a shallow furrow shall be made in it that can be readily closed by the laying of the brick. All bed and head joints shall be filled solid with mortar. End joints of stretchers and side or cross joints of headers shall be fully buttered with mortar and a shoved joint made to squeeze out mortar at the top of the joint. Any bricks that may be loosened after the mortar has taken its set, shall be removed, cleaned, and re-laid with fresh mortar. No broken or chipped brick shall be used in the face, and no spalls or bats shall be used except where necessary to shape around irregular openings or edges; in which case, full bricks shall be placed at ends or corners where possible, and the bats shall be used in the interior of the course. In making closures, no piece of brick shorter than the width of a whole brick shall be used; and wherever practicable, whole brick shall be used and laid as headers.~~

~~**c. Joints.** All joints shall be filled with mortar at every course Exterior faces shall be laid up in advance of backing. Exterior faces shall be plastered or parged with a coat of mortar not less than 3/8 inch (9 mm) thick before the backing is laid up. Prior to parging, all joints on the back of face courses shall be~~

~~cut flush. Unless otherwise noted, joints shall be not less than 1/4 inch (6 mm) nor more than 1/2 inch (12 mm) wide and the selected joint width shall be maintained uniform throughout the work.~~

~~**d. Pointing.** Face joints shall be neatly struck, using the weather-struck joint. All joints shall be finished properly as the laying of the brick progresses. When nails or line pins are used, the holes shall be immediately plugged with mortar and pointed when the nail or pin is removed.~~

~~**e. Cleaning.** Upon completion of the work all exterior surfaces shall be thoroughly cleaned by scrubbing and washing with water. If necessary to produce satisfactory results, cleaning shall be done with a 5% solution of muriatic acid which shall then be rinsed off with liberal quantities of water.~~

~~**f. Curing and cold weather protection.** The brick masonry shall be protected and kept moist for at least 48 hours after laying the brick. Brick masonry work or pointing shall not be done when there is frost on the brick or when the air temperature is below 50°F (10°C) unless the Contractor has, on the project ready to use, suitable covering and artificial heating devices necessary to keep the atmosphere surrounding the masonry at a temperature of not less than 60°F (16°C) for the duration of the curing period.~~

751-3.3 Concrete structures. Concrete structures which are to be cast-in-place within the project boundaries shall be built on prepared foundations, conforming to the dimensions and shape indicated on the plans. The construction shall conform to the requirements specified in Item P-610. Any reinforcement required shall be placed as indicated on the plans and shall be approved by the RPR before the concrete is placed.

All invert channels shall be constructed and shaped accurately to be smooth, uniform, and cause minimum resistance to flowing water. The interior bottom shall be sloped to the outlet.

751-3.4 Precast concrete structures. Precast concrete structures shall be furnished by a plant meeting National Precast Concrete Association Plant Certification Program or another RPR approved third party certification program.

Precast concrete structures shall conform to ASTM C478. Precast concrete structures shall be constructed on prepared or previously placed slab foundations conforming to the dimensions and locations shown on the plans. All precast concrete sections necessary to build a completed structure shall be furnished. The different sections shall fit together readily. Joints between precast concrete risers and tops shall be full-bedded in cement mortar and shall: (1) be smoothed to a uniform surface on both interior and exterior of the structure or (2) utilize a rubber gasket per ASTM C443. The top of the upper precast concrete section shall be suitably formed and dimensioned to receive the metal frame and cover or grate, or other cap, as required. Provision shall be made for any connections for lateral pipe, including drops and leads that may be installed in the structure. The flow lines shall be smooth, uniform, and cause minimum resistance to flow. The metal or metal encapsulated steps that are embedded or built into the side walls shall be aligned and placed in accordance to ASTM C478. When a metal ladder replaces the steps, it shall be securely fastened into position.

~~**751-3.5 Corrugated metal structures.** Corrugated metal structures shall be prefabricated. All standard or special fittings shall be furnished to provide pipe connections or branches with the correct dimensions and of sufficient length to accommodate connecting bands. The fittings shall be welded in place to the metal structures. The top of the metal structure shall be designed so that either a concrete slab or metal collar may be attached to allow the fastening of a standard metal frame and grate or cover. Steps or ladders shall be furnished as shown on the plans. Corrugated metal structures shall be constructed on prepared foundations, conforming to the dimensions and locations as shown on the plans. When indicated, the structures shall be placed on a reinforced concrete base.~~

751-3.6 Inlet and outlet pipes. Inlet and outlet pipes shall extend through the walls of the structures a sufficient distance beyond the outside surface to allow for connections. They shall be cut off flush with

the wall on the inside surface of the structure, unless otherwise directed. For concrete or brick structures, mortar shall be placed around these pipes to form a tight, neat connection.

751-3.7 Placement and treatment of castings, frames, and fittings. All castings, frames, and fittings shall be placed in the positions indicated on the plans or as directed by the RPR, and shall be set true to line and elevation. If frames or fittings are to be set in concrete or cement mortar, all anchors or bolts shall be in place before the concrete or mortar is placed. The unit shall not be disturbed until the mortar or concrete has set.

When frames or fittings are placed on previously constructed masonry, the bearing surface of the masonry shall be brought true to line and grade and shall present an even bearing surface so the entire face or back of the unit will come in contact with the masonry. The unit shall be set in mortar beds and anchored to the masonry as indicated on the plans or as directed by the RPR. All units shall set firm and secure.

After the frames or fittings have been set in final position, the concrete or mortar shall be allowed to harden for seven (7) days before the grates or covers are placed and fastened down.

751-3.8 Installation of steps. The steps shall be installed as indicated on the plans or as directed by the RPR. When the steps are to be set in concrete, they shall be placed and secured in position before the concrete is placed. When the steps are installed in brick masonry, they shall be placed as the masonry is being built. The steps shall not be disturbed or used until the concrete or mortar has hardened for at least seven (7) days. After seven (7) days, the steps shall be cleaned and painted, unless they have been galvanized.

When steps are required with precast concrete structures they shall meet the requirements of ASTM C478. The steps shall be cast into the side of the sections at the time the sections are manufactured or set in place after the structure is erected by drilling holes in the concrete and cementing the steps in place.

When steps are required with corrugated metal structures, they shall be welded into aligned position at a vertical spacing of 12 inches (300 mm).

Instead of steps, prefabricated ladders may be installed. For brick or concrete structures, the ladder shall be held in place by grouting the supports in drilled holes. For metal structures, the ladder shall be secured by welding the top support to the structure and grouting the bottom support into drilled holes in the foundation or as directed by the RPR.

751-3.9 Backfilling.

a. After a structure has been completed, the area around it shall be backfilled with approved material, in horizontal layers not to exceed 8 inches (200 mm) in loose depth, and compacted to the density required in Item P-152. Each layer shall be deposited evenly around the structure to approximately the same elevation. The top of the fill shall meet the elevation shown on the plans or as directed by the RPR.

b. Backfill shall not be placed against any structure until approved by the RPR. For concrete structures, approval shall not be given until the concrete has been in place seven (7) days, or until tests establish that the concrete has attained sufficient strength to withstand any pressure created by the backfill and placing methods.

c. Backfill shall not be measured for direct payment. Performance of this work shall be considered an obligation of the Contractor covered under the contract unit price for the structure involved.

751-3.10 Cleaning and restoration of site. After the backfill is completed, the Contractor shall dispose of all surplus material, dirt, and rubbish from the site. Surplus dirt may be deposited in embankments, shoulders, or as approved by the RPR. The Contractor shall restore all disturbed areas to their original condition. The Contractor shall remove all tools and equipment, leaving the entire site free, clear, and in good condition.

751-3.11 Desiltation of existing drainage structures and pipes. *The Contractor shall perform desiltation of the existing drainage structures and pipes shown on the plans.*

751-3.12 Repair existing pipe joint or replace brick and mortar at pipe opening. *The Contractor shall excavate as necessary to fully expose the pipe entering the structure. Upon exposure, the Contractor shall notify the Engineer for evaluation of the existing condition. Based on the Engineer's assessment, the Contractor shall either repair the existing pipe joint or remove and replace the brick and mortar surrounding the pipe opening. All work shall be performed in accordance with the Engineer's direction to ensure structural integrity, proper sealing, and compatibility with adjacent materials.*

METHOD OF MEASUREMENT

751-4.1 *Desiltation of existing structures and pipes shall be measured on a lump sum basis; hence no separate measurement will be made.*

751-4.1 *Repair of existing pipe joint or replacing brick and mortar at pipe opening shall be measured on a lump sum basis; hence no separate measurement will be made.*

BASIS OF PAYMENT

751-5.1 *Payment will be made at the contract lump sum price for the desiltation of existing structures and pipes as shown on the plans. The price shall be full compensation for all materials, equipment, preparation, all labor and incidentals necessary to complete the work.*

751-5.2 *Payment will be made at the contract lump sum price for the Repair of existing pipe joint or replacing brick and mortar at pipe opening as shown on the plans. The price shall be full compensation for all materials, equipment, preparation, all labor and incidentals necessary to complete the work.*

Payment will be made under:

Item D-751-5.1	*Desiltation of Existing Storm Pipe and Structures – per lump sum*
Item D-751-5.1	*Repair Existing Pipe Joint or Replace Brick and Mortar at Pipe Opening – per lump sum*

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM A27	Standard Specification for Steel Castings, Carbon, for General Application
ASTM A47	Standard Specification for Ferritic Malleable Iron Castings
ASTM A48	Standard Specification for Gray Iron Castings
ASTM A123	Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A283	Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates
ASTM A536	Standard Specification for Ductile Iron Castings

ASTM A897	Standard Specification for Austempered Ductile Iron Castings
ASTM C32	Standard Specification for Sewer and Manhole Brick (Made from Clay or Shale)
ASTM C144	Standard Specification for Aggregate for Masonry Mortar
ASTM C150	Standard Specification for Portland Cement
ASTM C443	Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets.
ASTM C478	Standard Specification for Precast Reinforced Concrete Manhole Sections
ASTM C913	Standard Specification for Precast Concrete Water and Wastewater Structures.

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO M36	Standard Specification for Corrugated Steel Pipe, Metallic-Coated, for Sewers and Drains

END OF ITEM D-751

Item T-904 Sodding

DESCRIPTION

904-1.1 This item shall consist of furnishing, hauling, and placing approved live sod on prepared areas in accordance with this specification at the locations shown on the plans or as directed by the RPR.

MATERIALS

904-2.1 Sod. Sod furnished by the Contractor shall have a good cover of living or growing grass. This shall be interpreted to include grass that is seasonally dormant during the cold or dry seasons and capable of renewing growth after the dormant period. All sod shall be obtained from areas where the soil is reasonably fertile and contains a high percentage of loamy topsoil. Sod shall be cut or stripped from living, thickly matted turf relatively free of weeds or other undesirable foreign plants, large stones, roots, or other materials that might be detrimental to the development of the sod or to future maintenance. At least 70% of the plants in the cut sod shall be composed of the species stated in the special provisions, and any vegetation more than 6 inches (150 mm) in height shall be mowed to a height of 3 inches (75 mm) or less before sod is lifted. Sod, including the soil containing the roots and the plant growth showing above, shall be cut uniformly to a thickness not less than that stated in the special provisions. *Sod species shall be Argentina Bahia as approved by the Engineer.*

904-2.2 Lime. Not required.

904-2.3 Fertilizer. Fertilizer shall be standard commercial fertilizers supplied separately or in mixtures containing the percentages of total nitrogen, available phosphoric acid, and water-soluble potash. They shall be applied at the rate and to the depth specified, and shall meet the requirements of *Federal Spec A-A-1909 and* applicable state laws. They shall be furnished in standard containers with name, weight, and guaranteed analysis of contents clearly marked thereon. No cyanamide compounds or hydrated lime shall be permitted in mixed fertilizers.

The fertilizers may be supplied in one of the following forms:

a. A dry, free-flowing fertilizer suitable for application by a common fertilizer spreader;

b. A finely-ground fertilizer soluble in water, suitable for application by power sprayers; or

c. A granular or pellet form suitable for application by blower equipment.

Fertilizers shall be with slow release of N, no P and 1:1 N:K ratio commercial fertilizer and shall be spread at the rate of 170 lbs/acre.

904-2.4 Water. The water shall be sufficiently free from oil, acid, alkali, salt, or other harmful materials that would inhibit the growth of grass.

904-2.5 Soil for repairs. The soil for fill and topsoiling of areas to be repaired shall be at least of equal quality to that which exists in areas adjacent to the area to be repaired. The soil shall be relatively free from large stones, roots, stumps, or other materials that will interfere with subsequent sowing of seed, compacting, and establishing turf, and shall be approved by the RPR before being placed.

CONSTRUCTION METHODS

904-3.1 General. Areas to be solid, strip, or spot sodded shall be shown on the plans. Areas requiring special ground surface preparation such as tilling and those areas in a satisfactory condition that are to remain undisturbed shall also be shown on the plans.

Suitable equipment necessary for proper preparation of the ground surface and for the handling and placing of all required materials shall be on hand, in good condition, and shall be approved by the RPR before the various operations are started. The Contractor shall demonstrate to the RPR before starting the various operations that the application of required materials will be made at the specified rates.

904-3.2 Preparing the ground surface. After grading of areas has been completed and before applying fertilizer and limestone, areas to be sodded shall be raked or otherwise cleared of stones larger than 2 inches (50 mm) in any diameter, sticks, stumps, and other debris which might interfere with sodding, growth of grasses, or subsequent maintenance of grass-covered areas. If any damage by erosion or other causes occurs after grading of areas and before beginning the application of fertilizer and ground limestone, the Contractor shall repair such damage. This may include filling gullies, smoothing irregularities, and repairing other incidental damage.

904-3.3 Applying fertilizer and ground limestone. Following ground surface preparation, fertilizer shall be uniformly spread at a rate which will provide not less than the minimum quantity of each fertilizer ingredient, as stated in the special provisions. If use of ground limestone is required, it shall then be spread at a rate that will provide not less than the minimum quantity stated in the special provisions. These materials shall be incorporated into the soil to a depth of not less than 2 inches (50 mm) by discing, raking, or other suitable methods. Any stones larger than 2 inches (50 mm) in any diameter, large clods, roots, and other litter brought to the surface by this operation shall be removed.

904-3.4 Obtaining and delivering sod. After inspection and approval of the source of sod by the RPR, the sod shall be cut with approved sod cutters to such a thickness that after it has been transported and placed on the prepared bed, but before it has been compacted, it shall have a uniform thickness of not less than 2 inches (50 mm). Sod sections or strips shall be cut in uniform widths, not less than 10 inches (250 mm), and in lengths of not less than 18 inches (0.5 m), but of such length as may be readily lifted without breaking, tearing, or loss of soil. Where strips are required, the sod must be rolled without damage with the grass folded inside. The Contractor may be required to mow high grass before cutting sod.

The sod shall be transplanted within 24 hours from the time it is stripped, unless circumstances beyond the Contractor's control make storing necessary. In such cases, sod shall be stacked, kept moist, and protected from exposure to the air and sun and shall be kept from freezing. Sod shall be cut and moved only when the soil moisture conditions are such that favorable results can be expected. Where the soil is too dry, approval to cut sod may be granted only after it has been watered sufficiently to moisten the soil to the depth the sod is to be cut.

The contractor shall, for each loaf of sod, submit a written certification from the sod source certifying the sod sources are tropical soda apple seed source and plants as well as Millet seed. Any Tropical Soda Apple plants or Millet seed that propagate in the areas of new sod shall be controlled by the Contractor, at the Contractor's sole cost without compensation, until all Tropical Soda Apple plants and/or Millet grass have been eradicated in the affected areas. The time frame for eradication or emergence of plant specimens shall be the full and complete Warranty Period or as directed by the Owner.

904-3.5 Laying sod. Sodding shall be performed only during the seasons when satisfactory results can be expected. Frozen sod shall not be used and sod shall not be placed upon frozen soil. Sod may be transplanted during periods of drought with the approval of the RPR, provided the sod bed is watered to moisten the soil to a depth of at least 4 inches (100 mm) immediately prior to laying the sod.

The sod shall be moist and shall be placed on a moist earth bed. Pitch forks shall not be used to handle sod, and dumping from vehicles shall not be permitted. The sod shall be carefully placed by hand, edge to edge and with staggered joints, in rows at right angles to the slopes, commencing at the base of the area to be sodded and working upward. The sod shall immediately be pressed firmly into contact with the sod bed by tamping or rolling with approved equipment to provide a true and even surface, and ensure knitting without displacement of the sod or deformation of the surfaces of sodded areas. Where the sod may be displaced during sodding operations, the workmen, when replacing it, shall work from ladders or treaded planks to prevent further displacement. Screened soil of good quality shall be used to fill all cracks between sods. The quantity of the fill soil shall not cause smothering of the grass. Where the grades are such that the flow of water will be from paved surfaces across sodded areas, the surface of the soil in the sod after compaction shall be set approximately one inch (25 mm) below the pavement edge. Where the flow will be over the sodded areas and onto the paved surfaces around manholes and inlets, the surface of the soil in the sod after compaction shall be placed flush with pavement edges.

On slopes steeper than one (1) vertical to 2-1/2 horizontal and in v-shaped or flat-bottom ditches or gutters, the sod shall be pegged with wooden pegs not less than 12 inches (300 mm) in length and have a cross-sectional area of not less than 3/4 sq inch (18 sq mm). The pegs shall be driven flush with the surface of the sod *at intervals sufficient to prevent the sod from being displaced by runoff.*

904-3.6 Watering. Adequate water and watering equipment must be on hand before sodding begins, and sod shall be kept moist until it has become established and its continued growth assured. In all cases, watering shall be done in a manner that will avoid erosion from the application of excessive quantities and will avoid damage to the finished surface. *Watering shall commence once sod has been installed and shall continue for a thirty (30) day period on a three-day-a-week frequency. Watering days shall not be consecutive. All cost for watering, including supplying the water, shall be included in the unit bid price for the sod. Depending on weather conditions, the need for watering may be waived by the RPR or the Owner if requested by the Contractor in writing. Access to the site for watering shall be coordinated through the Owner. Contractor is solely responsible for sourcing and transporting irrigation water at no extra cost to the Owner.*

904-3.7 Establishing turf. The Contractor shall provide general care for the sodded areas as soon as the sod has been laid and shall continue until final inspection and acceptance of the work. All sodded areas shall be protected against traffic or other use by warning signs or barricades approved by the RPR. The Contractor shall mow the sodded areas with approved mowing equipment, depending upon climatic and growth conditions and the needs for mowing specific areas. Weeds or other undesirable vegetation shall be mowed and the clippings raked and removed from the area.

904-3.8 Repairing. When the surface has become gullied or otherwise damaged during the period covered by this contract, the affected areas shall be repaired to re-establish the grade and the condition of the soil, as directed by the RPR, and shall then be sodded as specified in paragraph 904-3.5.

904-3.9 Elevation of Sod. *The top elevation of the sod when placed next to new or existing asphalt or concrete pavement shall have a 1-1/2" drop from the pavement edge. When sod is placed adjacent to new or existing concrete sign bases, light can bases, junction cans, manholes, other concrete slabs, etc., the drop shall be from zero to 1" maximum. The top of the sod mat is assumed to be the top of the root mass.*

METHOD OF MEASUREMENT

904-4.1 This item shall be measured on the basis of the area in square yards of the surface covered with sod and accepted. *The cost for watering for 30 days, including supplying the water, shall be included in the unit cost.*

BASIS OF PAYMENT

904-5.1 This item will be paid for on the basis of the contract unit price per square yard (square meter) for sodding, which price shall be full compensation for all labor, equipment, material, staking, and incidentals necessary to satisfactorily complete the items as specified.

Payment will be made under:

Item T-904-5.1	Sodding – per square yard

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM C602	Standard Specification for Agricultural Liming Materials

Advisory Circulars (AC)

AC 150/5200-33	Hazardous Wildlife Attractants on or Near Airports

FAA/United States Department of Agriculture

Wildlife Hazard Management at Airports, A Manual for Airport Personnel

END OF ITEM T-904

Item T-905 Topsoil

DESCRIPTION

905-1.1 This item shall consist of preparing the ground surface for topsoil application, removing topsoil from designated stockpiles or areas to be stripped on the site or from approved sources off the site, and placing and spreading the topsoil on prepared areas in accordance with this specification at the locations shown on the plans or as directed by the RPR.

MATERIALS

905-2.1 Topsoil. Topsoil shall be the surface layer of soil with no admixture of refuse or any material toxic to plant growth, and it shall be reasonably free from subsoil and stumps, roots, brush, stones (2 inches (50 mm) or more in diameter), and clay lumps or similar objects. Brush and other vegetation that will not be incorporated with the soil during handling operations shall be cut and removed. Ordinary sod and herbaceous growth such as grass and weeds are not to be removed, but shall be thoroughly broken up and intermixed with the soil during handling operations. Heavy sod or other cover, which cannot be incorporated into the topsoil by discing or other means, shall be removed. The topsoil or soil mixture, unless otherwise specified or approved, shall have a pH range of approximately 5.5 pH to 7.6 pH, when tested in accordance with the methods of testing of the Association of Official Agricultural Chemists in effect on the date of invitation of bids. The organic content shall be not less than 3% nor more than 20% as determined by the wet-combustion method (chromic acid reduction). There shall be not less than 20% nor more than 80% of the material passing the 200 mesh (75 µm) sieve as determined by the wash test in accordance with ASTM C117.

Natural topsoil may be amended by the Contractor with approved materials and methods to meet the above specifications.

905-2.2 Inspection and tests. Within 10 days following acceptance of the bid, the RPR shall be notified of the source of topsoil to be furnished by the Contractor. The topsoil shall be inspected to determine if the selected soil meets the requirements specified and to determine the depth to which stripping will be permitted. At this time, the Contractor may be required to take representative soil samples from several locations within the area under consideration and to the proposed stripping depths, for testing purposes as specified in paragraph 905-2.1.

CONSTRUCTION METHODS

905-3.1 General. Areas to be topsoiled shall be shown on the plans. If topsoil is available on the site, the location of the stockpiles or areas to be stripped of topsoil and the stripping depths shall be shown on the plans.

Suitable equipment necessary for proper preparation and treatment of the ground surface, stripping of topsoil, and for the handling and placing of all required materials shall be on hand, in good condition, and approved by the RPR before the various operations are started.

905-3.2 Preparing the ground surface. Immediately prior to dumping and spreading the topsoil on any area, the surface shall be loosened by discs or spike-tooth harrows, or by other means approved by the RPR, to a minimum depth of 2 inches (50 mm) to facilitate bonding of the topsoil to the covered subgrade

soil. The surface of the area to be topsoiled shall be cleared of all stones larger than 2 inches (50 mm) in any diameter and all litter or other material which may be detrimental to proper bonding, the rise of capillary moisture, or the proper growth of the desired planting. Limited areas, as shown on the plans, which are too compact to respond to these operations shall receive special scarification.

Grades on the area to be topsoiled, which have been established by others as shown on the plans, shall be maintained in a true and even condition. Where grades have not been established, the areas shall be smooth-graded and the surface left at the prescribed grades in an even and compacted condition to prevent the formation of low places or pockets where water will stand.

905-3.3 Obtaining topsoil. Prior to the stripping of topsoil from designated areas, any vegetation, briars, stumps and large roots, rubbish or stones found on such areas, which may interfere with subsequent operations, shall be removed using methods approved by the RPR. Heavy sod or other cover, which cannot be incorporated into the topsoil by discing or other means shall be removed.

When suitable topsoil is available on the site, the Contractor shall remove this material from the designated areas and to the depth as directed by the RPR. The topsoil shall be spread on areas already tilled and smooth-graded, or stockpiled in areas approved by the RPR. Any topsoil stockpiled by the Contractor shall be rehandled and placed without additional compensation. Any topsoil that has been stockpiled on the site by others, and is required for topsoil purposes, shall be removed and placed by the Contractor. The sites of all stockpiles and areas adjacent thereto which have been disturbed by the Contractor shall be graded if required and put into a condition acceptable for seeding.

When suitable topsoil is secured off the airport site, the Contractor shall locate and obtain the supply, subject to the approval of the RPR. The Contractor shall notify the RPR sufficiently in advance of operations in order that necessary measurements and tests can be made. The Contractor shall remove the topsoil from approved areas and to the depth as directed. The topsoil shall be hauled to the site of the work and placed for spreading, or spread as required. Any topsoil hauled to the site of the work and stockpiled shall be rehandled and placed without additional compensation.

905-3.4 Placing topsoil. The topsoil shall be evenly spread on the prepared areas to a uniform depth of 2 inches (50 mm) after compaction, unless otherwise shown on the plans or stated in the special provisions. Spreading shall not be done when the ground or topsoil is frozen, excessively wet, or otherwise in a condition detrimental to the work. Spreading shall be carried on so that turfing operations can proceed with a minimum of soil preparation or tilling.

After spreading, any large, stiff clods and hard lumps shall be broken with a pulverizer or by other effective means, and all stones or rocks (2 inches (50 mm) or more in diameter), roots, litter, or any foreign matter shall be raked up and disposed of by the Contractor. after spreading is completed, the topsoil shall be satisfactorily compacted by rolling with a cultipacker or by other means approved by the RPR. The compacted topsoil surface shall conform to the required lines, grades, and cross-sections. Any topsoil or other dirt falling upon pavements as a result of hauling or handling of topsoil shall be promptly removed.

METHOD OF MEASUREMENT

905-4.1 *No measurement will be made for direct payment of any topsoil as the cost shall be considered subsidiary to the items requiring topsoil.* ~~Topsoil obtained on the site shall be measured by the number of cubic yards (cubic meters) of topsoil measured in its original position and stripped or excavated. Topsoil stockpiled by others and removed for topsoil by the Contractor shall be measured by the number of cubic yards (cubic meters) of topsoil measured in the stockpile. Topsoil shall be measured by volume in cubic yards (cubic meters) computed by the method of end areas.~~

~~**905-4.2** Topsoil obtained off the site shall be measured by the number of cubic yards (cubic meters) of topsoil measured in its original position and stripped or excavated. Topsoil shall be measured by volume in cubic yards (meters) computed by the method of end areas.~~

BASIS OF PAYMENT

905-5.1 *No separate payment will be made for this item. All topsoiling shall be incidental to the items requiring topsoiling.* ~~Payment will be made at the contract unit price per cubic yard (cubic meter) for topsoil (obtained on the site). This price shall be full compensation for furnishing all materials and for all preparation, placing, and spreading of the materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.~~

~~**905-5.2** Payment will be made at the contract unit price per cubic yard (cubic meter) for topsoil (obtained off the site). This price shall be full compensation for furnishing all materials and for all preparation, placing, and spreading of the materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.~~

~~Payment will be made under:~~

~~Item T-905-5.1~~	~~Topsoil (Obtained on Site or Removed from Stockpile - per cubic yard (cubic meter)~~
~~Item T-905-5.2~~	~~Topsoil (Furnished from Off the Site) - per cubic yard (cubic meter)~~

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM C117	Materials Finer than 75 μm (No. 200) Sieve in Mineral Aggregates by Washing

Advisory Circulars (AC)

AC 150/5200-33	Hazardous Wildlife Attractants on or Near Airports

FAA/United States Department of Agriculture

Wildlife Hazard Management at Airports, A Manual for Airport Personnel

END OF ITEM T-905

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Item S-101 Project Survey

DESCRIPTION

101-1.1 Under this item, the Contractor shall do all necessary surveying and project stakeout required to construct all elements of the Project as shown on the Contract Drawings and specified in the Specifications. This shall include but not be limited to stakeout, layout and elevations for pavements, structures, forms and appurtenances as shown and required consistent with the current practices and shall be performed by a State of Florida licensed professional land surveyor. The stakeout survey shall proceed immediately following the Notice to Proceed or as soon as authorized by the Owner in accordance with the phasing of the construction and shall be expeditiously progressed to completion in a manner and at a rate satisfactory of the Owner. The Contractor shall keep the Resident Project Representative (RPR) fully informed as to the progress of the stakeout survey. All survey work shall be provided under the direction of a State of Florida licensed professional land surveyor.

MATERIALS

101-2.1 All instruments, equipment, stakes and any other material necessary to perform the work satisfactorily shall be provided by the Contractor. It shall be the Contractor's responsibility to maintain these stakes in their proper position and location at all times.

CONSTRUCTION METHODS

101-3.1 The Contractor shall trim trees, brush, roots and other interfering objects from survey lines in advance of all survey work to permit accurate and unimpeded work by his stakeout survey crews.

The exact position of all work shall be established from control points, baseline transit points or other points of similar nature which are shown on the Contract Drawings and/or modified by the Engineer. Prior to any layout of works to be constructed, the Contractor shall verify the location and accuracy of all control points provided in the plans. Any error, apparent discrepancy or absence in or of data shown or required for accurately accomplishing the stakeout survey shall be referred to the RPR and Engineer for interpretation or furnishing when such is observed or required.

The Contractor shall place two offset stakes or references at each centerline full and half station and at such intermediate locations as the RPR may direct. From computations and measurements made by the Contractor, these stakes shall be clearly and legibly marked with the correct centerline full and half station number, offset and cut or fill so as to permit the establishment of the exact centerline location and elevation during construction. If markings become faded or blurred for any reason, the markings shall be restored by the Contractor at the request of the RPR. He shall locate and place all cut, fill, slope, fine grade or other stakes and points, as the engineer may direct, for the proper progress of the work. All control points shall be properly guarded and flagged for easy identification.

Drainage structures shall be staked out by the Contractor at the locations and elevations shown on the Contract Drawings or specified by the Engineer through the RPR.

Reference points, baselines, stakes and benchmarks for stockpiles shall be established by the Contractor.

The Contractor shall be responsible for the accuracy of his work and shall maintain all reference points, stakes, etc., throughout the life of the Contract. Damaged or destroyed points, benchmarks or stakes, or any reference points made inaccessible by the progress of the construction, shall be replaced or transferred by the Contractor. Any of the above points which may be destroyed or damaged shall be transferred by the Contractor before they are damaged or destroyed. All control points shall be referenced by ties to acceptable objects and recorded. Any alterations or revisions in the ties shall be so noted and the information furnished to the RPR immediately. All stakeout survey work shall be referenced to the centerlines shown on the Contract Drawings. All computations necessary to establish the exact position of the work from control points shall be made and preserved by the Contractor. All computations, survey notes and other records shall be made available to the RPR upon request and shall become the property of the Owner.

The Contractor shall furnish, at his expense, all horizontal and vertical control, all staking and layout of construction work called for on the plans. The RPR, Engineer, and Owner shall not be responsible for such work. However, the Owner and Engineer reserve the right to check all said lines, grades, and measurements with their appointed surveyor. Should the Owner's surveyor detect errors in said lines, grades, and measurements, the contractor shall pay for all said surveying costs and subsequent surveying costs performed to verify correction of errors found in said lines, grades and measurements. Definition of an error shall be a discrepancy of ¼" or more. In the case of a discrepancy between the technical specifications and this defined tolerance, the more severe tolerance shall govern.

During the progress of the construction work, the Contractor will be required to furnish all of the surveying and stakeout incidental to the proper location by line and grade for each phase of the work. For paving and any other operation requiring extreme accuracy, the Contractor will re-stake with pins or other acceptable hubs located directly adjacent to the work at a spacing directed by the RPR.

Any existing stakes, iron pins, survey monuments or other markers defining property lines which may be disturbed during construction shall be properly tied into fixed reference points before being disturbed and accurately reset in their proper position upon completion of the work.

Just prior to completion of the Contract, the Contractor shall reestablish, if necessary, and retie all control points as permanently as possible and to the satisfaction of the RPR.

101-3.2 SURVEY REFERENCE POINTS. Establish, maintain and protect survey control points prior to starting work, using base reference points as shown on Plans. Promptly notify RPR, Engineer, and Owner of any discrepancies discovered.

Promptly report to RPR the loss or destruction of any reference point or relocation required because of changes in grades or other reasons. Replace dislocated survey control points based on original survey control.

101-3.3 SURVEYS FOR MEASUREMENT AND PAYMENT. Contractor shall submit progress surveys in .dwg format for subgrade, sub-base, base, pavement course prior to acceptance of payment per CADD requirements provided in section 101-4.

101-3.4 AS-BUILT SURVEY. Upon completion of the work, after Substantial Completion and before Final Acceptance, the Contractor shall supply to the RPR a complete as-built survey of the entire project site including drainage structures and utilities. All survey points, including horizontal and vertical control, property corners, section corner and reference (hereinafter referred to as "survey point") shall be clearly marked and referenced prior to construction. These survey points must be sufficiently referenced so that they can be reestablished after construction if they are disturbed. All survey data shall be in the same horizontal and vertical datum as the contract documents.

This as-built survey will be a complete topographic and physical features survey of the entire project site surrounded by the limits of construction plus an additional 10' beyond the limits of construction in all

directions. Elevations shall be obtained on all rigid pavement joint intersections and ends. 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 25'. This survey shall be certified by a Florida Licensed Professional 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" maximum size) at a scale matching the scale of the plans and be electronically submitted in AutoCAD .dwg format on a flash drive per requirements stated in section 101-4. Signed and sealed copies of all field notes, sketches and calculations must be submitted concurrently with the as-built survey. Larger scale details shall be provided to clarify any complicated or complex areas.

The as-built survey is to be supplied to the RPR for review and approval not more than thirty (30) calendar days after substantial completion for the project has been given. If the acceptable as-built survey is not supplied within the required time, the Owner reserves the right to perform the required survey and bill the Contractor for this work.

The as-built survey shall include all information needed to complete all project permit (i.e. SFWMD, etc. …) as required by the permits and/or agencies standard requirements. A digital signed and sealed copy of the as-built survey shall be supplied to the Engineer and RPR.

CADD SURVEY DELIVERABLE REQUIREMENTS

101-4.1 DIGITAL SURVEY DELIVERABLE REQUIREMENTS. Unless specifically directed by the engineer, the following specifications shall be applied for all digital survey deliverables to the Engineer that are to be utilized for construction as-builts.

101-4.2 DRAWING COORDINATE SYSTEM. The drawing file is to be in model space utilizing the coordinate system and vertical datum of the contract documents. A separate document should also be supplied with any combined site scale factor and origin needed to convert coordinates from ground to grid if applicable.

101-4.3 PROPERTIES AND DRAWING ENTITIES. Electronic survey to be delivered in AutoCAD Civil 3D release 2020 format or other approved format. The drawing shall be layered in accordance with Owner CAD Standards. National CAD Standards (NCS) shall be met if Owner CAD Standards do not exist. An AutoCAD template file containing layers can be requested by the Contractor to the Engineer.

Separate layer names should be used for all distinct objects surveyed. Do not group dis-similar items together on the same layer. For example, do not place line work and annotation on the same layer. All properties of the AutoCAD entities in the drawing are to be BYLAYER (Absolutely No Exceptions Here). In other words, do not change the properties of individual entities. For example, do not place water items on the sanitary layer and just change the color, linetype, or lineweight of the entity. Any user defined blocks used in the drawing shall have all entities created on layer 0, and all other properties shall be set to BYLAYER.

