Florida Department of Transportation
605 Suwannee Street
Tallahassee, FL 32399-0450

RON DESANTIS
GOVERNOR

KEVIN J. THIBAULT
SECRETARY

ADDENDUM NO. 4

To: ALL DESIGN BUILD FIRMS

FINANCIAL ITEM NUMBER: 407918-5-52-01 & 407918-5-56-02
CONTRACT NUMBER: E3T77
DESCRIPTION: Design Build for new SR 8 (I-10) Interchange West of Crestview in Okaloosa County

PROPOSALS TO BE RECEIVED: June 3, 2021

This is your authorization to make the following changes to the Request for Proposal package you now have for the subject project:

Attached for your use is a redline revision to the RFP document previously distributed. The following is a summary of the revisions:

Cover
- **Corrected date for Addendum 3**
- **Document denoted as Addendum 4**

Attachments
- **Removed typical section package due to confusion between written language in RFP. Written language shall be binding and the typical section package itself will be moved to a Reference Document.**
- **Revised pavement designs**
- **Added Noise Study Report Addendum (provided via email 2/22/21 in response to bid question)**

Reference Documents
- **Added typical section package**

Section I. Introduction, Description of Work
- **Added requirements related to ramps not being allowed in median**
- **Revised requirements for bike lane width on bridge**
- **Revised turn lane requirements related to dual right and left turn lanes.**
- **Added requirement for slip movement at roundabout**
- **Revised requirements for stormwater system design**
- **Revised fencing requirements**
- **Clarified requirements for existing pipes**
- **Added requirements related to Okaloosa County and Taylor Farms agreement**

Section II. Schedule of Events
- **Revised questions deadline prior to technical proposal**

Section VI. Design and Construction Criteria, Subsection I. Structures Plans, Subsection 2. Criteria

- **Add details for drainage design in wall zones**

Section VI. Design and Construction Criteria, Subsection N. Transportation Management Plan, Subsection 1. Traffic Control Restrictions

- **Revised requirements for traffic control design during construction**

Section VI. Design and Construction Criteria, Subsection R. Signalization and Intelligent Transportation System Plans, Subsection 2. Design and Engineering Services

- **Removed requirement related to flashing yellow arrow**
- **Revised fiber optic cable requirements**
- **Removed video detection requirements**
- **Removed illumination requirement for specific street signs**
- **Revised fiber optic cable splice requirements**

Please use this information when preparing your proposal.

All PROPOSAL HOLDERS please acknowledge receipt of the addendum on the Design Build Proposal of form (form no. 375-020-12), in the space provided.

Sincerely,

Ranae Dodson
Procurement Manager

cc: Kerrie Harrell, Alaina Webb, File

Please sign below to acknowledge receipt of Addendum No. 4.

Acknowledged by:_____

Florida Department of Transportation
District 3

DESIGN-BUILD
FINAL
REQUEST FOR PROPOSAL
for
New SR 8 (I-10) Interchange West of Crestview
Okaloosa County

Financial Projects Number(s): 407918-5-52-01 & 407918-5-56-02
Federal Aid Project Number(s): D320-013-B
Contract Number: E3T77

Addendum No. 1 – 11/20/20
Addendum No. 2 – 12/07/20
Addendum No. 3 – ~~01/11/20~~ 01/11/21
Addendum No. 4 – 02/18/21

Table of Contents

ATTACHMENTS

The Attachments listed below are hereby incorporated into and made a part of this Request for Proposal (RFP) as though fully set forth herein.

Project Advertisement - revised

Division I Design-Build Specifications

- Award and Execution of Contract – Public Records (SP0030900D3-720)
- Legal Requirements and Responsibility to the Public – laws to be observed – compliance with Federal Endangered Species Act and other wildlife regulations (Bear) (SP0070104-1)
- Legal Requirements and Responsibility to the Public – laws to be observed – compliance with Federal Endangered Species Act and other wildlife regulations (Eagle) (SP0070104-2)
- Legal Requirements and Responsibility to the Public – laws to be observed – compliance with Federal Endangered Species Act and other wildlife regulations (Gopher Tortoises) (SP0070104-3)
- Legal Requirements and Responsibility to the Public – laws to be observed – compliance with Federal Endangered Species Act and other wildlife regulations (Indigo Snake) (SP0070104-7)
- Legal Requirements and Responsibilities to the Public – E-Verify (SP0072900)
- Legal Requirements and Responsibilities to the Public – Scrutinized Companies (SP0073000)
- Legal Requirements and Responsibility to the Public-Title VI Assurance (SP0073100)
- Partnering (SP0080306)
- Damage Recovery (SP0081200)

Divisions II and III Special Provisions identified by the Department to be used on the Project:

- Mobilization (SP1010000DB)
- Contractor Quality Control General Requirements (SP1050813DB)
- **Structures Foundations (SP4550000DB) – REVISED**

Value Added Developmental Specifications

- Value Added Bridge Component (DEV475)

FHWA 1273

Workforce and Bituminous Material Document

Permits – *not available at this time*

~~**407918-5 I-10 at Antioch Design Typical Section Package**~~

407918-5 Pavement Design (Revised)

Right of Way Commitments and Final Judgements

ITS Facility Management Implementation Guidelines and Minimum Requirements

PD&E Study Documents

407918-5 Antioch Road Noise Study Report

Noise Study Report Addendum – January 2021

SR 8 (I-10) Re-evaluation

City of Crestview Utility Work by Highway Contractor Agreement

City of Crestview Utility Specifications

CS14 - Addition Water Main Spec

CS14 – Water Main Specs (93)

CS15 – Sewer Specs (91)

Bid Price Proposal Forms:

1. Design Build Proposal Of Proposer (No. 375-020-12)
2. Design Build Bid Blank (No. 375-020-17)
3. Design Build Bid or Proposal Bond (No. 375-020-34)
4. Vendor Certification Regarding Scrutinized Companies Lists (No. 375-030-60)
5. Design Build Bid Proposal (No. 700-010-65)

Other Contract Forms:

1. Design Build Contract Bond (No. 375-020-14)
2. Contract Affidavit (No. 375-020-30)
3. Design Build Contract (No. 375-020-13)

REFERENCE DOCUMENTS

The following documents are being provided with this RFP. Except as specifically set forth in the body of this RFP, these documents are being provided for reference and general information only. They are not being incorporated into and are not being made part of the RFP, the contract documents or any other document that is connected or related to this Project except as otherwise specifically stated herein. No information contained in these documents shall be construed as a representation of any field condition or any statement of facts upon which the Design-Build Firm can rely upon in performance of this contract. All information contained in these reference documents must be verified by a proper factual investigation. The bidder agrees that by accepting copies of the documents, any and all claims for damages, time or any other impacts based on the documents are expressly waived.

I-10 As-Built Plans State Job No. 57002-3403

407918-5 Concept Plans (including cadd files)
- 407918-5 Roadway Plans
- 407918-5 Signing & Marking Plans
- 407918-5 Signalization Plans
- 407918-5 ITS Plans
- 40791855201 zip file (CAD Drawings)

407918-5 I-10 at Antioch Design Typical Section Package

Bridge Development Report

Drainage Report

Pond Siting Report

Geotechnical Data
- 407918-5 Geotech Pond Report - I-10 at Antioch Rd
- 407918-5 Phase II Geotech Roadway and Embankments Report - I-10 at Antioch Rd

Preliminary Utility Assessment Lighting Design Analysis Report

Straight Line Diagrams

Right of Way Maps

Preliminary ICE evaluations
Wildlife Fence Plans and CAD Files
Okaloosa County PJ Adams Reconstruction Plans
Okaloosa County Arena Road Plans
Okaloosa County Phase V Bypass Roadway Plans-(Arena Road)
Okaloosa County Phase V Bypass Signing and Pavement Marking Plans-(Arena Road)
Preliminary Lighting Design Analysis Report (LDAR)
Pond permitting memo – December 2020

I. Introduction.

The Florida Department of Transportation (Department) has issued this Request for Proposal (RFP) to solicit competitive bids and proposals from Proposers for the design and construction of a new SR 8 (1-10) Interchange west of Crestview in Okaloosa County.

Description of Work

The proposed interchange is located along SR 8 (I-10) near Antioch Road/PJ Adams Parkway; that will be located approximately 2.6 miles west of SR 85 and 1,400 feet east of the existing CR 4 (Antioch Road) bridge over SR 8 (I-10). The interchange project is a critical part of a series of projects that will develop the Crestview Bypass that will ultimately connect US 90 to SR 85. US 90 to SR 85 (north of Crestview) via PJ Adams Parkway reconstruction and extension. The southern limits of the proposed Bypass includes the widening PJ Adams Parkway (currently under construction) and this interchange project. The northern limits are currently under design and will be under construction, if not completed, prior to this project. The overall project length of the interchange is approximately 1.42 miles.

The improvements include a new four lane corridor (approximately 2,000 LF) as an extension of PJ Adams Parkway, that will become part of the planned Crestview Bypass. The project begins where the alignment of the planned PJ Adams Parkway Extension deviates from the existing CR 4 (Antioch Road) approximately 100 feet east of the existing PJ Adams Parkway and CR 4 (Antioch Road) intersection and continues to travel west then curves to the north and travels over SR 8 (I-10). The interchange and new bridge are configured as a tight urban diamond interchange to minimize right-of-way needs, potential relocations, and wetland impacts. As the new alignment of PJ Adams Parkway (Crestview Bypass) crosses over SR 8 (I-10) and comes back down to grade, the alignment continues to travel north, approximately 1,900 feet, to connect with the planned PJ Adams Parkway Extension (as approved in 2009 during the PJ Adams Parkway Extension PD&E study, FPID 421988-1).

The existing SR 8 (I-10) has four 12-foot wide travel lanes with 12-foot shoulders (10-foot paved) with a design speed of 70 mph. The existing travel lanes and paved shoulders shall be milled and resurfaced between Sta. 650+00 and Sta 695+00 westbound and Sta 657+00 to Sta. 702+00 eastbound. The Design-Build Firm shall verify if the existing pavement cross slopes meet current design criteria. Areas not meeting current criteria shall be corrected by the Design-Build Firm. The outside shoulders will be reconstructed to accommodate the proposed ramp geometry, drainage improvements, and pavement structure. Any edge drains impacted shall also be reconstructed. This interchange improvement shall be compatible with the future six-laning of SR 8 (I-10) per FPID 441038-4-52-01 where new lanes will be added on the inside.

Proposed Ramp A is the eastbound off-ramp to PJ Adams Parkway. A 15-foot wide single lane ramp taper type exit shall be provided with a design speed of 50 mph. The horizontal geometry in the conceptual plans provides a 530-foot deacceleration length (70 mph to 40 mph) prior to the initial curve. At a minimum, this deceleration length shall be provided in the final design. The ramp shall widen and provide 12-foot wide double left turn lanes and a 12-foot single right turn lane at the proposed signal. The inside paved shoulder varies from 6 to 8 feet with a concrete barrier attached to a MSE wall system. The outside shoulder begins with 4-foot paved shoulder with shoulder gutter and then transitions to a 10-foot paved shoulder with a concrete barrier/noise wall attached to a MSE wall system.

Proposed Ramp B is the westbound off-ramp to PJ Adams Parkway. A 15-foot wide single lane ramp taper type exit shall be provided with a design speed of 50 mph. The horizontal geometry in the conceptual plans provides a 530-foot deacceleration length (70 mph to 40 mph) prior to the initial curve. At a minimum, this deceleration length shall be provided in the final design. The ramp shall widen to provide 12-foot wide double left turn lanes and a 12-foot wide single right turn lane at the proposed signal. The inside paved

shoulder varies from 6 to 8 feet with a concrete barrier attached to a MSE wall system. The outside shoulder begins with 4-foot paved shoulder with shoulder gutter/guardrail and then transitions to a 6 to 10-foot paved shoulder with a concrete barrier wall attached to a MSE wall system.

Proposed Ramp C is the eastbound on-ramp to SR 8 (I-10). Provide a dual lane ramp transitioning to a single lane parallel type entrance ramp with a design speed of 50 mph. Minimum single ramp width is 15 feet and 2 lane ramp shall be 24 feet. The horizontal geometry in the conceptual plans provide 1044-foot acceleration length (50 mph to 70 mph) prior to merging onto SR 8 (I-10). At a minimum, this acceleration length shall be provided in the final design. The inside paved shoulder varies from 6 to 8 feet with a concrete barrier attached to a MSE wall system. The outside shoulder begins with 10-foot paved shoulder with a concrete barrier wall attached to a MSE wall system, then transitions to a 10-foot paved shoulder with guardrail and finally to a 12-shoulder (10-foot paved).

Proposed Ramp D is the westbound on-ramp to SR 8 (I-10). Provide a dual lane ramp transitioning to a single lane parallel type entrance with a design speed of 50 mph. Minimum single ramp width is 15 feet and 2 lane ramp shall be 24 feet. The horizontal geometry in the conceptual plans provide 580-foot acceleration length (50 mph to 70 mph) prior to merging onto SR 8 (I-10). At a minimum, this acceleration length shall be provided in the final design. The inside paved shoulder varies from 6 to 8 feet with a concrete barrier attached to a MSE wall system. The outside shoulder begins with 10-foot paved shoulder with a concrete barrier wall attached to a MSE wall system, then transitions to a 8-foot paved shoulder with shoulder gutter/guardrail, then transitions to a 4-foot paved shoulder with shoulder gutter, then to a 6-foot paved shoulder with guardrail and finally to a 12-shoulder (10-foot paved).

The new interchange ramp design shall NOT include ramps that will enter or exit I-10 from within the I-10 median.

The proposed PJ Adams Parkway from Crab Apple Avenue to signalized intersection with Antioch Road is an urban arterial with a design speed of 40 mph. The design shall include four 11-foot travel lanes (two each way) with 22 to 29-foot wide raised median with Type E curb and gutter, 7-foot buffered bike lanes with Type F curb and gutter, and 6-foot sidewalks. This segment is to provide the following:

- Full median opening at Crab Apple Avenue with a westbound offset left turn lane.
- Restrictive median opening at first intersection with Antioch Road. No turn lanes.
- Full median opening at Lillian Way with eastbound and westbound offset left turn lanes.
- Signalized full median opening with the second intersection with Antioch Road with northbound double left turns.

The proposed PJ Adams Parkway from signalized intersection with Antioch Road to approximately 900 feet north of SR 8 (I-10) is an urban arterial with a design speed of 45 mph. The design shall include four 11-foot travel lanes (two each direction) with 22 to 50-foot wide raised median with Type E curb and gutter, 7-foot buffered bike lanes with Type F curb and gutter, and 6-foot sidewalks. This segment also includes a bridge that will have four 11-foot travel lanes (two each direction), two 11-foot left turn lanes (one each direction), two 11-foot striped gore (one each direction) and a 6-foot median with a 4-foot traffic separator. The ~~concept~~ bridge **shall** also includes **7-foot buffered bike lanes** ~~4-foot buffered bike lanes~~, 18-inch (16-inch) gutter pan buffer and 6-foot raised sidewalks with vertical-shape traffic railing. This segment is to provide the following:

- Southbound right turn lane with 7-foot keyhole at the signalized intersection with Antioch Road.
- Northbound left turn lane for SR 8 (I-10) westbound Ramp D.
- Northbound right turn lane with 7-foot keyhole for the SR 8 (I-10) eastbound Ramp C.
- Southbound left turn lane for SR 8 (I-10) eastbound Ramp C.
- Southbound right turn lane with 7-foot keyhole for the SR 8 (I-10) westbound Ramp D.

- Signalized intersections with the SR 8 (I-10) ramps.
- Approximately 236 linear feet (left) of concrete barrier/noise wall attached to a MSE wall system south of the bridge.
- Approximately 1133 linear feet (left and right) of concrete barrier wall attached to a MSE wall system north of the bridge.

The proposed PJ Adams Parkway from approximately 900 feet north of SR 8 (I-10) to Arena Road (to be constructed by others) is a suburban arterial with a design speed of 45 mph. The design shall include four 11-foot travel lanes (two each way) with 22-foot wide raised median with Type E curb and gutter, 10-foot shoulders (7-foot paved), open drainage ditches with 6-foot sidewalks. This segment is to provide the following:

- Northbound left turn lane connecting to Arena Road.
- Convert the open median opening at Arena Road to a signalized one.

A new roundabout shall be designed and constructed for the connection for CR 4 (Antioch Road) (North), Whitehurst Lane, and Garrett Pit Road with the new PJ Adams Parkway Extension alignment. The proposed roundabout approximately 660 feet west of PJ Adams Parkway is single lane roundabout with two lanes for the northbound Antioch Road traffic movement. The roundabout shall be designed for a design speed 25 mph with a landscaped center. The geometrics shall be designed in accordance with the FDM Section 213 and NCHRP Report 672 shall be utilized as a guide during the design. The Design-Build team shall work with the local government regarding landscape planting material for the area around and inside of the roundabout. The roundabout shall not be opened for service until vertical obstructions are included in the center of the circle. The concept incorporates following characteristics and the final design shall provide these minimum criteria:

- 210-foot Inscribed Diameter.
- Left of Center Approach.
- Entry Width (total) – 18 feet for one lane and 36 feet for two lanes.
- Circulatory Width (total) – 18 feet for one lane and 36 feet for two lanes.
- Entry Radii – 100 feet for one lane and 125 feet for two lanes.
- Exit Radii – 300 feet for Antioch Road and 100 feet for Addison Place, Whitehurst Lane and Garrett Pit Road.
- 18-foot Wide Truck Apron.
- WB-62FL Design Vehicle.
- Sidewalks/pedestrian accommodation.

The proposed Antioch Road from PJ Adams Parkway to the roundabout is an urban arterial with a design speed of 30 mph. The design shall include two 12-foot westbound travel lanes and one 12-foot lane eastbound lane with 22-foot wide raised median with Type E curb and gutter, 5-foot bike lanes with Type F curb and gutter, and 6 to 8-foot sidewalks. This segment is to provide the following:

- Eastbound lane widens to provide 11-foot double **right ~~left~~** turn lanes and a 11-foot single **left ~~right~~** turn lane at the signalized intersection with PJ Adams Parkway.

The proposed Antioch Road from the roundabout to south of existing Antioch Road bridge width will utilize design speeds 30 to 45 mph. The roadway transitions from urban to a rural arterial matching existing conditions. The urban concept will have two 12-foot northbound travel lanes and one 12-foot lane southbound lane with Type F curb and gutter, and 8-foot sidewalks. With the rural concept, the two 12-foot northbound travel lanes with 8-foot paved shoulders with shoulder gutter/guardrail transitions down to one matching existing conditions. The southbound lane remains 12 feet with 8-foot paved shoulders with shoulder gutter/guardrail. This segment is to provide the following:

- Widen Antioch Road to introduce a splitter island at the roundabout.
- **The design shall include a slip movement outside of the roundabout circular lanes connecting eastbound Antioch Road to Whitehurst Lane.**

The required pavement design for the project is included as an Attachment to this RFP. The minimum pavement design requirements for each design applies to the entire width of the lane/area. For cross slope correction, maximum and minimum milling depths are as follows:

I-10 Maximum Milling Depth: 3.0”
I-10 Minimum Milling Depth: 1.0”

All longitudinal joints, including base and pavement widening joints, shall be within 1 foot of the lane edge.

All roadway areas, not including I-10, shall be full depth reconstruction except for minimal milling/resurfacing at the beginning/ending limits of construction to provide proper tie-in to existing facilities.

The following requirements shall be implemented regarding side streets within the project:

Crab Apple Avenue is a side street entrance to the Rolling Ridge subdivision. The design needs to include all necessary work to tie-in the side street within the existing right-of-way while maintaining access to the neighborhood.

Antioch Road is a two-lane rural local side street. The design needs to include all necessary work to tie-in the side street within the existing right-of-way while maintaining access to local traffic.

Lilian Way is a side street entrance to Taylor Farms subdivision. The roadway needs to be extended and realigned to tie-in to PJ Adams Parkway similar to the concept plans. Lilian Way will include two 12-foot lanes, Type F curb and gutter, and a closed drainage system. Access to the neighborhood shall be maintained at all times.

Addison Place is a side street entrance to Addison Place Apartments. The roadway needs to be extended, reconstructed, and realigned to be one of the legs of the roundabout similar to the concept plans. Addison Place will include two lanes of variable width, Type F curb and gutter, and a closed drainage system. The design will also need to accommodate the dumpster services as well. Access to the apartments shall be maintained at all times.

Garrett Pit Road is a two-lane rural local side street. The roadway needs to be extended, reconstructed, and realigned to be one of the legs of the roundabout similar to the concept plans. Garrett Pit Road will include two 11-foot lanes, Type F curb and gutter, and a closed drainage system. The design will also need to accommodate maintenance access to Pond 2 as well. Access for local traffic shall be maintained at all times.

Whitehurst Lane is a two-lane rural local side street that services Antioch Elementary School and Antioch Estates subdivision. The roadway needs to be reconstructed and realigned to be one of the legs of the roundabout similar to the concept plans. Whitehurst Lane will include two 11-foot lanes, Type F curb and gutter, a closed drainage system and 6-foot sidewalk on the left side. Access for local traffic shall be maintained.

Offset left turn lanes shall be constructed at the following locations:

- Eastbound P.J. Adams Parkway at Crab Apple Lane
- Westbound P.J Adams Parkway west of Antioch Road (U-turn)
- Eastbound P.J Adams Parkway at Lillian Way extension
- Westbound P.J. Adams Parkway at Whitehurst Lane
- Westbound P.J. Adams Parkway at I-10 westbound on-ramp
- Eastbound P.J. Adams Parkway at I-10 eastbound on-ramp
- Westbound P.J. Adams Parkway at Arena Road
- Eastbound Antioch Road at P.J. Adams Parkway

Right turn lanes shall be constructed at the following locations:

- Eastbound Antioch Road at P.J. Adams Parkway
- Eastbound P.J. Adams Parkway at Antioch Road
- Westbound P.J. Adams Parkway at I-10 eastbound on-ramp
- Eastbound P.J. Adams Parkway at I-10 westbound on-ramp

Turn lanes shall be design in accordance with current design criteria for design speed and queue length.

The Design-Build Firm will develop a drainage system to convey, treat and attenuate runoff from the project. The stormwater management system shall meet the requirements set forth by the NWFWMD and FDOT for water quantity (attenuation) and water quality. **The stormwater system shall be designed by the Design-Build Firm in accordance with the requirements of this RFP. Stormwater ponds shall outfall at historic outfall locations. The concept plans do not accurately reflect this requirement in some locations.** The existing 8 ft wide by 5 ft wide Box Culvert Cross drain, EX-CD-2, under I-10 **may** ~~**will**~~ remain, and the existing 8 ft wide by 5 ft high Box Culvert Cross Drain, EX-CD-1 under Southwestern Crestview Bypass (EX CD-1) **can** ~~**will need to**~~ be extended to accommodate the widening. **These two specific cross drains (EX-CD-1 and EX-CD-2) may remain and be modified as appropriate to be incorporated into the Design-Build Firm's design and construction.** There are two proposed cross drains under PJ Adams Parkway: CD-4 and CD-5. ~~**Both are proposed 10 ft wide by 4 ft high concrete box culverts.**~~ ~~**The culverts will be designed by the Design-Build firm in accordance with the requirements of this RFP.**~~ **Stormwater ponds are not be allowed to be constructed within the I-10 median area.**

The Design-Build Firm shall construct D3 standard wildlife fencing along the newly acquired Limited Access Right-of-Way **as well as replace existing wildlife fencing disturbed by the construction activities** per Standard Plans Indexes 550-001 and 550-004. **The Design-Build Firm shall leave no gaps in fencing along the existing and proposed right-of-way within the project limits.** The Right-of-Way Maps for the project is included as a Reference Document in this RFP. The Design-Build Firm will need to verify right-of-way location before construction. **The Design-Build Firm shall design a reasonable and safe maintenance access driveway for each pond location to allow access between the roadway and pond and include a 12' access gate opening where the limited access fencing is located. The fence gate shall be a cantilever slide gate.**

The Design-Build Firm shall design, furnish, install and test, traffic signals that shall include mast arm signals, full pedestrian features with countdown pedestrian signals meeting ADA standards, vehicular detection (loop), LED internally illuminated overhead street name signs (servicing all applicable directions), uninterrupted power supply devices (UPS), and emergency preemption devices. The following intersections will be signalized:

- PJ Adams Parkway / Antioch Road

- PJ Adams Parkway / Ramps A & C
- PJ Adams Parkway / Ramps D & B
- PJ Adams Parkway / Arena Road

The Design-Build Firm is required to complete ICE evaluations for the new roundabout location and all new traffic signal locations if the previously approved ICE evaluation is no longer valid based on the Design-Build Firm's design.

~~**High mast lighting is required for the footprint of the interchange (ramps and SR 8 (I-10) mainline). Conventional lighting is required for PJ Adams Parkway. Underdeck lighting is required for the existing Antioch Bridge and the new bridge over SR 8 (I-10).**~~

LED high-mast lighting is required for the footprint of the interchange (ramps and SR 8 (I-10) mainline). Underdeck LED lighting is required for the existing Antioch Bridge and the new bridge over SR 8 (I-10). Complete conventional LED lighting design is required for PJ Adams Parkway from PJ Adams Parkway and Antioch Road intersection to the end of the Department right of way north of SR 8 (I-10) ramp intersection (Ramps D & B) (including but not limited to PJ Adams Parkway and Antioch Road intersection, south of SR 8 (I-10) ramp intersection (Ramps A & C) until the PJ Adams Parkway and Antioch Road intersection, SR 8 (I-10) ramp intersections (Ramps A & C and Ramps D & B), between two (2) SR 8 (I-10) ramp intersections (Ramps A & C and Ramps D & B), and north of SR 8 (I-10) ramp intersection (Ramps D & B) until the end of the Department right of way). Complete conventional LED lighting design and lighting analysis is required for Antioch Road from the roundabout (including the roundabout) to Antioch Road and PJ Adams intersection. Use LED lighting only for lighting design and construction. See the Lighting Plans section of this RFP for more detailed requirements.

Overhead cantilever signing is required for the 1 Mile, ½ Mile and at the exit gore illuminating each direction of SR 8 (I-10) approaching the interchange with PJ Adams Parkway.

Pier protection is required for the existing Antioch Bridge in accordance with the FDOT Standard Plans Index 521-002.