All blocks, dimensions, mtext, mleaders used in the drawing will use the Annotative property wherever possible. An exception to this will be blocks used as point symbols. These blocks cannot have an annotative property. Points shall not be used to depict physical features. Features shall be depicted using blocks or linework. Points shall only be used for topographic information.

101-4.4 SURFACES. Creating an accurate existing surface model is critical to the overall design process. An accurate model extends past the requirements for the given contour interval stated by the Master Services Agreement. It is the intention of this model to be generated with breaklines. There must be breaklines at all breaks in grade along the site. This should include but not limited to ALL Tops, Toes, Swales, Crowns, Flow Lines, Face/Back of Curbs, Edge of Pavement and any other linear features. A surface given without breaklines will be a cause for immediate rejection and delay the project schedule.

Surfaces created with Civil 3D shall be created from Survey Points and 3D break lines (with preference to the use of Feature Lines) at a minimum. In the event the number of collected points exceeds 20,000, an external point file may be used for natural ground or spot shots. The external file shall be a separate comma delimited ASCII point file in PNEZD (Point Number, Northing, Easting, Elevation, and Description) format. The point file should then be linked to the existing ground surface and a note placed in the description of the surface giving the external file name.

Surfaces created from other software programs should include Survey Points and 3D Breaklines at a minimum. The drawing should include polylines representing contours, 3D Lines or 3D Faces representing the surface model.

104-4.5 SURVEY OBJECTS. Survey Figures should NOT be used in the drawing for 2D line work.

METHOD OF MEASUREMENT

101-5.1 No separate measurement for payment shall be made for Project Survey and shall be considered incidental to the project items.

END OF ITEM S-101

Item S-102 Airport Safety and Maintenance of Air Operations Area Traffic Requirements

GENERAL

102-1.1 SUMMARY

a. The work specified in this Section consists of airport safety and 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 Airport users as well as for minimizing public nuisance; all as specified in this Section and Section 40-05. The Section also includes installing temporary wildlife burrow protection around any owl or tortoise nests, as directed by the Engineer or Owner's Representative.

b. The Contractor shall carry out its operations in a manner that will cause a minimum of interference with air traffic, and shall be required to cooperate with the Federal Aviation Administration (FAA), the Fort Lauderdale Executive Airport, airport operations, and other contractors working in the area. All work shall be completed in accordance with the Contract Documents including the Safety Program and FAA Advisory Circular 150/5370-2G, Operational Safety on Airports during Construction or current edition as of bid date.

c. The Contractor shall supply, place, maintain, move and store the items listed herein, as appropriate, to facilitate construction and protect air traffic. The Contractor shall maintain an adequate extra supply of these items on site.

d. The generalized overviews presented in this document are statements of expectations that the Contractor will be measured against. Failure to meet these requirements may be grounds for the removal of the individual employee from the worksite and could also lead to grounds for termination of the Contract by the Owner.

e. The Contractor shall provide an on-site safety coordinator for the duration of the contract if the value of the work to be performed is in excess of $250,000 and requires more than four hundred (400) man-hours to be completed for the duration of any one week. If less than four hundred (400) man-hours are worked in a work week, then a Safety Coordinator shall be appointed, but does not have to be onsite.

f. The Contractor must not interfere with or make more difficult or expensive Airport's compliance with any law, statue, code, ordinance or regulation. The Airport will notify the Contractor, orally or in writing, and the Contractor shall within forty-eight hours of receiving Airport's notification make whatever changes are necessary to remedy the situation, including, without limitation, changes in the work schedule, installation of safety devices. Airport's exercise of its rights under this provision will not be grounds for an increase in the Contract Sum under the Contract.

g. The Fort Lauderdale Executive Airport has the right to monitor (Contractor shall still be responsible for assuring safe work practices) the Contractors' operations for safety performance, workmanship, protection of operations, work progress, housekeeping, and compliance to design specifications. It is a general practice that the Fort Lauderdale Executive Airport will work

through the Contractor's supervision and not directly with the employee. The Fort Lauderdale Executive Airport has the right to participate with and investigate any accident or incident.

h. The Owner has the right to direct the Contractor to refresh pavement markings outside the project area that was used during construction to get to and from the project site from the staging area that have been degraded by Contractor's construction traffic and sweeping operations. The payment for this work shall be included in the price for Airport Safety and Maintenance of Traffic.

102-1.2 DEFINITIONS. Safety Program – The Contractor shall submit its Safety Program to the Fort Lauderdale Executive Airport and obtain approval prior to issuance of the Notice to Proceed. The Safety Program shall be prepared in accordance with the FAA Advisory Circular 150/5370-2, current edition as of bid date, 'Operation Safety on Airports During Construction'.

PRODUCTS

102-2.1 WILDLIFE BURROW PROTECTION. Safety fence shall be furnished and installed at the locations as indicated on the Contract Documents and/or directed by the Resident Project Representative (RPR). The Contractor shall provide materials per the details in the plans at locations identified in the field by the Engineer as burrows for Owls and Tortoises. These areas shall be protected and maintained throughout the construction period and the fencing shall be removed during project demobilization. Disturbances to these areas during installation and deconstruction of fences shall me minimized and prevented.

102-2.2 SUBSURFACE UTILITY INVESTIGATION. The Contractor shall locate and map wherever earth disturbance activities are prior to ground disturbance activities and their elevations. Locates shall be performed to Quality Level B. Contractor shall provide the owner with a sketch of the mapped features in AutoCAD .DWG format, with each feature described in a legend. Features shall be mapped on top of a base map of the project in the same coordinate system as the design documents.

METHOD OF MEASUREMENT

102-3.1 Measurement for payment shall be the work under this Section completed and accepted in accordance with the Plans and these Specifications airport safety and maintenance of air operations area traffic requirements. Including but not limited to the completed and accepted Safety Plan Compliance Document.

102-3.2 Measurement of wildlife burrow protection for owl/tortoise nests for payment shall be the number of fences completed and accepted in accordance with the Plans and these Specifications.

102-3.3 Measurement for payment shall be the work under this Section completed and accepted in accordance with these Specifications. Payment shall be maid as lump sum at the completion of the subsurface utility investigation and after the deliverable of the AutoCAD and PDF file of the exact utility locations and elevations and accepted by the Engineer.

BASIS OF PAYMENT

102-4.1 Payment for the work measured as described shall be made at the contract lump sum price bid for airport safety and maintenance of traffic, which prices and payments shall be full compensation for the work described in this section and section 40-05. Including but not limited to the completion and acceptance of the Safety Plan Compliance Document. Forty percent of the amount bid will be paid with the first estimate after the item is completely furnished and operational to the Owner's satisfaction. The

remaining sixty percent will be prorated and paid with each application for payment based on the percent of contract completion.

Payment will be made under:

Item S-102-5.1	Airport Safety and Maintenance of Traffic - per lump sum

END OF ITEM S-102

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V01	TOPOGRAPHIC SURVEY
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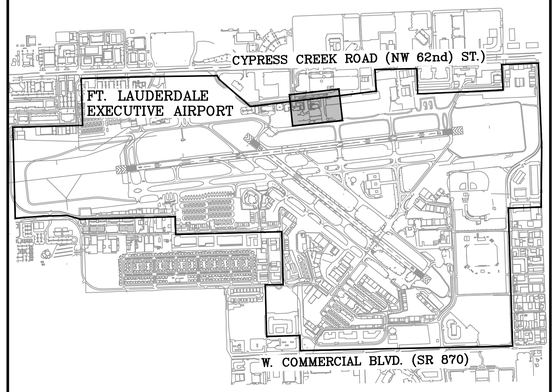
CITY OF FORT LAUDERDALE

PROJECT #12883
AES APRON PAVEMENT REHABILITATION

2020 EXECUTIVE AIRPORT WAY
FORT LAUDERDALE, FLORIDA

FXE FORT LAUDERDALE EXECUTIVE AIRPORT

ATTENTION, THESE PLANS MAY HAVE REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE TAKEN INTO ACCOUNT WHEN OBTAINING SCALED DATA.



= PROJECT LOCATION

NORTH

LOCATION SKETCH

PROJECT #P12883
AES APRON PAVEMENT REHABILITATION
FORT LAUDERDALE EXECUTUVE AIRPORT
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FLORIDA 33301

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

FORT LAUDERDALE CITY COMMISSION

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JOHN C. HERBST	COMMISSIONER - DISTRICT I
STEVEN GLASSMAN	COMMISSIONER - DISTRICT II
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HARMON C. BENNETT, P.E.	GEOTECHNICAL ENGINEER	(561) 687-8536

DATE: 05/30/2025

CAD FILE: 12883-000-COVR.DWG

DRAWING FILE No.: 4-145-34

BID DOCUMENTS

THIS ITEM HAS BEEN DIGITALLY SIGNED
AND SEALED BY

ON THE DATE ADJACENT TO THE SEAL.

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HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BOULEVARD, SUITE 400
FORT LAUDERDALE, FLORIDA 33309
RAHEEL DOSSANI, P.E. NO 89831

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR
THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15–23.004, F.A.C.

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C17	MARKING DETAILS

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THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15–23.004, F.A.C.

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SHEET NUMBER	SHEET NAME
V01	TOPOGRAPHIC SURVEY
V02	TOPOGRAPHIC SURVEY

ENGINEER:
RAHEEL DOSSANI
REG. No: 89831
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY: SC
DATE: 05/30/2025
DESIGNED BY: RD
SCALE: AS NOTED
CHECKED BY: WB
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15–23.004, F.A.C.

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
SIGNATURE SHEET
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

BID DOCUMENTS

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

SHEET NO.
G01

TOTAL: 31

CAD FILE:
12883–MULTI–NOTE

DRAWING FILE NO.
4–145–34

C:\PWWORKING\EAST01\D4261495\12883–MULTI–NOTE.DWG

Tuesday, July 15, 2025 COLOME, GIADHA

GENERAL NOTES

1. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY REGULATIONS.
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 SPOKEN ENGLISH.
5. REQUESTS FOR FIELD CHANGES OR DEVIATIONS MUST BE SUBMITTED IN WRITING TO THE ENGINEER. ENGINEER WILL HAVE UP TO TWO WEEKS TO RESPOND TO REQUESTED CHANGES. THE ENGINEER'S REVIEW TIME IS NOT PERMITTED TO BE INCLUDED IN REQUEST FOR ADDITIONAL CONTRACT TIME.
6. CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC DURING CONSTRUCTION IN ACCORDANCE WITH THESE PLANS, SPECIFICATION ITEM S-102, AND ALL STATE, COUNTY AND LOCAL REQUIREMENTS.
7. BARRICADES ARE TO REMAIN UNTIL ALL PROJECT CONSTRUCTION IS COMPLETED UNLESS NOTED OTHERWISE BY THE ENGINEER OR THE AIRPORT.
8. THE CONTRACTOR SHALL SHALL PERFORM DAILY CLEANUP OF THE CONSTRUCTION SITE AND AFFECTED AIRPORT PAVEMENTS. VACUUM CLEANING SHALL BE CONDUCTED PRIOR TO REOPENING ANY PAVEMENT TO AIRPORT TRAFFIC AND IMMEDIATELY AFTER ANY CONSTRUCTION ACCESS ONTO ACTIVE PAVEMENTS. UPON COMPLETION OF CONSTRUCTION, ALL DISTURBED AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION, AND ALL DEBRIS SHALL BE DISPOSED OF OFF AIRPORT PROPERTY AT THE CONTRACTOR'S EXPENSE.
9. ALL LOCATIONS, DIMENSIONS, AND ELEVATIONS MUST BE VERIFIED BY THE CONTRACTOR IN THE FIELD BEFORE COMMENCING WORK. ANY DISCREPANCY MUST BE BROUGHT, IN WRITING, TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
10. 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.
11. 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.
12. COMPENSATION FOR OPERATIONS THAT ARE NECESSARY TO CONTROL EROSION AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION SHALL BE ACCORDING TO SPECIFICATION C-102 UNLESS SPECIFIC PAY ITEMS ARE SPECIFIED HEREIN.
13. ALL CONSTRUCTION STAKING 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 IN WRITING. EXISTING AIRPORT SURVEY MONUMENTS ARE LOCATED NEAR THE CONSTRUCTION AREA. THE CONTRACTOR SHALL AT THEIR EXPENSE, HAVE A QUALIFIED FLORIDA REGISTERED LAND SURVEYOR REPLACE ANY DISTURBED MONUMENT.
14. ALL EXISTING UTILITIES ARE TO REMAIN UNLESS OTHERWISE NOTED.
15. REFER TO THE CONTRACTOR ACCESS AND STAGING AREA PLAN ON SHEET G04 FOR ACCESS POINTS TO BE USED BY THE CONTRACTOR FOR THIS PROJECT.
16. SPECIFICATIONS ARE PROVIDED WHICH REQUIRE THE CONTRACTOR TO APPLY EITHER WATER, CHEMICALS, VEGETATION OR OTHER MATERIALS TO PREVENT THE OCCURRENCE OF DUST WHICH WILL BE OBJECTIONABLE TO THE OPERATIONS OR USERS OF THE AREA. ALL COST FOR CONTROLLING DUST OR POLLUTANTS OF ANY KIND SHALL BE INCIDENTAL TO THE CONTRACT.
17. WHERE SCALE CONTRADICTS DIMENSION, GIVEN DIMENSIONS SHALL GOVERN.
18. 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 OWNER AT THE CONTRACTOR'S EXPENSE.
19. 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:

    THE NATIONAL GEODETIC SURVEY, INFORMATION SERVICE BRANCH,
    NOAA, N/NGS12
    1315 EAST-WEST HIGHWAY, ATTENTION SSMC-3 #9202
    SILVER SPRING, MARYLAND 20910-3282
    TELEPHONE: (301) 713-3242

20. NO ADJUSTMENT FOR ADDITIONAL COMPENSATION AND TIME WILL BE MADE FOR TIME LOST IN WORK AREAS CONTIGUOUS TO TAXIWAYS AND RUNWAYS DUE TO AIRCRAFT TRAFFIC.
21. ALL DEMOLITION WORK AND REMOVAL OF CONSTRUCTION DEBRIS SHALL BE CONDUCTED DURING HOURS APPROVED BY THE OWNER WITHOUT THE INTERRUPTION OF NORMAL AIRPORT DAILY ACTIVITIES.
22. CONTRACTOR SHALL PROVIDE CONSTRUCTION SITE ACCESS TO THE OWNER AND ITS REPRESENTATIVES FOR INSPECTION PURPOSES.
23. 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.
24. THE CONTRACTOR IS REQUIRED TO PROVIDE LIGHTING FOR CONSTRUCTION DURING THE HOURS OF DARKNESS.
25. WHENEVER, IN THE CONTRACT DOCUMENTS, THE WORDS "PROVIDE", "FURNISH", "INSTALL", "FURNISH AND INSTALL", OR OTHER WORDS OF LIKE IMPORT ARE USED, IT SHALL BE UNDERSTOOD THAT THE INTENT OF THE CONTRACT DOCUMENTS IS TO PROVIDE FOR THE CONSTRUCTION AND COMPLETION IN EVERY DETAIL OF THE WORK DESCRIBED. IT IS FURTHER INTENDED THAT THE CONTRACTOR SHALL FURNISH ALL LABOR, SUPERVISION, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, SUPPLIES, TESTING AND INCIDENTALS REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH THE DRAWINGS (PLANS), SPECIFICATIONS AND TERMS OF THE CONTRACT.
26. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, LICENSES, ETC., PRIOR TO COMMENCEMENT OF WORK. THE COST OF PERMITS, LICENSES, ETC., SHALL BE INCIDENTAL TO AND INCLUDED IN THE BID PRICE FOR THE RESPECTIVE PAY ITEMS. PROVIDE AND PAY FOR ALL PERMITS, LICENSES, FEES AND INSPECTIONS REQUIRED FOR THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL PAY ALL SALES, CONSUMER, USE AND OTHER TAXES REQUIRED IN ACCORDANCE WITH THE LAW OF THE PLACE OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN AND PAY FOR ALL REQUIRED LICENSES, FEES AND INSPECTIONS INCLUDING METER INSTALLATION FEE. THE COST FOR SUCH SHALL BE INCLUDED IN THE BID PRICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE APPLICABLE UTILITY COMPANY(S) TO DETERMINE IF ANY FEES, CHARGES OR COSTS WILL BE DUE THE UTILITY COMPANY(S) AS REQUIRED BY THE UTILITY COMPANY(S) FOR TEMPORARY POWER, INSTALLATIONS, HOOK-UPS, ETC. THIS FEE, CHARGE OR COST SHALL BE INCLUDED IN THIS CONTRACTOR'S PRICE.
27. ITEMS SHOWN IN SCREEN (HALFTONE) ARE EXISTING ITEMS. ITEMS SHOWN IN SOLID (BOLD) ARE NEW TO BE INSTALLED UNDER THIS CONTRACT, UNLESS OTHERWISE NOTED.

RECORD DRAWINGS

1. THE CONTRACTOR SHALL COMPLETE THE ENTIRE PROJECT, AND THOSE MILESTONES DESCRIBED IN THE CONTRACT DOCUMENTS, WITHIN THE TIME STATED IN THE CONTRACT DOCUMENTS.

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 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 SHALL ONLY 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. VEHICLE PERMITS SHALL BE ASSIGNED IN ACCORDANCE WITH AIRPORT SECURITY PROCEDURES.
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 SHALL BE EQUIPPED WITH A FLASHING AMBER (YELLOW) DOME-TYPE OR BAR-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 ACCESS GATES SHALL BE GUARDED OR LOCKED. CONTRACTOR SHALL PROVIDE GATE GUARDS. COST OF GUARDS SHALL BE INCIDENTAL TO THE AIRPORT SAFETY AND MAINTENANCE OF TRAFFIC PAY ITEM.
13. CONTRACTOR SHALL OBTAIN AT HIS OWN EXPENSE ANY PERMITS, INCLUDING BUT NOT LIMITED TO DRIVEWAY PERMITS, FOR CONSTRUCTION AND USE OF ACCESS GATE.
14. ACCESS GATE LOCATION IS SUBJECT TO APPROVAL BY OWNER.
15. COVER EXISTING UTILITIES IN AREAS OF TRUCK TRAFFIC WITH MINIMUM 12" OF LIMEROCK, INCLUDE IN PAY ITEM FOR MOBILIZATION.
16. CONTRACTOR PARKING:
    A. All CONTRACTOR VEHICLES SHALL BE PARKED WITHIN THE STAGING AREA ENCLOSURE.
    B. CONTRACTOR SHALL NOT PARK IN ANY OTHER LOCATION UNLESS APPROVED IN WRITING BY THE OWNER.
    C. CONTRACTOR ASSUMES ALL LIABILITY FOR VEHICLES AND EQUIPMENT IN THE CONTRACTOR PARKING AREAS.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE ACCESS HAUL ROAD FOR THE DURATION OF CONSTRUCTION.

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. CONTRACTOR MAY PROPOSE TO MODIFY THE DIMENSION OF FENCING FOR RPR AND OWNER APPROVAL. 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. 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, SOIL STABILIZATION, CLEAN-UP AND RESTORATION OF SITE TO ORIGINAL CONDITION.
2. CONSTRUCTION EQUIPMENT SHALL BE PARKED ONLY WITHIN CONTRACTOR'S STAGING AND STORAGE AREA OUTSIDE OF ESTABLISHED HOURS OF CONSTRUCTION. NO STOCKPILING OF MATERIALS SHALL BE ALLOWED OUTSIDE THE STAGING AND STORAGE AREA.

LEGEND

✲	BLUE LIGHT UNLESS NOTED OTHEWISE
⌖	BENCHMARK
	WIND SOCK
—TSA—	TAXIWAY SAFETY AREA
—TOFA—	TAXIWAY OBJECT FREE AREA
—RSA—	RUNWAY SAFETY AREA
—ROFA—	RUNWAY OBJECT FREE AREA

ABBREVIATIONS

AC	ADVISORY CIRCULAR
AOA	AIR OPERATIONS AREA
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATC	AIR TRAFFIC CONTROL
ATCT	AIR TRAFFIC CONTROL TOWER
℄	CENTER LINE
CONC	CONCRETE
CSPP	CONSTRUCTION SAFETY AND PHASING PLAN
E	EASTING - ELECTRICAL - EAST
EA	EACH
EX	EXISTING
EXIST	EXISTING
FAA	FEDERAL AVIATION ADMINISTRATION
FOD	FOREIGN OBJECT DEBRIS
FPL	FLORIDA POWER AND LIGHT
FT	FEET
FXE	FT. LAUDERDALE EXECUTIVE AIRPORT
ILS	INSTRUMENT LANDING SYSTEM
LB	LICENSED BUSINESS
LF	LINEAR FOOT
LS	LUMP SUM
MAX	MAXIMUM
MIN	MINIMUM
N	NORTHING - NORTH
NAVD	NORTH AMERICAN VERTICAL DATUM
NO.	NUMBER
NOTAM	NOTICE TO AIRMEN
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
NTP	NOTICE TO PROCEED
NTS	NOT TO SCALE
PAPI	PRECISION APPROACH PATH INDICATOR
PG	PAGE
PG	PERFORMANCE GRADE
PROP	PROPOSED
PSI	POUNDS PER SQUARE INCH
REF	REFERENCE
RPR	RESIDENT PROJECT REPRESENTATIVE
RPZ	RUNWAY PROTECTION ZONE
RSA	RUNWAY SAFETY AREA
RW	RUNWAY
SPCD	SAFETY PLAN COMPLIANCE DOCUMENT
STA	STATION
STD	STANDARD
SWPPP	STORMWATER POLLUTION PREVENTION PLAN
SY	SQUARE YARDS
TOFA	TAXIWAY OBJECT FREE AREA
TWY	TAXIWAY
TSA	TAXIWAY SAFETY AREA OR TRANSPORTATION SECURITY ADMINISTRATION
TW	TAXIWAY
TYP	TYPICAL
W/	WITH

BID DOCUMENTS

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PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
GENERAL NOTES
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO. G02
TOTAL: 31
CAD FILE: 12883-MULTI-NOTE
DRAWING FILE NO. 4-145-34

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Tuesday, July 15, 2025 COLOME, GIADHA

SUMMARY OF QUANTITIES – BASE BID				
ITEM NO.	SPEC	DESCRIPTION	QUANTITY	UNIT
1	C-100-14.1	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	1	LS
2	C-102-5.1a	TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL	1	LS
3	C-105-6.1	MOBILIZATION	1	LS
4	C-105-6.2	CONTRACTOR STAGING AND STORAGE	1	LS
5	P-101-5.2	COLD MILLING, 2" DEPTH	4850	SY
6	P-101-5.3	CONCRETE WHEELSTOP REMOVAL	5	EA
7	P-401-8.1	ASPHALT SURFACE COURSE	530	TON
8	P-603-5.1	EMULSIFIED ASPHALT TACK COAT	1	LS
9	P-620-5.2a	PERMANENT MARKINGS WITH GLASS BEADS	460	SF
10	P-620-5.2b	PERMANENT MARKINGS WITH NO BEADS	170	SF
11	D-751-5.1	DESILTATION OF EXISTING STORM PIPE AND STRUCTURES	1	LS
12	520-001*	CONCRETE WHEELSTOP	5	EA
13	0710-11102*	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6"	180	LF
14	0710-90*	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	1	LS
15	S-102-5.1	AIRPORT SAFETY AND MAINTENANCE OF TRAFFIC	1	LS

SUMMARY OF QUANTITIES – BID ALTERNATE 1				
ITEM NO.	SPEC	DESCRIPTION	QUANTITY	UNIT
1	C-100-14.1	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	1	LS
2	C-102-5.1a	TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL	1	LS
3	C-105-6.1	MOBILIZATION	1	LS
4	P-101-5.1a	PAVEMENT REMOVAL	1540	SY
5	P-101-5.1b	FULL DEPTH ASPHALT REMOVAL, INCLUDING BASE AND SUBBASE MATERIAL	20	SY
6	P-101-5.3	CONCRETE WHEELSTOP REMOVAL	8	EA
7	D-751-5.1	DESILTATION OF EXISTING STORM PIPE AND STRUCTURES	1	LS
8	D-751-5.2	REPAIR EXISTING PIPE JOINT OR REPLACE BRICK AND MORTAR AT PIPE OPENING	1	LS
9	0120-6*	EMBANKMENT	30	CY
10	0160-4-1*	TYPE B STABILIZATION	20	SY
11	0285-706*	OPTIONAL BASE, BASE GROUP 6	20	SY
12	0337-7-83*	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC C, FC-12.5, PG 76-22	160	TON
13	520-001*	CONCRETE WHEELSTOP	8	EA
14	0710-11101*	LOOP DETECTOR INDUCTIVE, F&I, TYPE 1	1	EA
15	0710-11123*	LOOP ASSEMBLY, F&I, TYPE E	1	AS
16	0710-11125*	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6"	330	LF
17	0710-11160*	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12"	150	LF
18	0710-11201*	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID FOR STOP LINE OR CROSSWALK, 24"	20	LF
19	0710-11421*	PERMANENT PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE OR SYMBOL	7	EA
20	0710-90*	PERMANENT PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6"	110	LF
21	0710-11421*	PAINTED PAVEMENT MARKINGS, STANDARD, BLUE, SOLID FOR PARKING LOT-ACCESSIBLE MARKINGS, 6"	40	LF
22	0710-90*	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	1	LS

SUMMARY OF QUANTITIES – BID ALTERNATE 2				
ITEM NO.	SPEC	DESCRIPTION	QUANTITY	UNIT
1	C-102-5.1a	TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL	1	LS
2	C-105-6.1	MOBILIZATION	1	LS
3	P-151-4.1	STRIPPING	1530	SY
4	T-904-5.1	SODDING	1880	SY

* PAY ITEMS SPECIFICATION REFERENCE IS PER FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (FY 2024-25) AND ARE NOT INCLUDED IN THE CONTRACT DOCUMENTS TECHNICAL SPECIFICATIONS.

SUMMARY OF QUANTITIES NOTES

1. SEE SPECIFICATIONS SECTIONS 'METHOD OF MEASUREMENT' AND 'BASIS OF PAYMENT' FOR DETAILED DEFINITIONS FOR EACH PAY ITEM.
2. THE PROJECT PAY ITEMS ARE INTENDED TO BE INCLUSIVE OF ALL WORK TO BE PERFORMED WITHIN THESE CONTRACT DOCUMENTS. ALL INCIDENTAL WORK REQUIRED TO COMPLETE THE PROJECT OR ADHERE TO THIS PROJECT'S REQUIREMENTS SHALL BE INCLUDED IN THE CONTRACTOR'S BID UNDER THE NEAREST APPLICABLE BID ITEM.
3. ANY DAMAGE TO EXISTING ITEMS TO REMAIN INCLUDING, BUT NOT LIMITED TO, TREES, UTILITIES, LIGHTING, SIGNAGE, FENCING AND GRASS SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. THE COST OF TEMPORARY UTILITIES NEEDED, IF AVAILABLE, TO ACCOMPLISH THE WORK IS CONSIDERED INCIDENTAL TO THE PROJECT AND PAID FOR BY THE CONTRACTOR UNDER THE NEAREST APPLICABLE ITEM.
5. IF THERE IS ANY DISCREPANCY BETWEEN THE ITEMS AND QUANTITIES SHOWN ON THIS SHEET, AND THE BID PRICE FORM, THE BID PRICE FORM SHALL GOVERN.
6. ALL COSTS ASSOCIATED WITH PREPARING THE CONTRACTOR'S STAGING AREAS AND HAUL ROUTE, PROJECT RECORD DOCUMENTS, AND TEMPORARY POLLUTION, EROSION, AND SILTATION CONTROL SHALL BE INCLUDED UNDER MOBILIZATION. THIS INCLUDES, BUT IS NOT LIMITED TO, CLEARING AND GRADING OF THE STAGING AREA, STABILIZATION OF STAGING AREA, CONSTRUCTION OF ALL TEMPORARY UTILITIES IF AVAILABLE, SECURITY FENCING, PERMITTING COSTS, AND RESTORATION OF THE SITE TO ITS ORIGINAL CONDITION AND TO THE SATISFACTION OF THE RESIDENT PROJECT REPRESENTATIVE (RPR). CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS ARE MET.

ENGINEER: RAHEEL DOSSANI
REG. No: 89831
DATE: 04/16/2025
TEL: (954) 233-4982

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AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
SUMMARY OF QUANTITIES
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

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Tuesday, July 15, 2025 COLOME, GIADHA

NW 21ST AVE

EXECUTIVE AIRPORT WAY

BID ALT 1 WORK AREA

SHELTAIR NORTHSIDE

AES BUILDING EXPANSION (BY OTHERS)

FXE ADMINISTRATION BUILDING

AES BUILDING

BASE BID WORK AREA

BID ALT 2 WORK AREA

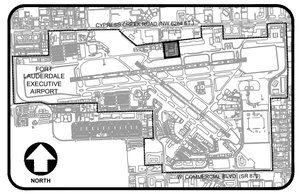
BID ALT 2 WORK AREA

TW F

30' 0' 30' 60'

GRAPHIC SCALE (IN FEET)

KEY MAP



LEGEND

- BASE BID WORK AREA
- BID ALT 1 WORK AREA
- BID ALT 2 WORK AREA

ENGINEER: RAHEEL DOSSANI
REG. No: 89631
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY:	DATE:	SCALE:
SC	05/30/2025	AS NOTED
DESIGNED BY:	CHECKED BY:	FIELD BOOK:
RD	WB	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

BID DOCUMENTS

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
OVERALL SITE PLAN
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

SHEET NO. G04

TOTAL: 31

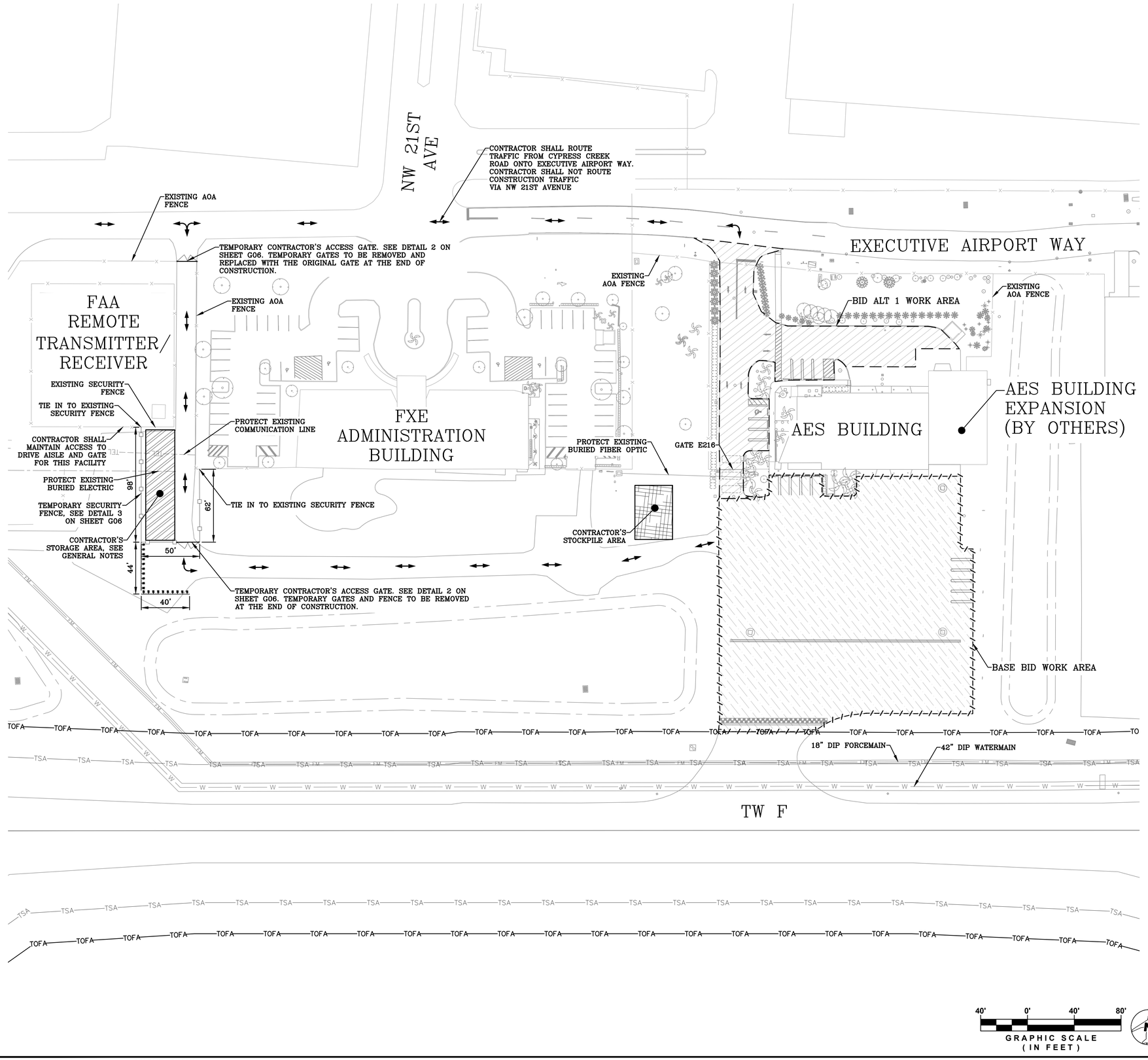
CAD FILE: 12883-G04-OVRL

DRAWING FILE NO. 4-145-34

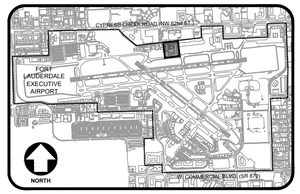
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Tuesday, July 15, 2025 COLOME, GIADHA



KEY MAP



LEGEND

- CONTRACTOR STAGING AND STORAGE AREA
- CONTRACTOR STOCKPILE AREA
- -/-/-/-/-/- BASE BID LIMITS, SEE NOTE 7
- — — — BID ALT 1 LIMITS, SEE NOTE 7
- LOW PROFILE BARRICADE. SEE DETAIL 1 ON SHEET G06
- TEMPORARY SECURITY FENCE. SEE DETAIL 3 ON SHEET G06
- SAN — EXISTING SANITARY SEWER
- FM — EXISTING FORCE MAIN
- FO — EXISTING FIBER OPTIC
- W — EXISTING WATER MAIN
- SD — EXISTING STORM DRAIN
- ELECT — EXISTING ELECTRICAL
- x — EXISTING AOA SECURITY FENCE

ACCESS & STAGING NOTES

1. LOCATIONS AND SIZES OF ALL EXISTING SURFACE FEATURES, UNDERGROUND UTILITIES AND STRUCTURES MAY BE APPROXIMATE AND WERE DETERMINED FROM BEST INFORMATION AVAILABLE (SURVEY DATA, AS-BUILTS DRAWINGS, OR CONSTRUCTION DOCUMENTS).
2. LOCATIONS, CONFIGURATIONS, SIZE AND MATERIAL TYPES SHOWN MAY NOT MATCH ACTUAL CONDITIONS, AND EXISTING CONDITIONS MAY VARY AT THE TIME OF COMMENCEMENT OF CONSTRUCTION.
3. CONTRACTOR SHALL FIELD VERIFY ALL ITEMS WITHIN THE LIMITS OF THE DEMOLITION OR INSTALLATION WORK INCLUDING DEPTH OF ALL CABLES, DUCTS AND SHALL TAKE THE NECESSARY MEASURES TO PROTECT THEM.
4. CONTRACTOR SHALL REPORT TO THE AIRPORT ANY DISCREPANCIES PRIOR TO BEGINNING WORK.
5. CONTRACTOR TO VERIFY LOCATIONS IN THE FIELD PRIOR TO CONSTRUCTION.
6. PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL REQUEST FAA UTILITY LOCATES.
7. CONTRACTOR'S WORK IN THIS AREA SHALL BE PROTECTED BY BARRICADES AND CLOSELY COORDINATED WITH AES BUILDING STAFF TO ALLOW FOR REGULAR USE OF EXISTING DOORWAYS.
8. CONTRACTOR SHALL RESTORE STAGING AREA TO EXISTING OR BETTER CONDITION AFTER COMPLETION OF PROJECT.
9. SEE WORK AREA PLANS (G08 – G11) FOR ADDITIONAL INFORMATION ON LIMITS AND BARRICADES DURING CONSTRUCTION.
10. CONTRACTOR MAY BE REQUIRED TO SHARE THE STAGING AREA WITH ANOTHER CONTRACTOR FOR CONCURRENT PROJECT.