The existing Freeway Management System (FMS) ITS fiber backbone will require replacement with new ITS fiber backbone and the ITS infrastructure shall be upgraded in the project corridor. The Design-Build Firm shall design, furnish, install a new FMS ITS fiber conduit duct bank.

The Design-Build Firm shall provide a fully functional drainage system to accommodate the requirements of this project. This includes, but is not limited to, replacement of existing structures and any other drainage improvements necessary to complete this project. No existing drainage shall be utilized in the new drainage design **(with the exception of EX-CD-1 and EX-CD-2)** . ~~**Three new stormwater ponds will be designed and constructed to accommodate the new roadway infrastructure stormwater.**~~ **The conceptual design included five (5) ponds associated with the proposed roadway improvements. Three ponds are anticipated to be constructed/modified by the Design-Build Firm and two ponds are anticipated to be designed, permitted, and constructed by others. See Section VI. F.3 Drainage Analysis for further information on the ponds.** ~~**The Design-Build Firm will be responsible for obtaining all permits.**~~ **The Department has begun permitting the three (3) ponds to be constructed by the Design-Build Firm, but the Design-Build Firm will ultimately be responsible for completing the permitting process since the Department does not anticipate obtaining permits prior to the letting of this Design-Build contract. If the Design-Build Firm's pond design deviates or includes any necessary modifications the permit application, the Design-Build Firm is responsible for submitting revised permit**

applications. The Design-Build Firm shall not include littoral zones and plantings in stormwater pond designs.

Sound Barrier wall construction is a requirement of this contract as per the final Noise Study Report Addendum. The Design-Build Firm will be required to install noise walls along the north and south sides of SR 8 (I-10) between the existing Antioch Road bridge and the new PJ Adams overpass and along the west side of the new PJ Adams Blvd between SR 8 and the new Antioch Road intersection. The locations, station limits and height requirements are provided below:

Barrier Location	Limits Start/Stop		Barrier Height (ft)	Barrier Length (ft)
I-10 Eastbound Off-Ramp	1001+50 Rt	1009+60 Rt	22	810
I-10 Eastbound Off-Ramp*	1009+20 Rt	1012+05 Rt	8	332**
PJ Adams Blvd	129+50 Lt	133+25 Lt	22	375
PJ Adams Blvd*	132+85 Lt	135+20 Lt	8	235
I-10 Westbound On-Ramp	4008+90 Lt	4018+90 Lt	22	1,000

*Concrete Barrier/Noise Wall – Standard Plans 521-510
**Include radius of return

The offset of the sound wall from the roadway may vary but should be as close to the right-of-way as feasible. Variations in required wall offsets are allowed with Department approval. The Design-Build Firm shall offset the wall as close to the location shown in the Final Noise Study Report to avoid reanalysis of the sound wall's effectiveness.

The Design-Build Firm will prepare the Final Noise Study Report if their design deviates from the Department's latest Noise Study Report in terms of wall elevation, wall offset from travel lane, roadway profile and noise wall effectiveness. The Department will review and must provide approval of the Design-Build Firm's Final Noise Study Report before the wall can be installed. The Design-Build Firm shall ensure their design provides equal to or better noise wall effectiveness than the Department's latest Noise Study Report. The Design-Build Firm will be required to adjust the wall height and/or offset if necessary, until noise wall effectiveness is achieved. The Department will be responsible for any public involvement required for the noise wall. The Design-Build Firm shall provide all graphics, renderings, and project information as required by the Department to facilitate the public involvement process.

All driveways and side roads shall remain open at all times.

A Structure Number Request Form will be required at the 90% submittal for the new bridge, mast arms, sign structures, or any other specific structure identified by District 3 Bridge Maintenance.

The conceptual plans are being provided for information only. An extensive amount of coordination with Okaloosa County has occurred regarding the proposed interchange, roundabout and traffic signals. The Design-Build Firm is required to provide a fully functional design that complies with this RFP and meets the intent of project. **The Design-Build Firm shall review and become familiar with the agreement between Taylor Farms and the County regarding future access points along Antioch Road and PJ Adams Parkway.**

Adjacent Project Coordination - This project should be coordinated with any and all adjacent County, State or private projects, including the following known project(s):

- FPID 445815-1-52-01 – FDOT Project – Resurfacing of SR 8 (I-10) From West of Yellow River

to East of Shoal River. This project is scheduled for design and construction in FDOT Fiscal Year 2021 and 2023 respectively.

- Okaloosa County - Southwest Crestview Bypass (Phase V) – Arena Road to US 90. This project is currently being advertised for construction. Anticipated construction is Fall 2020.
- Okaloosa County -PJ Adams Parkway Multi-laning (Phase IV) – SR 85N to Wild Horse Drive. This project is currently under construction.

It is the intent to always preserve existing vegetation including trees and palms that do not conflict with proposed improvements. Tree and palm protection shall comply with FDOT Standard Plans for Road and Bridge Construction (Standard Plans), Index 110-100. Within the Project limits and within the Project Right of Way, it will be the responsibility of the Design-Build Firm to identify and remove all Category 1 invasive exotics as defined by the Florida Exotic Pest Plant Council (www.fleppc.org) and as identified in the Landscape Opportunity Plan.

The Design-Build Firm shall replace in-kind any ditch pavement disturbed or damaged during construction.

The Design-Build Firm shall design the drainage system so that is will not adversely impact any proposed retaining walls.

The intent of this Project is to replace, repair or rehabilitate all deficiencies noted in the RFP within the Project limits such that maintenance work required upon Final Acceptance is limited to routine work.

It is the Department's intent to promote the use of innovative design concepts, components, details, and construction techniques for bridge structures as discussed in Part 1, Chapter 121 of the FDOT Design Manual (FDM). The Design-Build Firm may submit a Technical Proposal that includes innovative concepts if they are discussed with the Department and approved in accordance with Part 1, Chapter 121 of the FDM using the Alternative Technical Concept (ATC) process.

Along with all engineering services needed to satisfy the requirements of this project, the Design-Build Firm shall include a Landscape Architect duly authorized to practice Landscape Architecture in the State of Florida consistent with State Statute 481 part II. The Design-Build Firm's Landscape Architect (DBLA) shall review and identify future unencumbered landscape areas for this Project. This Project shall reserve landscape opportunities and implement the FDOT Highway Beautification Policy. Landscape construction will be performed by others and not included with this Project. Areas shall be identified in the Design-Build Firm's Proposal Plans as "future landscape areas to be constructed by others". Coordination will be required by the Design-Build Firm and the District Landscape Architect. Coordination between Design-Build Firm's Landscape Architect, the District Landscape Architect and Engineer will be required during the Design-Build plans development process to ensure landscape opportunities are accommodated within the project limits. The DBLA shall be included in the project kick-off meeting and subsequent progress meetings.

The anticipated right-of-way clear date for this project is April 18, 2022. **This right-of-way clear date has been utilized to determine the contract duration for this project. The Design-Build Firm shall utilize this date in determining their project schedule that will be submitted in accordance with the Design-Build Division I Specifications.**
A Notice to Proceed for construction will be issued once all right-of-way is clear, design plans and specifications are ready to be released for construction, NEPA for construction is clear, all permits are obtained, and utilities are certified. The Department will be responsible for right-of-way and NEPA clearances and the Design-Build Firm will be responsible for plans, specifications, permits, and utility certification. Design can commence immediately upon the Department's issuance of the

initial Notice to Proceed for the contract. The Design-Build Firm will be allowed to request to be released for construction to clear and grub in advance of the official Notice to Proceed for construction. These clearing and grubbing activities should be in upland areas that do not require a permit for clearing activities or a permit must be approved if clearing and grubbing in wetlands is pursued. The Design-Build Firm shall provide sufficient advance notification to allow the Department sufficient time to obtain NEPA clearance, as necessary. The Design-Build Firm will also be allowed to request to be released for construction for various components of construction (i.e. utility relocations, pond excavations, specific lengths of roadway construction, etc.) to help expedite their schedule. This may include issuing an early NTP and then releasing certain plan components for construction. The Department will ONLY consider this request if appropriate permits have been obtained and the Department has cleared these activities based on right-of-way and NEPA constraints.

No work may be performed outside of the Department's existing right-of-way until the planned right-of-way acquisitions are complete (and then only within the existing right-of-way).

The Department's Right-of-Way Office will acquire the necessary property right-of-way for the project either by negotiated settlement or by the exercise of eminent domain (condemnation). The right-of-way requirements for the contract are based on the maps as developed from the requirements of the conceptual plans included in this RFP.

The right-of-way maps for the project are included as a Reference Document in this RFP. These Right-of-way maps are for informational purposes only. Minor modifications to these right-of-way maps may occur as the project progresses. The Design-Build Firm's verification with the public records is advised to confirm the accuracy of the maps.

Construction activities cannot occur on acquired property until it has been certified as "clear" by the Department's Right-of-Way Office and the Notice to Proceed for construction has been issued.

During the right-of-way acquisition process there are often instances where design commitments are made based on agreements with owners during settlement negotiations or as part of final negotiated settlements. Such agreements are required to enable successful negotiations with property owners. Oftentimes these agreements are of benefit to both the property owner and the Department. These agreements include, but are not limited to modifications of profile grade, driveway connections, culverts, ditch profiles, median openings, etc. The design commitments previously made in settlement must be incorporated in the design and construction of the project. It is the desire of the Department for the design and construction of the project to not only function as a safe and efficient roadway, but for it to also consider the desires and needs of adjoining property owners. Right-of-way Commitments and Judgements for these specific items are included as attachments to this RFP. Any Right-of-Way Commitments made by the Department and subsequently issued to the awarded Design-Build Firm after contract execution shall be incorporated into the plans and design documents for the project and be constructed as part of the project. The Department will negotiate with the Design-Build Firm on an appropriate supplemental agreement for the required work or in the Department's discretion pay for such work pursuant to Subarticle 4-3.2, Division I, Design-Build Specifications for this contract.

As the negotiation phase of any right-of-way parcel acquisition comes to a close there will likely be a need for one or more parcels that have not been acquired by negotiation to be condemned. Any such condemnation action will be initiated by the Department and will immediately require assistance and possible court testimony from the Engineer of Record for the Design-Build Firm regarding both

public purpose and the reasonable necessity of specific parcels for the project. The Design-Build Firm will be required to provide any and all documentation immediately as may be requested by the Department to aid in the Right-of-Way acquisition process. The Design-Build Firm's Engineer of Record is required to be available as needed by the Department to assist in the Right-of-Way acquisition process. If the Design-Build Firm's Engineer of Record is required to act as an expert witness (i.e. for deposition or court testimony) the Department will enter into a separate contract with the Design-Build Firm's Engineer of Record for this effort.

After right-of-way acquisitions are complete, the Department will have its demolition contractor (under a separate contract) remove any buildings, septic tanks, lift stations and wells during its clearing activities. The Design-Build Firm will be responsible for any remaining clearing and grubbing including, but not limited to existing fencing, trees, concrete removal, etc.

All design and construction activities for the project will be required to remain within the existing right-of-way. These right-of-way maps are the controlling document in reference to right-of-way line location. The conceptual plans may or may not accurately depict the right-of-way being acquired by the Department.

During the right-of-way acquisition negotiation process, the Department may obtain rights-of-entry or easements from property owners and document this specific access right in the Right-of-Way Commitments. For this reason, the Right-of-Way Commitments that include property access rights shall overrule the Right-of-Way Maps and the conceptual plans.

It is the Department's intent that all Project construction activities be conducted within the existing Right of Way. The Design-Build Firm may submit a Technical Proposal that requires the acquisition of additional Right of Way if the subject acquisition was approved during the ATC process. Any Technical Proposal that requires the acquisition of additional Right of Way will not extend the contract duration as set forth in the Request for Proposal under any circumstances. The Department will have sole authority to determine whether the acquisition of additional Right of Way on the Project is in the Department's best interest, and the Department reserves the right to reject the acquisition of additional Right of Way.

If a Design-Build Firm intends to submit a Technical Proposal that requires the acquisition of additional Right of Way, the Design-Build Firm shall discuss such a proposal with the Department as part of the ATC process. If a Design-Build Firm submits a Technical Proposal that requires the acquisition of additional Right of Way and the Design-Build Firm fails to obtain Department approval as part of the ATC process, then the Department will not consider such aspects of the Proposal during the Evaluation process. If the Design-Build Firm's Technical Proposal requires additional Right of Way approved by the ATC process, the additional Right of Way will be required to be directly acquired by the Department. The Design-Build Firm shall submit, along with the Technical Proposal, Right of Way maps and legal descriptions including area in square feet of any proposed additional Right of Way parcels in the Technical Proposal. The additional Right of Way will be acquired by the Department in accordance with all applicable state and federal laws, specifically including but not limited to the Uniform Relocation Assistance and Real Property Acquisition Policies for Federal and Federally Assisted Programs (42 USC Chapter 61) and its implementing regulations. This includes completing a State Environmental Impact Report (SEIR) or National Environmental Policy Act (NEPA) evaluation as appropriate. All costs concerning the acquisition of additional Right of Way will be borne solely by the Design-Build Firm. These costs include, but are not limited to consultant acquisition, appraisal services, court fees, attorney and any expert fees, property cost, etc. The Department will have sole discretion with respect to the entire acquisition process of the additional Right of Way.