BID DOCUMENTS

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100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS			
NO.	DATE	BY	CHKD

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
SITE ACCESS AND STAGING PLAN
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO.	
G05	
TOTAL:	31
CAD FILE:	12883-G05 STAG
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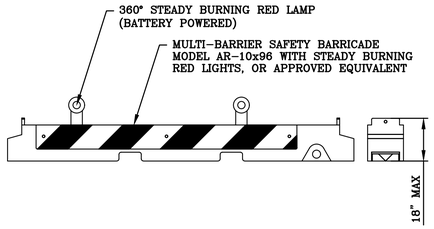
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Tuesday, July 15, 2025 COLOME, GIADHA

CONSTRUCTION SAFETY NOTES

1. ALL CONSTRUCTION FOR THIS PROJECT SHALL CONFORM TO THE GUIDELINES SET FORTH IN FEDERAL AVIATION ADMINISTRATION (FAA) AC150/5370-2 "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", AND THESE PLANS AND SPECIFICATIONS.
2. CONSTRUCTION ACTIVITIES ARE NOT PERMITTED WITHIN THE ROFA OF ANY RUNWAY WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER.
3. CONSTRUCTION ACTIVITIES ARE NOT PERMITTED WITHIN THE TOFA OF AN ACTIVE TAXIWAY OR AN ON- APRON TAXILANE WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER.
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.
5. NO CONSTRUCTION TRAFFIC SHALL ENTER OR CROSS ANY LOCALIZER OR GLIDE SLOPE CRITICAL AREA EXCEPT UPON AUTHORIZATION BY THE OWNER AND ATCT.
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 72-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. CONTRACTOR'S VEHICLES SHALL BE EQUIPPED WITH ROTATING OR FLASHING AMBER LIGHTS. 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 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, EXCEPT IN STAGING AREA.
19. SPECIAL ACCESS REQUIREMENTS AND OPERATING LIMITATIONS ARE REQUIRED INSIDE THE AOA FENCE. THE CONTRACTOR SHALL DELINEATE WORK LIMITS WITHIN THESE AREAS USING SAFETY FENCING. CONFINE MEN, EQUIPMENT AND MATERIALS OUTSIDE OF THE TAXIWAY OBJECT FREE AREA (TOFA) WHEN TAXIWAY IS ACTIVE.
20. 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.
21. 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 PLACED IN A CONTINUOUS LINE 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.
22. THE CONTRACTOR SHALL PERFORM CONSTRUCTION OPERATIONS AS NECESSARY TO PREVENT ATTRACTION OF BIRDS CAUSED BY PONDED WATER AND GRASS SEED.
23. REFER TO THE GENERAL NOTES FOR REQUIREMENTS PERTAINING TO STORAGE OF CONSTRUCTION EQUIPMENT AND MATERIALS WHEN NOT IN USE.
24. 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.
25. 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.
26. 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.
27. 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.
28. ITEMS FOR CONTROL OF SAFETY DURING CONSTRUCTION SUCH AS VEHICLE LIGHTING, ETC. SHALL BE PAID FOR AS DESCRIBED IN THE SPECIFICATIONS.
29. SEE SHEETS G07 – G08 FOR BARRICADE LOCATIONS.
30. SCHEDULING
    - 30.1. CONTRACTOR SHALL SUBMIT A ONE-MONTH AND FULL CONSTRUCTION SCHEDULE PRIOR TO NTP AND WITH EVERY PAY APPLICATION.
    - 30.2. CONTRACTOR SHALL SUBMIT A TWO-WEEK LOOK AHEAD SCHEDULE BY FRIDAY AT 5 PM THE WEEK BEFORE.
31. CONTRACTOR SHALL COMPLY WITH FAA AC 150/5210-5 'PAINTING, MARKING, AND LIGHTING OF VEHICLES USED ON AN AIRPORT'.

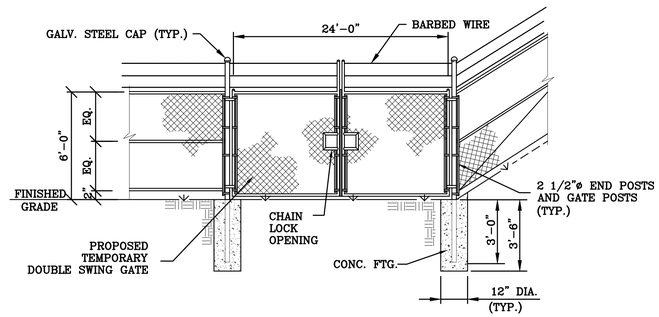


NOTES

1. BARRICADES SHALL BE PLACED AS SHOWN IN THE PHASING PLAN SHEETS TO DELINEATE THE CONTRACTOR'S WORK AREAS.
2. BARRICADE SECTIONS MUST BE HIGHLY REFLECTIVE MARKED WITH DIAGONAL, ALTERNATING ORANGE AND WHITE STRIPES. BARRICADES WILL BE LIGHTED. ALL INCIDENTAL CONNECTORS, SPACERS, SPLICE PLATES, ETC., SHALL BE PAINTED ORANGE.
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. 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.
5. THE FINAL LOCATION FOR THE BARRICADES SHALL BE ESTABLISHED IN THE FIELD WITH CONCURRENCE FROM THE OWNER.
6. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, RELOCATE AND REMOVE ALL BARRICADES. ALL WORK SHALL BE INCIDENTAL TO AIRPORT SAFETY AND MAINTENANCE OF TRAFFIC (S-102-5.1).
7. THE CONTRACTOR SHALL MAINTAIN DAILY 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.
8. LIGHTS ON BARRICADES SHALL BE STEADY-BURN.
9. FOR ALL BARRICADES ON THIS PROJECT: BARRICADE SPACING SHALL BE INTERLOCKED.
10. BARRICADES MUST BE OF LOW MASS, EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT OR ANY OF ITS COMPONENTS AND WEIGHED OR STURDILY ATTACHED TO THE SURFACE TO PREVENT DISPLACEMENT FROM PROP WASH, JET BLAST, WING VORTEX, AND OTHER SURFACE WIND CURRENTS.

① LOW PROFILE AIRFIELD BARRICADE DETAIL

NOT TO SCALE

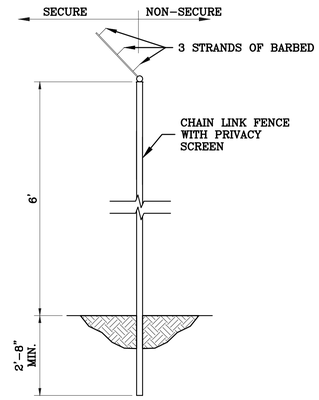


NOTES

1. TEMPORARY GATES TO BE REMOVED AFTER CONSTRUCTION IS COMPLETE. CONTRACTOR TO RE-INSTALL ORIGINAL GATES AFTER CONSTRUCTION IS COMPLETED.
2. TEMPORARY GATE DETAIL SHOWS MAX WIDTH, CONTRACTOR TO MEASURE ACTUAL DIMENSIONS IN FIELD PRIOR TO FABRICATION.

② TEMPORARY ACCESS DOUBLE SWING GATE DETAIL

NOT TO SCALE



NOTES

1. BARBED WIRE IS TO BE PROVIDED WHERE THE SECURITY FENCE IS OUTSIDE THE AOA.

③ TEMPORARY SECURITY FENCE DETAIL

NOT TO SCALE

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CITY OF FORT LAUDERDALE
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DRAWN BY: SC | DATE: 05/30/2025 | DESIGNED BY: RD | SCALE: AS NOTED | CHECKED BY: WB | FIELD BOOK:

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
SAFETY AND SECURITY NOTES
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO. G06
TOTAL: 31
CAD FILE: 12883-G06-DETL
DRAWING FILE NO. 4-145-34

HDR ENGINEERING, INC.
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BID DOCUMENTS

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Tuesday, July 15, 2025 COLOME, GIADHA

GENERAL WORK AREA NOTES

1. THE INTENT OF THIS WORK AREA AREA PLAN IS TO MINIMIZE THE IMPACT OF CONSTRUCTION ON THE OPERATION OF THE AIRPORT. THE REQUIREMENTS CONTAINED IN THE CONSTRUCTION DOCUMENTS SHALL BE STRICTLY ENFORCED.

2. CONSTRUCTION BARRICADES, BARRIERS, AND CLOSED TAXIWAY MARKINGS SHALL BE PLACED AS SHOWN ON THE WORK AREA CONSTRUCTION PLANS AND / OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ADDITIONAL BARRICADES SHALL BE PLACED TO MARK ALL OPEN EXCAVATIONS, PAVEMENT DROP-OFFS, OR OTHER POTENTIALLY HAZARDOUS CONDITIONS ADJACENT TO ACTIVE AIRFIELD PAVEMENTS.

3. HAUL ROUTES SHALL BE AS DESIGNATED ON THE WORK AREA CONSTRUCTION PLANS. HAUL ROUTES THAT VARY FROM WHAT ARE SHOWN ON THE CONSTRUCTION WORK AREA PLANS SHALL BE APPROVED BY THE OWNERS REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS FOR HAUL ROUTES OUTSIDE OF AIRPORT PROPERTY.

4. ALL CONSTRUCTION ACTIVITIES THAT ARE NECESSARY BEYOND THE WORK AREA LIMITS SHOWN ON THE WORK AREA CONSTRUCTION PLANS SHALL BE PERFORMED WHEN THE ADJACENT AIRFIELD PAVEMENT IS CLOSED TO AIR TRAFFIC. ARRANGEMENTS FOR CLOSING THESE PAVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE CSPP AND SPCD. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REFUSE CONTRACTOR'S REQUEST TO WORK OUTSIDE OF THE DESIGNATED WORK AREA LIMITS.

5. NO CHANGE IN THE WORK AREAS PLAN SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL FROM THE OWNER'S REPRESENTATIVE.

6. FOURTEEN (14) CALENDAR DAYS PRIOR TO THE START OF WORK AREA OR SUB PHASE AREA, THE CONTRACTOR SHALL SUBMIT, IN WRITING, A DETAILED WORK PLAN FOR THAT WORK AREA OR SUB WORK AREA. THE PLAN SHALL DETAIL THE DURATIONS OF ALL WORK ITEMS NECESSARY TO COMPLETE THE WORK AREA OR SUB WORK AREA. ALL ITEMS SHALL BE RESOURCE LOADED TO IDENTIFY MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO ACCOMPLISH EACH ITEM. THE PLAN SHALL PRESENT THE SEQUENCING OF ITEMS IN RELATIONSHIP TO ONE ANOTHER TO DEMONSTRATE A CLEAR PATH FOR COMPLETION OF THE WORK AREA OR SUB WORK AREA WITHIN THE SPECIFIED CONTRACTUAL TIME FRAME.

7. THE CONTRACTOR MAY NOT BREACH THE SECURITY FENCE, EXCEPT FOR THOSE AREAS DESIGNATED ON THE PLANS, FOR ANY REASON UNLESS WRITTEN PERMISSION IS GRANTED BY THE OWNER'S REPRESENTATIVE.

8. PRIOR TO OPENING NEW AIRFIELD FEATURE OR REOPENING RECONSTRUCTED FEATURES, THE ASSOCIATED AIRFIELD GUIDANCE SIGNS SHALL BE INSTALLED AND OPERATIONAL. ANY SIGNAGE LEGEND ASSOCIATED WITH AIRFIELD FEATURES NOT AVAILABLE TO AIRCRAFT SHALL BE COVERED/OBSCURED FROM THE PILOTS' VISION IN ACCORDANCE WITH THE SPECIFICATIONS. PRIOR TO OPENING AND AFTER INSPECTION BY THE OWNER'S REPRESENTATIVE, REMOVE SIGNAGE COVERING.

9. CONTRACTOR SHALL NOTIFY AIRPORT OPERATIONS TWO WEEKS IN ADVANCE FOR A REQUEST FOR WORK TO BE CONDUCTED AFTER WORK HOURS.

10. CONTRACTOR SHALL HAVE ACCESS TO STAGING AREA 24 HOURS 7 DAYS A WEEK.

11. PORTABLE LIGHTED RUNWAY CLOSURE MARKERS ARE TO BE PROVIDED AND MAINTAINED BY THE CONTRACTOR. CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE THE MARKERS AND WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE LIGHTED RUNWAY CLOSURE MARKERS THROUGHOUT THE DURATION OF THE PROJECT.

12. CONTRACTOR SHALL NOT USE THE STAGING AREA TO STORE EXCAVATED MATERIALS FROM THE CONSTRUCTION SITE. CONTRACTOR SHALL IMMEDIATELY TAKE THE EXCAVATED MATERIAL OFF SITE AND DISPOSE OF IT IN LEGAL MANNER. STOCKPILE AREA SHALL ONLY BE USED TO STORE NEW MATERIAL FOR THE PROPOSED SCOPE OF WORK.

13. CONTRACTOR SHALL PROVIDE TRAINED FLAGMEN TO COORDINATE AND CONTROL CONSTRUCTION TRAFFIC WHEN OPERATING ON OR ACROSS ANY ACTIVE RUNWAY, TAXIWAY, OR TAXILANE. THROUGH A TWO-WAY RADIO WITH THE AIR TRAFFIC CONTROL TOWER. FLAGMEN SHALL ALSO BE PROVIDED FOR CONTROLLING EQUIPMENT ENTERING AND LEAVING THE PROJECT AREA.

14. CONTRACTOR SHALL MAINTAIN CLEAN PAVEMENTS ON ALL ACTIVE CROSSINGS. CONTRACTOR SHALL PROVIDE BROOM AND VACUUM TRUCKS ON ALL ACTIVE AIRFIELD PAVEMENTS DURING WORK HOURS.

15. IF ACCESS TO THE CONSTRUCTION, STAGING OR STORAGE SITES REQUIRES THE CROSSING OF AN ACTIVE RUNWAY OR TAXIWAY, ALL VEHICLES SHALL BE ESCORTED ACROSS SAID RUNWAY OR TAXIWAY BY A CONTRACTOR VEHICLE EQUIPPED WITH A VHF-AM TRANSCEIVER RADIOS AND OPERATED BY A DRIVER SPECIFICALLY AUTHORIZED BY THE AIRPORT TO CROSS THESE OPERATIONAL PAVEMENTS. RADIO CONTACT IS REQUIRED WHILE THE CONTRACTOR HAS PERSONNEL AND EQUIPMENT IN THE ACTIVE AOA.

ENGINEER: RAHEEL DOSSANI
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AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
CONSTRUCTION WORK AREA MOT GENERAL NOTES
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

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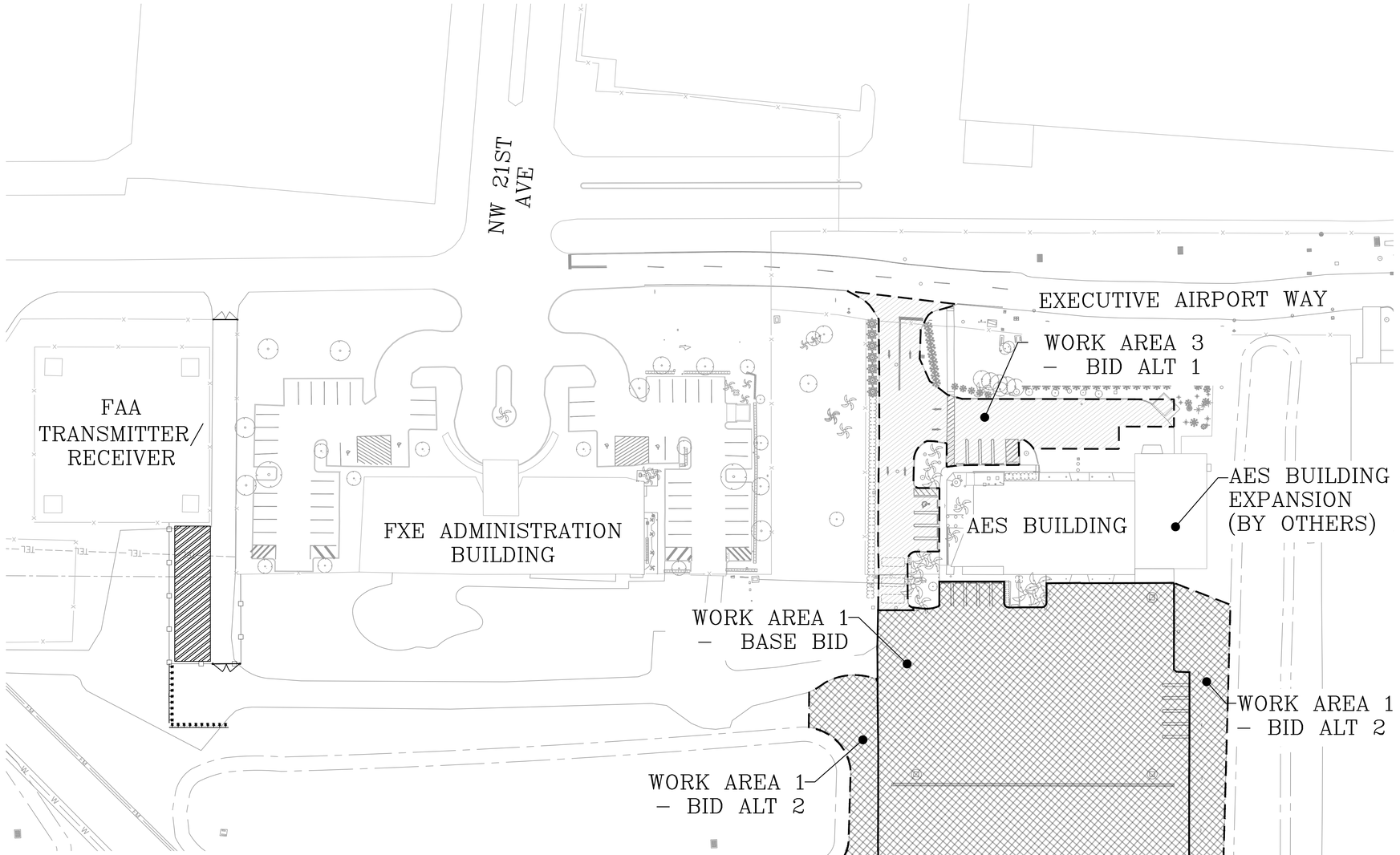
HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

SHEET NO. G07
TOTAL: 31
CAD FILE: 12883-MULTI-PHAS
DRAWING FILE NO. 4-145-34

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Tuesday, July 15, 2025 COLOME, GIADHA



CONSTRUCTION SCHEDULE – BASE BID				
CONSTRUCTION AREA	START	DURATION	AVAILABLE WORK PERIODS*	PULL–BACK OR TEMPORARY DEMOBILIZATION REQUIRED
MOBILIZATION, STAGING AREA, AND HAUL ROUTE SETUP	CONTRACT NTP	30 CONSECUTIVE CALENDAR DAYS	MON – FRI 0700 – 1600	
WORK AREA 1	COMPLETION OF STAGING AREA AND HAUL ROUTE SETUP AND CONSTRUCTION NTP	14 CONSECUTIVE CALENDAR DAYS	MON – FRI 0700 – 1600	
WORK AREA 2	CONCURRENT WITH WORK AREA 1	2 CALENDAR DAYS	MON – FRI 0700 – 1600	PULL–BACK OPERATION

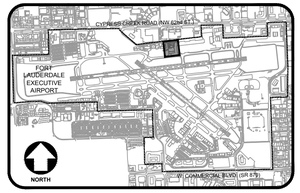
CONSTRUCTION SCHEDULE – BID ALTERNATE 1				
CONSTRUCTION AREA	START	DURATION	AVAILABLE WORK PERIODS*	PULL–BACK OR TEMPORARY DEMOBILIZATION REQUIRED
WORK AREA 3 – BID ALT 1	COMPLETION OF WORK AREA 1	14 CONSECUTIVE CALENDAR DAYS	MON – FRI 0700 – 1600	

*OWNER BUSINESS HOURS ARE 0700–1700, MONDAY–FRIDAY. CONTRACTOR TO COORDINATE ALL ACTIVITIES REQUIRING OWNER PARTICIPATION WITHIN THE BUSINESS HOURS.

CONSTRUCTION SCHEDULE – BID ALTERNATE 2				
CONSTRUCTION AREA	START	DURATION	AVAILABLE WORK PERIODS*	PULL–BACK OR TEMPORARY DEMOBILIZATION REQUIRED
WORK AREA 1 – BID ALT 2	CONCURRENT WITH WORK AREA 1	4 CONSECUTIVE CALENDAR DAYS	MON – FRI 0700 – 1600	
WORK AREA 2 – BID ALT 2	CONCURRENT WITH WORK AREA 1	2 CONSECUTIVE CALENDAR DAYS	MON – FRI 0700 – 1600	PULL–BACK OPERATION

40' 0' 40' 80'
GRAPHIC SCALE (IN FEET)

KEY MAP



LEGEND

- CONTRACTOR STAGING AND STORAGE AREA
- WORK AREA 1
- WORK AREA 2
- WORK AREA 3
- LOW PROFILE BARRICADE. SEE DETAIL 1 ON SHEET G06

PHASING NOTES

1. SEE GENERAL WORK AREA NOTES ON SHEET G07 FOR ADDITIONAL REQUIREMENTS AND INFORMATION.

ENGINEER: RAHEEL DOSSANI
REG. No: 89831
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY: SC | DESIGNED BY: RD | CHECKED BY: WB
DATE: 05/30/2025 | SCALE: AS NOTED
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
OVERALL CONSTRUCTION WORK AREA PLAN
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

BID DOCUMENTS

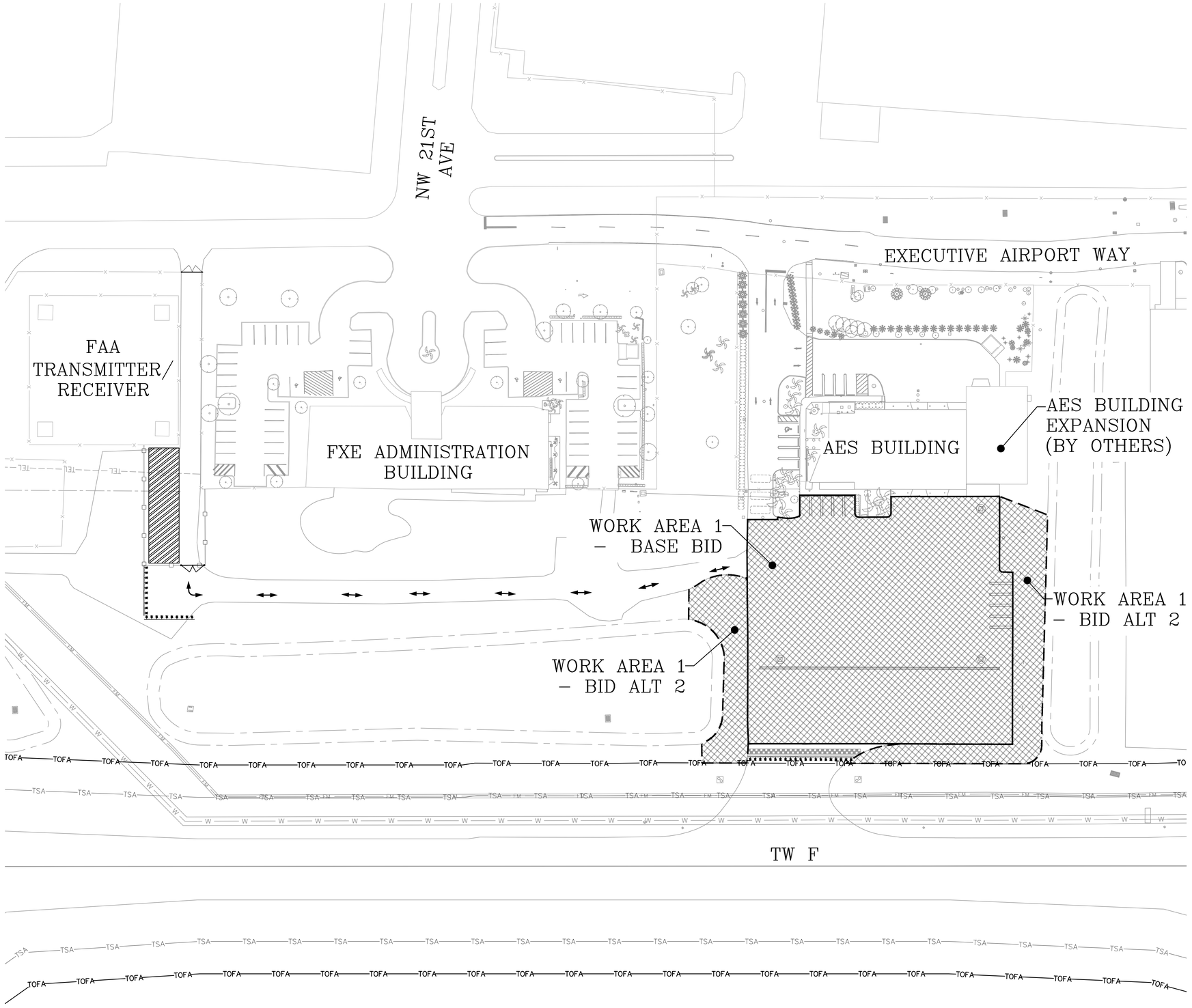
SHEET NO. G08
TOTAL: 31
CAD FILE: 12883–MULTI–PHAS
DRAWING FILE NO. 4–145–34

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

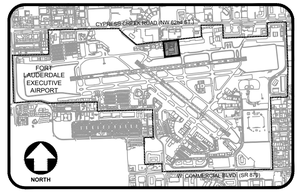
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Tuesday, July 15, 2025 COLOME, GIADHA



KEY MAP



LEGEND

- CONTRACTOR STAGING AND STORAGE AREA
- WORK AREA 1
- LOW PROFILE BARRICADE. SEE DETAIL 1 ON SHEET G06

BASE BID WORK ITEMS

1. CONSTRUCTION ACTIVITIES INCLUDE:
   - 1.1. PAVEMENT MILLING
   - 1.2. PLACEMENT OF NEW ASPHALT
   - 1.3. PLACEMENT OF PAVEMENT MARKINGS
   - 1.4. INSTALL CONCRETE BUMPER GUARDS
   - 1.5. DESILTATION OF EXISTING PIPE AND STRUCTURES

BID ALT 2 WORK ITEMS

1. CONSTRUCTION ACTIVITIES INCLUDE:
   - 1.1. GRADING IMPROVEMENTS OFF PAVEMENT EDGES
   - 1.2. SODDING OF DISTURBED EARTH
   - 1.3. REMOVAL OF WORK AREA SPECIFIC MOT ITEMS

PHASING NOTES

1. SEE GENERAL WORK AREA NOTES ON SHEET G07 FOR ADDITIONAL REQUIREMENTS AND INFORMATION.

BID DOCUMENTS

ENGINEER: RAHEEL DOSSANI
REG. No: 89831
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY: SC | DESIGNED BY: RD | CHECKED BY: WB
DATE: 05/30/2025 | SCALE: AS NOTED | FIELD BOOK:

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
WORK AREA PLAN 1
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

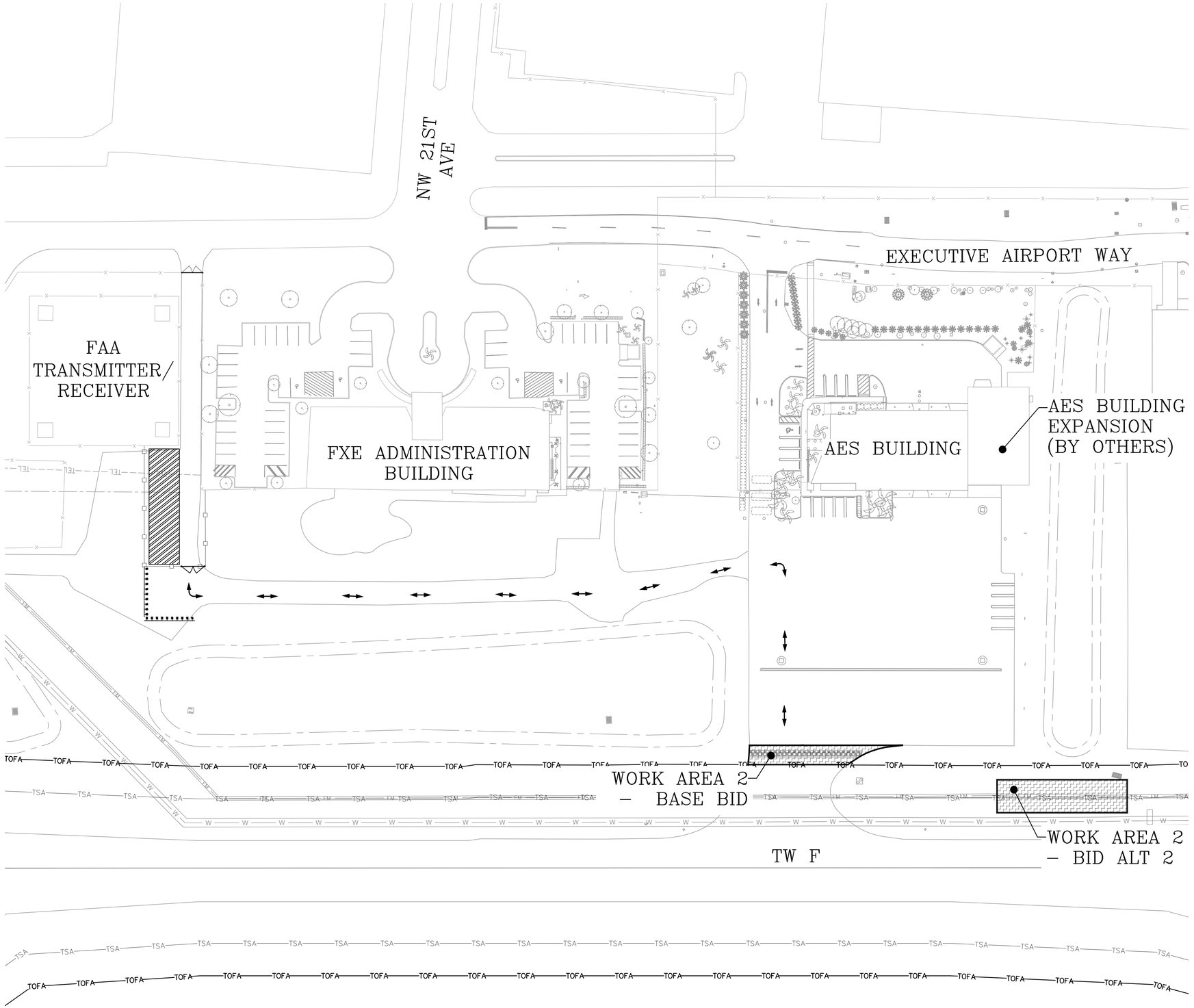
SHEET NO. G09
TOTAL: 31
CAD FILE: 12883-MULTI-PHAS
DRAWING FILE NO. 4-145-34

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
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CA# 4213

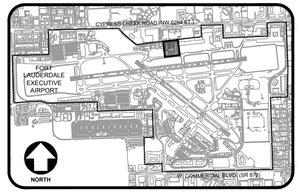
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Tuesday, July 15, 2025 COLOME, GIADHA



KEY MAP



LEGEND

- CONTRACTOR STAGING AND STORAGE AREA
- WORK AREA 2
- LOW PROFILE BARRICADE. SEE DETAIL 1 ON SHEET G06

BASE BID WORK ITEMS

2. CONSTRUCTION ACTIVITIES INCLUDE:
 2.1. PLACEMENT OF PAVEMENT MARKINGS

BID ALT 2 WORK ITEMS

2. CONSTRUCTION ACTIVITIES INCLUDE:
 2.1. SODDING OF DISTURBED EARTH
 2.2. REMOVAL OF WORK AREA SPECIFIC MOT ITEMS

PHASING NOTES

1. SEE GENERAL WORK AREA NOTES ON SHEET G07 FOR ADDITIONAL REQUIREMENTS AND INFORMATION.
2. THE CONTRACTOR SHALL PERFORM ALL WORK WITHIN THIS PHASE ON A PULL–BACK BASIS, MAINTAINING CLOSE COORDINATION WITH AIRPORT OPERATIONS THROUGHOUT THE DURATION OF THE WORK.

GRAPHIC SCALE (IN FEET) 40' 0' 40' 80'

ENGINEER: RAHEEL DOSSANI
REG. No: 89631
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY: SC | DESIGNED BY: RD | CHECKED BY: WB
DATE: 05/30/2025 | SCALE: AS NOTED | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

BID DOCUMENTS

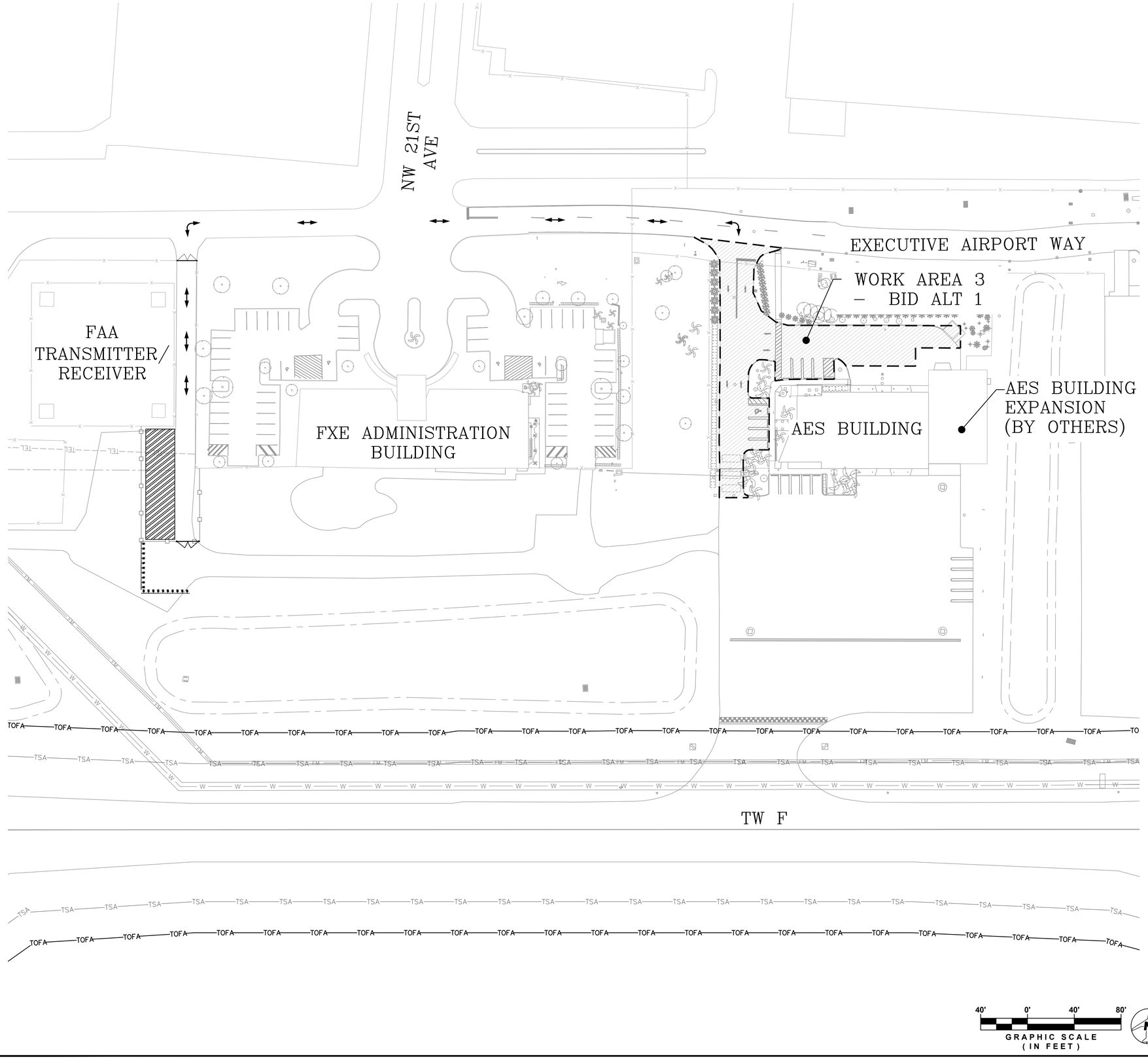
PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
WORK AREA PLAN 2
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
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CA# 4213

SHEET NO. G10
TOTAL: 31
CAD FILE: 12883–MULTI–PHAS
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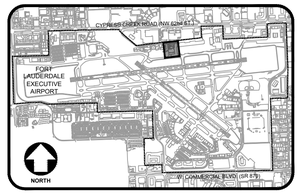
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Tuesday, July 15, 2025 COLOME, GIADHA



40' 0' 40' 80'

GRAPHIC SCALE
(IN FEET)

KEY MAP



LEGEND

- CONTRACTOR STAGING AND STORAGE AREA
- WORK AREA 3 – BID ALT 1
- LOW PROFILE BARRICADE. SEE DETAIL 1 ON SHEET G06

BID ALT 1 WORK ITEMS

3. CONSTRUCTION ACTIVITIES INCLUDE:
   - 3.1. PAVEMENT MILLING
   - 3.2. PLACEMENT OF NEW ASPHALT
   - 3.3. PLACEMENT OF PAVEMENT MARKINGS
   - 3.4. INSTALL CONCRETE WHEELSTOPS
   - 3.5. REMOVAL OF WORK AREA SPECIFIC MOT ITEMS

PHASING NOTES

1. SEE GENERAL WORK AREA NOTES ON SHEET G07 FOR ADDITIONAL REQUIREMENTS AND INFORMATION.

ENGINEER: RAHEEL DOSSANI
REG. No: 89631
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY:	DESIGNED BY:	CHECKED BY:	FIELD BOOK:
SC	RD	WB	

DATE: 05/30/2025
SCALE: AS NOTED

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
WORK AREA PLAN 3 - BID ALT 1
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

BID DOCUMENTS

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
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CA# 4213

SHEET NO. G11
TOTAL: 31
CAD FILE: 12883-MULTI-PHAS
DRAWING FILE NO. 4-145-34

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Tuesday, July 15, 2025 COLOME, GIADHA

EXECUTIVE AIRPORT WAY

AES BUILDING

AES BUILDING EXPANSION (BY OTHERS)

MANHOLE

MANHOLE

MANHOLE

MANHOLE

TRENCH DRAIN

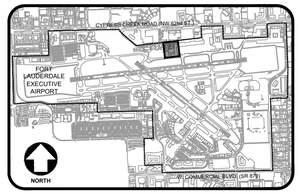
SF

20' 0' 20' 40'

GRAPHIC SCALE (IN FEET)

N

KEY MAP



LEGEND

SF — SILT FENCE

TEMPORARY INLET PROTECTION

EROSION NOTES

1. SEE SHEET C03 FOR EROSION CONTROL NOTES AND ADDITIONAL REQUIREMENTS.
2. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.
3. CONTRACTOR SHALL INSTALL AND MAINTAIN NECESSARY SYSTEMS THROUGHOUT THE DURATION OF THE CONTRACT AND PROVIDE ADDITIONAL BEST MANAGEMENT PRACTICES (BMP'S) AS REQUIRED TO MEET REGULATORY CRITERIA AT NO ADDITIONAL COST TO OWNER
4. CONTRACTOR SHALL INSTALL STABILIZED CONSTRUCTION ENTRANCE PRIOR TO BEGINNING ANY WORK. REFER TO SHEET G04 FOR TEMPORARY CONSTRUCTION ENTRANCE LOCATION.
5. CONTRACTOR WILL SUBMIT A PLAN FOR DUST CONTROL PRIOR TO ANY LAND DISTURBING ACTIVITIES PER ITEM C-102. THE PLAN MUST INCLUDE BUT NOT BE LIMITED TO, PROVIDING WATER TRUCK ON 24/7 BASIS CAPABLE OF BEING ON SITE WITHIN 30 MINUTES TO WATER DISTURBED AND UNPROTECTED SURFACES.
6. SWEEPER TRUCK SHALL FOLLOW ALL WORKING VEHICLES TO PREVENT FOREIGN OBJECT DEBRIS (FOD) ON OPEN TAXIWAYS. CONTRACTOR SHALL PROVIDE VACUUM TRUCKS IF RPR DEEMS THE SWEEPERS TO BE INSUFFICIENT FOR FOD PREVENTION.
7. THE LOCATION AND LIMITS OF SILT FENCE SHOWN ON THESE DRAWINGS ARE APPROXIMATE. THE ACTUAL LOCATION AND LIMITS WILL BE DETERMINED IN THE FIELD BASED ON CONTRACTOR CONSTRUCTION OPERATIONS AND WORK AREAS IN ACCORDANCE WITH APPROVED SWPPP AND AS AUTHORIZED BY THE CONSTRUCTION MANAGER.
8. CONTRACTOR MAY BE REQUIRED TO INSTALL/UNINSTALL AND/OR ADJUST EROSION CONTROL ITEMS BASED ON WORK AREA SEQUENCING BEYOND WHAT IS SHOWN ON THIS DRAWING.
9. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ANY SEDIMENT THAT LEAVES THE SITE AND CHANGES ANY DOWNSTREAM CONDITION BY RAISING CHANNEL BOTTOM AND/OR OUTFALL CULVERTS.

BID DOCUMENTS

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

ENGINEER: RAHEEL DOSSANI
REG. No: 89631
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY:	DATE:
SC	05/30/2025
DESIGNED BY:	SCALE:
RD	AS NOTED
CHECKED BY:	
WB	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS			
NO.	DATE	BY	CHK'D

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
EROSION CONTROL PLAN - BASE BID
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO.
C01

TOTAL: 31

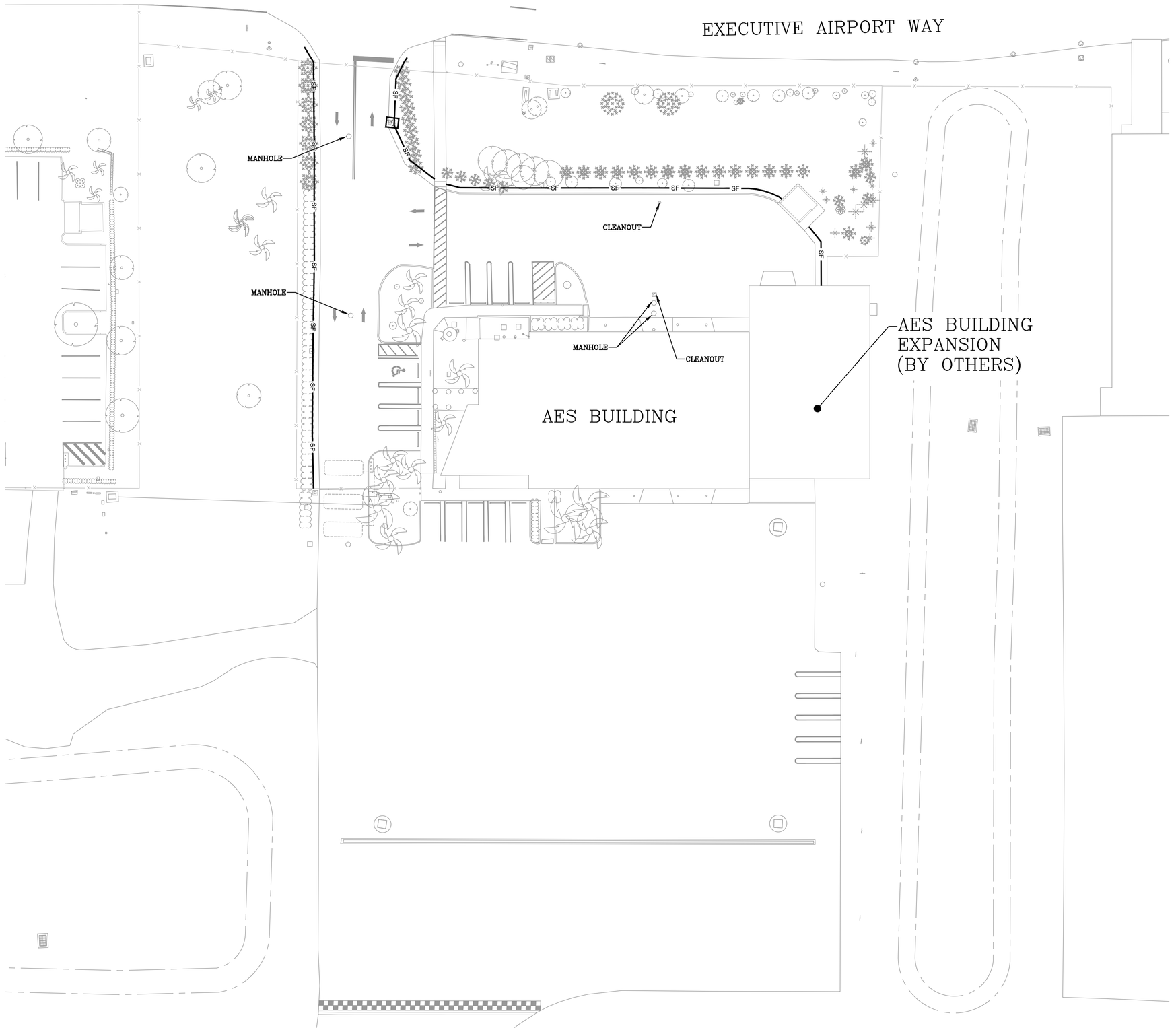
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12883-MULTI-EROS

DRAWING FILE NO.
4-145-34

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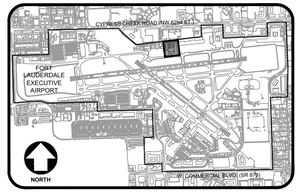
Tuesday, July 15, 2025 COLOME, GIADHA



20' 0' 20' 40'

GRAPHIC SCALE
(IN FEET)

KEY MAP



LEGEND

SF — SILT FENCE

TEMPORARY INLET PROTECTION

EROSION NOTES

1. SEE SHEET C03 FOR EROSION CONTROL NOTES AND ADDITIONAL REQUIREMENTS.
2. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.
3. CONTRACTOR SHALL INSTALL AND MAINTAIN NECESSARY SYSTEMS THROUGHOUT THE DURATION OF THE CONTRACT AND PROVIDE ADDITIONAL BEST MANAGEMENT PRACTICES (BMP'S) AS REQUIRED TO MEET REGULATORY CRITERIA AT NO ADDITIONAL COST TO OWNER
4. CONTRACTOR SHALL INSTALL STABILIZED CONSTRUCTION ENTRANCE PRIOR TO BEGINNING ANY WORK. REFER TO SHEET G04 FOR TEMPORARY CONSTRUCTION ENTRANCE LOCATION.
5. CONTRACTOR WILL SUBMIT A PLAN FOR DUST CONTROL PRIOR TO ANY LAND DISTURBING ACTIVITIES PER ITEM C-102. THE PLAN MUST INCLUDE BUT NOT BE LIMITED TO, PROVIDING WATER TRUCK ON 24/7 BASIS CAPABLE OF BEING ON SITE WITHIN 30 MINUTES TO WATER DISTURBED AND UNPROTECTED SURFACES.
6. SWEEPER TRUCK SHALL FOLLOW ALL WORKING VEHICLES TO PREVENT FOREIGN OBJECT DEBRIS (FOD) ON OPEN TAXIWAYS. CONTRACTOR SHALL PROVIDE VACUUM TRUCKS IF RPR DEEMS THE SWEEPERS TO BE INSUFFICIENT FOR FOD PREVENTION.
7. THE LOCATION AND LIMITS OF SILT FENCE SHOWN ON THESE DRAWINGS ARE APPROXIMATE. THE ACTUAL LOCATION AND LIMITS WILL BE DETERMINED IN THE FIELD BASED ON CONTRACTOR CONSTRUCTION OPERATIONS AND WORK AREAS IN ACCORDANCE WITH APPROVED SWPPP AND AS AUTHORIZED BY THE CONSTRUCTION MANAGER.
8. CONTRACTOR MAY BE REQUIRED TO INSTALL/UNINSTALL AND/OR ADJUST EROSION CONTROL ITEMS BASED ON WORK AREA SEQUENCING BEYOND WHAT IS SHOWN ON THIS DRAWING.
9. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ANY SEDIMENT THAT LEAVES THE SITE AND CHANGES ANY DOWNSTREAM CONDITION BY RAISING CHANNEL BOTTOM AND/OR OUTFALL CULVERTS.

BID DOCUMENTS

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

ENGINEER:
RAHEEL DOSSANI
REG. No: 89831
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY:	DESIGNED BY:	CHECKED BY:	FIELD BOOK:
SC	RD	WB	

DATE: 05/30/2025
SCALE: AS NOTED

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
EROSION CONTROL PLAN - BID ALT 1
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO.
C02

TOTAL: 31

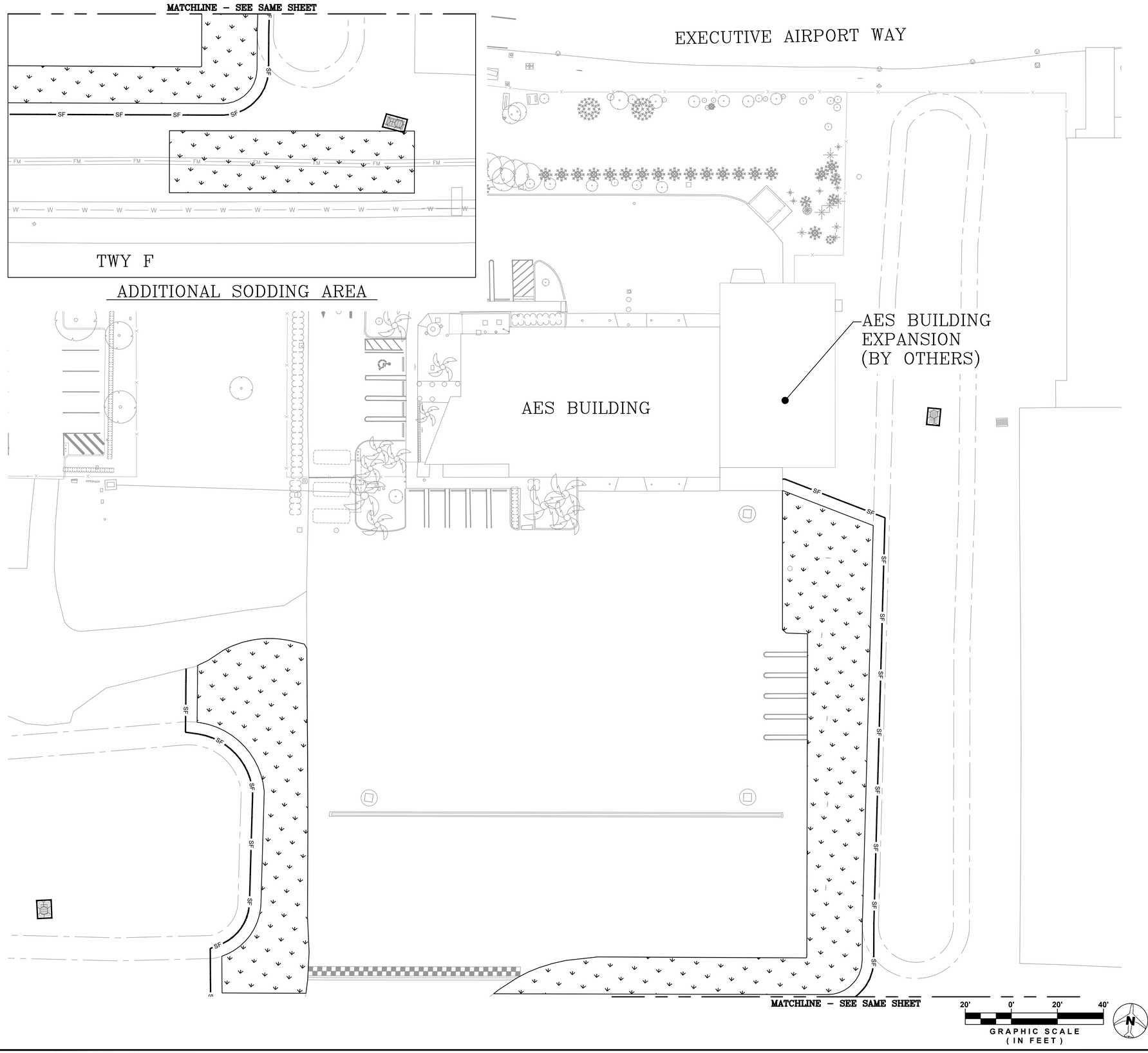
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4-145-34

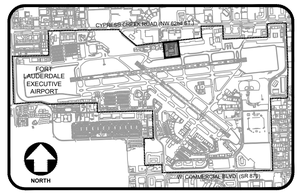
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Tuesday, July 15, 2025 COLOME, GIADHA



KEY MAP



LEGEND

- SF — SILT FENCE
- SODDING (WITH TOPSOIL)
- TEMPORARY INLET PROTECTION

EROSION NOTES

1. SEE SHEET C03 FOR EROSION CONTROL NOTES AND ADDITIONAL REQUIREMENTS.
2. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.
3. CONTRACTOR SHALL INSTALL AND MAINTAIN NECESSARY SYSTEMS THROUGHOUT THE DURATION OF THE CONTRACT AND PROVIDE ADDITIONAL BEST MANAGEMENT PRACTICES (BMP'S) AS REQUIRED TO MEET REGULATORY CRITERIA AT NO ADDITIONAL COST TO OWNER
4. CONTRACTOR SHALL INSTALL STABILIZED CONSTRUCTION ENTRANCE PRIOR TO BEGINNING ANY WORK. REFER TO SHEET G04 FOR TEMPORARY CONSTRUCTION ENTRANCE LOCATION.
5. CONTRACTOR WILL SUBMIT A PLAN FOR DUST CONTROL PRIOR TO ANY LAND DISTURBING ACTIVITIES PER ITEM C-102. THE PLAN MUST INCLUDE BUT NOT BE LIMITED TO, PROVIDING WATER TRUCK ON 24/7 BASIS CAPABLE OF BEING ON SITE WITHIN 30 MINUTES TO WATER DISTURBED AND UNPROTECTED SURFACES.
6. SWEEPER TRUCK SHALL FOLLOW ALL WORKING VEHICLES TO PREVENT FOREIGN OBJECT DEBRIS (FOD) ON OPEN TAXIWAYS. CONTRACTOR SHALL PROVIDE VACUUM TRUCKS IF RPR DEEMS THE SWEEPERS TO BE INSUFFICIENT FOR FOD PREVENTION.
7. THE LOCATION AND LIMITS OF SILT FENCE SHOWN ON THESE DRAWINGS ARE APPROXIMATE. THE ACTUAL LOCATION AND LIMITS WILL BE DETERMINED IN THE FIELD BASED ON CONTRACTOR CONSTRUCTION OPERATIONS AND WORK AREAS IN ACCORDANCE WITH APPROVED SWPPP AND AS AUTHORIZED BY THE CONSTRUCTION MANAGER.
8. CONTRACTOR MAY BE REQUIRED TO INSTALL/UNINSTALL AND/OR ADJUST EROSION CONTROL ITEMS BASED ON WORK AREA SEQUENCING BEYOND WHAT IS SHOWN ON THIS DRAWING.
9. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ANY SEDIMENT THAT LEAVES THE SITE AND CHANGES ANY DOWNSTREAM CONDITION BY RAISING CHANNEL BOTTOM AND/OR OUTFALL CULVERTS.

BID DOCUMENTS

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

ENGINEER: RAHEEL DOSSANI
REG. No: 89631
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY: SC | DATE: 05/30/2025
DESIGNED BY: RD | SCALE: AS NOTED
CHECKED BY: WB | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHKD	DESCRIPTION

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
EROSION CONTROL PLAN - BID ALT 2
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO. C03
TOTAL: 31
CAD FILE: 12883-MULTI-EROS
DRAWING FILE NO. 4-145-34

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

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Tuesday, July 15, 2025 COLOME, GIADHA

SHEET FLOW APPLICATION: SILT FENCE

1. THIS SEDIMENT BARRIER USES STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED.
2. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES. HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.
3. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED AS DESCRIBED IN ITEM NO. 8 BELOW.
4. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 12 INCHES. WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET.
5. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 4 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
6. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
7. WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF ITEM NO. 6 APPLYING.
8. WHEN ATTACHING TWO SLIT FENCES TOGETHER, PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE. ROTATE BOTH POSTS AT LEAST 180 DEGREES ON A CLOCKWISE DIRECTIONS TO CREATE A TIGHT SEAL WITH THE FILTER FABRIC. DRIVE BOTH POSTS INTO THE GROUND AND BURY THE FLAP.
9. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
10. WHEN USED TO CONTROL SEDIMENTS FROM A STEEP SLOPE, SILT FENCES SHOULD BE PLACED AWAY FROM THE TOE OF THE SLOPE FOR INCREASED HOLDING CAPACITY.
11. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED AND PRIOR TO ADJACENT AIRFIELD PAVEMENTS BEING OPENED TO TRAFFIC.

CHANNEL FLOW APPLICATIONS

1. IF A FILTER BARRIER IS TO BE CONSTRUCTED ACROSS A DITCH LINE OR SWALE, THE BARRIER SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE BOTTOM OF THE END SECTIONS OF THE FENCE ARE HIGHER IN ELEVATION THAN THE TOP OF THE CENTER SECTION TO ELIMINATE END FLOW. THE PLAN CONFIGURATION SHALL RESEMBLE AN ARC OR HORSESHOE WITH THE ENDS ORIENTED UPSLOPE.
2. USE FDOT STANDARD INDEX 102, CHART 1 AS A GUIDE FOR SPACING.

MAINTENANCE

1. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE BEFORE THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

GENERAL STORMWATER PREVENTION NOTES

1. THE CONTRACTOR SHALL COMPLY WITH ALL TERMS AND CONDITIONS OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) NPDES PERMIT. IN PARTICULAR, SEDIMENT AND EROSION CONTROLS, STORMWATER MANAGEMENT MEASURES, DUST CONTROL, WASTE MANAGEMENT MEASURES SHALL BE STRICTLY FOLLOWED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL EROSION SEDIMENTATION AND STORMWATER MANAGEMENT MEASURES FOR THE DURATION OF THE PROJECT UNTIL FINAL STABILIZATION. ONCE THE PROJECT HAS BEEN COMPLETED, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY STORMWATER, EROSION AND SEDIMENT MEASURES AND SHALL DISPOSE OF THEM IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS.
3. THE CONTRACTOR SHALL SUBMIT AN FDEP NOTICE OF INTENT (NOI) CONSTRUCTION GENERAL PERMIT (CGP) TO THE FDEP AND PROVIDE CONFIRMATION OF COVERAGE PRIOR TO COMMENCEMENT OF ANY WORK.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL APPLICABLE RECORD KEEPING, UPDATING OF THE STORWMATER POLLUTION PREVENTION PLAN (SWPPP) AND MAINTENANCE OF ALL MEASURES THROUGHOUT THE DURATION OF CONSTRUCTION UNTIL FINAL STABILIZATION AND COMPLETION OF THE PROJECT. TEMPORARY MEASURES IMPLEMENTED AS PART OF THE PROJECT SWPPP SHALL BE IN ACCORDANCE WITH APPLICABLE REGULATORY CRITERIA AND THE FLORIDA EROSION AND SEDIMENTATION CONTROL INSPECTORS MANUAL.
5. TO ENSURE THAT OFF-SITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST IS MINIMIZED, CONTRACTOR IS TO PUT INTO PRACTICE THE METHODS DETAILED IN THE SOIL TRACKING PREVENTION DEVICE OF THE FLORIDA EROSION AND SEDIMENT CONTROL MANUAL (LATEST VERSION).
6. DUST GENERATED FROM CONSTRUCTION WILL BE MINIMIZED BY WATERING OF THE SITE AS NECESSARY WITH A MINIMUM FREQUENCY OF ONCE DAILY.
7. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
8. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
9. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
10. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
11. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
12. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
13. TEMPORARY ROADS SHALL FOLLOW THE CONTOUR OF THE NATURAL TERRAIN TO THE EXTENT POSSIBLE. SLOPES SHOULD NOT EXCEED 10 PERCENT.
14. TEMPORARY PARKING AREAS SHOULD BE LOCATED ON NATURALLY FLAT AREAS TO MINIMIZE GRADING. GRADES SHOULD BE SUFFICIENT TO PROVIDE DRAINAGE BUT SHOULD NOT EXCEED 4 PERCENT.
15. ROADBEDS SHALL BE AT LEAST 14 FEET WIDE FOR ONE-WAY TRAFFIC AND 20 FEET WIDE FOR TWO-WAY TRAFFIC.
16. ALL CUTS AND FILLS SHALL HAVE SIDE SLOPES THAT ARE STABLE FOR THE PARTICULAR SOIL. SLOPES OF 2:1 OR FLATTER ARE RECOMMENDED FOR CLAY SOILS, AND SLOPES OF 3:1 OR FLATTER ARE RECOMMENDED FOR SANDY SOILS.
17. STORMWATER SYSTEM SHALL BE PROVIDED AS NEEDED AND SHALL BE DESIGNED AND CONSTRUCTED ACCORDING TO APPLICABLE REGULATIONS.
18. THE ROADBED OR PARKING SURFACE SHALL BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
19. A 6 INCH COURSE OF FDOT NO. 1 AGGREGATE SHALL BE APPLIED IMMEDIATELY AFTER GRADING OR THE COMPLETION OF UTILITY INSTALLATION WITHIN THE RIGHT-OF-WAY. FILTER FABRIC MAY BE APPLIED TO THE ROADBED FOR ADDITIONAL STABILITY ACCORDING TO THE FABRIC MANUFACTURER'S SPECIFICATIONS.
20. WHERE USED AS SLOPE PROTECTION, SILT FENCE IS TO BE CONSTRUCTED ON 0% LONGITUDINAL GRADE TO AVOID CHANNELIZING RUNOFF ALONG THE LENGTH OF THE FENCE.

CONTRACTOR'S NPDES PERMIT REQUIREMENTS

1. CONTRACTOR SHALL OBTAIN COVERAGE UNDER AN NPDES STORMWATER PERMIT AND IMPLEMENT APPROPRIATE POLLUTION PREVENTION TECHNIQUES TO MINIMIZE EROSION AND SEDIMENTATION AND PROPERLY MANAGE STORMWATER. A GENERIC PERMIT IS A GENERAL PERMIT ISSUED BY DEP UNDER THE AUTHORITY OF SECTION 403.0885, FLORIDA STATUTES (F.S.), WHICH IS THE PROVISION AUTHORIZING THE STATE TO IMPLEMENT THE NPDES PROGRAM.
2. CONTRACTOR SHALL SUBMIT A CGP NOTICE OF INTENT (NOI) TO THE NPDES STORMWATER NOTICES CENTER TO OBTAIN PERMIT COVERAGE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITY.
3. CONTRACTOR SHALL DEVELOP A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) TO BE IN COMPLIANCE WITH THE PERMIT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITY.
4. CONTRACTOR SHALL SUBMIT A NOTICE OF TERMINATION (NOT) TO THE NPDES STORMWATER NOTICES CENTER TO DISCONTINUE PERMIT COVERAGE. PERMIT COVERAGE SHALL BE TERMINATED WHEN THE ELIGIBILITY REQUIREMENTS FOR TERMINATION SPECIFIED IN THE CGP ARE MET.
5. CONTRACTOR SHALL RENEW COVERAGE EVERY FIVE YEARS IF THE CONSTRUCTION ACTIVITY EXTENDS BEYOND A 5-YEAR PERIOD.