If the Design-Build Firm's Technical Proposal requires additional Right of Way, the acquisition of any such Right of Way shall be at no cost to the Department, and all costs associated with securing and making ready for use such Right of Way for the Project shall be borne solely by the Design-Build Firm as a part of the Design-Build Firm's Lump Sum Price Bid. The Department will not advance any funds for any such Right of Way acquisition and the Design-Build Firm shall bear all risk of delays in the acquisition of the additional property, regardless of cause or source. No additional contract time will be granted.

The Design Build Firm shall provide to the Department an estimate of the purchase price of the land from the property owner and any conditions related to the purchase. The Department will provide to the successful Design-Build Firm an estimate of all costs related to the acquisition and use of the additional Right-of-Way for the project. At the time the Design-Build Firm returns the executed contract to the Department, the Design-Build Firm will provide the Department funds equal to the amount of the Department's estimate along with a Letter of Credit approved by the Department in an amount equal to 100% of the Department's estimate. If additional funds beyond the Department's estimate are anticipated, the Design-Build Firm shall be solely responsible for all such costs and provide the same to the Department upon ten (10) days written notice from the Department. The Letter of Credit is for the purpose of securing the obligations of the Design-Build Firm with respect to the acquisition and use of additional Right-of-Way. The Letter of Credit will be released upon the Department's determination that all costs related to the acquisition of and making ready for use of the additional Right-of-Way have been satisfied. Any remaining funds provided will be returned to the Design-Build Firm.

Any additional Right of Way must be acquired prior to the commencement of any construction on or affecting the subject property. The Design-Build Firm waives any and all rights or claims for information, compensation, or reimbursement of expenses with respect to the Design-Build Firm's payment to the Department for costs associated with the acquisition of the additional Right of Way. The additional Right-of-Way cannot be used for any construction activity or other purpose until the Department has issued an applicable parcel clear letter or a Right of Way Certification for Construction.

If the Department's attempt to acquire the additional Right of Way is unsuccessful, then the Design-Build Firm shall provide a design of the Project within existing Right of Way and be required to complete the Project solely for the Lump Sum Price Bid, with no further monetary or time adjustments arising therefrom. Under no circumstances will the Department be liable for any increase in either time or money impacts the Design-Build Firm suffers due to the Design-Build Firm's proposed acquisition of additional Right of Way, whether or not the acquisition is successful.

All time granted during the design phase and before commencement of field construction work of controlling items of work shall be non-compensable.

Utilities

The Design-Build Firm will be responsible for providing utility adjustment plans and coordinating utility relocations. The Design-Build Firm shall be responsible for determining, through the use of non-destructive means, both the horizontal and vertical location of all existing utilities above and below ground within the project limits, and for coordinating with the Utility owner(s) for any necessary relocation and/or adjustment of their utilities through the development of a comprehensive utility work schedule. Existing utility location information is provided in the RFP – Reference Documents for information purposes only.

Along with coordinating utility relocations for the project, the Design-Build Firm is required to perform the utility relocation work for the City of Crestview. The work effort for these anticipated relocations is described below:

1.) The City of Crestview

The Design-Build Firm shall be required to design, construct, and prepare as-built plans for the City of Crestview water and sewer adjustment/relocation work as approved by the City of Crestview and the Department. The Design-Build Firm will be responsible for acquiring all permits required for the utility work**, with the exception of the FDOT Utility permit in which the utility owner shall obtain**. All water and sewer design, construction, tie-ins to existing water and sewer system, service connections and resolution of conflicts with existing water and sewer systems shall be in accordance with the current City of Crestview standards**, 2017 Utility Accommodation Manual** and shall be scheduled with and coordinated through the City of Crestview. The Design-Build Firm shall copy the Department on all correspondence with the City of Crestview related to schedule and coordination efforts.

Design of Utility Work

a. The Design-Build Firm shall prepare the final engineering design, plans, technical special provisions, permit applications (including, but not limited to, FDEP and the FDOT) for the utility work for the City of Crestview water and sewer in accordance with the City of Crestview's standards. In the event of a conflict between the City of Crestview requirements and any FDOT governing Regulations, the Department shall determine which provisions apply based on the intent and purpose of the Utility Work.
b. The Plans Package shall be in the same format as the Department's contract documents for the Project and shall be suitable for reproduction.
c. Unless otherwise specifically directed in writing, the Plans Package shall include any and all activities and work effort required to perform the utility work, including, but not limited to, all clearing and grubbing, permitting, survey, subsurface engineering (as required), utility coordination (telephone, fiber, cable, electrical, gas, etc.) and shall include a traffic control plan.
d. Construction costs for mobilization, clearing and grubbing and maintenance of traffic for this utility work are to be included in the main project and not in the utility relocations cost.
e. The Plans Package shall be prepared in compliance with the FDOT Utility Accommodation Manual and the FDOT Design Manual, and the Department's contract documents for the Project. If the FDOT Design Manual conflicts with the FDOT Utility Accommodation Manual, the Utility Accommodation Manual shall apply where such conflicts exist.
f. The Design-Build Firm shall prepare the Utility Work's technical special provisions, which are a part of the Plans Package, in accordance with the Department's guidelines on preparation of technical special provisions and shall not duplicate or change the general contracting provisions of the FDOT Standard Specifications for Road and Bridge Construction and any Supplemental Specifications for the Project.
g. The Design-Build Firm shall provide a copy of the proposed Plans Package to the Department and the City of Crestview for review at the following stages: 90% and 100% plans.
~~**h. The Design-Build Firm shall at all times be and remain solely responsible for proper preparation of the Plans Package and for verifying all information necessary to properly prepare the Plans Package, including survey information as to the location (both vertical and horizontal) of the Utility.**~~
i. The utility work will include all utility facilities of the City of Crestview which are located within the limits of the Project.
~~**j. The Design-Build Firm shall fully cooperate and coordinate the utility work with all other right of way users in the preparation of the Plans Package.**~~
k. Upon completion of the utility work, the facilities shall be deemed to be located on the Department's right-of-way under and pursuant to the Utility Permit to be issued by the

Department. The Design-Build Firm shall facilitate and comply with all permit conditions, and provide all disinfection, pressure testing, laboratory tests, permit certifications, record drawings, etc. to obtain regulatory approval and clearance to place the utilities in service.

l. The Design-Build Firm is responsible for handling and removing any residual content in utility lines when making new connections for relocated segments.

Performance of Utility Work

~~a. The Department shall perform all engineering, inspection, and monitoring of the Utility Work to insure it is properly performed in accordance with the Plans Package. The City of Crestview shall have representation on site periodically for consultation as necessary.~~

b. Testing, monitoring and reporting shall be performed by the Design-Build Firm in accordance with standard industry practices for water and wastewater and in accordance with the City of Crestview's standards.

c. The Design-Build Firm shall coordinate with the City of Crestview during construction and schedule any necessary temporary utility interruptions, in advance with the City.

d. All out of service City of Crestview mains, services, and appurtenances that are in conflict with the Design-Build Firm's Project design shall be removed and cost of removal be covered under FPID 407918-5-56-02 (Water & Sewer).

Should out of service facilities not require removal, then Design-Build Firm shall cap them or grout fill and place them out of service in accordance with County Specifications with costs being covered under FPID 407918-5-56-02 (Water & Sewer).

~~The Design-Build Firm shall minimize and, to the greatest extent possible, avoid impacts to existing landscaping or future landscaping opportunities associated with utility relocations.~~

The Design-Build Firm shall comply with the Utility Work by Highway Contractor Agreement that the Department executed with the City of Crestview (see RFP Attachments).

Advance utility coordination information is provided in RFP – Reference Documents for information only

During the Design-Build procurement process for this contract, the Design-Build Firm shall NOT coordinate directly with the City of Crestview due to their work being a requirement of this RFP. All questions related to their utility work requirements will be required to go through the FDOT Bid Question website.

A. Design-Build Responsibility

The Design-Build Firm shall be responsible for survey, geotechnical investigation, design, preparation of all documentation related to the acquisition of all permits not acquired by the Department, preparation of any and all information required to modify permits acquired by the Department if necessary, maintenance of traffic, demolition, and construction on or before the Project completion date indicated in the Proposal. The Design-Build Firm shall coordinate all utility relocations.

The Design-Build Firm shall be responsible for compliance with Design and Construction Criteria (Section VI) which sets forth requirements regarding survey, design, construction, and maintenance of traffic during construction, requirements relative to Project management, scheduling, and coordination with other agencies and entities such as state and local government, utilities and the public.

The Design-Build Firm shall be responsible for reviewing the approved Environmental Document of the PD&E

Study and any subsequent environmental document reevaluations.

The Design-Build Firm is responsible for coordinating with the District Environmental Management Office (DEMO) on any engineering information related to Environmental Reevaluations. The Design-Build Firm will not be compensated for any additional costs or time associated with Reevaluation(s) resulting from proposed design changes.

The Design-Build Firm may propose changes which differ from the approved Interchange Access Request (if applicable) and/or the Project Development & Environment (PD&E) Study. Proposed changes must be coordinated through the Department. If changes are proposed to the configuration, the Design-Build Firm shall be responsible for preparing the necessary documentation required for the Department to analyze and satisfy requirements to obtain approval of the Department, and if applicable, the Office of Environmental Management (OEM) for the NEPA document, or FHWA for the Interchange Access Request document. The Design-Build Firm shall provide the required documentation for review and processing. Approved revisions to the configuration may also be required to be included in the Reevaluation of the NEPA document or SEIR Reevaluations, per the Environmental Services/Permits/Mitigation Section of this RFP. The Design-Build Firm will not be compensated for any additional costs or time resulting from proposed changes.

The Design-Build Firm shall examine the Contract Documents and the site of the proposed work carefully before submitting a Proposal for the work contemplated and shall investigate the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished and as to the requirements of all Contract Documents. Written notification of differing site conditions discovered during the design or construction phase of the Project will be given to the Department's Project Manager.

The Design-Build Firm shall examine boring data, where available, and make their own interpretation of the subsoil investigations and other preliminary data, and shall base their bid on their own opinion of the conditions likely to be encountered. The submission of a proposal is prima facia evidence that the Design-Build Firm has made an examination as described in this provision.

The Design-Build Firm shall demonstrate good Project management practices while working on this Project. These include communication with the Department and others as necessary, management of time and resources, and documentation.

The Design-Build Firm will provide litter removal and mowing within the project limits in accordance with Specification Section 107 with a 30 **day** mowing frequency and a 30 **day** litter removal.

B. Department Responsibility

The Department will provide contract administration, management services, construction engineering inspection services, environmental oversight, and quality acceptance reviews of all work associated with the development and preparation of the contract plans, permits, and construction of the improvements. The Department will provide Project specific information and/or functions as outlined in this document.

In accordance with 23 CFR 636.109 of the FHWA, in a Federal Aid project, the Department shall have oversight, review, and approval authority of the permitting process.

The Department will determine the environmental impacts and coordinate with the appropriate agencies during the preparation of NEPA or SEIR Reevaluations. For federal projects, NEPA Reevaluations will be processed by the Department's EMO Office for approval by OEM pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016 and executed by the FHWA and the Department.

II. Schedule of Events.

Below is the current schedule of the events that will take place in the procurement process. The Department reserves the right to make changes or alterations to the schedule as the Department determines is in the best interests of the public. Proposers will be notified sufficiently in advance of any changes or alterations in the schedule. Unless otherwise notified in writing by the Department, the dates indicated below for submission of items or for other actions on the part of a Proposer shall constitute absolute deadlines for those activities and failure to fully comply by the time stated shall cause a Proposer to be disqualified.