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DESIGNED BY: RD
SCALE: AS NOTED
CHECKED BY: WB
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

BID DOCUMENTS

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
EROSION CONTROL NOTES
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

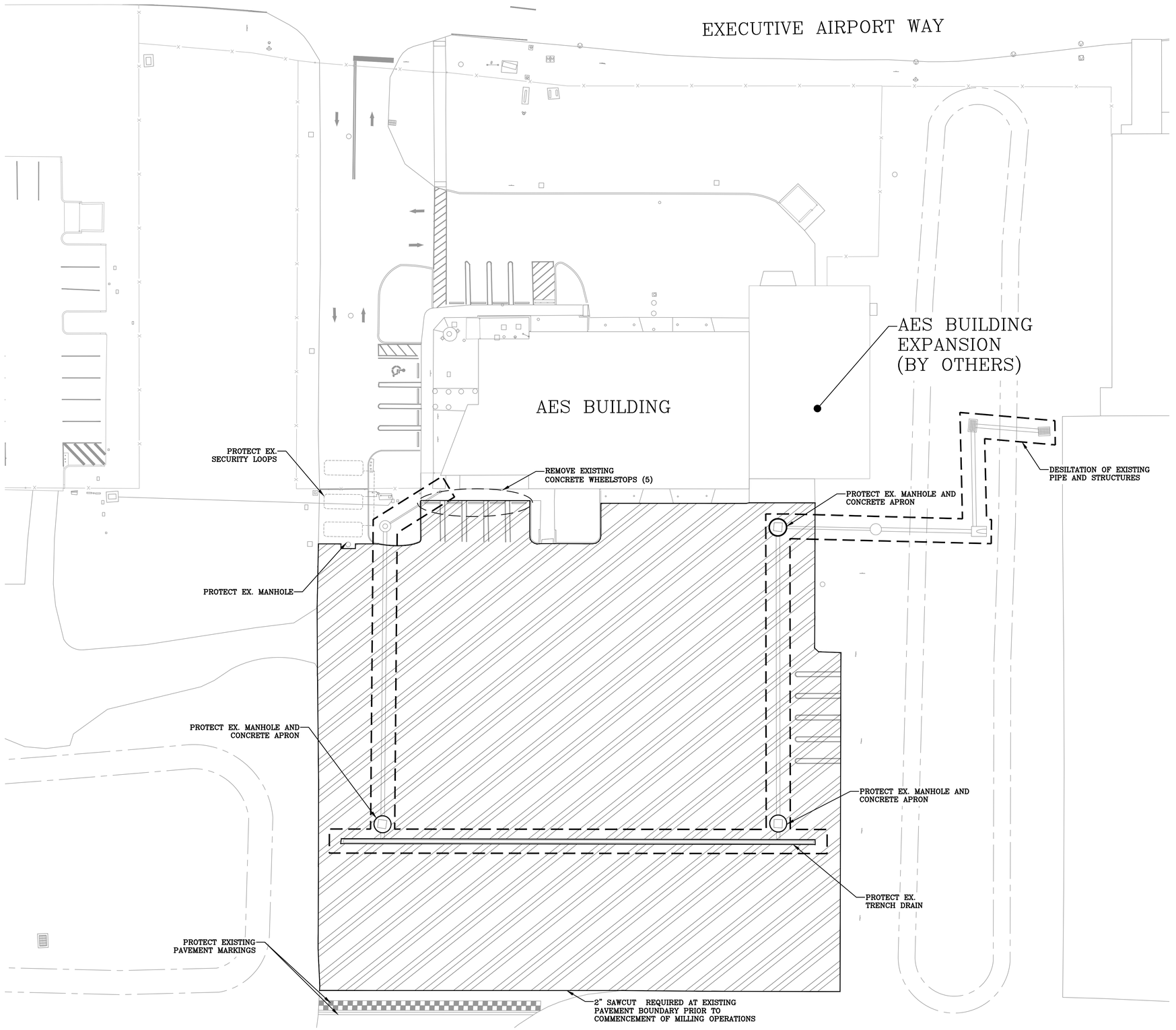
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SHEET NO. C04
TOTAL: 31
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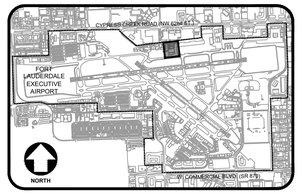
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Tuesday, July 15, 2025 COLOME, GIADHA



KEY MAP



LEGEND

COLD MILLING, 2" DEPTH

DESILTATION OF EXISTING PIPE AND STRUCTURES, SEE NOTE 7

DEMOLITION NOTES

1. CONTRACTOR WILL PROTECT ALL EXISTING CONCRETE OR ASPHALT PAVEMENT TO REMAIN IN PLACE DURING MILLING AND FULL DEPTH PAVEMENT REMOVAL. ALL CONCRETE OR ASPHALT PAVEMENT DAMAGED DURING MILLING AND REMOVAL SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE BY A METHOD SATISFACTORY TO THE ENGINEER.
2. CONTRACTOR SHALL USE A METHOD OF MARKING REMOVAL THAT DOES NOT DAMAGE EXISTING PAVEMENT AND JOINT SEALS. ANY DAMAGE CAUSED TO THE EXISTING PAVEMENT JOINT SEALS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
3. CONTRACTOR SHALL PROTECT ALL MARKINGS TO REMAIN. ANY MARKINGS THAT ARE DAMAGED OR INADVERTENTLY REMOVED SHALL BE REPAINTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
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5. CONTRACTORS SHALL PROTECT EXISTING AIRFIELD LIGHTING AND NAVIGATIONAL AID POWER SUPPLY, GROUNDING AND COUNTERPOISE SYSTEMS EXISTING IN THE AREAS OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH AIRPORT FACILITIES PRIOR TO DIGGING. THESE ITEMS ARE LOCAL TO THE AIRPORT AND ARE NOT IDENTIFIED BY FLORIDA SUNSHINE ONE CALL.
6. PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL REQUEST FAA UTILITIES LOCATES.
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DATE: 05/30/2025
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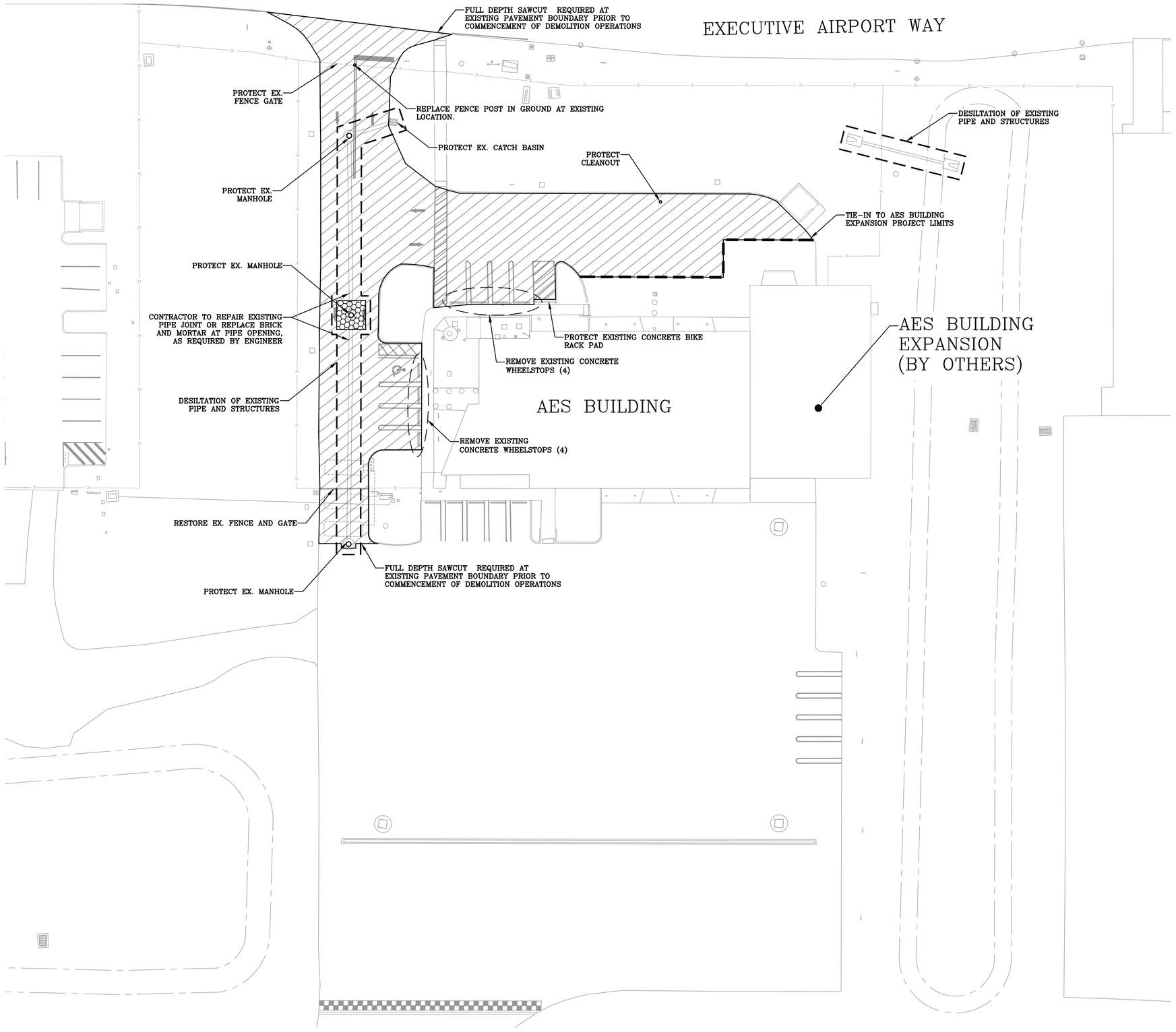
PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
DEMOLITION PLAN - BASE BID
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

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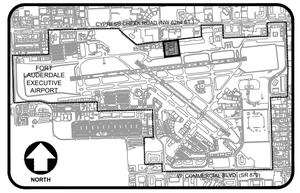
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Tuesday, July 15, 2025 COLOME, GIADHA



KEY MAP



LEGEND

- ASPHALT PAVEMENT REMOVAL
- FULL DEPTH ASPHALT REMOVAL, INCLUDING BASE MATERIAL AND SUBBASE
- DESILTATION OF EXISTING PIPE AND STRUCTURES, SEE NOTE 7

DEMOLITION NOTES

1. CONTRACTOR WILL PROTECT ALL EXISTING CONCRETE OR ASPHALT PAVEMENT TO REMAIN IN PLACE DURING MILLING AND FULL DEPTH PAVEMENT REMOVAL. ALL CONCRETE OR ASPHALT PAVEMENT DAMAGED DURING MILLING AND REMOVAL SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE BY A METHOD SATISFACTORY TO THE ENGINEER.
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5. THERE ARE EXISTING AIRFIELD LIGHTING AND NAVIGATIONAL AID POWER SUPPLY, GROUNDING AND COUNTERPOISE SYSTEMS EXISTING IN THE AREAS OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH AIRPORT FACILITIES PRIOR TO DIGGING. THESE ITEMS ARE LOCAL TO THE AIRPORT AND ARE NOT IDENTIFIED BY FLORIDA SUNSHINE ONE CALL.
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PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

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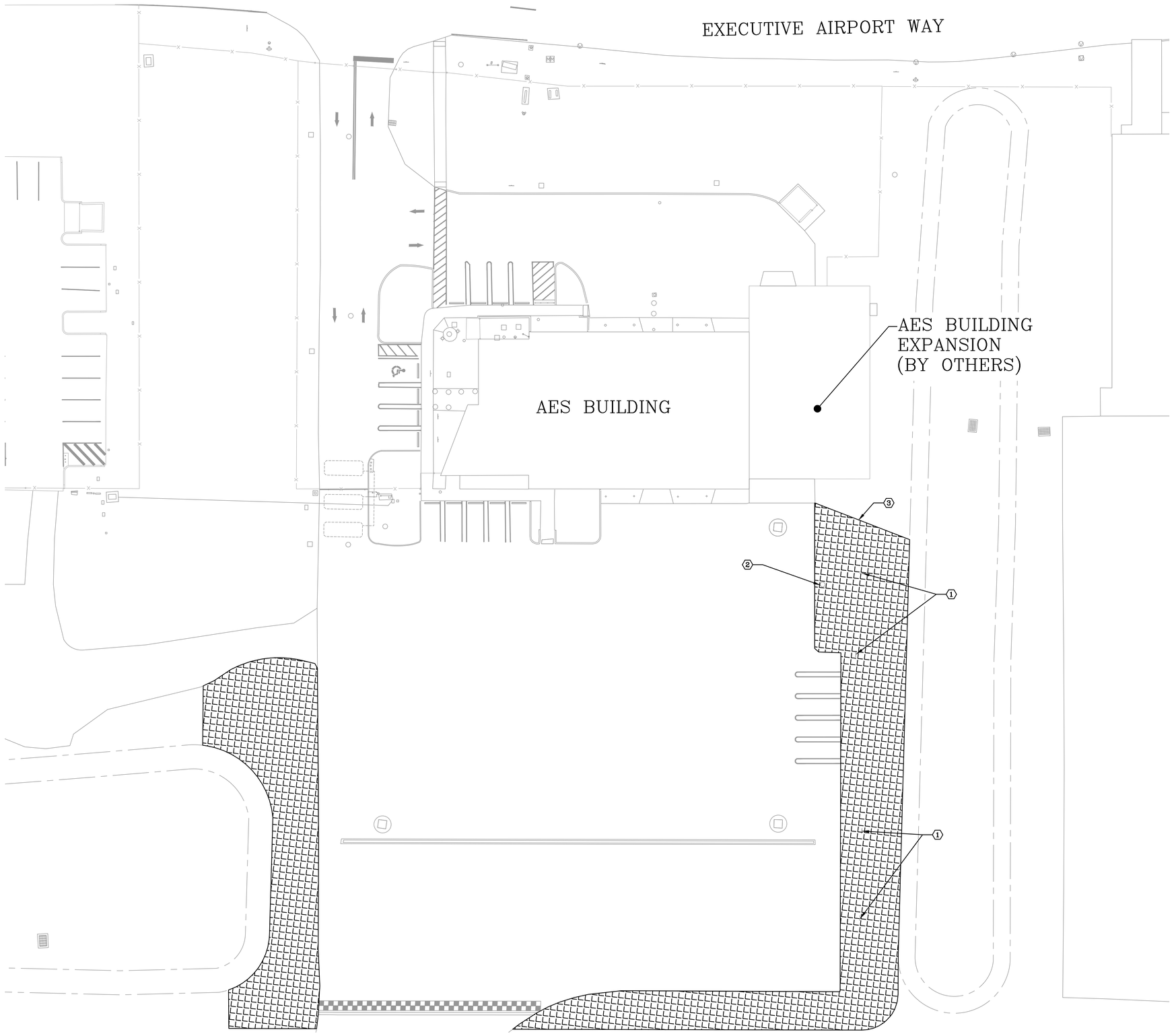
PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
DEMOLITION PLAN - BID ALT 1
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

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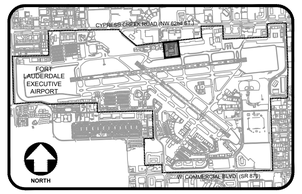
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Tuesday, July 15, 2025 COLOME, GIADHA

CAM 26-0136
Exhibit 1
Page 327 of 377



KEY MAP



LEGEND

STRIPPING

SHEET KEYNOTES

1. PROTECT EXISTING SIGN
2. PROTECT EXISTING HOSEBIB
3. STRIPPING LIMITS SHALL MATCH THE LIMITS OF DISTURBANCE SHOWN ON THE GRADING PLAN ON SHEET C14

DEMOLITION NOTES

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7. CONTRACTOR TO CLEAN OUT AND REMOVE SILT FROM ALL EXISTING INLETS AND PIPES WITHIN THE PROJECT AREA AND TO THE NEAREST OUTFALL. CONTRACTOR TO PROVIDE A VIDEO OF EACH PIPE CLEANED. DESILTATION SHALL BE PAID UNDER SPECIFICATION D-751.
8. STRIPPING SHALL INCLUDE BLADING GRASS, AND REMOVAL OR VEGETATION, AND TOPSOIL FROM THE SURFACE DOWN TO 4" BELOW THE EXISTING GRADE. THE STRIPPING DEPTH SHALL BE MINIMIZED AS TO MINIMIZE THE QUANTITY OF EMBANKMENT REQUIRED.

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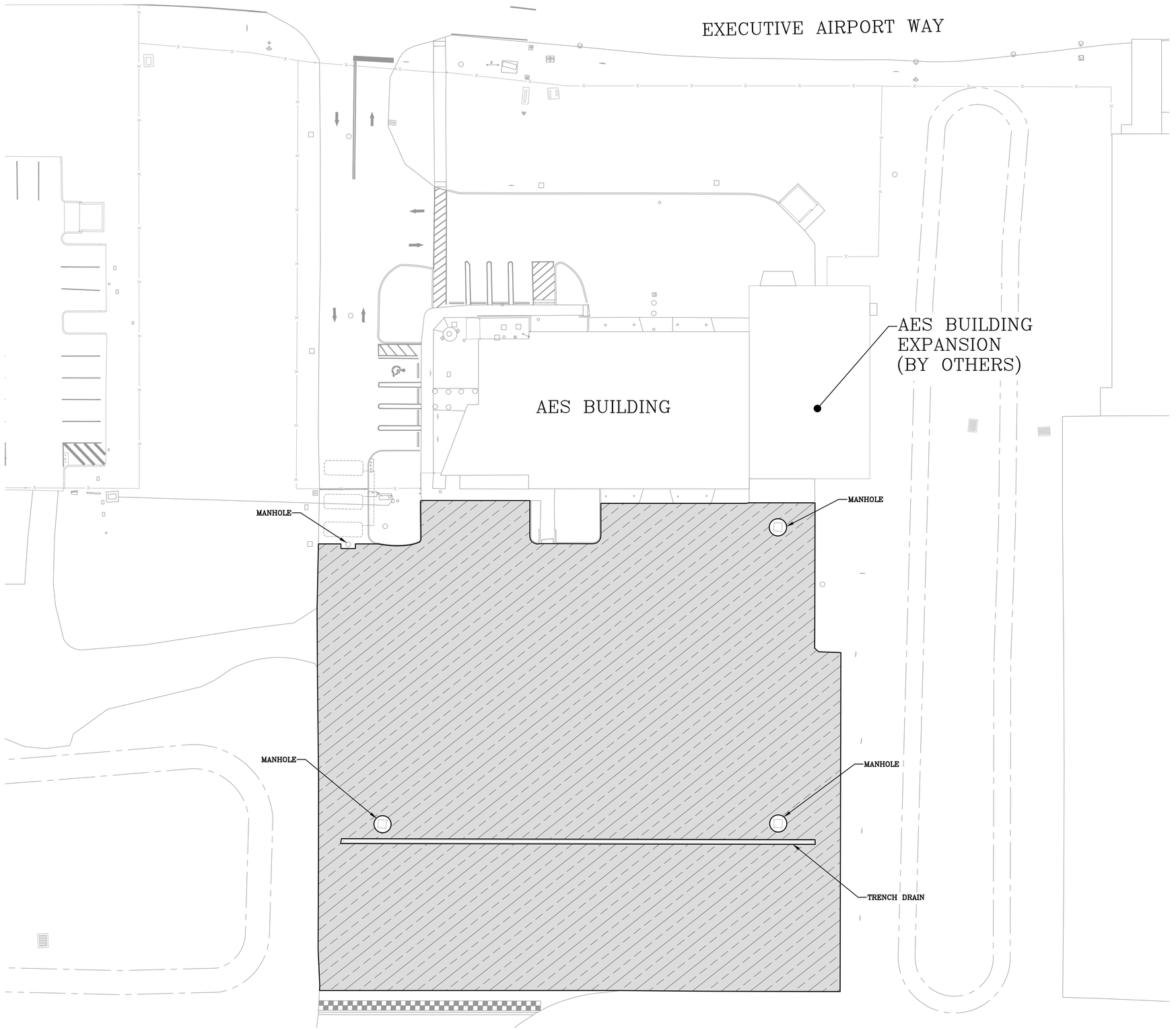
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AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
DEMOLITION PLAN - BID ALT 2
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

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CAD FILE: 12883-MULTI-DEMO
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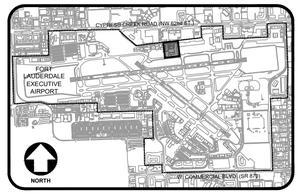
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Tuesday, July 15, 2025 COLOME, GIADHA



KEY MAP



LEGEND

2" P-401 ASPHALT OVERLAY, SEE DETAIL 1 ON SHEET C10

GEOMETRY NOTES

1. LOCATIONS AND SIZES OF ALL EXISTING SURFACE FEATURES, UNDERGROUND UTILITIES AND STRUCTURES MAY BE APPROXIMATE AND WERE DETERMINED FROM BEST INFORMATION AVAILABLE (SURVEY DATA, AS-BUILTS DRAWINGS, OR CONSTRUCTION DOCUMENTS).
2. CONTRACTOR SHALL REPORT TO THE AIRPORT ANY DISCREPANCIES PRIOR TO BEGINNING WORK.
3. CONTRACTOR TO VERIFY LOCATIONS IN THE FIELD PRIOR TO CONSTRUCTION.
4. IN CASE WHERE GEOMETRY IS NOT DELINEATED BY STATION/OFFSET OR NORTHING/EASTING, IT SHALL MATCH THE EXISTING LAYOUT OF THE MILLED EDGE OF PAVEMENT.
5. PAVING LIMITS MAY BE ADJUSTED SLIGHTLY DURING CONSTRUCTION BY THE ENGINEER BASED ON OBSERVATIONS IN THE FIELD.

BID DOCUMENTS

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

ENGINEER: RAHEEL DOSSANI
REG. No: 89631
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY:	DESIGNED BY:	CHECKED BY:	FIELD BOOK:
SC	RD	WB	

DATE: 05/30/2025
SCALE: AS NOTED

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

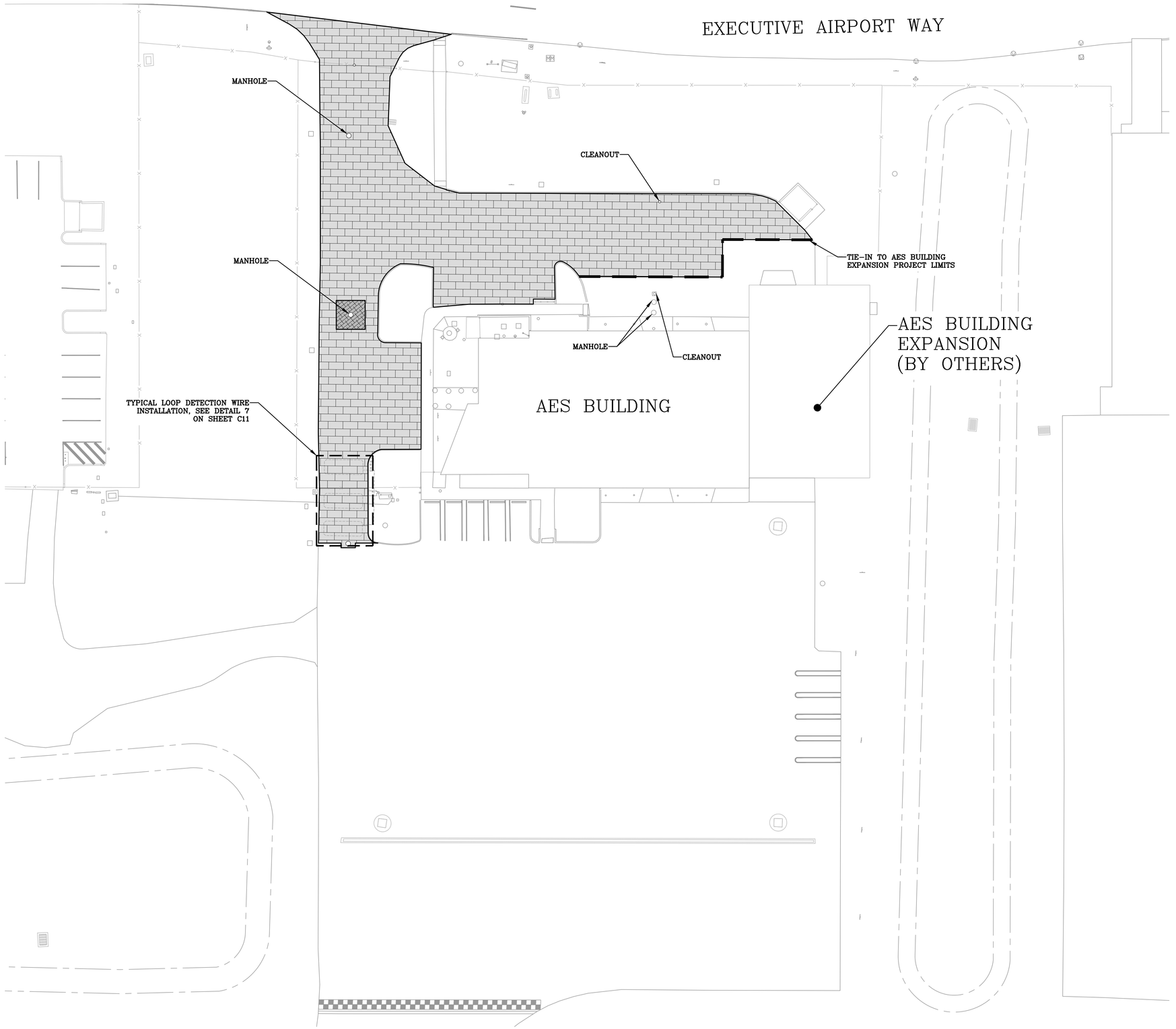
PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
GEOMETRY AND PAVING PLAN - BASE BID
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO. C08
TOTAL: 31
CAD FILE: 12883-MULTI-GEOM
DRAWING FILE NO. 4-145-34

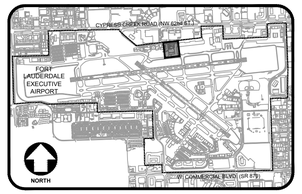
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Tuesday, July 15, 2025 COLOME, GIADHA



KEY MAP



LEGEND

2" FDOT TYPE SP 12.5 ASPHALT OVERLAY, SEE DETAIL 2 ON SHEET C10

FULL DEPTH ASPHALT PAVEMENT SECTION, SEE DETAIL 3 ON SHEET C10

GEOMETRY NOTES

1. LOCATIONS AND SIZES OF ALL EXISTING SURFACE FEATURES, UNDERGROUND UTILITIES AND STRUCTURES MAY BE APPROXIMATE AND WERE DETERMINED FROM BEST INFORMATION AVAILABLE (SURVEY DATA, AS-BUILTS DRAWINGS, OR CONSTRUCTION DOCUMENTS).
2. CONTRACTOR SHALL REPORT TO THE AIRPORT ANY DISCREPANCIES PRIOR TO BEGINNING WORK.
3. CONTRACTOR TO VERIFY LOCATIONS IN THE FIELD PRIOR TO CONSTRUCTION.
4. IN CASE WHERE GEOMETRY IS NOT DELINEATED BY STATION/OFFSET OR NORTHING/EASTING, IT SHALL MATCH THE EXISTING LAYOUT OF THE MILLED EDGE OF PAVEMENT.
5. PAVING LIMITS MAY BE ADJUSTED SLIGHTLY DURING CONSTRUCTION BY THE ENGINEER BASED ON OBSERVATIONS IN THE FIELD.

20' 0' 20' 40'
GRAPHIC SCALE (IN FEET)

BID DOCUMENTS

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

ENGINEER: RAHEEL DOSSANI
REG. No: 89631
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY:	DATE:
SC	05/30/2025
DESIGNED BY:	SCALE:
RD	AS NOTED
CHECKED BY:	
WB	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
GEOMETRY AND PAVING PLAN - BID ALT 1
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO.
C09

TOTAL: 31

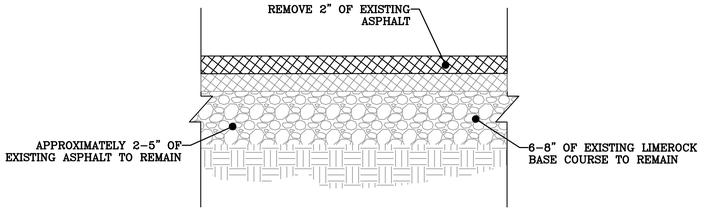
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DRAWING FILE NO. 4-145-34

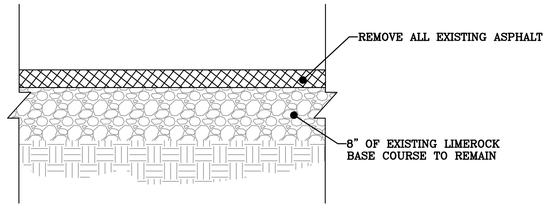
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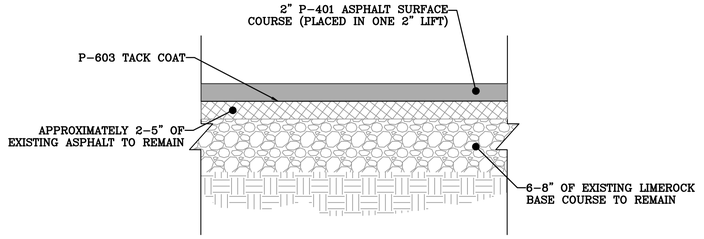
Tuesday, July 15, 2025 COLOME, GIADHA



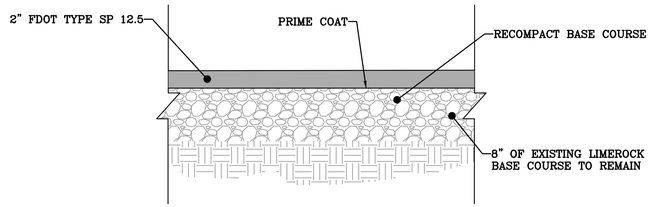
MILLING DETAIL



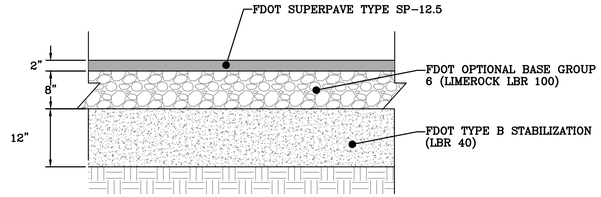
MILLING DETAIL



ASPHALT OVERLAY DETAIL



ASPHALT OVERLAY DETAIL



ASPHALT OVERLAY DETAIL

NOTES

1. PROVIDE PRIME COAT IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS SECTION 300.

① APRON REHABILITATION DETAIL

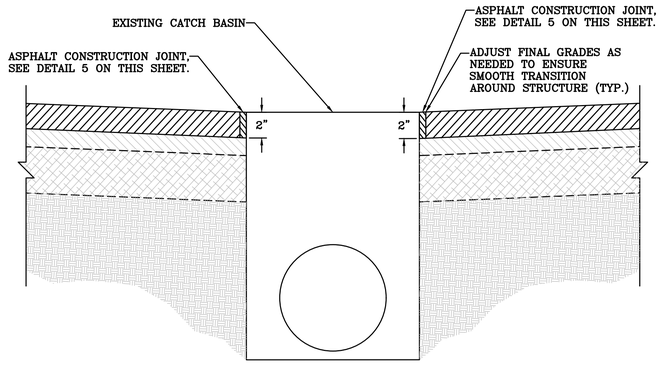
NOT TO SCALE

② PARKING LOT REHABILITATION DETAIL (BID ALTERNATE 1)

NOT TO SCALE

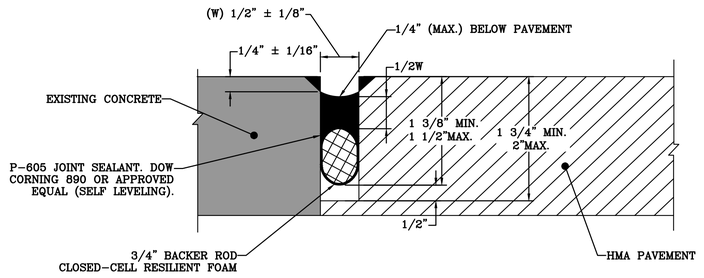
③ HMA LANDSIDE FULL DEPTH PAVEMENT SECTION (BID ALTERNATE 1)

NOT TO SCALE



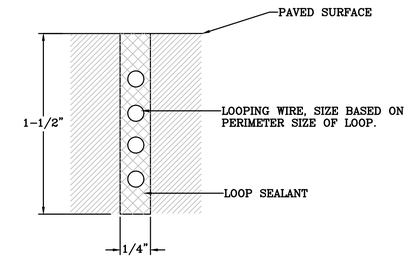
④ APRON PAVING AROUND EXISTING CONCRETE STRUCTURES DETAIL

NOT TO SCALE



⑤ ASPHALT CONSTRUCTION JOINT

NOT TO SCALE



NOTES

1. DO NOT EXCEED A MAXIMUM OF 200 SQUARE FEET OF LOOP AREA TO ONLY ONE DETECTOR.
2. IN APPLICATIONS THAT NEED TO SPAN A WIDE AREA, USE SEVERAL SMALLER LOOPS. IF MULTIPLE LOOPS ARE USED KEEP EACH LOOP AT LEAST SIX FEET APART.
3. LOOP AND LEAD-IN WIRE SHOULD BE ONE CONTINUOUS PIECE.
4. USE ONLY 14, 16, OR 18 GUAGE STRANDED WIRE WITH A DIRECT BURIAL JACKET. A CROSS LINKED POLYETHYLENE INSULATION SHALL BE USED.
5. TWIST LOOSE TAILS OF LEAD-IN AT LEAST 10 TURNS PER FOOT.
6. THE SLOT IN THESURFACE SHOULD BE CUT 1/4"W x 1-1/2"D.
7. AFTER WIRE IS INSTALLED THE SLOT MUST BE COMPLETELY BACKFILLED WITH A NON-HARDENING SEALER.
8. NUMBER OF INDIVIDUAL WIRE LOOPS FOR LOOP SECTION BASED ON MANUFACTURER'S SPECIFICATIONS.

⑥ TYPICAL LOOP DETECTION WIRE INSTALLATION

NOT TO SCALE

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

BID DOCUMENTS

ENGINEER: RAHEEL DOSSANI
REG. No: 89831
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY:	DATE:
SC	05/30/2025
DESIGNED BY:	SCALE:
RD	AS NOTED
CHECKED BY:	
WB	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
SITE DETAILS
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO.
C10

TOTAL: 31

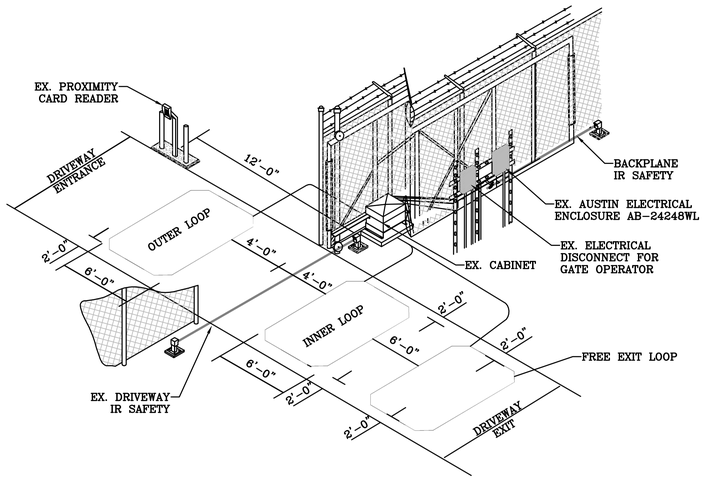
CAD FILE:
12883-MULTI-SITE

DRAWING FILE NO.
4-145-34

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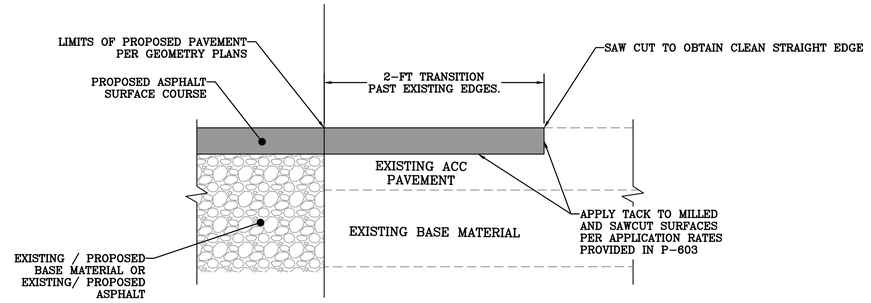
Tuesday, July 15, 2025 COLOME, GIADHA



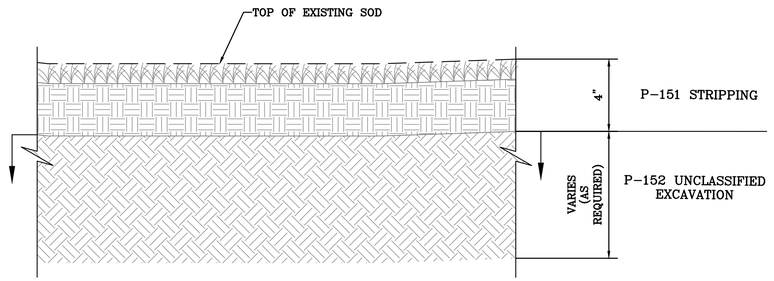
NOTES

1. PROVIDE VEHICLE LOOPS IN ACCORDANCE WITH FDOT STANDARD PLANS 660-001 AND FDOT STANDARD SPECIFICATIONS SECTION 660.

⑦ TYPICAL GATE OPERATOR SAFETY REQUIREMENT DETAIL
NOT TO SCALE



⑧ ASPHALT TRANSITION DETAIL
NOT TO SCALE



⑨ STRIPPING DETAIL
NOT TO SCALE

BID DOCUMENTS

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

ENGINEER:
RAHEEL DOSSANI
REG. No: 89631
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY: SC | DATE: 05/30/2025
DESIGNED BY: RD | SCALE: AS NOTED
CHECKED BY: WB | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

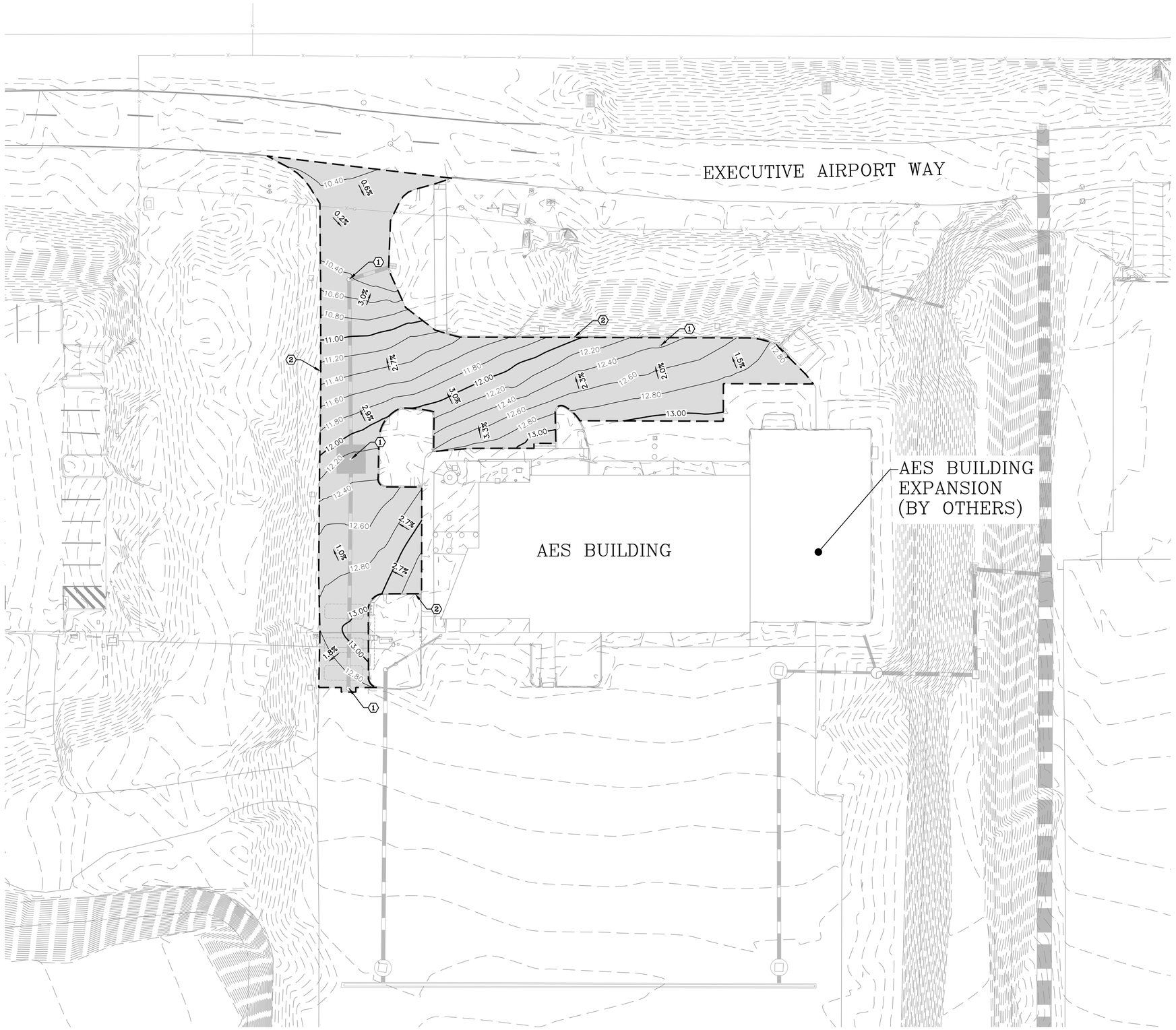
NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
SITE DETAILS
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO. C11
TOTAL: 31
CAD FILE: 12883-MULTI-SITE
DRAWING FILE NO. 4-145-34

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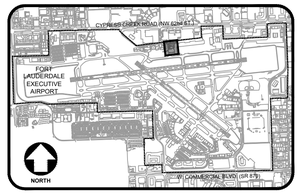
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Tuesday, July 15, 2025 COLOME, GIADHA



THE ELEVATION SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88). TO CONVERT THE ELEVATIONS HEREON TO NATIONAL GEODETIC VERTICAL DATUM (NGVD29) ADD 1.585 FEET.

GRAPHIC SCALE (IN FEET)
20' 0' 20' 40'

KEY MAP



LEGEND

- PROPOSED BID ALT-1 PAVEMENT REHABILITATION
- —X.XX— PROPOSED MAJOR CONTOUR (1-FOOT)
- —X.XX— PROPOSED MINOR CONTOUR (0.2-FOOT)
- —X.XX— EXISTING CONTOUR (0.2-FOOT)
- LIMITS OF DISTURBANCE
- EXISTING STORM PIPE

GRADING NOTES

1. CONTRACTOR SHALL MATCH GRADE AROUND ALL EXISTING STRUCTURES TO REMAIN.

SHEET KEYNOTES

(1) CONTRACTOR SHALL PROTECT AND MATCH EXISTING GRADE AT EXISTING STRUCTURES

(2) CONTRACTOR SHALL MATCH EXISTING EDGE OF ASPHALT PAVEMENT ELEVATIONS FOR ALL LIMITS OF BID ALT 1 WORK. THIS INCLUDES TYING INTO EXISTING SIDEWALKS AND CURB AND GUTTER

BID DOCUMENTS

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

ENGINEER: RAHEEL DOSSANI
REG. No: 89631
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY:	DATE:
SC	05/30/2025
DESIGNED BY:	SCALE:
RD	AS NOTED
CHECKED BY:	FIELD BOOK:
WB	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

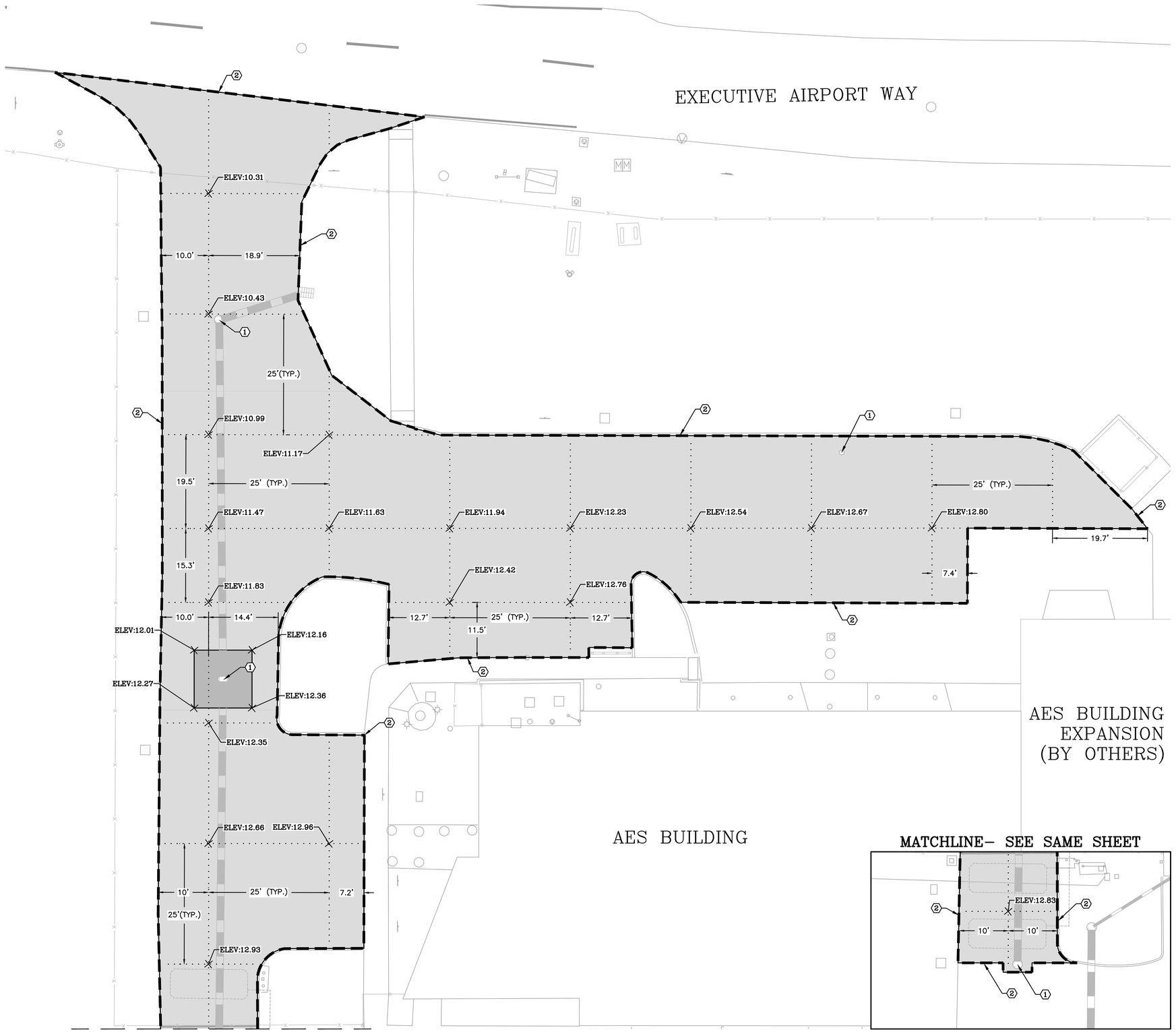
PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
GRADING PLAN - BID ALT 1
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO.	
C12	
TOTAL:	31
CAD FILE:	12883-C12-GRAD
DRAWING FILE NO.	4-145-34

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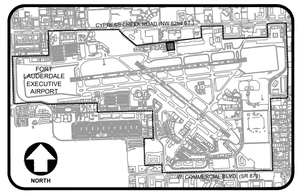
Tuesday, July 15, 2025 COLOME, GIADHA



THE ELEVATION SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88). TO CONVERT THE ELEVATIONS HEREON TO NATIONAL GEODETIC VERTICAL DATUM (NGVD29) ADD 1.585 FEET.

GRAPHIC SCALE (IN FEET)
10' 0' 10' 20'

KEY MAP



LEGEND

- PROPOSED BID ALT–1 PAVEMENT REHABILITATION
- ELEV: X.XX PROPOSED ELEVATION
- MATCH EXISTING ELEVATION
- EXISTING STORM PIPE

ELEVATION NOTES

1. CONTRACTOR MUST USE THIS SPOT ELEVATION PLAN AND GRID TO PROVIDE AS–BUILT ELEVATIONS FOR BASE COURSE AND FINAL ASPHALT LIFT.

SHEET KEYNOTES

(1) CONTRACTOR SHALL PROTECT AND MATCH EXISTING GRADE AT EXISTING STRUCTURES

(2) CONTRACTOR SHALL MATCH EXISTING EDGE OF ASPHALT PAVEMENT ELEVATIONS FOR ALL LIMITS OF BID ALT 1 WORK. THIS INCLUDES TYING INTO EXISTING SIDEWALKS AND CURB AND GUTTER

ENGINEER: RAHEEL DOSSANI
REG. No: 89631
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY: SC | DESIGNED BY: RD | CHECKED BY: WB
DATE: 05/30/2025 | SCALE: AS NOTED
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
PAVEMENT ELEVATION PLAN - BID ALT 1
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

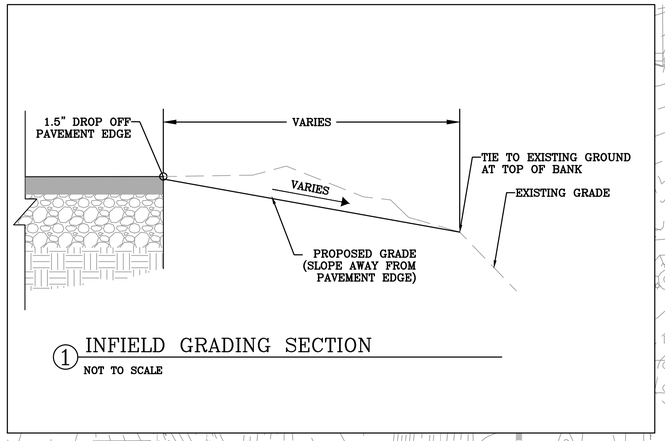
BID DOCUMENTS

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

SHEET NO. C13
TOTAL: 31
CAD FILE: 12883–C13–GRAD
DRAWING FILE NO. 4–145–34

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Tuesday, July 15, 2025 COLOME, GIADHA



1 INFIELD GRADING SECTION

NOT TO SCALE

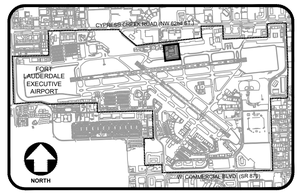
AES BUILDING

AES BUILDING EXPANSION (BY OTHERS)

THE ELEVATION SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88). TO CONVERT THE ELEVATIONS HEREON TO NATIONAL GEODETIC VERTICAL DATUM (NGVD29) ADD 1.585 FEET.

GRAPHIC SCALE (IN FEET)
20' 0' 20' 40'

KEY MAP



LEGEND

- PROPOSED BASE BID PAVEMENT REHABILITATION
- —X.XX— PROPOSED MAJOR CONTOUR (1-FOOT)
- —X.XX— PROPOSED MINOR CONTOUR (0.2-FOOT)
- —X.XX— EXISTING CONTOUR (0.2-FOOT)
- LIMITS OF DISTURBANCE
- EXISTING STORM PIPE

GRADING NOTES

1. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE SITE IN ACCORDANCE WITH THE SWPPP. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL SOD AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE RPR.
2. CONTRACTOR SHALL SEQUENCE WORK SO THAT AREAS OF STANDING WATER ARE NOT CREATED.

SHEET KEYNOTES

(1) REMOVE AND REINSTALL EXISTING SIGN IN SAME LOCATION.

(2) CONTRACTOR SHALL TIE INTO EXISTING TOP OF BANK. SEE SECTION 1 ON THIS SHEET FOR MORE DETAILS.

(3) CONTRACTOR SHALL PROTECT AND GRADE AROUND EXISTING WATER SPIGOT.

ENGINEER: RAHEEL DOSSANI
REG. No: 89831
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY: SC | DESIGNED BY: RD | CHECKED BY: WB | DATE: 05/30/2025 | SCALE: AS NOTED | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

BID DOCUMENTS

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
GRADING PLAN - BID ALT 2
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

SHEET NO. C14

TOTAL: 31

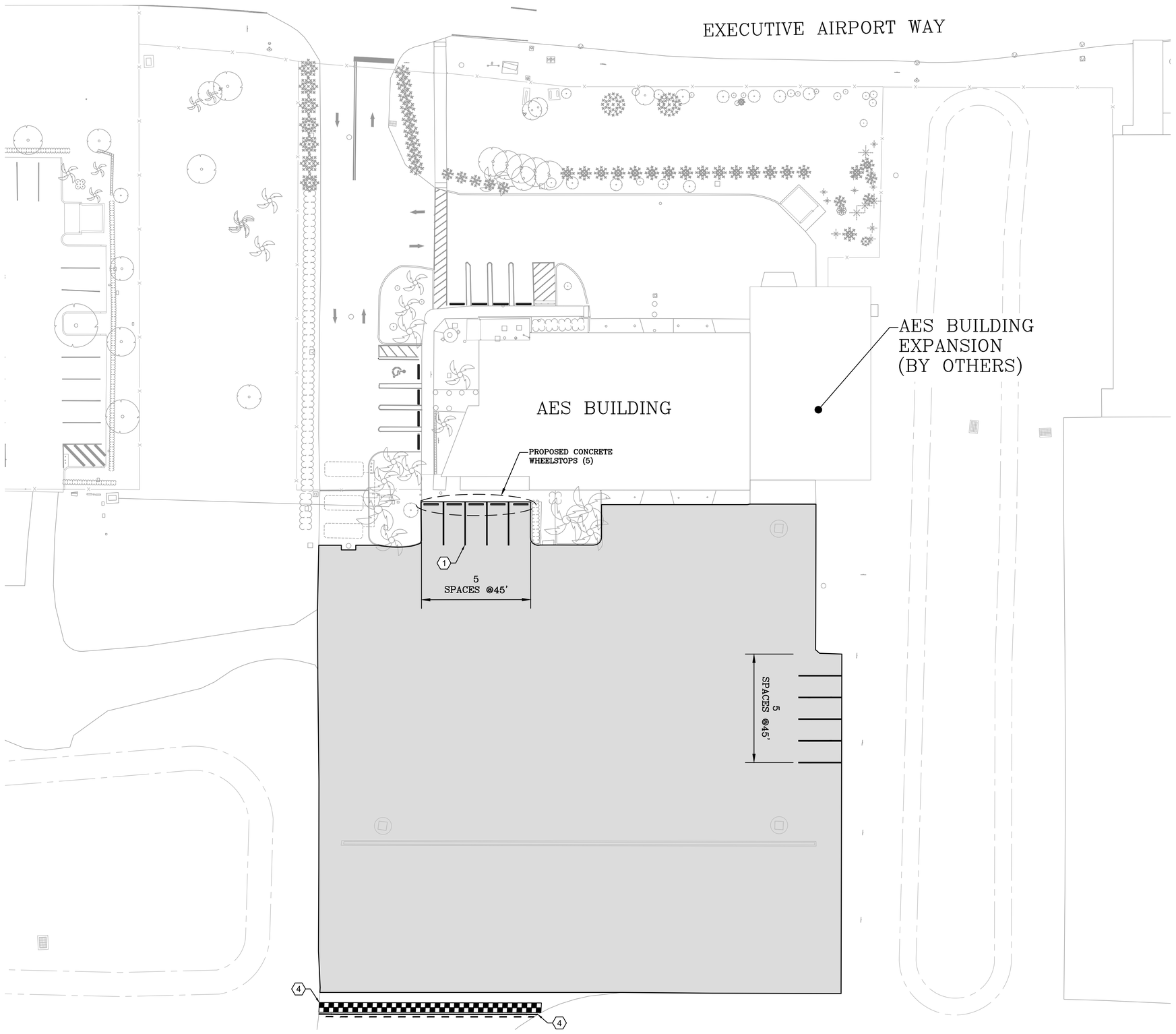
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DRAWING FILE NO. 4-145-34

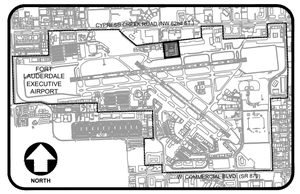
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Tuesday, July 15, 2025 COLOME, GIADHA



KEY MAP



SHEET KEYNOTES

1. PARKING SPACE MARKING, SEE DETAIL 1 ON SHEET C17
2. ZIPPER STYLE MARKING, SEE DETAIL 2 ON SHEET C17
3. NON-MOVEMENT AREA BOUNDARY, SEE DETAIL 3 ON SHEET C17
4. REPLACE MARKINGS PER EXISTING TO THE LIMITS SHOWN. EXISTING OUT OF TOLERANCE MARKINGS ARE NOT REQUIRED TO BE BROUGHT INTO COMPLIANCE AS SPECIFIED IN ITEM P-620.

MARKING NOTES

1. PREPARE SURFACES IN ACCORDANCE WITH SPECIFICATION P-620 PRIOR TO APPLYING MARKINGS.
2. TEMPORARY MARKINGS ARE REQUIRED ONLY IN LOCATIONS WHERE THE EXISTING MARKINGS WERE DESTROYED OR NEW MARKING CONFIGURATION IS PROPOSED.
3. TEMPORARY MARKINGS ARE NOT REQUIRED WERE EXISTING MARKINGS ARE BEING REAPPLIED.
4. BLACK BORDERS ARE NOT TO BE APPLIED AS PART OF THE TEMPORARY MARKINGS.
5. MARKING DETAILS ARE PROVIDED ON SHEET C17.
6. FOR MARKINGS SPECIFIED TO BE REAPPLIED IN THE SAME LAYOUT AS THE EXISTING CONDITION, CONTRACTOR MUST PROVIDE SUFFICIENT FIELD SURVEY TO RE-ESTABLISH THE MARKING LAYOUT AFTER THE MARKING IS REMOVED DURING CONSTRUCTION.
7. CONTRACTOR SHALL LAYOUT ALL MARKINGS FOR RPR APPROVAL PRIOR TO PROCEEDING WITH THE MARKING APPLICATION.

20' 0' 20' 40'
GRAPHIC SCALE
(IN FEET)

BID DOCUMENTS

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

ENGINEER: RAHEEL DOSSANI
REG. No: 89831
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY:	DATE:	SCALE:
SC	05/30/2025	AS NOTED
DESIGNED BY:	CHECKED BY:	FIELD BOOK:
RD	WB	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

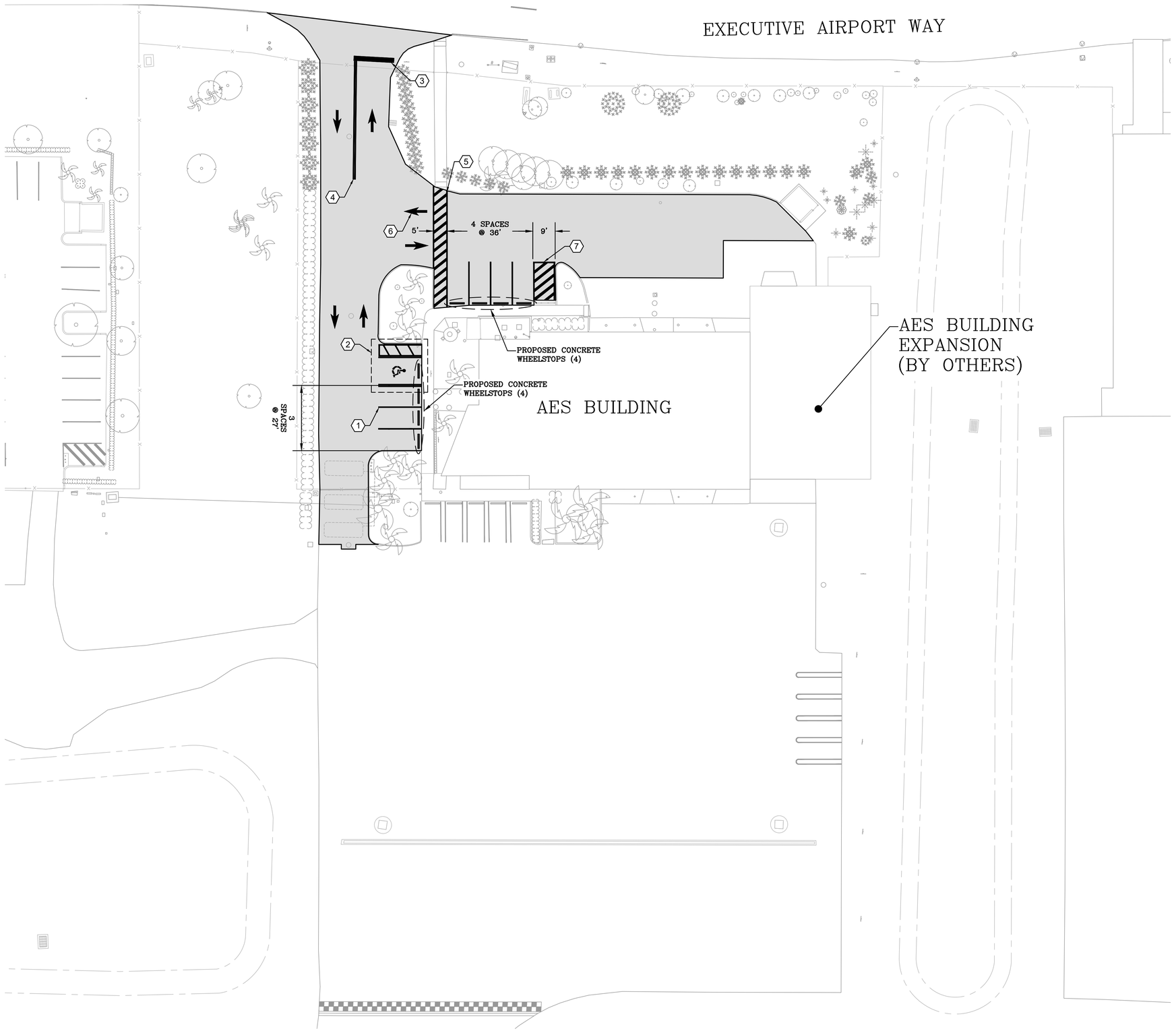
NO.	DATE	BY	CHKD	DESCRIPTION

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
MARKING PLAN - BASE BID
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

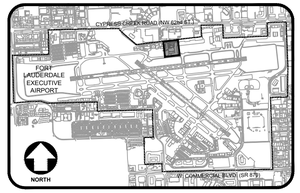
SHEET NO. C15
TOTAL: 31
CAD FILE: 12883-MULTI-STRP
DRAWING FILE NO. 4-145-34

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

C:\PWWORKING\EAST01\D4261495\12883-MULTI-STRP.DWG
Tuesday, July 15, 2025 COLOME, GIADHA



KEY MAP



SHEET KEYNOTES

1. PARKING SPACE MARKING, SEE DETAIL 1 ON SHEET C17
2. ADA PARKING SPACE, SEE DETAIL 1 ON SHEET C17
3. ROADWAY STOP BAR, SEE DETAIL 6 ON SHEET C17
4. ROADWAY YELLOW MARKINGS, SEE DETAIL 6 ON SHEET C17
5. ROADWAY PEDESTRIAN CROSSWALK, SEE DETAIL 4 ON SHEET C17
6. THROUGH LANE-USE ARROW, SEE DETAIL 5 ON SHEET C17
7. NO PARKING ZONE, SEE DETAIL 5 ON SHEET C17

MARKING NOTES

1. PREPARE SURFACES IN ACCORDANCE WITH SPECIFICATION P-620 PRIOR TO APPLYING MARKINGS.
2. TEMPORARY MARKINGS ARE REQUIRED ONLY IN LOCATIONS WHERE THE EXISTING MARKINGS WERE DESTROYED OR NEW MARKING CONFIGURATION IS PROPOSED.
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HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
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T: 954.535.1876 F:954.233.4953
CA# 4213

ENGINEER: RAHEEL DOSSANI
REG. No: 89631
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY:	DATE:	SCALE:
SC	05/30/2025	AS NOTED
DESIGNED BY:	CHECKED BY:	FIELD BOOK:
RD	WB	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

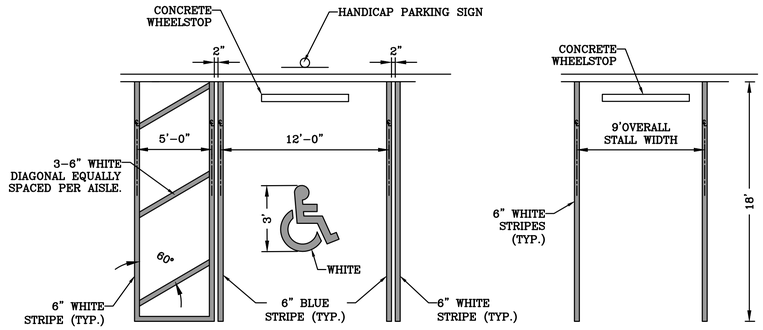
PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
MARKING PLAN - BID ALT 1
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO. C16
TOTAL: 31
CAD FILE: 12883-MULTI-STRP
DRAWING FILE NO. 4-145-34

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Tuesday, July 15, 2025 COLOME, GIADHA



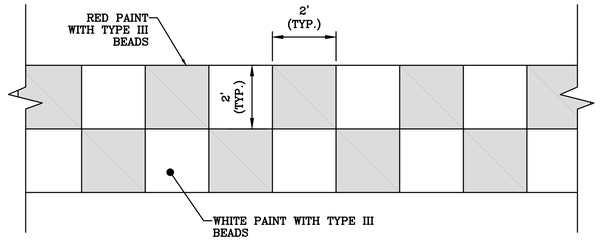
ACCESSIBLE SPACE STANDARD SPACE

NOTES

1. MARKINGS SHALL COMPLY WITH FDOT STANDARD SPECIFICATION 710.

① TYPICAL PARKING STRIPE DETAIL

NOT TO SCALE

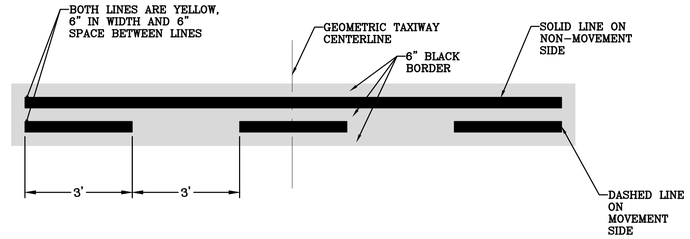


NOTES

1. DIMENSIONS PROVIDED FOR GENERAL GUIDANCE ONLY. CONTRACTOR SHALL MATCH EXISTING LAYOUT.

② ZIPPER STYLE MARKING DETAIL

NOT TO SCALE



NOTES

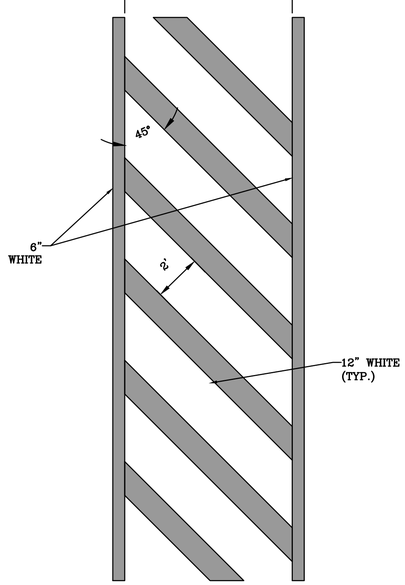
1. DIMENSIONS PROVIDED FOR GENERAL GUIDANCE ONLY. CONTRACTOR SHALL MATCH EXISTING LAYOUT.
2. FINAL NON-MOVEMENT AREA MARKINGS SHALL BE YELLOW WITH TYPE III REFLECTIVE MEDIA.
3. A 6" BLACK BORDER OR BACKGROUND SHALL BE APPLIED TO FINAL MARKINGS AS SHOWN.

③ NON-MOVEMENT AREA BOUNDARY MARKING

NOT TO SCALE

GENERAL NOTES

1. REFLECTORIZED (GLASS BEADS) PAINT SHALL BE USED FOR ALL PERMANENT PAVEMENT MARKINGS EXCEPT BLACK OUTLINE. SEE ITEM P-620 FOR GLASS BEAD TYPE AND APPLICATION RATE FOR EACH PAINT COLOR.
2. SEE PAVEMENT GEOMETRY PLANS, SHEET C08 FOR HORIZONTAL LAYOUT.
3. PAVEMENT MARKING DETAILS SHALL CONFORM TO THE LATEST EDITION OF FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR 150-5340-1M: IF A CONFLICT OCCURS BETWEEN THESE PLANS AND THE CIRCULAR THE ADVISORY CIRCULAR WILL TAKE PRECEDENCE.
4. MEASURED QUANTITY PAID TO THE CONTRACTOR SHALL BE MEASUREMENT OF FINAL VISIBLE PAINT MARKINGS ACCORDING TO ITEM P-620.

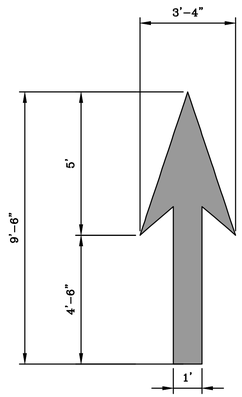


NOTES

1. MARKINGS SHALL COMPLY WITH FDOT STANDARD SPECIFICATION 710.

④ STANDARD CROSSWALK AND NO PARKING ZONE MARKING

NOT TO SCALE

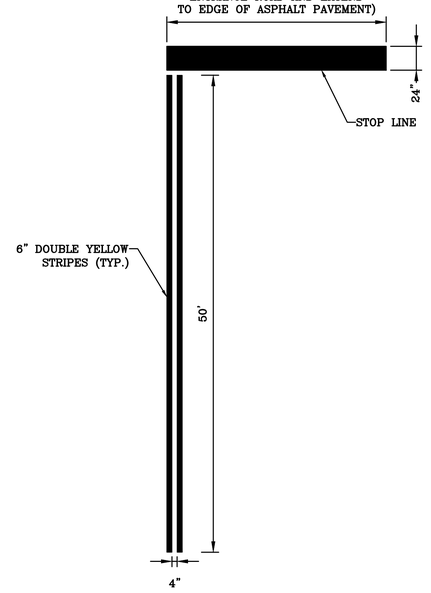


NOTES

1. MARKINGS SHALL COMPLY WITH FDOT STANDARD SPECIFICATION 710.

⑤ THROUGH LANE-USE ARROW

NOT TO SCALE



NOTES

1. MARKINGS SHALL COMPLY WITH FDOT STANDARD SPECIFICATION 710.

⑥ EXECUTIVE AIRPORT WAY ENTRANCE

NOT TO SCALE

HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

BID DOCUMENTS

ENGINEER: RAHEEL DOSSANI
REG. No: 89631
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY: SC | DATE: 05/30/2025
DESIGNED BY: RD | SCALE: AS NOTED
CHECKED BY: WB | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
MARKING DETAILS
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

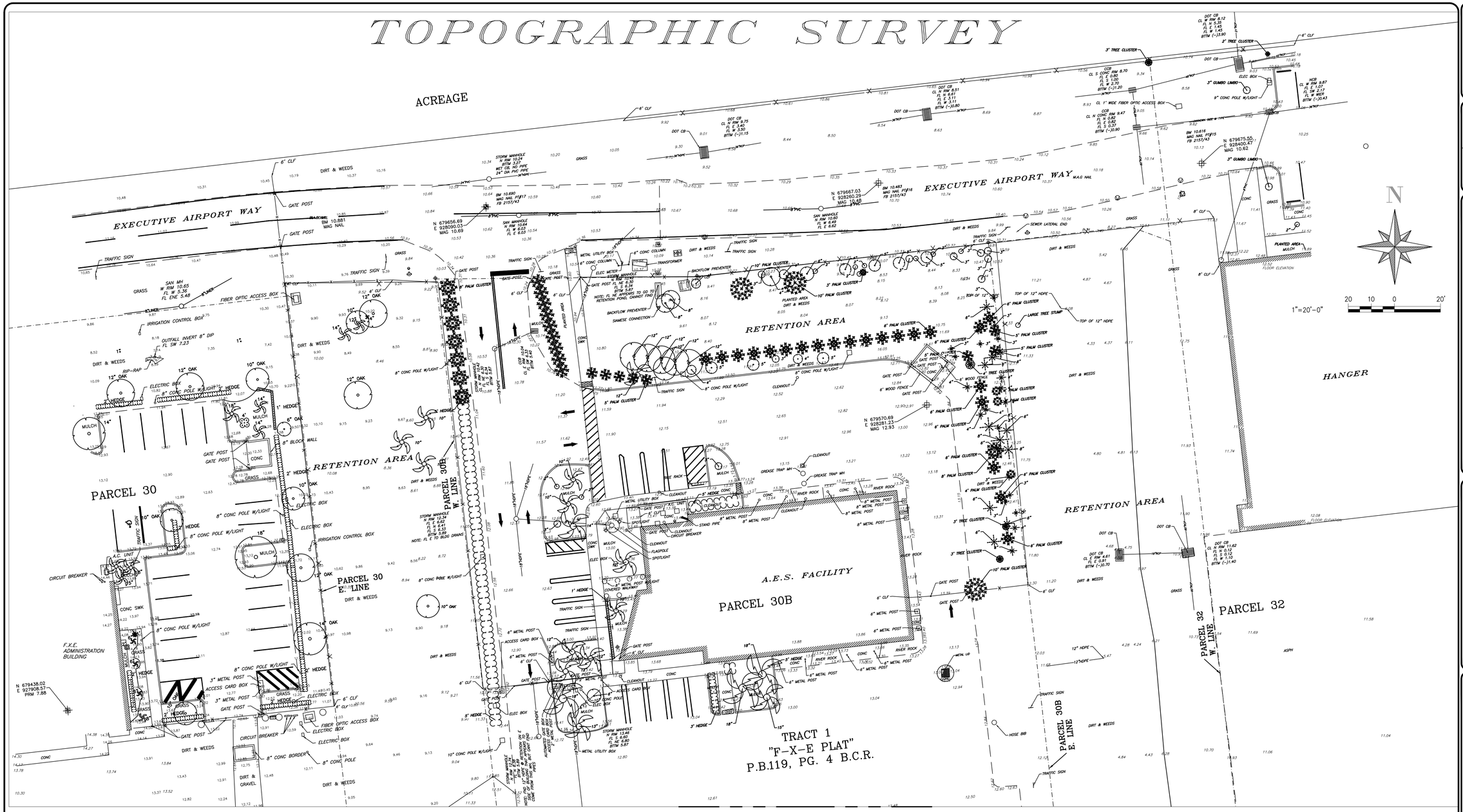
SHEET NO. C17
TOTAL: 31
CAD FILE: 12883-C17-DETL
DRAWING FILE NO. 4-145-34

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

C:\PWWORKING\EAST01\D4261495\12883-C17-DETL.DWG

Tuesday, July 15, 2025 COLOME, GIADHA

TOPOGRAPHIC SURVEY



DESCRIPTION: AES FACILITY (PARCEL 30B) AND ADJACENT LANDS.