DATE	EVENT
03/02/20	Planned Advertisement
09/21/20	Official Advertisement
10/19/20	Letters of Interest for Phase I of the procurement process due in District Office by 4:00 pm local time
11/09/20	Proposal Evaluators submit Letter of Interest Scores to Contracting Unit 12:00 pm local time
11/12/20	Contracting Unit provides Letter of Interest scores and Proposal Evaluators comments to Selection Committee
11/16/20	Public Meeting of Selection Committee to Shortlist 9:00 am local time
11/16/20	Shortlist Posting Date
11/20/20	Final RFP provided to Design-Build Firms continuing to Phase II of the procurement process
12/01/20	Mandatory Pre-Proposal meeting at 10:00 am local time will be held virtually. Virtual Meeting log in information will be provided via email to shortlisted Firms. All Utility Agency/Owners that the Department contemplates an adjustment, protection, or relocation is possible are to be invited to the Mandatory Pre-Proposal Meeting.
12/04/20	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 1, 4:00 pm local time
12/14/20	Deadline for Design-Build Firm to submit preliminary list of Alternative Technical Concepts prior to One-on-One Alternative Technical Concept Discussion Meeting No. 1, 4:00 pm local time
12/17/20 **& 12/18/20**	One-on-One Alternative Technical Concept Discussion Meeting No. 1. 90 Minutes will be allotted for this Meeting.
12/17/20	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 2, 4:00 pm local time
01/07/21	Deadline for Design-Build Firm to submit preliminary list of Alternative Technical Concepts prior to One-on-One Alternative Technical Concept Discussion Meeting No. 2, 4:00 pm local time
01/13/21 & 01/14/21	One-on-One Alternative Technical Concept Discussion Meeting No. 2. 90 Minutes will be allotted for this Meeting.
01/28/21	Deadline for submittal of Alternative Technical Concept Proposals 4:00 pm local time.
01/28/21	Final deadline for submission of requests for Design Exceptions

	or Design Variations. 4:00 pm local time
03/02/21 ~~**02/25/21**~~	Deadline for submittal of questions, for which a response is assured, prior to the submission of the Technical Proposal. All questions shall be submitted to the Pre-Bid Q&A website.
03/04/21	Deadline for the Department to post responses to the Pre-Bid Q&A website for questions submitted by the Design-Build Firms prior to the submittal of the Technical Proposal.
03/11/21	Technical Proposals due in District Office by 2:00 pm local time
03/11/21	Deadline for Design-Build Firm to "opt out" of Technical Proposal Page Turn meeting.
03/31/21 ~~**03/23/21**~~	Technical Proposal Page Turn Meeting. Times will be assigned during the Pre-Proposal Meeting. 30 Minutes will be allotted for this Meeting.
04/12/21	Question and Answer Written Reponses. Deadline for the Department to provide a list of questions/clarifications for the Design-Build Firm to answer.
04/19/21	Deadline for submittal of Question and Answer Written Responses to the Department's questions/clarifications from the Design-Build Firm. 4:00 pm local time
04/27/21	Deadline for submittal of follow up questions to previously submitted Question and Answer Written Responses to the Department's questions/clarifications from the Design-Build Firm. 4:00 pm local time
05/04/21	Deadline for submittal of Question and Answer Written Responses to the Department's follow up questions. 4:00 pm local time.
05/11/21	Deadline for submittal of questions, for which a response is assured, prior to the submission of the Price Proposal. All questions shall be submitted to the Pre-Bid Q&A website.
05/18/21	Deadline for the Department to post responses to the Pre-Bid Q&A website for questions submitted by the Design-Build Firms prior to the submittal of the Price Proposal.
05/18/21	Deadline for the Design-Build Firm to submit a written statement per Section III. Threshold Requirements, F. Question and Answer Written Responses
06/03/21	Price Proposals due in District Office by 10:00 am local time.
06/03/21	Public announcing of Technical Scores and opening of Price Proposals at 10:30 am local time will be held as a Virtual Meeting. Log in information for the Virtual Meeting will be posted on the Procurement website and emailed to the Shortlisted Firms.
06/09/21	Deadline for original hard copy bid documents, including the original bid bond. Documents shall be provided no later than 4:00 pm.
06/14/21	Public Meeting Date of Selection Committee to determine intended Award
06/14/21	Final Selection Posting Date
06/18/21	Anticipated Award Date
07/12/21	Anticipated Execution Date

III. Threshold Requirements.

A. Qualifications

Proposers are required to be pre-qualified in all work types required for the Project. The technical qualification requirements of Florida Administrative Code (F.A.C.) Chapter 14-75 and all qualification requirements of F.A.C. Chapter 14-22, based on the applicable category of the Project, must be satisfied.

B. Joint Venture Firm

Two or more Firms submitting as a Joint Venture must meet the Joint Venture requirements of Section 14-22.007, F.A.C. Parties to a Joint Venture must submit a Declaration of Joint Venture and Power of Attorney Form No. 375-020-18, prior to the deadline for receipt of Letters of Interest.

If the Proposer is a Joint Venture, the individual empowered by a properly executed Declaration of Joint Venture and Power of Attorney Form shall execute the proposal. The proposal shall clearly identify who will be responsible for the engineering, quality control, and geotechnical and construction portions of the Work. The Joint Venture shall provide an Affirmative Action Plan specifically for the Joint Venture.

C. Price Proposal Guarantee

A Price Proposal guaranty in an amount of not less than five percent (5%) of the total bid amount shall accompany each Proposer's Price Proposal. The Price Proposal guaranty may, at the discretion of the Proposer, be in the form of a cashier's check, bank money order, bank draft of any national or state bank, certified check, or surety bond, payable to the Department. The surety on any bid bond shall be a company recognized to execute bid bonds for contracts of the State of Florida. The Price Proposal guaranty shall stand for the Proposer's obligation to timely and properly execute the contract and supply all other submittals due therewith. The amount of the Price Proposal guaranty shall be a liquidated sum, which shall be due in full in the event of default, regardless of the actual damages suffered. The Price Proposal guaranty of all Proposers' shall be released pursuant to 3-4 of the Division I Design-Build Specifications.

D. Pre-Proposal Meeting

Attendance at the pre-proposal meeting is mandatory. Any Short-Listed Design-Build Firm failing to attend will be deemed non-responsive and eliminated from further consideration. The purpose of this meeting is to provide a forum for the Department to discuss with all concerned parties the proposed Project, the design and construction criteria, contract procurement schedule, method of compensation, instructions for submitting proposals, Design Exceptions, Design Variations, and other relevant issues. In the event that any discussions at the pre-proposal meeting require official additions, deletions, or clarifications of the Request for Proposal, or any other document, the Department will issue a written addendum to this Request for Proposal as the Department determines is appropriate. No oral representations or discussions, which take place at the pre-proposal meeting, will be binding on the Department. FHWA will be invited on Projects of Division Interest (PoDIs), in order to discuss the Project in detail and to clarify any concerns. Proposers shall direct all questions to the Department's Question and Answer website:

https://fdotwp1.dot.state.fl.us/BidQuestionsAndAnswers/

Failure by a Proposer to attend or be represented at the pre-proposal meeting will constitute a non-responsive determination of their bid package. Bids found to be non-responsive will not be considered. All Proposers

must be present and signed in prior to the start of the mandatory pre-proposal meeting. The convener of the meeting will circulate the attendee sign in sheet at the time the meeting was advertised to begin. Once all Proposers have signed, the sign in sheet will be taken and the meeting will "officially" begin. Any Proposer not signed in at the "official" start of the meeting will be considered late and will not be allowed to propose on the Project.

E. Technical Proposal Page-Turn Meeting

The Department will meet with each Proposer, formally for thirty (30) minutes, for a page-turn meeting. FHWA will be invited on Projects of Division Interest (PoDIs). The purpose of the page-turn meeting is for the Design-Build Firm to guide the Technical Review Committee through the Technical Proposal, highlighting sections within the Technical Proposal that the Design-Build Firm wishes to emphasize. The page-turn meeting will occur between the date the Technical Proposal is due and the Question and Answer Written Response occurs, per the Schedule of Events section of this RFP. The Department will terminate the page-turn meeting promptly at the end of the allotted time. The Department will record all of the page-turn meeting. All recordings will become part of the Contract Documents. The page-turn meeting will not constitute discussions or negotiations. The Design-Build Firm will not be permitted to ask questions of the Technical Review Committee during the page-turn meeting. Roll plots submitted with the Technical Proposal and an unmodified aerial or map of the project limits provided by the Design-Build Firm is acceptable for reference during the page-turn meeting. The unmodified aerial or map may not be left with the Department upon conclusion of the page turn meeting. Use of other visual aids, electronic presentations, handouts, etc., during the page turn meeting is expressly prohibited. Upon conclusion of the thirty (30) minutes, the Technical Review Committee is allowed five (5) minutes to ask questions pertaining to information highlighted by Design-Build Firm. Participation in the page-turn meeting by the Design-Build Firm shall be limited to eight (8) representatives from the Design-Build Firm. Design-Build Firms desiring to opt out of the page-turn meeting may do so by submitting a request to the Department.

F. Question and Answer Written Responses

The Department will provide all proposed questions to each Design-Build Firm as it relates to their Technical Proposal approximately 1 (one) week before the written Q & A letter is due.

The Design-Build Firm shall submit to the Department a written letter answering the questions provided by the Department. The questions and written answers/clarifications will become part of the Contract Documents and will be considered by the Department as part of the Technical Proposal.

On or prior to the due date listed in the Schedule of Events, the Design-Build Firm shall submit to the Department a written statement as follows: "[insert name of the Design-Build Firm] confirms that, despite any provision in the Design-Build Firm's Technical Proposal or any Q&A written response letter that may be inconsistent with the other requirements of the Contract Documents, [insert name of the Design-Build Firm] intends to comply fully with the requirements otherwise provided for in the Contract Documents, except for, pursuant to Subsection 5-2 Coordination of Contract Documents of the Design-Build Division I Specifications, any [insert name of Design-Build Firm]'s statements, terms, concepts or designs that can reasonably be interpreted as offers to provide higher quality items than otherwise required by the other Contract Documents or to perform services or meet standards in addition to or better than those otherwise required which such statements, terms, concepts and designs are the obligations of [insert name of the Design-Build Firm]." In case of the failure of the Design-Build Firm to timely provide such a written statement, the Department may determine the Design-Build Firm to be deemed non-responsive.

G. Protest Rights

Any person who is adversely affected by the specifications contained in this Request for Proposal must file a notice of intent to protest in writing within seventy-two hours of the posting of this Request for Proposal. Pursuant to Sections 120.57(3) and 337.11, Florida Statutes, and Rule Chapter 28-110, F.A.C., any person adversely affected by the agency decision or intended decision shall file with the agency both a notice of protest in writing and bond within 72 hours after the posting of the notice of decision or intended decision, or posting of the solicitation with respect to a protest of the terms, conditions, and specifications contained in a solicitation and will file a formal written protest within 10 days after the filing of the notice of protest. The formal written protest shall be filed within 10 days after the date of the notice of protest if filed. The person filing the Protest must send the notice of intent and the formal written protest to:

Clerk of Agency Proceedings
Department of Transportation
605 Suwannee Street, MS 58
Tallahassee, Florida 32399-0458

Failure to file a notice of protest or formal written protest within the time prescribed in section 120.57(3), Florida Statutes, or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under Chapter 120 Florida Statutes.

H. Non-Responsive Proposals

Proposals found to be non-responsive shall not be considered. Proposals may be rejected if found to be in nonconformance with the requirements and instructions herein contained. A proposal may be found to be non-responsive by reasons, including, but not limited to, failure to utilize or complete prescribed forms, conditional proposals, incomplete proposals, indefinite or ambiguous proposals, failure to meet deadlines and improper and/or undated signatures.

Other conditions which may cause rejection of proposals include evidence of collusion among Proposers, obvious lack of experience or expertise to perform the required work, submission of more than one proposal for the same work from an individual, firm, joint venture, or corporation under the same or a different name (also included for Design-Build Projects are those proposals wherein the same Engineer is identified in more than one proposal), failure to perform or meet financial obligations on previous contracts, employment of unauthorized aliens in violation of Section 274A (e) of the Immigration and Nationalization Act, or in the event an individual, firm, partnership, or corporation is on the United States Department of Labor's System for Award Management (SAM) list.

The Department will not give consideration to tentative or qualified commitments in the proposals. For example, the Department will not give consideration to phrases as "we may" or "we are considering" in the evaluation process for the reason that they do not indicate a firm commitment.

Proposals will also be rejected if not delivered or received on or before the date and time specified as the due date for submission.

Any proposal submitted by a Proposer that did not sign-in at the mandatory pre-proposal meeting will be non-responsive.

I. Waiver of Irregularities

The Department may waive minor informalities or irregularities in proposals received where such is merely a matter of form and not substance, and the correction or waiver of which is not prejudicial to other Proposers. Minor irregularities are defined as those that will not have an adverse effect on the Department's interest and will not affect the price of the Proposals by giving a Proposer an advantage or benefit not enjoyed by other Proposers.

1. Any design submittals that are part of a proposal shall be deemed preliminary only.

2. Preliminary design submittals may vary from the requirements of the RFP. The Department, at their discretion, may elect to consider those variations in awarding points to the proposal rather than rejecting the entire proposal.

3. In no event will any such elections by the Department be deemed to be a waiving of the RFP requirements.

4. The Proposer who is selected for the Project will be required to fully comply with the RFP for the price bid, regardless that the proposal may have been based on a variation from the RFP.

5. Proposers shall identify separately all innovative aspects as such in the Technical Proposal. An innovative aspect does not include revisions to specifications or established Department policies. Innovation should be limited to Design-Build Firm's means and methods, roadway alignments, approach to Project, use of new products, new uses for established products, etc.

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6. The Proposer shall obtain any necessary permits or permit modifications not already provided.

7. Those changes to the Design Concept may be considered together with innovative construction techniques, as well as other areas, as the basis for grading the Technical Proposals in the area of innovative measures.

J. Modification or Withdrawal of Technical Proposal

Proposers may modify or withdraw previously submitted Technical Proposals at any time prior to the Technical Proposal due date. Requests for modification or withdrawal of a submitted Technical Proposal shall be in writing and shall be signed in the same manner as the Technical Proposal. Upon receipt and acceptance of such a request, the entire Technical Proposal will be returned to the Proposer and not considered unless resubmitted by the due date and time. ~~**Proposers may also send a change in sealed envelope to be opened at the same time as the Technical Proposal provided the change is submitted prior to the Technical Proposal due date.**~~

K. Department's Responsibilities

This Request for Proposal does not commit the Department to make studies or designs for the preparation of any proposal, nor to procure or contract for any articles or services.

The Department does not guarantee the details pertaining to borings, as shown on any documents supplied by the Department, to be more than a general indication of the materials likely to be found adjacent to holes

bored at the site of the work, approximately at the locations indicated.

L. Design-Build Contract

The Department will enter into a Lump Sum contract with the successful Design-Build Firm. In accordance with Section V, the Design-Build Firm will provide a schedule of values to the Department for their approval. The total of the Schedule of Values will be the lump sum contract amount.