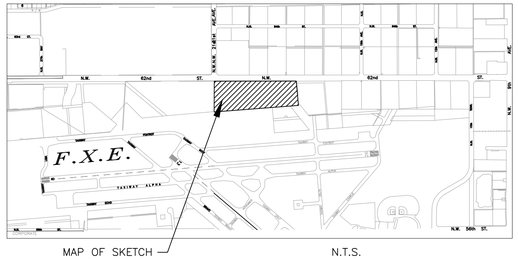
A PORTION OF TRACT 1, "F-X-E PLAT", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 119, PAGE 4, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, ALSO A PORTION OF THE SOUTHWEST QUARTER OF SECTION 9, TOWNSHIP 49 SOUTH, RANGE 42 EAST, WITHIN FORT LAUDERDALE EXECUTIVE AIRPORT. MORE PARTICULARLY DESCRIBED AS FOLLOWS:

ALL OF PARCEL 30B, THE EAST 100 FEET OF PARCELS 30 AND 30A TOGETHER WITH THOSE LANDS ADJACENT TO SAID PARCEL 30B ON THE EAST AND WEST SIDE THEREOF AND TOGETHER WITH THE WEST 100.00 FEET OF PARCEL 32. SAID LANDS SITUATE, LYING AND BEING IN THE CITY OF FORT LAUDERDALE, BROWARD COUNTY, FLORIDA.

NOTES:
1) THIS TOPOGRAPHIC SURVEY IS LIMITED TO THE LOCATION OF ABOVE GROUND IMPROVEMENTS AND SPOT ELEVATIONS WITHIN THE DESCRIBED LANDS, EXCEPT AS INDICATED, SUBJECT TO EXISTING EASEMENTS, RIGHT-OF WAYS, COVENANTS, RESERVATIONS AND RESTRICTIONS OF RECORD, IF ANY.
2) THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
3) ELEVATIONS SHOWN HEREON ARE IN FEET AND DECIMALS REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929) AND CONVERTED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988). THE DATUM WAS CONVERTED FROM NGVD 1929 TO NAVD 1988 UTILIZING THE U.S. ARMY CORPS OF ENGINEERS PROGRAM VERTCON. THE MODEL VALUE OF (-)1.585 WAS ADDED ALGEBRAICALLY TO THE NGVD 1929 HEIGHT.
4) BENCHMARK DESCRIPTION: CITY OF FORT LAUDERDALE BENCHMARK, FIELD BOOK 2157, PAGE 43, DESCRIBED AS FOLLOWS: MAG NAIL POINT # 15 147' E OF N BUILDING EXTENDED A.E.S. FACILITIES AND 126' N OF E BUILDING LINE EXTENDED A.E.S. FACILITIES ELEVATION= 12.206' (NGVD 1929) OR 10.616' (NAVD88)
5) ADDITIONS OR DELETIONS TO THIS SURVEY MAP BY OTHER THAN THE SIGNING PARTY ARE PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY.
6) THE HORIZONTAL POSITIONAL ACCURACY OF WELL-DEFINED IMPROVEMENTS SHOWN HEREON IS ±0.1'. THE VERTICAL ACCURACY OF ELEVATIONS IS ±0.08'.
7) THIS SURVEY MAP IS INTENDED TO BE DISPLAYED AT A SCALE OF 1"=20' OR SMALLER.
8) PROPERTY LINES SHOWN ARE BASED ON ADJACENT PLATS AND ARE FOR INFORMATIONAL PURPOSES ONLY.
9) THIS IS NOT A BOUNDARY SURVEY.
10) HORIZONTAL FEATURE LOCATIONS ARE TO THE CENTER OF SYMBOLS AND MAY HAVE BEEN ENLARGED FOR CLARITY. DISTANCES AND ELEVATIONS SHOWN HEREON ARE UNITED STATES SURVEY FEET.
11) DATE OF LAST SURVEY FIELD WORK: PARCEL 30, AUGUST 29, 2016; PARCEL 30B AND RETENTION AREAS, FEBRUARY 27, 2018; PARCEL 30B EAST RETENTION AREA AND A PORTION OF NEWLY CONSTRUCTED TAXIWAY FOXTROT SOUTH OF PARCEL 30B, MAY 14, 2021.
12) UNDERGROUND UTILITIES WERE NOT LOCATED.

MATCH LINE SEE SHEET 2

LOCATION MAP



MAP OF SKETCH N.T.S.

CERTIFICATION:

THIS IS TO CERTIFY THAT THIS TOPOGRAPHIC SURVEY MEETS THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES IN CHAPTER 5J-17.05 FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES. MADE UNDER MY RESPONSIBLE CHARGE AND IS ACCURATE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

SIGNED : _____

MICHAEL W. DONALDSON
PROFESSIONAL SURVEYOR AND MAPPER
NO. 6490 STATE OF FLORIDA

DRAWN BY: CH | DATE: 5/19/2021
DESIGNED BY: CH | SCALE: 1:20
CHECKED BY: MD
FIELD BOOK: 2157-2191

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

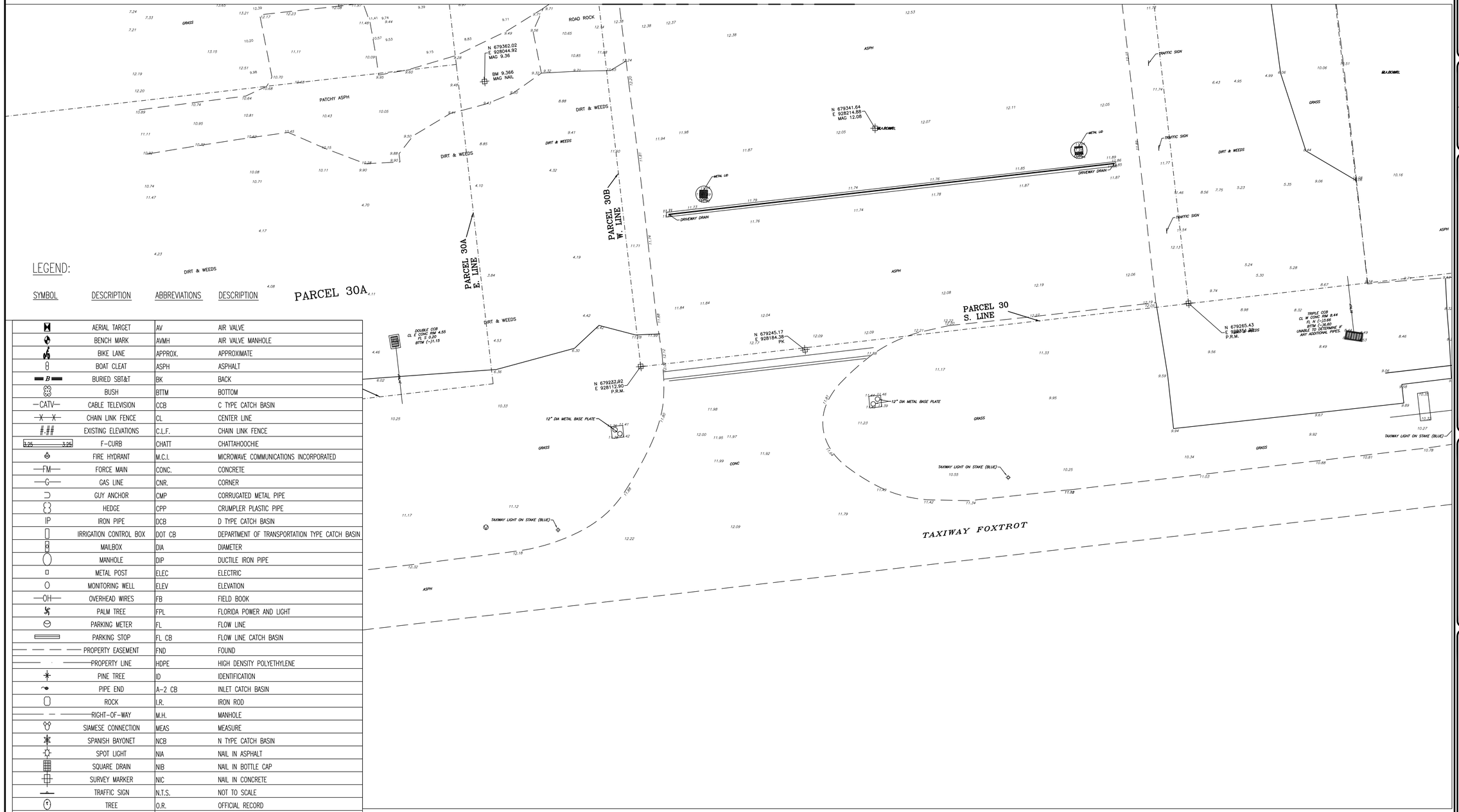
REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12356
EXECUTIVE AIRPORT AES FACILITY
TOPOGRAPHIC SURVEY
FACILITY EXPANSION
FT. LAUDERDALE EXECUTIVE AIRPORT

SHEET NO.	OF
1	2
TOTAL:	2
CAD FILE: 12356-TOPO-SURV	
DRAWING FILE NO. 4-140-97	

MATCH LINE SEE SHEET 1



LEGEND:

SYMBOL	DESCRIPTION	ABBREVIATIONS	DESCRIPTION
	AERIAL TARGET	AV	AIR VALVE
	BENCH MARK	AVMH	AIR VALVE MANHOLE
	BIKE LANE	APPROX.	APPROXIMATE
	BOAT CLEAT	ASPH	ASPHALT
B	BURIED SBT&T	BK	BACK
	BUSH	BTTM	BOTTOM
CATV	CABLE TELEVISION	CCB	C TYPE CATCH BASIN
X X	CHAIN LINK FENCE	CL	CENTER LINE
#.##	EXISTING ELEVATIONS	C.L.F.	CHAIN LINK FENCE
3.25 3.25	F-CURB	CHATT	CHATTAHOOCHIE
	FIRE HYDRANT	M.C.I.	MICROWAVE COMMUNICATIONS INCORPORATED
FM	FORCE MAIN	CONC.	CONCRETE
G	GAS LINE	CNR.	CORNER
	GUY ANCHOR	CMP	CORRUGATED METAL PIPE
	HEDGE	CPP	CRUMPLER PLASTIC PIPE
IP	IRON PIPE	DCB	D TYPE CATCH BASIN
	IRRIGATION CONTROL BOX	DOT CB	DEPARTMENT OF TRANSPORTATION TYPE CATCH BASIN
	MAILBOX	DIA	DIAMETER
	MANHOLE	DIP	DUCTILE IRON PIPE
	METAL POST	ELEC	ELECTRIC
	MONITORING WELL	ELEV	ELEVATION
OH	OVERHEAD WIRES	FB	FIELD BOOK
	PALM TREE	FPL	FLORIDA POWER AND LIGHT
	PARKING METER	FL	FLOW LINE
	PARKING STOP	FL CB	FLOW LINE CATCH BASIN
	PROPERTY EASEMENT	FND	FOUND
	PROPERTY LINE	HDPE	HIGH DENSITY POLYETHYLENE
	PINE TREE	ID	IDENTIFICATION
	PIPE END	A-2 CB	INLET CATCH BASIN
	ROCK	I.R.	IRON ROD
	RIGHT-OF-WAY	M.H.	MANHOLE
	SIAMESE CONNECTION	MEAS	MEASURE
	SPANISH BAYONET	NCB	N TYPE CATCH BASIN
	SPOT LIGHT	NIA	NAIL IN ASPHALT
	SQUARE DRAIN	NIB	NAIL IN BOTTLE CAP
	SURVEY MARKER	NIC	NAIL IN CONCRETE
	TRAFFIC SIGN	N.T.S.	NOT TO SCALE
	TREE	O.R.	OFFICIAL RECORD
UE	UNDERGROUND ELECTRIC	P.K.	PARKER KALON FASTENERS
	ASBUILT WATER VALVE	P.B.	PLAT BOOK
	TOPO WATER VALVE	P.O.C.	POINT ON CURB
3.25 3.25	VALLEY GUTTER	P.S.M.	PROFESSIONAL SURVEYOR AND MAPPER
W	WATER MAIN	PCP	PERMANENT CONTROL POINT
M	WATER METER BOX	PVC	POLYVINYL CHLORIDE PIPE
o	WOOD POLE	RCP	REINFORCED CONCRETE PIPE
		RND	ROUND
		SAN	SANITARY
		SWK	SIDEWALK
		STND	STANDARD
		ST	STORM
		TYP	TYPICAL
		VCP	VITRIFIED CLAY PIPE

N

1"=20'-0"

20 10 0 20'

DRAWN BY: CH | DATE: 5/19/2021
DESIGNED BY: CH | SCALE: 1:20
CHECKED BY: MD | FIELD BOOK: 2157 -2191

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12356
EXECUTIVE AIRPORT AES FACILITY
TOPOGRAPHIC SURVEY
FACILITY EXPANSION
FT. LAUDERDALE EXECUTIVE AIRPORT

SHEET NO.	OF
2	2

TOTAL: 2

CAD FILE: 12356-TOPO-SURV

DRAWING FILE NO. 4-140-97

SUPPLEMENTAL CONDITIONS

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SUPPLEMENTAL CONDITIONS
PROJECT 12883
FORT LAUDERDALE EXECUTIVE AIRPORT
FXE AES APRON PAVEMENT REHABILITATION

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 ***subordinate*** 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 150/5370-2E (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 without varifiying 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:

Air Operations Area (AOA) - 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.
Any closure of Taxiways or Runways require at least 2 weeks notice. **Once a NOTAM has been issued, Contractor shall adhere strictly to the construction schedule agreed to for the NOTAM.**

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 Owner, the Contractor, the FAA, and the Engineer shall each designate a representative to be responsible for the safety aspects of the project. Each 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(or determined by the Aiport's Project Manager), 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.

8. 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.

9. 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 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.

10. 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.

12883 – FXE AES APRON PAVEMENT REHABILITATION

PROCUREMENT CONTRACTS (NON-AIP)

REQUIRED FEDERAL PROVISIONS:

A. GENERAL CIVIL RIGHTS PROVISIONS

In all its activities within the scope of its airport program, the Contractor agrees to comply with pertinent statutes, Executive Orders, and such rules as identified in Title VI List of Pertinent Nondiscrimination Acts and Authorities to ensure that no person shall, on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

The above provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract.

B. CIVIL RIGHTS – TITLE VI ASSURANCE

1. Title VI Solicitation Notice

Title VI Solicitation Notice:

The **City of Fort Lauderdale,** in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, [select businesses, or disadvantaged business enterprises or airport concession disadvantaged business enterprises] will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in consideration for an award.

2. Title VI List of Pertinent Nondiscrimination Acts and Authorities

Insert this list in every contract or agreement, unless the Sponsor has determined and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities. This list can be omitted if the FAA has determined that the contractor or company is already subject to nondiscrimination requirements, which is a rare occurrence.

Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") 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 USC § 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 USC § 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 USC § 794 *et seq*.), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27 (Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance);
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq*.) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-259) (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 (42 USC § 12101, et seq) (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) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Nondiscrimination statute (49 USC § 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 (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. 74087 (2005)];
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC § 1681, et seq).

3. Compliance with Nondiscrimination 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:

1. **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. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability 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. **Information and Reports:** 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 Sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a 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. **Sanctions for Noncompliance:** In the event of a Contractor's noncompliance with the non-discrimination provisions of this contract, the Sponsor 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. **Incorporation of Provisions:** 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 Sponsor 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 Sponsor to enter into any litigation to protect the interests of the Sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

4. Clause for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by City of Fort Lauderdale pursuant to the provisions of the Airport Improvement Program grant assurances.

A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Title VI List of Pertinent Nondiscrimination Acts and Authorities.
B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non-discrimination covenants, City of Fort Lauderdale will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same

as if said (license, permit, etc., as appropriate) had never been made or issued.*

C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, City of Fort Lauderdale will there upon revert to and vest in and become the absolute property of City of Fort Lauderdale and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

C. 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. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer 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 (29 CFR Part 1910). The employer 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.

D. CERTIFICATION REGARDING DOMESTIC PREFERENCES FOR PROCUREMENTS

The Bidder or Offeror certifies by signing and submitting this bid or proposal that, to the greatest extent practicable, the Bidder or Offeror has provided a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including, but not limited to, iron, aluminum, steel, cement, and other manufactured products) in compliance with 2 CFR § 200.322.

AFFIDAVIT OF COMPLIANCE WITH FOREIGN ENTITY LAWS
(Florida Statute- §287.138, 692.201, 692.202, 692.203, and 692.204)

The undersigned, on behalf of the entity listed below ("Entity"), hereby attests under penalty of perjury as follows:

1. Entity is not owned by the government of a foreign country of concern as defined in Section 287.138, Florida Statutes. (Source:§ 287.138(2)(a), Florida Statutes)
2. The government of a foreign country of concern does not have a controlling interest in Entity. (Source:§ 287.138(2)(b), Florida Statutes)
3. Entity is not organized under the laws of, and does not have a principal place of business in, a foreign country of concern. (Source: § 287.138(2)(c), Florida Statutes)
4. Entity is not owned or controlled by the government of a foreign country of concern, as defined in Section 692.201, Florida Statutes. (Source:§ 288.007(2), Florida Statutes)
5. Entity is not a partnership, association, corporation, organization, or other combination of persons organized under the laws of or having its principal place of business in a foreign country of concern, as defined in Section 692.201, Florida Statutes, or a subsidiary of such entity. (Source: § 288.007(2), Florida Statutes)
6. Entity is not a foreign principal, as defined in Section 692.201, Florida Statutes. (Source: § 692.202(5)(a)(I), Florida Statutes)
7. Entity is in compliance with all applicable requirements of Sections 692.202, 692.203, and 692.204, Florida Statutes.
8. ***(Only applicable if purchasing real property)*** Entity is not a foreign principal prohibited from purchasing the subject real property. Entity is either (a) not a person or entity described in Section 692.204(1)(a), Florida Statutes, or (b) authorized under Section 692.204(2), Florida Statutes, to purchase the subject property. Entity is in compliance with the requirements of Section 692.204, Florida Statutes. (Source:§§ 692.203(6)(a), 692.204(6)(a), Florida Statutes)

The undersigned is authorized to execute this affidavit on behalf of Entity.

Name: _____ Title:_____ Entity: _____

Signature: _____ Date: _____

NOTARY PUBLIC ACKNOWEDGEMENT SECTION

STATE OF _____

COUTY OF _____

The foregoing instrument was acknowledged before me, by means of □ physical presence or □ online notarization, this ____ day of _____20 __, by _____, as

_____ for _____, who is

personally known to me or who has produced _____as identification.

Notary Public Signature: _____ (Notary Seal)

Print Name:_____ My commission expires:_____

QUESTIONNAIRE SHEET

PLEASE PRINT OR TYPE:

Firm Name:

President

Business Address:

Telephone:

Fax:

E-Mail Address:

What was the last project of this nature which you completed? Include the year, description, and contract value.

The following are named as three corporations and representatives of those corporations for which you have performed work similar to that required by this contract, and which the City may contact as your references (include addresses, telephone numbers and e-mail addresses). Include the project name, year, description, and contract value.

How many years has your organization been in business?

Have you ever failed to complete work awarded to you; if so, where and why?

The name of the qualifying agent for the firm and his position is:

Certificate of Competency Number 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 must 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?

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?

BID/EVENT NO. 530 SPECIFIC REFERENCES FORM

The contractor shall have at least ten (10) years previous construction experience in runway pavement rehabilitation in the State of Florida. Bidder shall submit proof of 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, telephone number and e-mail address.

Note: Do not include proposed team members or parent/subsidiary companies as references in your submittals.

A. PRIME BIDDER'S NAME: _____

SPECIFIC EXPERIENCE NO.1

Name of firm to be contacted: _____

Address: _____

Contact Person: _____

Phone No: (___) _____

Contact E-Mail Address: _____

Project Performance Period: _____ to _____
Dates should be in mm/yy format

Project Name : _____

Location of Project: _____

Description of the overall scope:

_____

_____

_____

Description of work that was self-performed by Bidder:

_____

_____

_____

_____

Original Project Budget:_____ Project Final Cost:_____

SPECIFIC EXPERIENCE NO.2

Address: _____

Contact Person: _____

Phone No: (___) _____

Contact E-Mail Address: _____

Project Performance Period: _____ to _____
Dates should be in mm/yy format

Project Name : _____

Location of Project: _____

Description of the overall scope:

_____

_____

_____

_____

Description of work that was self-performed by Bidder:

_____

_____

_____

_____

Original Project Budget:_____ Project Final Cost:_____

SPECIFIC EXPERIENCE NO.3

Address: _____

Contact Person: _____

Phone No: (___) _____

Contact E-Mail Address: _____

Project Performance Period: _____ to _____
Dates should be in mm/yy format

Project Name : _____

Location of Project: _____

Description of the overall scope:

_____

_____

_____

_____

Description of work that was self-performed by Bidder:

_____

_____

_____

_____

Original Project Budget:_____ Project Final Cost:_____

CONSTRUCTION BID CERTIFICATION

Please Note: It is the sole responsibility of the bidder to ensure that his bid is submitted electronically through www.BidSync.com prior to the bid opening date and time listed. Paper bid submittals will not be accepted. All fields below must be completed. If the field does not apply to you, please note N/A in that field.

If you are a foreign corporation, you may be required to obtain a certificate of authority from the Department of State, in accordance with Florida Statute §607.1501 (visit http://www.dos.state.fl.us/).

Company: (Legal Registration)

Address:

City: State: Zip:

Telephone No.: FAX No.: Email:

Check box if your firm qualifies for MBE / SBE / WBE: ☐

If a corporation, state the name of the President, Secretary and Resident Agent. If a partnership, state the names of all partners. If a trade name, state the names of the individuals who do business under the trade name.

Name	**Title**	**Name**	**Title**
Name	**Title**	**Name**	**Title**

ADDENDUM ACKNOWLEDGEMENT - Bidder acknowledges that the following addenda have been received and are included in the proposal:

Addendum No.	Date Issued	Addendum No.	Date Issued	Addendum No.	Date Issued

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VARIANCES: If you take exception or have variances to any term, condition, specification, or requirement in this bid you must specify such variance in the space provided below or reference in the space provided below all variances contained on other pages within your bid. Additional pages may be attached if necessary. No variances will be deemed to be part of the bid submitted unless such is listed and contained in the space provided below. The City does not, by virtue of submitting a variance, necessarily accept any variances. If no statement is contained in the below space, it is hereby implied that your response is in full compliance with this competitive solicitation. If you do not have variances, simply mark N/A. **You must also click the "Take Exception" button.**

The below signatory affirms 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. The below signatory agrees to furnish all labor, tools, material, equipment and supplies, and to sustain all the expense incurred in doing the work set forth in strict accordance with the bid plans and contract documents at the unit prices indicated if awarded a contract. The below signatory has not divulged to, discussed, or compared this bid with other bidders, and has not colluded with any other bidder or parties to this bid whatsoever. Furthermore, the undersigned guarantees the truth and accuracy of all statements and answers contained in this bid. The below signatory also hereby agrees, by virtue of submitting or attempting to submit a bid, that in no event shall the City's liability for bidder's direct, indirect, incidental, consequential, special or exemplary damages, expenses, or lost profits arising out of this competitive solicitation process, including but not limited to public advertisement, bid conferences, site visits, evaluations, oral presentations, or award proceedings exceed the amount of Five Hundred Dollars ($500.00). This limitation shall not apply to claims arising under any provision of indemnification or the City's protest ordinance contained in this competitive solicitation.

Submitted by:

Name (printed)

Signature

Date

Title

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 has transitioned 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 payments fast and safely. No more waiting for checks to be printed and mailed.

In accordance with the contract, payments on this contract will be made utilizing the City's P-Card (MasterCard or Visa). Accordingly, bidders must presently have the ability to accept the credit card or take whatever steps necessary to implement acceptance of a card before the start of the contract term, or contract award by the City.

All costs associated with the Contractor's participation in this purchasing program shall be borne by the Contractor. The City reserves the right to revise this program as necessary.

By signing below, you agree with these terms.

Please indicate which credit card payment you prefer:

☐ MasterCard

☐ Visa

_____

Company Name

_____ _____

Name (Printed) Signature

_____ _____

Title Date

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PREFERENCE

Section 2-185, Code of Ordinances of the City of Fort Lauderdale, provides for a disadvantaged business preference.

In order to be considered for a DBE Preference, a bidder must include a certification from a government agency, as applicable to the DBE Preference class claimed **at the time of bid submittal**.

Upon formal request of the City, based on the application of a DBE Preference the Bidder shall, within ten (10) calendar days, submit the following documentation to the DBE Class claimed:

A) Copy of City of Fort Lauderdale current year business tax receipt, **or** Broward County current year business tax receipt, **or** State of Florida active registration **and/or**

B) List of the names of all employees of the bidder and evidence of employees' residence within the geographic bounds of the City of Fort Lauderdale or Broward County, as the case may be, such as current Florida driver license, residential utility bill (water, electric, telephone, cable television), or other type of similar documentation acceptable to the City.

Failure to comply at time of bid submittal shall result in the bidder being found ineligible for the disadvantaged business preference.

THE COMPLETE DBE PREFERENCE ORDINANCE MAY BE FOUND ON THE CITY'S WEB SITE AT THE FOLLOWING LINK: https://www.fortlauderdale.gov/home/showpublisheddocument?id=56883

Definitions

a. The term "disadvantaged class 1 enterprise" shall mean any disadvantaged business enterprise that has established and agrees to maintain a permanent place of business located in a non-residential zone, staffed with full-time employees within the limits of the city, and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

b. The term "disadvantaged class 2 enterprise" shall mean any disadvantaged business enterprise that has established and agrees to maintain a permanent place of business within the limits of the city with a full-time employees and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

c. The term "disadvantaged class 3 enterprise" shall mean any disadvantaged business enterprise that has established and agrees to maintain a permanent place of business located in a non-residential zone, staffed with full-time employees within the limits of the Tri-County area and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

d. The term "disadvantaged class 4 enterprise" shall mean any disadvantaged business enterprise that does not qualify as a Class A, Class B, or Class C business, but is located in the State of Florida and provides supporting documentation of its disadvantaged certification as established in the City's Procurement Manual.

DISADVANTAGED BUSINESS ENTERPRISE CERTIFICATION STATEMENT

The Business identified below certifies that it qualifies for the disadvantaged business enterprise price preference classification as indicated herein, and further certifies and agrees that it will re-affirm its preference classification annually no later than thirty (30) calendar days prior to the anniversary of the date of a contract awarded pursuant to this solicitation. Violation of the foregoing provision may result in contract termination.

(1) _____ is a disadvantaged class 1 enterprise as defined in the City of Fort Lauderdale Ordinance Section 2-185 disadvantaged business enterprise that has established and agrees to maintain a permanent place of business located in a non-residential zone, staffed with full-time employees within the limits of the city, and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

Business Name

(2) _____ is a disadvantaged class 2 enterprise as defined in the City of Fort Lauderdale Ordinance Section 2-185 disadvantaged business enterprise that has established and agrees to maintain a permanent place of business within the limits of the city with a full-time employee(s) and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

Business Name

(3) _____ is a disadvantaged class 3 enterprise as defined in the City of Fort Lauderdale Ordinance Section 2-185 disadvantaged business enterprise that has established and agrees to maintain a permanent place of business located in a non-residential zone, staffed with full-time employees within the limits of the Tri-County area and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

Business Name

(4) _____ is a disadvantaged class 4 enterprise as defined in the City of Fort Lauderdale Ordinance Section 2-185 disadvantaged business enterprise that does not qualify as a Class A, Class B, or Class C business, but is located in the State of Florida and provides supporting documentation of its disadvantaged certification as established in the City's Procurement Manual.

Business Name

(5) _____ is not considered a Disadvantaged Enterprise Business as defined in the City of Fort Lauderdale Ordinance Sec.2-185 and does not qualify for DBE Preference consideration.

Business Name

BIDDER'S COMPANY: _____

AUTHORIZED COMPANY PERSON: _____

PRINT NAME SIGNATURE DATE

E-VERIFY AFFIRMATION STATEMENT

Solicitation/Bid /Contract No: _____

Project Description:

Contractor/Proposer/Bidder acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of,

A. all persons employed by Contractor/Proposer/Bidder to perform employment duties within Florida during the term of the Contract, and,

B. all persons (including subcontractors/vendors) assigned by Contractor/Proposer/Bidder to perform work pursuant to the Contract.

The Contractor/Proposer/Bidder acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the Contract is a condition of the Contract.

Contractor/Proposer/ Bidder Company Name: _____

Authorized Company Person's Signature: _____

Authorized Company Person's Title: _____

Date: _____

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.

NAME	RELATIONSHIPS
_____	_____
_____	_____
	_____
	_____

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.

_____ _____

Authorized Signature Title

_____ _____

Name (Printed) Date

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.

Contracts. 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:

(i) 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

CITY OF FORT LAUDERDALE

SWORN STATEMENT PURSUANT TO SECTION 287.087, FLORIDA STATUTES, ON PREFERENCE TO BUSINESS WITH DRUG-FREE WORK PLACE PROGRAMS

I certify that I have established a Drug Free Work Place program and have complied with the following

a. Published and distributed to each employee a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibitions.

b. Required all new employees to undergo laboratory testing as a condition of employment and will require all employees, as a condition of their continued employment, to undergo laboratory testing to detect illegal drug or alcohol use according to Florida Statutes 440.101 and 440.102.

c. Ensured that applicants with a confirmed positive drug or alcohol screening test result are not considered for employment.

d. Have tested employees when reasonably suspected of illegal drug or alcohol use.

e. Ensured that any employee refusing to take a drug or alcohol screening test in violation of the Drug Free Work Place Policy is subject to dismissal for failure to abide by the provisions of the Policy.

f. Informed employees about the dangers of drug abuse in the workplace, the business' policy of maintain a drug-free workplace, any available drug counseling, rehabilitation and employee assistance programs and the penalties that may be imposed upon employees for drug abuse violations.

g. In the statement specified in subparagraph a, notified the employees that, as a condition of their employment, the employee will abide by the terms of the statement and will notify their employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States of any state, for a violation occurring in the workplace no later than 5 days after such conviction.

h. Have required all employees to sign a copy of this statement of compliance acknowledging their understanding and agreeing to abide with the requirements of the Drug Work Place Policy.

i. Will impose a sanction on or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by, any employee who is so convicted.

j. Am making a good faith effort to continue to maintain a Drug Free Work Place through implementation of this document.

BY: _____ DATE: _____

NAME (Printed) _____ TITLE: _____

COMPANY NAME:_____

Affix Company Seal

CITY OF FORT LAUDERDALE

ANTI-HUMAN TRAFFICKING AFFIDAVIT

Rev Date: 01/13/2025

The undersigned, on behalf of _____,
(Print complete name incorporated with suffix: INC, LLC, LTD, LP, PA, etc.)
a _____ (*State corporation is registered*) _____ (Type of entity: profit or non-profit), ("Nongovernmental Entity"), under penalty of perjury, hereby deposes and says:

1. My name is _____.
(Print complete name of corporate officer/authorized representative)
2. I am an ☐ officer or ☐ authorized representative (Select one) of the Nongovernmental Entity. My title is: _____.
(Print title of corporate officer/authorized representative)
3. I attest that the Nongovernmental Entity does not use coercion for labor or services as defined in Section 787.06, Florida Statutes (2024), as may be amended or revised.

Under penalties of perjury, I declare that I have read the foregoing Anti-Human Trafficking Affidavit and that the facts stated in it are true.

Signature of Officer or Representative: _____

Office Address: _____

Email Address: _____

Main Phone Number: _____ FEIN No.: _____

STATE OF _____
COUNTY OF _____

Sworn to and subscribed before me by means of ❑ physical presence or ❑ online notarization, this ____ day of _____, 2025, by _____.
(Print name of corporate officer/representative)

_____
(Signature of Notary Public – State of _____)

(NOTARY SEAL)

_____
Print, Type or Stamp Commissioned Name of Notary Public)

Personally Known ☐ OR Produced Identification ☐

Type of Identification Produced_____

SAMPLE

City of Fort Lauderdale • Procurement Services Division
101 NE 3rd Ave., Suite 1650 • Fort Lauderdale, Florida 33301
954-828-5933 Fax 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 1

ITB No. 530

TITLE: FXE AES APRON PAVEMENT REHABILITATION

ISSUED: October 24, 2025

This addendum is being issued to make the following change(s):

1. A line item for Joint and Crack Repair (P-101-5.4), quantity 300 LF, was added to the Base Bid.

2. Page 78 of the Technical Specifications was replaced to include Section 101.5.4, per the clouded notes.

3. Plan sheets G03, G08, G09, G11, and C10 were replaced to include clouded revisions.

All other terms, conditions, and specifications remain unchanged.

Yesenia Pascual
Sr. Procurement Specialist

Company Name: _____
(please print)

Bidder's Signature: _____

Date: _____

foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method used cleans the cracks and does not damage the pavement.

101-3.9.1 Preparation of Crack. Widen crack with router by removing a minimum of 1/16 inch (2 mm) from each side of crack. Immediately before sealing, cracks will be blown out with a hot air lance combined with oil and water-free compressed air.

101-3.9.2 Removal of Existing Crack Sealant. Existing sealants will be removed by routing. Following routing any remaining debris will be removed by use of a hot lance combined with oil and water-free compressed air.

101-3.9.3 Crack Sealant. Crack sealant material and installation will be in accordance with Item P-605.

101-3.9.4 Removal of Pipe and other Buried Structures.

a. **Removal of Existing Pipe Material.** Not used.

b. **Removal of Inlets/Manholes.** Not used.

METHOD OF MEASUREMENT

101-4.1 Pavement removal. The unit of measurement for pavement removal shall be the number of square yards (square meters) removed by the Contractor. Any pavement removed outside the limits of removal because the pavement was damaged by negligence on the part of the Contractor shall not be included in the measurement for payment. No direct measurement or payment shall be made for saw cutting. Saw cutting shall be incidental to pavement removal. Dowel bar installation shall be incidental to pavement removal.

101-4.2 Cold milling. The unit of measure for cold milling shall be 2 inches of milling per square yard (square meter). The location and average depth of the cold milling shall be as shown on the plans. If the initial cut does not correct the condition, the Contractor shall re-mill the area and will be paid for the total depth of milling.

101-4.3 Concrete Wheelstop Removal. The unit of measure for concrete wheelstop removal shall be per each. The location and number shall be as shown on the plans.

101-4.4 Joint and crack repair. The unit of measurement for joint and crack repair shall be the linear foot of joint.

1

BASIS OF PAYMENT

101-5.1 Payment. Payment shall be made at contract unit price for the unit of measurement as specified above. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.

Item P-101-5.1a	Pavement Removal – per square yard
Item P-101-5.1b	Full Depth Asphalt Removal, Including Base and Subbase Material – per square yard
Item P-101-5.2	Cold Milling, 2” Depth – per square yard
Item P-101-5.3	Concrete Wheelstop Removal – per each
Item P 101-5.4	Joint and Crack Repair – per linear foot

1

SUMMARY OF QUANTITIES – BASE BID				
ITEM NO.	SPEC	DESCRIPTION	QUANTITY	UNIT
1	C-100-14.1	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	1	LS
2	C-102-5.1a	TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL	1	LS
3	C-105-6.1	MOBILIZATION	1	LS
4	C-105-6.2	CONTRACTOR STAGING AND STORAGE	1	LS
5	P-101-5.2	COLD MILLING, 2" DEPTH	4850	SY
6	P-101-5.3	CONCRETE WHEELSTOP REMOVAL	5	EA
7	P-101-5.4	JOINT AND CRACK REPAIR	300	LF
8	P-401-8.1	ASPHALT SURFACE COURSE	530	TON
9	P-603-5.1	EMULSIFIED ASPHALT TACK COAT	1	LS
10	P-620-5.2a	PERMANENT MARKINGS WITH GLASS BEADS	460	SF
11	P-620-5.2b	PERMANENT MARKINGS WITH NO BEADS	170	SF
12	D-751-5.1	DESILTATION OF EXISTING STORM PIPE AND STRUCTURES	1	LS
13	520-001*	CONCRETE WHEELSTOP	5	EA
14	0710-11102*	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6"	180	LF
15	0710-90*	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	1	LS
16	S-102-5.1	AIRPORT SAFETY AND MAINTENANCE OF TRAFFIC	1	LS

SUMMARY OF QUANTITIES – BID ALTERNATE 1				
ITEM NO.	SPEC	DESCRIPTION	QUANTITY	UNIT
1	C-100-14.1	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	1	LS
2	C-102-5.1a	TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL	1	LS
3	C-105-6.1	MOBILIZATION	1	LS
4	P-101-5.1a	PAVEMENT REMOVAL	1540	SY
5	P-101-5.1b	FULL DEPTH ASPHALT REMOVAL, INCLUDING BASE AND SUBBASE MATERIAL	20	SY
6	P-101-5.3	CONCRETE WHEELSTOP REMOVAL	8	EA
7	D-751-5.1	DESILTATION OF EXISTING STORM PIPE AND STRUCTURES	1	LS
8	D-751-5.2	REPAIR EXISTING PIPE JOINT OR REPLACE BRICK AND MORTAR AT PIPE OPENING	1	LS
9	0120-6*	EMBANKMENT	30	CY
10	0160-4-1*	TYPE B STABILIZATION	20	SY
11	0285-706*	OPTIONAL BASE, BASE GROUP 6	20	SY
12	0337-7-83*	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC C, FC-12.5, PG 76-22	160	TON
13	520-001*	CONCRETE WHEELSTOP	8	EA
14	0710-11101*	LOOP DETECTOR INDUCTIVE, F&I, TYPE 1	1	EA
15	0710-11123*	LOOP ASSEMBLY, F&I, TYPE E	1	AS
16	0710-11125*	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 6"	330	LF
17	0710-11160*	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID, 12"	150	LF
18	0710-11201*	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SOLID FOR STOP LINE OR CROSSWALK, 24"	20	LF
19	0710-11421*	PERMANENT PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGE OR SYMBOL	7	EA
20	0710-90*	PERMANENT PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID, 6"	110	LF
21	0710-11421*	PAINTED PAVEMENT MARKINGS, STANDARD, BLUE, SOLID FOR PARKING LOT-ACCESSIBLE MARKINGS, 6"	40	LF
22	0710-90*	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	1	LS

SUMMARY OF QUANTITIES – BID ALTERNATE 2				
ITEM NO.	SPEC	DESCRIPTION	QUANTITY	UNIT
1	C-102-5.1a	TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL	1	LS
2	C-105-6.1	MOBILIZATION	1	LS
3	P-151-4.1	STRIPPING	1530	SY
4	T-904-5.1	SODDING	1880	SY

* PAY ITEMS SPECIFICATION REFERENCE IS PER FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (FY 2024-25) AND ARE NOT INCLUDED IN THE CONTRACT DOCUMENTS TECHNICAL SPECIFICATIONS.

1

SUMMARY OF QUANTITIES NOTES

1. SEE SPECIFICATIONS SECTIONS 'METHOD OF MEASUREMENT' AND 'BASIS OF PAYMENT' FOR DETAILED DEFINITIONS FOR EACH PAY ITEM.
2. THE PROJECT PAY ITEMS ARE INTENDED TO BE INCLUSIVE OF ALL WORK TO BE PERFORMED WITHIN THESE CONTRACT DOCUMENTS. ALL INCIDENTAL WORK REQUIRED TO COMPLETE THE PROJECT OR ADHERE TO THIS PROJECT'S REQUIREMENTS SHALL BE INCLUDED IN THE CONTRACTOR'S BID UNDER THE NEAREST APPLICABLE BID ITEM.
3. ANY DAMAGE TO EXISTING ITEMS TO REMAIN INCLUDING, BUT NOT LIMITED TO, TREES, UTILITIES, LIGHTING, SIGNAGE, FENCING AND GRASS SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. THE COST OF TEMPORARY UTILITIES NEEDED, IF AVAILABLE, TO ACCOMPLISH THE WORK IS CONSIDERED INCIDENTAL TO THE PROJECT AND PAID FOR BY THE CONTRACTOR UNDER THE NEAREST APPLICABLE ITEM.
5. IF THERE IS ANY DISCREPANCY BETWEEN THE ITEMS AND QUANTITIES SHOWN ON THIS SHEET, AND THE BID PRICE FORM, THE BID PRICE FORM SHALL GOVERN.
6. ALL COSTS ASSOCIATED WITH PREPARING THE CONTRACTOR'S STAGING AREAS AND HAUL ROUTE, PROJECT RECORD DOCUMENTS, AND TEMPORARY POLLUTION, EROSION, AND SILTATION CONTROL SHALL BE INCLUDED UNDER MOBILIZATION. THIS INCLUDES, BUT IS NOT LIMITED TO, CLEARING AND GRADING OF THE STAGING AREA, STABILIZATION OF STAGING AREA, CONSTRUCTION OF ALL TEMPORARY UTILITIES IF AVAILABLE, SECURITY FENCING, PERMITTING COSTS, AND RESTORATION OF THE SITE TO ITS ORIGINAL CONDITION AND TO THE SATISFACTION OF THE RESIDENT PROJECT REPRESENTATIVE (RPR). CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS ARE MET.

ENGINEER: RAHEEL DOSSANI
REG. No: 89831
DATE: 04/16/2025
TEL: (954) 233-4982

DRAWN BY: SC | DATE: 05/30/2025
DESIGNED BY: RD | SCALE: AS NOTED
CHECKED BY: WB
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	10/23/25	GC	WB	ADDENDUM 1

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
SUMMARY OF QUANTITIES
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

BID DOCUMENTS

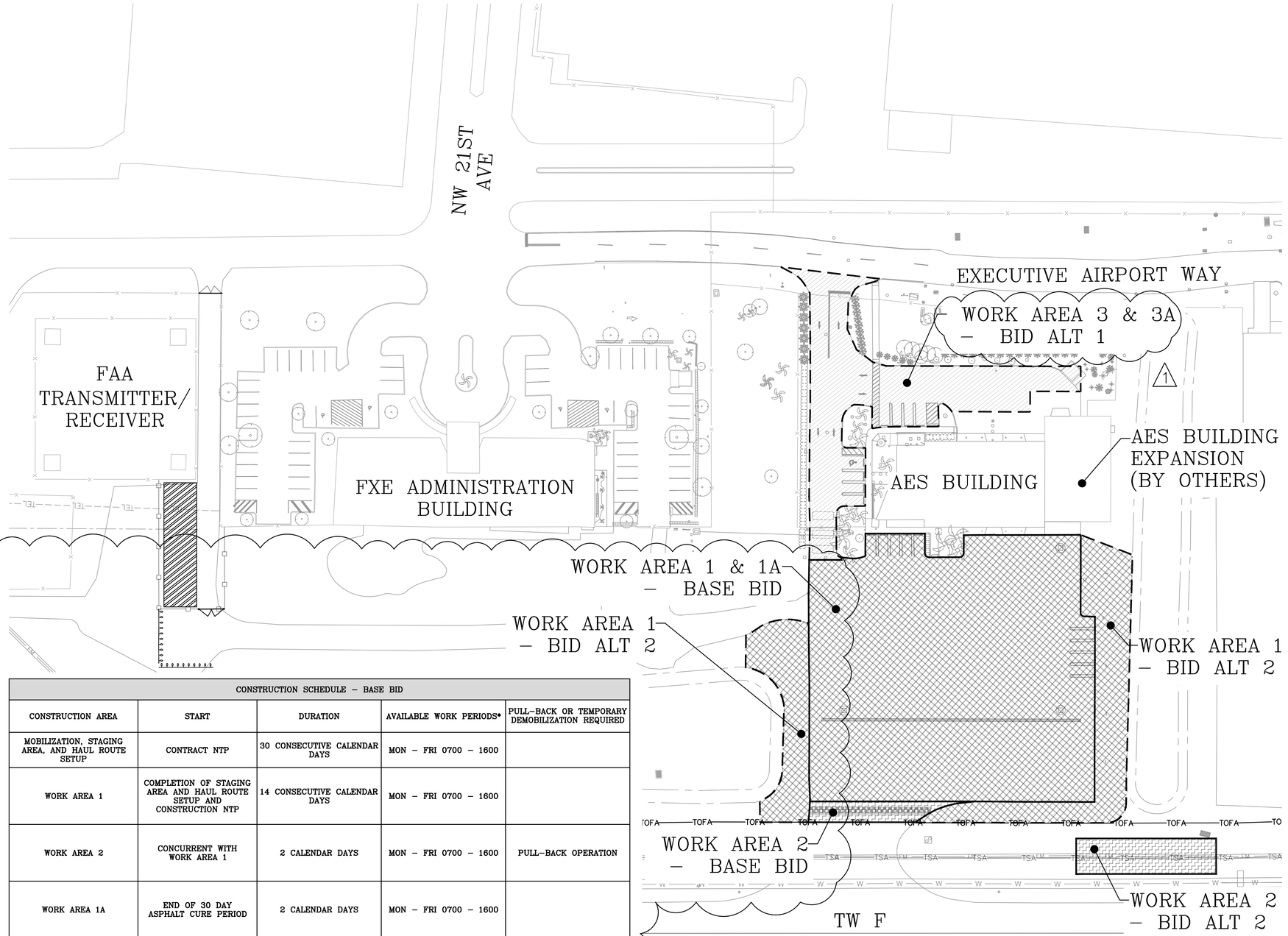
HDR ENGINEERING, INC.
3230 WEST COMMERCIAL BLVD., SUITE 400
FORT LAUDERDALE, FLORIDA, 33309
T: 954.535.1876 F:954.233.4953
CA# 4213

SHEET NO. G03
TOTAL: 31
CAD FILE: 12883-MULTI-NOTE
DRAWING FILE NO. 4-145-34

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

C:\PWWORKING\EAST01\D4261495\12883-MULTI-NOTE.DWG

Wednesday, October 22, 2025 COLOME, GIADHA



CONSTRUCTION SCHEDULE – BASE BID				
CONSTRUCTION AREA	START	DURATION	AVAILABLE WORK PERIODS*	PULL–BACK OR TEMPORARY DEMOBILIZATION REQUIRED
MOBILIZATION, STAGING AREA, AND HAUL ROUTE SETUP	CONTRACT NTP	30 CONSECUTIVE CALENDAR DAYS	MON – FRI 0700 – 1600	
WORK AREA 1	COMPLETION OF STAGING AREA AND HAUL ROUTE SETUP AND CONSTRUCTION NTP	14 CONSECUTIVE CALENDAR DAYS	MON – FRI 0700 – 1600	
WORK AREA 2	CONCURRENT WITH WORK AREA 1	2 CALENDAR DAYS	MON – FRI 0700 – 1600	PULL–BACK OPERATION
WORK AREA 1A	END OF 30 DAY ASPHALT CURE PERIOD	2 CALENDAR DAYS	MON – FRI 0700 – 1600	

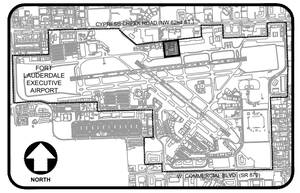
CONSTRUCTION SCHEDULE – BID ALTERNATE 1				
CONSTRUCTION AREA	START	DURATION	AVAILABLE WORK PERIODS*	PULL–BACK OR TEMPORARY DEMOBILIZATION REQUIRED
WORK AREA 3 – BID ALT 1	COMPLETION OF WORK AREA 1	14 CONSECUTIVE CALENDAR DAYS	MON – FRI 0700 – 1600	
WORK AREA 3A – BID ALT 1	END OF 30 DAY ASPHALT CURE PERIOD	2 CALENDAR DAYS	MON – FRI 0700 – 1600	

*OWNER BUSINESS HOURS ARE 0700–1700, MONDAY–FRIDAY. CONTRACTOR TO COORDINATE ALL ACTIVITIES REQUIRING OWNER PARTICIPATION WITHIN THE BUSINESS HOURS.

CONSTRUCTION SCHEDULE – BID ALTERNATE 2				
CONSTRUCTION AREA	START	DURATION	AVAILABLE WORK PERIODS*	PULL–BACK OR TEMPORARY DEMOBILIZATION REQUIRED
WORK AREA 1 – BID ALT 2	CONCURRENT WITH WORK AREA 1	4 CONSECUTIVE CALENDAR DAYS	MON – FRI 0700 – 1600	
WORK AREA 2 – BID ALT 2	CONCURRENT WITH WORK AREA 1	2 CONSECUTIVE CALENDAR DAYS	MON – FRI 0700 – 1600	PULL–BACK OPERATION

40' 0' 40' 80'
GRAPHIC SCALE
(IN FEET)

KEY MAP



LEGEND

- CONTRACTOR STAGING AND STORAGE AREA
- WORK AREA 1
- WORK AREA 2
- WORK AREA 3
- LOW PROFILE BARRICADE. SEE DETAIL 1 ON SHEET G06

PHASING NOTES

1. SEE GENERAL WORK AREA NOTES ON SHEET G07 FOR ADDITIONAL REQUIREMENTS AND INFORMATION.

ENGINEER: RAHEEL DOSSANI
REG. No: 89831
DATE: 04/16/2025
TEL: (954) 233-4952

DRAWN BY: SC | DESIGNED BY: RD | CHECKED BY: WB
DATE: 05/30/2025 | SCALE: AS NOTED
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS				
NO.	DATE	BY	CHK'D	DESCRIPTION
1	10/23/25	GC	WB	ADDENDUM 1

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
OVERALL CONSTRUCTION WORK AREA PLAN
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

BID DOCUMENTS

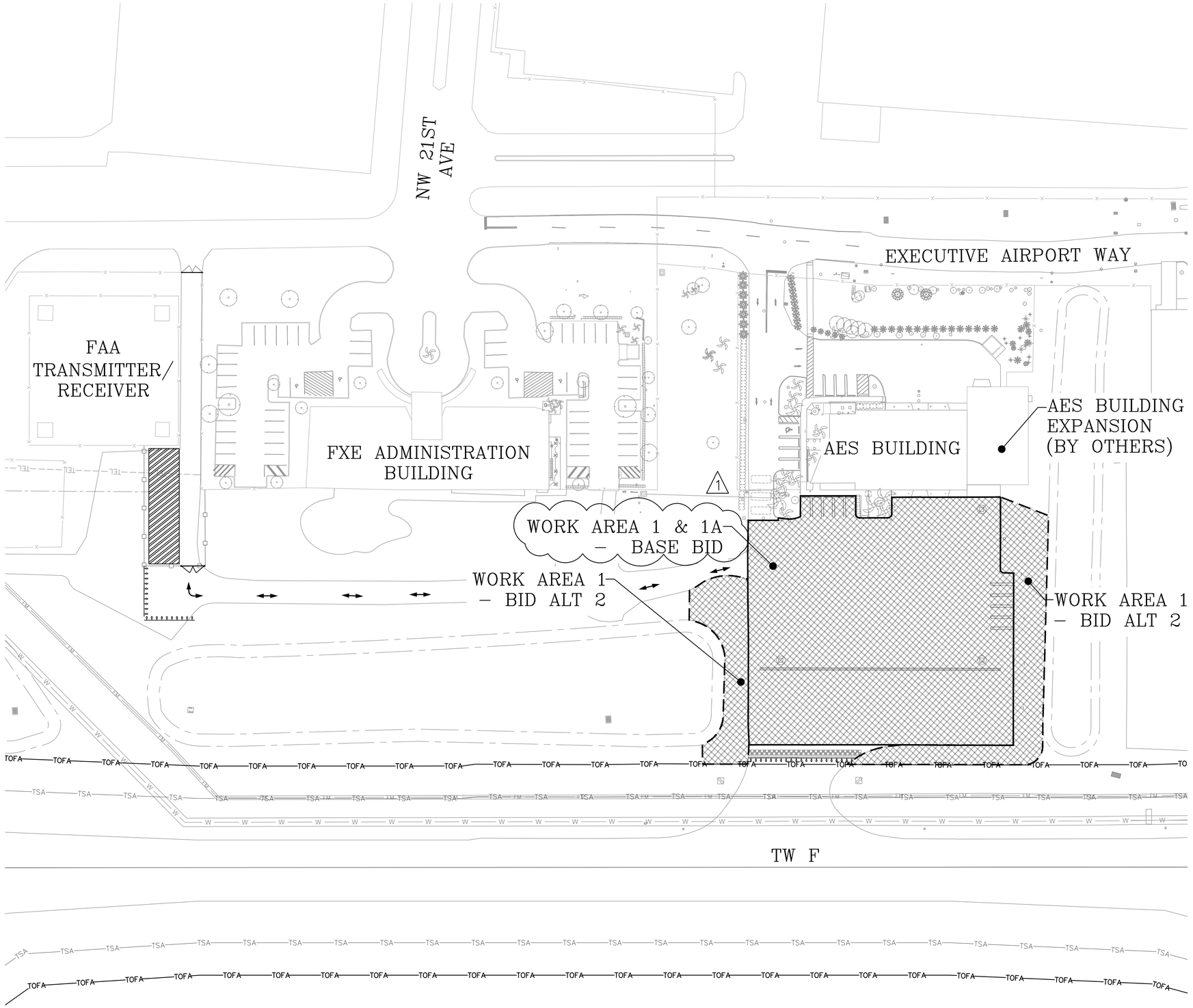
SHEET NO.
G08
TOTAL: 31
CAD FILE: 12883–MULTI–PHAS
DRAWING FILE NO. 4–145–34

HDR ENGINEERING, INC.
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CA# 4213

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Wednesday, October 22, 2025 COLOME, GIADHA

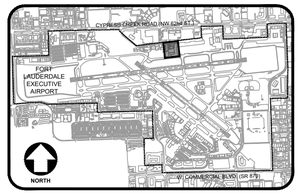


40' 0' 40' 80'

GRAPHIC SCALE (IN FEET)

N

KEY MAP



LEGEND

- CONTRACTOR STAGING AND STORAGE AREA
- WORK AREA 1
- LOW PROFILE BARRICADE. SEE DETAIL 1 ON SHEET G06

BASE BID WORK ITEMS

1. CONSTRUCTION ACTIVITIES INCLUDE:
   - 1.1. PAVEMENT MILLING
   - 1.2. PLACEMENT OF NEW ASPHALT
   - 1.3. PLACEMENT OF PAVEMENT MARKINGS
   - 1.4. INSTALL CONCRETE BUMPER GUARDS
   - 1.5. DESILTATION OF EXISTING PIPE AND STRUCTURES

BID ALT 2 WORK ITEMS

1. CONSTRUCTION ACTIVITIES INCLUDE:
   - 1.1. GRADING IMPROVEMENTS OFF PAVEMENT EDGES
   - 1.2. SODDING OF DISTURBED EARTH
   - 1.3. REMOVAL OF WORK AREA SPECIFIC MOT ITEMS

PHASING NOTES

1. SEE GENERAL WORK AREA NOTES ON SHEET G07 FOR ADDITIONAL REQUIREMENTS AND INFORMATION.

BASE BID – WORK AREA 1A WORK ITEMS

1. CONSTRUCTION ACTIVITIES INCLUDE:
   - 1.1. SURFACE PREPARATION
   - 1.2. PLACEMENT OF PERMANENT PAVEMENT MARKINGS

1

BID DOCUMENTS

HDR ENGINEERING, INC.
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100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

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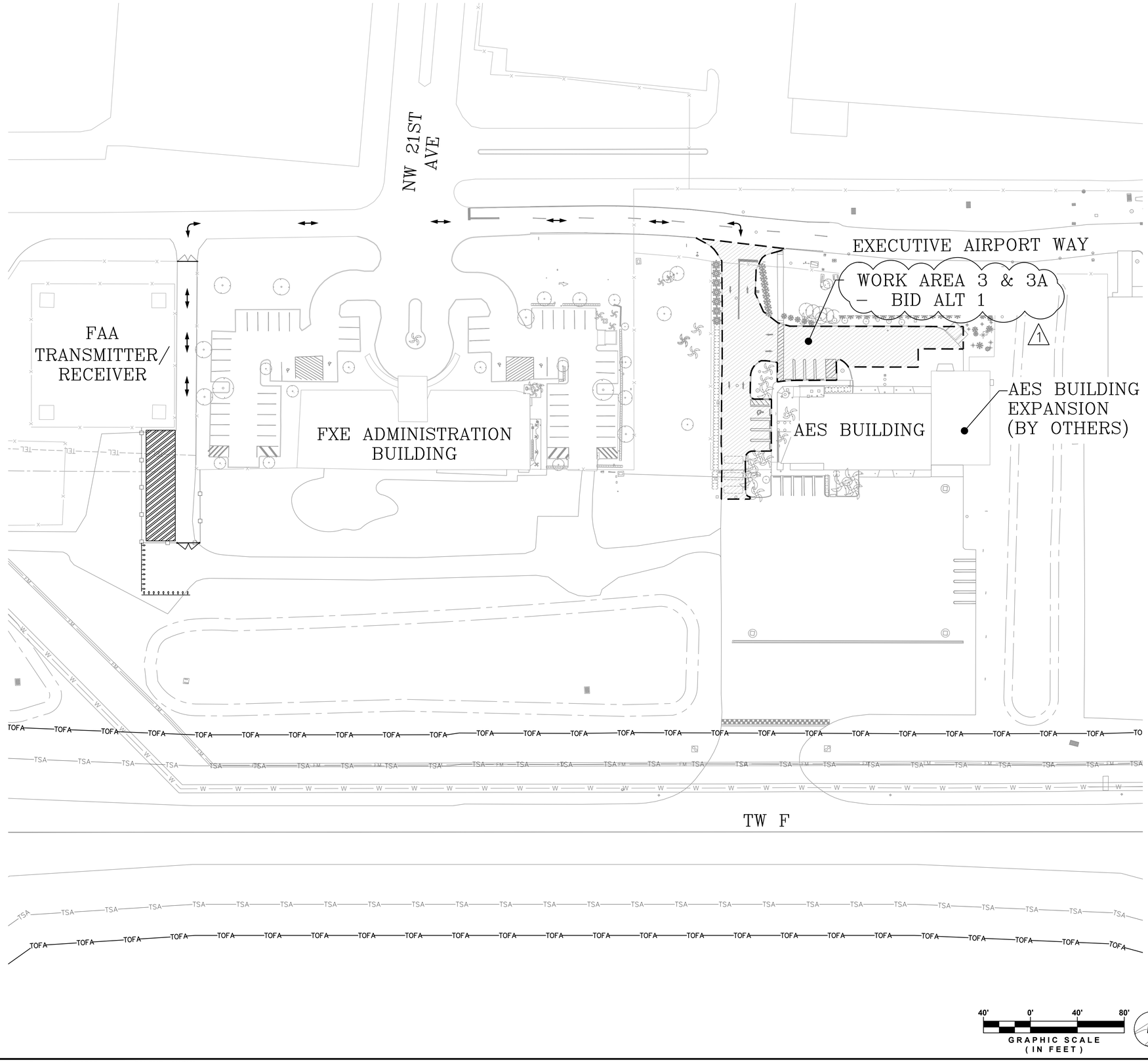
PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
WORK AREA PLAN 1
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO. G09
TOTAL: 31
CAD FILE: 12883-MULTI-PHAS
DRAWING FILE NO. 4-145-34

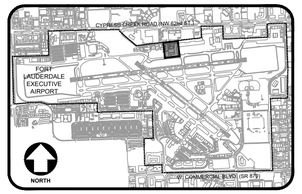
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KEY MAP



LEGEND

- CONTRACTOR STAGING AND STORAGE AREA
- WORK AREA 3 – BID ALT 1
- LOW PROFILE BARRICADE. SEE DETAIL 1 ON SHEET G06

BID ALT 1 WORK ITEMS

3. CONSTRUCTION ACTIVITIES INCLUDE:
   - 3.1. PAVEMENT MILLING
   - 3.2. PLACEMENT OF NEW ASPHALT
   - 3.3. PLACEMENT OF PAVEMENT MARKINGS
   - 3.4. INSTALL CONCRETE WHEELSTOPS
   - 3.5. REMOVAL OF WORK AREA SPECIFIC MOT ITEMS

PHASING NOTES

1. SEE GENERAL WORK AREA NOTES ON SHEET G07 FOR ADDITIONAL REQUIREMENTS AND INFORMATION.

BID ALT 1 – WORK AREA 3A WORK ITEMS

1. CONSTRUCTION ACTIVITIES INCLUDE:
   - 1.1. SURFACE PREPARATION
   - 1.2. PLACEMENT OF PERMANENT PAVEMENT MARKINGS

1

BID DOCUMENTS

ENGINEER: RAHEEL DOSSANI
REG. No: 89831
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DATE: 05/30/2025
SCALE: AS NOTED

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PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	10/23/25	GC	WB	ADDENDUM 1

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
WORK AREA PLAN 3 - BID ALT 1
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

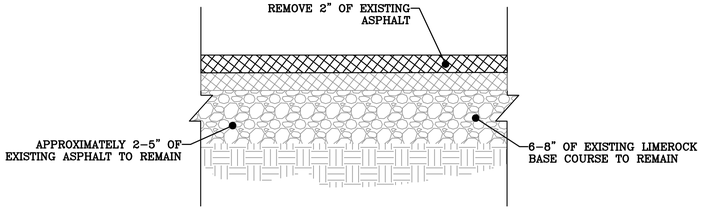
HDR ENGINEERING, INC.
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SHEET NO. G11
TOTAL: 31
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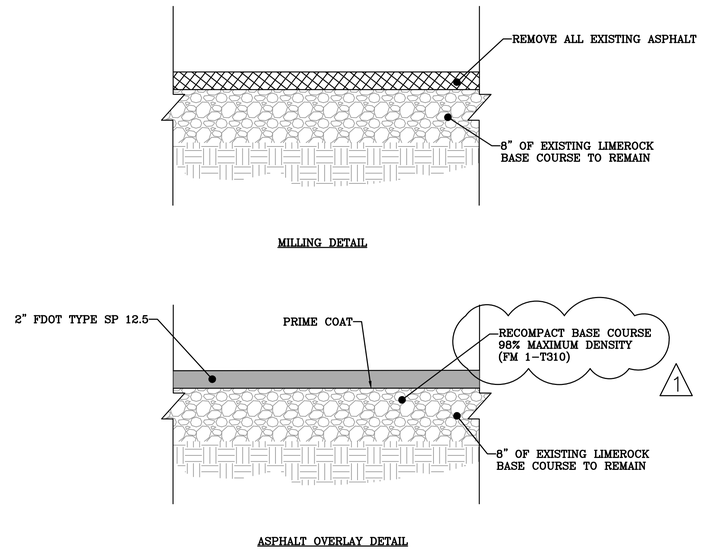
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Wednesday, October 22, 2025 COLOME, GIADHA



① APRON REHABILITATION DETAIL

NOT TO SCALE

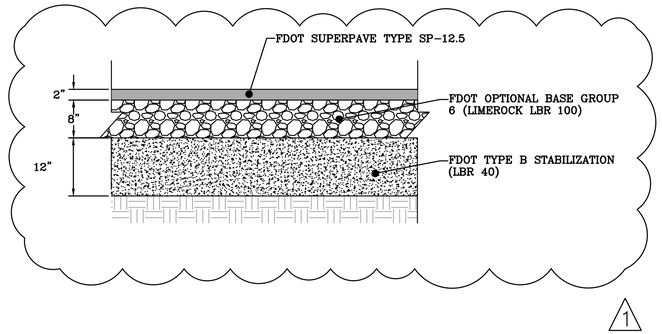


NOTES

1. PROVIDE PRIME COAT IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS SECTION 300.

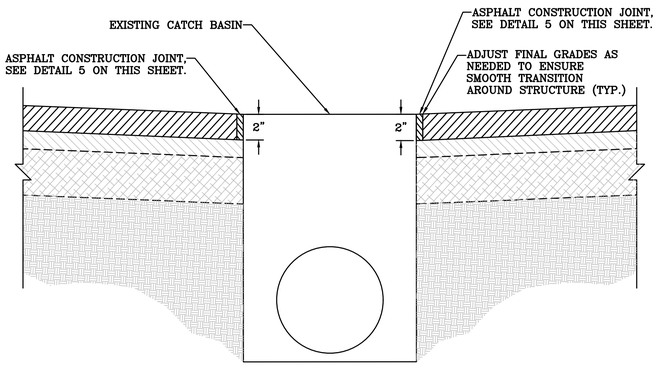
② PARKING LOT REHABILITATION DETAIL (BID ALTERNATE 1)

NOT TO SCALE



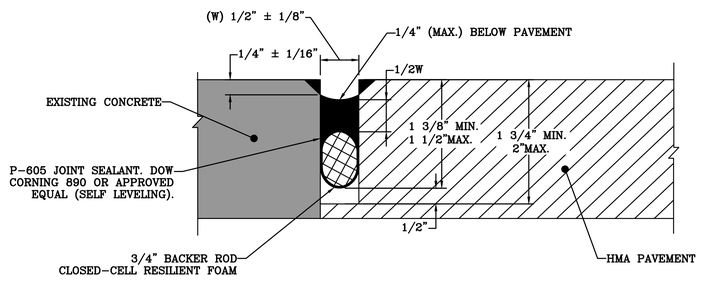
③ HMA LANDSIDE FULL DEPTH PAVEMENT SECTION (BID ALTERNATE 1)

NOT TO SCALE



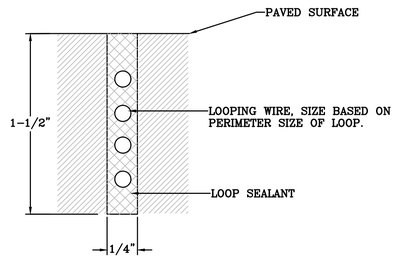
④ APRON PAVING AROUND EXISTING CONCRETE STRUCTURES DETAIL

NOT TO SCALE



⑤ ASPHALT CONSTRUCTION JOINT

NOT TO SCALE



NOTES

1. DO NOT EXCEED A MAXIMUM OF 200 SQUARE FEET OF LOOP AREA TO ONLY ONE DETECTOR.
2. IN APPLICATIONS THAT NEED TO SPAN A WIDE AREA, USE SEVERAL SMALLER LOOPS. IF MULTIPLE LOOPS ARE USED KEEP EACH LOOP AT LEAST SIX FEET APART.
3. LOOP AND LEAD-IN WIRE SHOULD BE ONE CONTINUOUS PIECE.
4. USE ONLY 14, 16, OR 18 GUAGE STRANDED WIRE WITH A DIRECT BURIAL JACKET. A CROSS LINKED POLYETHYLENE INSULATION SHALL BE USED.
5. TWIST LOOSE TAILS OF LEAD-IN AT LEAST 10 TURNS PER FOOT.
6. THE SLOT IN THESURFACE SHOULD BE CUT 1/4"W x 1-1/2"D.
7. AFTER WIRE IS INSTALLED THE SLOT MUST BE COMPLETELY BACKFILLED WITH A NON-HARDENING SEALER.
8. NUMBER OF INDIVIDUAL WIRE LOOPS FOR LOOP SECTION BASED ON MANUFACTURER'S SPECIFICATIONS.

⑥ TYPICAL LOOP DETECTION WIRE INSTALLATION

NOT TO SCALE

BID DOCUMENTS

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1	10/23/25	GC	WB	ADDENDUM 1

PROJECT # P12883
AES APRON PARKING REHABILITATION
FORT LAUDERDALE EXECUTIVE AIRPORT
SITE DETAILS
2020 EXECUTIVE AIRPORT WAY, FORT LAUDERDALE, FL

SHEET NO. C10
TOTAL: 31
CAD FILE: 12883-MULTI-SITE
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