The terms and conditions of this contract are fixed price and fixed time. The Design-Build Firm's submitted bid (time and cost) is to be a lump sum bid for completing the scope of work detailed in the Request for Proposal.

IV. Disadvantaged Business Enterprise (DBE) Program.

a. DBE Availability Goal Percentage:

The Department of Transportation has an overall, race-neutral DBE goal. This means that the State's goal is to spend a portion of the highway dollars with Certified DBE's as prime Design-Build Firms or as subcontractors. Race-neutral means that the Department believes that the overall goal can be achieved through the normal competitive procurement process. The Department has reviewed this Project and assigned a DBE availability goal shown in the Project Advertisement and on the bid blank/contract front page under "% DBE Availability Goal". The Department has determined that this DBE percentage can be achieved on this Project based on the number of DBE's associated with the different types of work that will be required.

Under 49 Code of Federal Regulations Part 26, if the overall goal is not achieved, the Department may be required to return to a race-conscious program where goals are imposed on individual contracts. The Department encourages Design-Build Firms to actively pursue obtaining bids and quotes from Certified DBE's.

The Department is reporting to the Federal Highway Administration the planned commitments to use DBE's, as well as actual dollars paid to DBE's. This information is being collected through the Department's Equal Opportunity Compliance (EOC) system. Additional requirements of the Design-Build Firm may be found in Chapter 2 of the FDOT Equal Opportunity Construction Contract Compliance Manual.

b. DBE Supportive Services Providers:

The Department has contracted with a consultant, referred to as DBE Supportive Services Provider, to provide managerial and technical assistance to DBE's. This consultant is also required to work with prime Design-Build Firms, who have been awarded contracts, to assist in identifying DBE's that are available to participate on the Project. The successful Design-Build Firm should meet with the DBE Supportive Services Provider to discuss the DBE's that are available to work on this Project. The current DBE Supportive Services Provider for the State of Florida can be found in the Equal Opportunity website at: http://www.fdot.gov/equalopportunity/serviceproviders.shtm

c. Bidders Opportunity List:

The Federal DBE Program requires States to maintain a database of all Firms that are participating, or attempting to participate, on DOT-assisted contracts. The list must include all Firms that bid on prime contracts or bid or quote subcontracts on DOT-assisted Projects, including both DBEs and Non-DBEs.

A Bid Opportunity List should be submitted through the Equal Opportunity Compliance system which is available at the Equal Opportunity Office Website. This information should be entered into the Equal Opportunity Compliance System within 3 business days of submission of the bid or proposal.

V. Project Requirements and Provisions for Work.

A. Governing Regulations:

The services performed by the Design-Build Firm shall be in compliance with all applicable Manuals and Guidelines including the Department, FHWA, AASHTO, and additional requirements specified in this document. Except to the extent inconsistent with the specific provisions in this document, the current edition, including updates, of the following Manuals and Guidelines shall be used in the performance of this work. Current edition is defined as the edition in place and adopted by the Department at the date of advertisement of this contract with the exception of the Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications, Manual on Uniform Traffic Control Devices (MUTCD), and FDOT Standard Plans with applicable Interim Revisions. The Design-Build Firm shall use the edition of the Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications, FDOT Standard Plans and applicable Interim Revisions in effect at the time the bid price proposals are due in the District Office. The Design-Build Firm shall use the 2009 edition of the MUTCD (as amended in 2012). It shall be the Design-Build Firm's responsibility to acquire and utilize the necessary manuals and guidelines that apply to the work required to complete this Project. The services will include preparation of all documents necessary to complete the Project as described in Section I of this document.

1. Florida Department of Transportation Design Manual (FDM)
   http://www.fdot.gov/roadway/FDM/

2. Florida Department of Transportation Specifications Package Preparation Procedure
   http://www.fdot.gov/programmanagement/PackagePreparation/Handbooks/630-010-005.pdf

3. Florida Department of Transportation Standard Plans for Road and Bridge Construction
   http://www.fdot.gov/design/standardplans/

4. Standard Plans Instructions (Refer to Part I, Chapter 115, FDM)
   http://www.fdot.gov/roadway/FDM/

5. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications
   http://www.fdot.gov/programmanagement/default.shtm

6. Florida Department of Transportation Surveying Procedure 550-030-101
   http://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/FormsAndProcedures/ViewDocument?topicNum=550-030-101

7. Florida Department of Transportation EFB User Handbook (Electronic Field Book)
   http://www.fdot.gov/geospatial/doc_pubs.shtm

8. Florida Department of Transportation Drainage Manual
   http://www.fdot.gov/roadway/Drainage/ManualsandHandbooks.shtm

9. Florida Department of Transportation Soils and Foundations Handbook

http://www.fdot.gov/structures/Manuals/SFH.pdf

10. Florida Department of Transportation Structures Manual
http://www.fdot.gov/structures/DocsandPubs.shtm

11. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Manual
http://www.fdot.gov/cadd/downloads/publications/CADDManual/default.shtm

12. AASHTO – A Policy on Geometric Design of Highways and Streets
https://bookstore.transportation.org/collection_detail.aspx?ID=110

13. MUTCD – 2009 (as amended in 2012)
http://mutcd.fhwa.dot.gov/

14. Safe Mobility for Life Program Policy Statement
http://www.fdot.gov/traffic/TrafficServices/PDFs/000-750-001.pdf

15. Traffic Engineering and Operations Safe Mobility for Life Program
http://www.fdot.gov/traffic/TrafficServices/SafetyisGolden.shtm/

16. Florida Department of Transportation American with Disabilities Act (ADA) Compliance – Facilities Access for Persons with Disabilities Procedure 625-020-015
https://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/?viewBy=0&procType=pr

17. Florida Department of Transportation Florida Sampling and Testing Methods
http://www.fdot.gov/materials/administration/resources/library/publications/fstm/disclaimer.shtm

18. Florida Department of Transportation Flexible Pavement Coring and Evaluation Procedure
http://www.fdot.gov/materials/administration/resources/library/publications/materialsmanual/documents/v1-section32-clean.pdf

19. Florida Department of Transportation Design Bulletins and Update Memos
http://www.fdot.gov/roadway/Bulletin/Default.shtm

20. Florida Department of Transportation Utility Accommodation Manual
https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/programmanagement/utilities/docs/uam/uam2017.pdf?sfvrsn=d97fd3dd_0

21. AASHTO LRFD Bridge Design Specifications
https://bookstore.transportation.org/category_item.aspx?id=BR

22. Florida Department of Transportation Flexible Pavement Design Manual
http://www.fdot.gov/roadway/PM/publicationS.shtm

23. Florida Department of Transportation Rigid Pavement Design Manual
http://www.fdot.gov/roadway/PM/publicationS.shtm

24. Florida Department of Transportation Pavement Type Selection Manual
http://www.fdot.gov/roadway/PM/publicationS.shtm

25. Florida Department of Transportation Right of Way Manual
http://www.fdot.gov/rightofway/Documents.shtm

26. Florida Department of Transportation Traffic Engineering Manual

http://www.fdot.gov/traffic/TrafficServices/Studies/TEM/tem.shtm

27. Florida Department of Transportation Intelligent Transportation System Guide Book
http://www.fdot.gov/traffic/Doc_Library/Doc_Library.shtm

28. Federal Highway Administration Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Plans and Specifications
http://www.fhwa.dot.gov/engineering/geotech/pubs/reviewguide/checklist.cfm

29. AASHTO Guide for the Development of Bicycle Facilities
https://bookstore.transportation.org/collection_detail.aspx?ID=116

30. Federal Highway Administration Hydraulic Engineering Circular Number 18 (HEC 18).
http://www.fhwa.dot.gov/engineering/hydraulics/library_arc.cfm?pub_number=17

31. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways
http://www.fdot.gov/roadway/FloridaGreenbook/FGB.shtm

32. Florida Department of Transportation Project Development and Environment Manual, Parts 1 and 2
http://www.fdot.gov/environment/pubs/pdeman/pdeman1.shtm

33. Florida Department of Transportation Driveway Information Guide
http://www.fdot.gov/planning/systems/programs/sm/accman/pdfs/driveway2008.pdf

34. AASHTO Highway Safety Manual
http://www.highwaysafetymanual.org/

35. Florida Statutes
http://www.leg.state.fl.us/Statutes/index.cfm?Mode=View%20Statutes&Submenu=1&Tab=statutes&CFID=14677574&CFTOKEN=80981948

36. Florida Department of Transportation Equal Opportunity Construction Contract Compliance Manual
http://www.fdot.gov/equalopportunity/contractcomplianceworkbook.shtm

B. Innovative Aspects:

All innovative aspects shall be identified separately as such in the Technical Proposal.

An innovative aspect does not include revisions to specifications, standards or established Department policies. Innovation should be limited to Design-Build Firm's means and methods, roadway alignments, approach to Project, etc.

1. Alternative Technical Concept (ATC) Proposals

The Department has chosen to incorporate in the Design-Build method of project delivery the process whereby Design-Build Firms may propose innovative technical solutions for the Departments approval which meet or exceed the goals of the project. The process involves the submission of an Alternative Technical Concept (ATC) as outlined below. This process has shown to be very cost effective in providing the best-value solution which often times is a result of the collaborative approach of the contractor and their designer which is made possible with the Design Build project delivery method and the ATC process.

The ATC process allows innovation, flexibility, time and cost savings on the design and construction of Design-Build Projects while providing the best value for the public. Any deviation from the RFP that the Design-Build Firm seeks to obtain approval to utilize prior to Technical Proposal submission is, by definition, an ATC and therefore must be discussed and submitted to the Department for consideration through the ATC process. ATCs also include items defined in FDM, Part 1, Chapter 121.3.2. The proposed ATC shall provide an approach that is equal to or better than the requirements of the RFP, as determined by the Department. ATC Proposals which reduce scope, quality, performance, or reliability should not be proposed. A proposed concept does not meet the definition of an ATC if the concept is contemplated by the RFP.

The Department will keep all ATC submissions confidential prior to the Final Selection of the Proposer to the fullest extent allowed by law, with few exceptions. Although the Department will issue an addendum for all ATC Proposals contained in the list below, the Department will endeavor to maintain confidentiality of the Design-Build Firms specific ATC proposal. Prior to approving ATC's which would result in the issuance of an Addendum as a result of the item being listed below, the Design-Build Firm will be given the option to withdraw previously submitted ATC proposals. Any approved ATC Proposal related to following requirements described by this RFP shall result in the issuance of an Addendum to the RFP:

- New Design Exceptions required
- Modifications to the Pavement Types or approved Pavement Design.
- Significant changes in scope as determined by the Department.

The following requirements described by this RFP may be modified by the Design-Build Firm provided they are presented in the One-on-One ATC discussion meeting, as defined below, and submitted to the Department for review and approval through the ATC process described herein. The Department may deem a Proposal Non-Responsive should the Design-Build Firm include but fail to present and obtain Department approval of the proposed alternates through the ATC process. Department approval of an ATC proposal that is related to the items listed below will NOT result in the issuance of an Addendum to the RFP.

- Any RFP requirement other than the items included in the previous paragraph's bulleted list

2. One-on-One ATC Proposal Discussion Meetings

One-on-One ATC discussion meetings may be held in order for the Design-Build Firm to describe proposed changes to supplied basic configurations, Project scope, design criteria, and/or construction criteria. Each Design-Build Firm with proposed changes may request a One-on-One ATC discussion meeting to describe the proposed changes. The Design-Build Firm shall provide, by the deadline shown in the Schedule of Events of this RFP, a preliminary list of ATC proposals to be reviewed and discussed during the One-on-One ATC discussion meetings. This list may not be inclusive of all ATC's to be discussed but it should be sufficiently comprehensive to allow the Department to identify appropriate personnel to participate in the One-on-One ATC discussion meetings.

The purpose of the One-on-One ATC discussion meeting is to discuss the ATC proposals, answer questions that the Department may have related to the ATC proposal, review other relevant information and when possible establish whether the proposal meets the definition of an ATC thereby requiring the submittal of a formal ATC submittal. The meeting should be between representatives of the Design-Build Firm and/or the Design-Build Engineer of Record and District/Central Office staff as needed to provide feedback on the ATC proposal. FHWA should be invited to ATC meetings for all PoDI projects. Immediately prior to the conclusion of the One-on-One ATC discussion meeting, the Department will advise the Design-Build Firm

as to the following related to the ATC proposals which were discussed:

- The Proposal meets the criteria established herein as a qualifying ATC Proposal; therefore, an ATC Proposal submission IS required, or
- The Proposal does not meet the criteria established herein as a qualifying ATC proposal since the Proposal is already allowed or contemplated by the original RFP; therefore, an ATC Proposal submission is NOT required.

The Department will return all handouts back to the Design-Build Firm except one copy to remain in the secure procurement file.

3. Submittal of ATC Proposals

All ATC submittals must be in writing and may be submitted at any time following the Shortlist Posting but shall be discussed and submitted prior to the deadline shown in the Schedule of Events of this RFP.

The Department will allow the submission of draft ATCs at any time following the Shortlist Posting until the date on which the last One-on-One ATC discussion meeting is held as defined in the Schedule of Events. The submission must be clearly marked as DRAFT. The Design-Build Firm, by submitting a Draft ATC, understands that the purpose of the submission is to provide information to facilitate the discussion during ATC meetings and that the Department will discuss the concept but is not obligated to reply to the draft submission as if it were a formal ATC submittal. However, at any time prior to the formal Alternative Technical Concept Proposal submittal, the Department may provide the Design-Build Firm with a draft written response. The draft written response shall be clearly marked as DRAFT.

The intent of this draft ATC response is to provide the Design-Build Firm with possible additional feedback beyond what is provided during the one-on-one ATC meetings, with the goal of allowing for more condensed procurement schedules, as well as potentially eliminating a one-on-one ATC meeting on complex projects.

All ATC submittals are required to be on plan sheets or on roll plots no wider than 36” and shall be sequentially numbered and include the following information and discussions:

a) Description: A description and conceptual drawings of the configuration of the ATC or other appropriate descriptive information, including, if appropriate, product details and a traffic operational analysis as applicable;

b) Usage: The locations where and an explanation of how the ATC would be used on the Project;

c) Deviations: References to requirements of the RFP which are inconsistent with the proposed ATC, an explanation of the nature of the deviations from the requirements and a request for approval of such deviations along with suggested changes to the requirements of the RFP which would allow the alternative proposal;

d) Analysis: An analysis justifying use of the ATC and why the deviation, if any, from the requirements of the RFP should be allowed;

e) Impacts: A preliminary analysis of potential impacts on vehicular traffic (during construction), environmental impacts, community impacts, safety, and life-cycle Project and infrastructure costs, including impacts on the cost of repair, maintenance, and operation;

f) Risks: A description of added risks to the Department or third parties associated with implementation of the ATC;

g) Quality: A description of how the ATC is equal or better in quality and performance than the requirements of the RFP including the traffic operational analysis if requested by the Department;

h) Operations: Any changes in operation requirements associated with the ATC, including ease of operations;

i) Maintenance: Any changes in maintenance requirements associated with the ATC, including ease of maintenance;

j) Anticipated Life: Any changes in the anticipated life of the item comprising the ATC;

4. Review and Approval of ATC Submittals

After receipt of the ATC submittal, the District Design Engineer (DDE), or designee, will communicate with the appropriate staff (i.e. District Structures Design Engineer, District Construction Engineer, District Maintenance Engineer, State Structures Design Engineer, State Roadway Design Engineer, FHWA, as applicable) as necessary, and respond to the Design-Build Firm in writing within 14 calendar days of receipt of the ATC submittal as to whether the ATC is acceptable, not acceptable, or requires additional information. If the DDE, or designee, determines that more information is required for the review of an ATC, questions should be prepared by the DDE, or designee, to request and receive responses from the Design-Build Firm. The review should be completed within 14 calendar days of the receipt of the ATC submittal. If the review will require additional time, the Design-Build Firm should be notified in advance of the 14 day deadline with an estimated timeframe for completion.

Approved Design Exceptions required as part of an approved ATC submittal will result in the issuance of an addendum to the RFP notifying all Shortlisted Design-Build Firms of the approved Design Exception(s). Such a change will be approved by FHWA, as applicable. Prior to approving ATC's which would result in the issuance of an Addendum as a result of a Design Exception, the Design-Build Firm will be given the option to withdraw previously submitted ATC Proposals.

The Department reserves the right to disclose to all Design-Build Firms, via an Addendum to the RFP, any errors of the RFP that are identified during the One-on-One ATC meetings, except to the extent that the Department determines, in its sole discretion, such disclosure would reveal confidential or proprietary information of the ATC.

Through the ATC process, the Design-Build Firm may submit, and the Department may consider, geometric modifications to the Concept Plans or other contract requirements that will provide an engineering solution that is better overall in terms of traffic flow and reduced congestion. The approval of ATCs related to improvements of traffic flow and reduced congestion is at the sole discretion of the Department. It is the Design-Build Firm's responsibility to clearly establish in the ATC process how the engineering solution provides a benefit to the Department and identify areas of conflict outlined in the RFP.

ATC's are accepted by the Department at the Department's discretion and the Department reserves the right to reject any ATC submitted. The Department reserves the right to issue an Addendum to the RFP based upon a previously denied ATC Proposal, without regard to the confidentiality of the denied ATC Proposal. All Department approvals of ATC submissions are based upon the known impacts on the Project at the time

of submission. The Department reserves the right to require a modification or amendment to a previously approved ATC as a result of a contract change which is issued by an addendum subsequent to the Department's initial approval of the ATC.

5. Incorporation of Approved ATC's into the Technical Proposal

The Design-Build Firm will have the option to include any Department Approved ATC's in the Technical Proposal. The Proposal Price should reflect any incorporated ATC's. All approved ATC's that are incorporated into the Technical Proposal must be clearly identified in the Technical Proposal Plans and/or Roll Plots. The Technical Proposal shall also include a listing of the incorporated, approved ATCs.

By submitting a Proposal, the Design-Build Firm agrees, if it is not selected, to disclosure of its work product to the successful Design-Build Firm, only after receipt of the designated stipend (if applicable) or after award of the contract whichever occurs first.

C. Geotechnical Services:

1. **General Conditions**:

The Design-Build Firm shall be responsible for identifying and performing any geotechnical investigation, analysis and design of foundations, foundation construction, foundation load and integrity testing, and inspection dictated by the Project needs in accordance with Department guidelines, procedures and specifications. All geotechnical work necessary shall be performed in accordance with the Governing Regulations. The Design-Build Firm shall be solely responsible for all geotechnical aspects of the Project.

D. Department Commitments:

The Design-Build Firm will be responsible for adhering to the project commitments identified below:

1. All right-of-way commitments, agreements and stipulated final judgements provided as an Attachment to the RFP.
2. Environmental commitments detailed in the Environmental Services/Permits/Mitigation section of this RFP.

E. Environmental Permits:

The Design-Build Firm shall be responsible for obtaining all applicable permits and/or permit modifications required for this project. The Design-Build Firm shall be responsible for any necessary permit time extensions or re-permitting in order to keep the environmental permits valid throughout the construction period. The Design-Build Firm shall provide the Department with draft copies of any and all permit applications, including responses to agency Requests for Additional Information, requests to modify the permits and/or requests for permit time extensions, for review and approval by the Department prior to submittal to the agencies. The FDOT Design PM, Drainage Engineer, and Permit Coordinator should be included on all meetings and correspondence with the permit agencies.

All applicable data shall be prepared in accordance with Chapter 373 and 403, Florida Statutes, Chapters 40 and 62, F.A.C.; Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, 23 CFR 771, 23 CFR 636, and parts 114 and 115, Title 33, Code of Federal Regulations. Preparation of all documentation related to the acquisition of all applicable permits will be the responsibility of the Design-Build Firm. Preparation of complete permit packages will be the responsibility of the Design-Build Firm. The Design-

Build Firm is responsible for the accuracy of all information included in permit application packages. As the permittee, the Department is responsible for reviewing, approving, and signing, the permit application package including all permit modifications, or subsequent permit applications. This applies whether the Project is federal or state funded. Once the Department has approved the permit application, the Design-Build Firm is responsible for submitting the permit application to the environmental permitting agency. A copy (electronic and hard copy) of any and all correspondence with any of the environmental permitting agencies shall be sent to the District Environmental Permits Coordinator. If any agency rejects or denies the permit application, it is the Design-Build Firm's responsibility to make whatever changes necessary to ensure the permit application is approved.

The Design-Build Firm will be required to pay all permit and public notice fees. Any fines levied by permitting agencies shall be the responsibility of the Design-Build Firm. The Design-Build Firm shall be responsible for complying with all permit conditions.

The Department is responsible for providing mitigation of all wetland impacts identified in the conceptual plans, if any exist. If any design modifications by the Design-Build Firm propose to increase the amount of wetland impacts such that mitigation or additional mitigation is required, the Design-Build Firm shall be responsible for providing the Department information on the amount and type of wetland impacts as soon as the impacts are identified (including temporary impacts and/or any anticipated impacts due to construction staging or construction methods). Prior to submitting a permit modification to a regulatory agency, the Design-Build Firm shall provide the Department a draft of all supporting information. The Department will have up to 15 calendar days (excluding weekends and Department observed holidays) to review and comment on the draft permit application package. The Design-Build Firm will address all comments by the Department and obtain Department approval, prior to submittal of the draft permit application package. The Design-Build Firm shall be solely responsible for all time and costs associated with providing the required information to the Department, as well as the time required by the Department to perform its review of the permit application package, prior to submittal of the permit application(s) by the Design-Build Firm to the regulatory agency(ies).

Any additional mitigation required due to design modifications proposed by the Design-Build Firm shall be the responsibility of the Design-Build Firm and shall be satisfied through the purchase of mitigation bank credits. The Design-Build Firm shall purchase credits directly from a permitted mitigation bank. In the event that permitted mitigation bank credits are unavailable or insufficient to meet the project needs, the Design-Build Firm will be responsible for providing alternative mitigation consistent with the provisions of section 373.-4137, Florida Statutes, and acceptable to the permitting agency. The Design-Build Firm shall be solely responsible for all costs associated with permitting activities and shall include all necessary permitting activities in their schedule.

However, notwithstanding anything above to the contrary, upon the Design-Build Firm's preliminary request for extension of Contract Time, pursuant to 8-7.3, being made directly to the District Construction Engineer, the Department reserves unto the District Construction Engineer, in their sole and absolute discretion, according to the parameters set forth below, the authority to make a determination to grant a non-compensable time extension for any impacts beyond the reasonable control of the Design-Build Firm in securing permits. Furthermore, as to any such impact, no modification provision will be considered by the District Construction Engineer unless the Design-Build Firm clearly establishes that it has continuously from the beginning of the Project aggressively, efficiently and effectively pursued the securing of the permits including the utilization of any and all reasonably available means and methods to overcome all impacts. There shall be no right of any kind on behalf of the Design-Build Firm to challenge or otherwise seek review or appeal in any forum of any determination made by the District Construction Engineer under this provision.

F. Railroad Coordination: N/A

G. Survey:

If the Design-Build Firm chooses to utilize the existing survey, the Design-Build Firm shall be responsible for verifying the accuracy of the information being provided and for providing all other surveys necessary for the Project.

The Design-Build Firm shall perform all surveying (Terrestrial, Mobile and/or Aerial) and mapping services necessary to complete the Project. Survey services must also comply with all pertinent Florida Statutes (Chapters 177 and 472, F.S.) and applicable rules in the Florida Administrative Code (Rule Chapter 5J-17, F.A.C.). All field survey data will be furnished to the District Surveyor in a Department approved digital format, readily available for input and use in CADD Design files. All surveying and mapping work must be accomplished in accordance with the Department's Surveying and Mapping Procedure, Topic Nos. 550-030-101, and the Surveying and Mapping Handbook.

H. Verification of Existing Conditions:

The Design-Build Firm shall be responsible for verification of existing conditions, including research of all existing Department records and other information.

By execution of the contract, the Design-Build Firm specifically acknowledges and agrees that the Design-Build Firm is contracting and being compensated for performing adequate investigations of existing site conditions sufficient to support the design developed by the Design-Build Firm and that any information is being provided merely to assist the Design-Build Firm in completing adequate site investigations. Notwithstanding any other provision in the contract documents to the contrary, no additional compensation will be paid in the event of any inaccuracies in the preliminary information.

I. Submittals:

1. Component Submittals:

The Design-Build Firm may submit components of the contract plans set instead of submitting the entire contract plan set; however, sufficient information from other components must be provided to allow for a complete review. In accordance with the FDOT Design Manual, components of the contract plans set are roadway, signing and pavement marking, signalization, ITS, lighting, landscape, architectural, structural, and toll facilities. The Department will designate in the review comments if the next submittal will be a resubmittal of the 90% phase submittal or if the plans and supporting calculations are significantly developed to proceed to the Final Submittal.

The Design-Build Firm may divide the Project into separate areas and submit components for each area; however, sufficient information on adjoining areas must be provided to allow for a complete review. Submittals for bridges are limited to foundation, substructure, and superstructure. Further dividing the foundation, substructure, or superstructure into individual elements (i.e. Pier 2, Abutment 1, Span 4, etc.) will not be accepted.

Category 1 and 2 bridge submittals shall contain the following:

- Plan sheets for the component under review developed to the specified level of detail (i.e. 90% plans, Final plans, etc.) as outlined in the FDM.
- A complete set of the most developed plan sheets for all other major elements of the bridge. These sheets shall be marked "For Information Only" on the index sheet. In no case shall a plan sheet be less than 30% complete.
- Design documentation including a complete set of calculations, geotechnical reports, pertinent correspondence, etc. in support of the 90% and final component submittals.

2. Phase Submittals:

The Design-Build Firm shall provide the documents for each phase submittal listed below to the Department's Project Manager. The particular phase shall be clearly indicated on the documents. The Department's Project Manager will send the documents to the appropriate office for review and comment. Once all comments requiring a response from the Design-Build Firm have been satisfactorily resolved as determined by the Department, the Department's Project Manager will initial, date and stamp the signed and sealed plans and specifications as "Released for Construction".

Submit for Department's review and approval the Independent Peer Review Firm's comments, design verifications calculations, and the EOR's response to the Independent Peer reviewer's comments in conjunction with the submittal of the 90% component bridge plans for Category 2 Bridge Structures. The Department will designate in the review comments if the next submittal will be a resubmittal of the 90% phase submittal or if the plans and supporting calculations are significantly developed to proceed to the Final Submittal.

One (1) month prior to the 90% submittal listed below, the Design-Build Firm will be required to prepare and submit to the Department for review phase submittal notification draft email for distribution to Local Governments to obtain comments from the respective entity. The Design-Build Firm may obtain an example of a sample distribution email from the Department's Project Manager. The Design-Build Firm will provide a list of proposed recipients, such as City and/or County Commissioners, TPO, appropriate public officials, etc., and submit this list to the District Public Information Office for review and approval prior to submitting the draft email for distribution by the Department. Along with the draft email, a PDF of the plans (without structures included) shall be provided for distribution. Exempt structural information shall NOT be distributed. A sample distribution list can be obtained from the Department's Project Manager.

The draft email distribution shall include the following information:

- FPID Number
- State Road Number and Local Road Name
- Project limits
- Type of work
- Anticipated construction start date
- Estimated duration of construction
- Department contact persons
- A fourteen (14) calendar day deadline for providing comments

Each comment or request provided by the local government or entity reviewing the submittal shall be evaluated by the Design-Build Firm and discussed with the Department's Project Manager. Responses will be prepared by the Design-Build Firm for the District Secretary (i.e. for elected officials) or District

Consultant Project Management Engineer's signature. All comments or requests shall be responded to in writing within thirty (30) days of receipt of comments.

90% Phase Submittal

1 copy of 11" X 17" plans (all required components)
2 signed and sealed geotechnical reports
1 copy of Settlement and Vibration Monitoring Plan (SVMP) for Department acceptance and update throughout the construction period
1 copy of design documentation
1 copy of Technical Special Provisions, if applicable
1 copy of Landscape Opportunity Plans
1 copy of Concept of Operations (ITS)
1 copy of Maintenance of communication (MOC) plans
1 copy of Project System Engineering Management Plan (ITS)
1 copy of Requirement Traceability Verification Matrix (ITS)
1 copy existing Signalization and Intelligent Transportation System equipment report
1 copy of power design analysis report (PDAR)
1 copy of Bridge Load Rating Calculations
1 copy of Completed Bridge Load Rating Summary Detail Sheet
1 copy of Load Rating Summary Form

All of the information above shall be submitted electronically in .pdf format. All QC plans and documentation for each component submittal shall be electronic in .pdf format

The Department will designate in the review comments if the next submittal will be a resubmittal of the 90% phase submittal or if the plans and supporting calculations are significantly developed to proceed to the Final Submittal. If the Department requires more than 2 resubmittals a submittal workshop between the Department and the Design-Build Firm must be held to resolve any outstanding issues or comments.

Final Submittal

1 set of signed and sealed 11" X 17" plans (all required documents)
1 set of signed and sealed Landscape Opportunity Plans
1 signed and sealed Construction Specifications Package
1 signed and sealed Technical Special Provision, as applicable
1 set of signed and sealed design documentation
1 copy of Settlement and Vibration Monitoring Plan (SVMP)
1 copy of Concept of Operations (ITS)
1 copy of Maintenance of communication (MOC) plans
1 copy of Project System Engineering Management Plan (ITS)
1 copy of Requirement Traceability Verification Matrix (ITS)
1 copy of power design analysis report (PDAR)
1 copy existing Signalization and Intelligent Transportation System equipment report
1 set of final documentation
1 signed and sealed Bridge Load Rating Summary Detail Sheet
1 signed and sealed Load Rating Summary Form

All of the information above shall be submitted electronically in .pdf format. All QC plans and documentation for each component submittal shall be electronic in .pdf format

The Design-Build Firm shall provide a list of all changes made to the plans or specifications that were not directly related to the 90% plans review comments. Significant changes (as determined by the Department) made as a part of the Final submittal, that were not reviewed or provided in response to the 90% submittal comments, may require an additional review phase prior to stamping the plans or specifications "Released for Construction." The Design-Build Firm shall provide a signed certification that all Electronic Review Comments (ERC) have been resolved to the Department's satisfaction as a requirement before obtaining "Released for Construction" plans.

3. Requirements to Begin Construction:

The Department's indication that the signed and sealed plans and specifications are "Released for Construction" authorizes the Design Build Firm to proceed with construction based on the contract plans and specifications. The Department's review of submittals and subsequent Release for Construction is to assure that the Design-Build Firm's EOR has approved and signed the submittal, the submittal has been independently reviewed and is in general conformance with the contract documents. The Department's review is not meant to be a complete and detailed review. No failure by the Department in discovering details in the submittal that are released for construction and subsequently found not to be in compliance with the requirements of the contract shall constitute a basis for the Design-Build Firm's entitlement to additional monetary compensation, time, or other adjustments to the contract. The Design-Build Firm shall cause the Engineer of Record to resolve the items not in compliance with the contract, errors or omissions at no additional cost to the Department and all revisions are subject to the Department's approval.

The Design-Build Firm may choose to begin construction prior to completion of the Phase Submittals and the Department stamping the plans and specifications Released for Construction except for bridge construction. To begin construction the Design-Build Firm shall submit signed and sealed plans for the specific activity; submit a signed and sealed Construction Specifications Package; obtain regulatory permits as required for the specific activity; obtain utility agreements and permits, if applicable; and provide five (5) days notice before starting the specific activity. The plans to begin construction may be in any format including report with details, 8 1/2" X 11" sheets, or 11" X 17" sheets, and only the information needed by the Design-Build Firm to construct the specific activity needs to be shown. Beginning construction prior to the Department stamping the plans and specifications Released for Construction does not reduce or eliminate the Phase Submittal requirements.

As-Built Set:

The Design-Build Firm's Professional Engineer in responsible charge of the Project's design shall professionally endorse (sign, seal, and certify) the As-Built Plans, the special provisions and all reference and support documents. The professional endorsement shall be performed in accordance with the FDOT Design Manual.

Design-Build Firm shall complete the As-Built Plans as the Project is being constructed. All changes made subsequent to the "Released for Construction" Plans shall be signed/sealed by the EOR. The As-Built Plans shall reflect all changes initiated by the Design-Build Firm or the Department in the form of revisions. The As-Built Plans shall be submitted prior to Project completion for Department review and acceptance as a condition precedent to the Department's issuance of Final Acceptance.

The Department shall review, certify, and accept the As-Built Plans prior to issuing Final Acceptance of the project in order to complete the As-Built Plans.

The Department shall accept the As-Built Plans and related documents when in compliance with Design

Build Division I Specification 7-2.3, As-Built Drawings and Certified Surveys, and the As-Built Requirements.

The Design-Build Firm shall furnish to the Department, upon Project completion, the following:

- 1 set of 11” X 17” signed and sealed As-Built plans, drawings and Certified Surveys (including Landscape Opportunity Plans)
- 1 set of 11 "X 17” copies of the signed and sealed As-Built plans, drawings and Certified Surveys
- 1 signed and sealed Bridge Load Rating Summary Form and Calculations based on as-built conditions
- 1 set of final documentation (if different from final component submittal)
- 1 set of survey information, including electronic files and field books
- CADD Files
- 1 Final Project submittal containing the information above shall be electronic in .pdf format

4. Milestones:

Component submittals, in addition to the plan submittals listed in the previous section will be required. In addition to various submittals mentioned throughout this document the following milestone submittals will be required.

- Typical Section package
- Utility Clearance Certification
- Permit applications
- Responses to Request for Additional Information from permitting agencies
- Approved permits package
- Pavement design package, if different than the minimum pavement design included as an Attachment to the RFP
- Any information necessary to complete any NEPA reevaluations

5. Railroad Submittals: N/A

J. Contract Duration:

The Department has established a **Contract Duration of ~~1134 calendar days~~ 1290 calendar days** for the subject Project.

K. Project Schedule:

The Design-Build Firm shall submit a Schedule, in accordance with Subarticle 8-3.2 (Design-Build Division I Specifications). The Design-Build Firm’s Schedule shall allow for up to fifteen (15) calendar days (excluding weekends and Department observed Holidays) review time for the Department’s review of all submittals.

The Department will perform the review of Foundation Construction submittals in accordance with Section

455.

No special events have been identified as described in Specification 8-6.4 for this project.

The minimum number of activities included in the Schedule shall be those listed in the Schedule of Values and those listed below:

- Anticipated Contract Execution Date
- Anticipated Notice to Proceed Date
- Design Submittals
- Shop Drawing Submittals
- Other Contractor-Initiated Submittals including RFI's, RFM's, RFC's, and NCR's
- Design Survey
- Submittal Reviews by the Department
- Design Review / Acceptance Milestones
- Materials Quality Tracking
- Geotechnical Investigation
- Start of Construction
- Clearing and Grubbing
- Construction Mobilization
- Embankment/Excavation
- Environmental Permit Acquisition
- Foundation Design
- Foundation Construction
- Substructure Design
- Substructure Construction
- Superstructure Design
- Superstructure Construction
- Walls Design
- Walls Construction
- Roadway Design
- Roadway Construction
- Signing and Pavement Marking Design
- Signing and Pavement Marking Construction
- Signalization and Intelligent Transportation System Design
- Signalization and Intelligent Transportation System Construction
- Lighting Design
- Lighting Construction
- Maintenance of Traffic Design
- Landscape Opportunity Plans
- Permit Submittals
- Maintenance of Traffic Set-Up (per duration)
- Erosion Control
- Holidays and Special Events (shown as non-work days)
- Maintenance of Communication (MOC) Plan
- Existing Signalization and Intelligent Transportation System equipment report
- Equipment Testing and Commissioning; System Testing, Standalone
- Equipment Testing and Commissioning; System Testing, Network Communication

- Equipment Testing and Commissioning; System Testing, Central Test End-User
- Equipment Submittals (Prior to Start of Construction)
- Test Plan Submittal to FDOT
- Field Device Deployment
- System Integration (District Coordination, County Coordination, Meetings, Field Work, Acceptance)
- As-Built Plan Preparation and Submittal
- RTVM Updates
- Additional Construction Milestones as determined by the Design-Build Firm
- Final Completion Date for All Work

L. Key Personnel/Staffing:

The Design-Build Firm's work shall be performed and directed by key personnel identified in the Letter of Interest and/or Technical Proposal by the Design-Build Firm. In the event a change in key personnel is requested, the Design-Build Firm shall submit the qualifications of the proposed key personnel and include the reason for the proposed change. Any changes in the indicated personnel shall be subject to review and approval by the District Construction Engineer. The Department shall have sole discretion in determining whether or not the proposed substitutions in key personnel are comparable to the key personnel identified in the Letter of Interest and/or Technical Proposal. The Design-Build Firm shall have available professional staff meeting the minimum training and experience set forth in Florida Statute Chapter 455.

M. Partner/Teaming Arrangement:

Partner/Teaming Arrangements of the Design-Build Firm (i.e., Prime Contractor or Lead Design Firm) cannot be changed after submittal of the Letter of Interest without written consent of the Department. In the event a change in the Partner/Teaming Arrangement is requested, the Design-Build Firm shall submit the reason for the proposed change. Any changes in the Partner/Teaming Arrangement shall be subject to review and approval by the Department's Chief Engineer. The Department shall have sole discretion in determining whether or not the proposed substitutions in Partner/Teaming Arrangements are comparable to the Partner/Teaming Arrangements identified in the Letter of Interest and/or Technical Proposal.

N. Meetings and Progress Reporting:

The Design-Build Firm shall anticipate periodic meetings with Department personnel and other agencies as required for resolution of design and/or construction issues. These meetings may include:

- Department technical issue resolution
- Local government agency coordination
- Maintenance of Traffic Workshop
- Pavement Design Meeting
- Permit agency coordination
- Scoping Meetings
- System Integration Meetings
- Post Submittal Design Review Meetings

During design, the Design-Build Firm shall meet with the Department's Project Manager on a monthly basis at a minimum and provide a one month look ahead of the activities to be completed during the upcoming month.

During construction, the Design-Build Firm shall meet with the Department's Project Manager on a weekly basis and provide a one-week look ahead for activities to be performed during the coming week.

The Design-Build Firm shall meet with the Department's Project Manager at least thirty (30) calendar days before beginning system integration activities. The purpose of these meetings shall be to verify the Design-Build Firm's ITS and signalization integration plans by reviewing site survey information, proposed splicing diagrams, IP addressing schemes, troubleshooting issues, and other design issues. In addition, at these meetings the Design-Build Firm shall identify any concerns regarding the Integration and provide detailed information on how such concerns will be addressed and/or minimized.

The Design-Build Firm shall provide all documentation required to support system integration meetings, including detailed functional narrative text, system and subsystem drawings and schematics. Also included shall be the documentation to demonstrate all elements of the proposed design which includes, but is not limited to: technical, functional, and operational requirements; ITS/communications; equipment; termination/patch panels; performance criteria; and details relating to interfaces to other ITS subsystems. If, for any reason, planned network or signal operation outages are to occur, the Design-Build Firm shall submit to the Department for approval a Maintenance of Communication (MOC) Plan in advance of the planned network or signal operation outage detailing work to be performed and a strategy for minimizing the outage. The existing fiber backbone cut over shall be coordinated District Three Transportation System Management Operations (TSM&O) manager and designated representatives before beginning of roadway construction.

All action items resulting from the System Integration Meeting shall be satisfactorily addressed by the Design-Build Firm and reviewed and approved by the Department.

The Design-Build Firm shall, on a monthly basis, provide written progress reports that describe the items of concern and the work performed on each task.

O. Public Involvement:

1. General:

Public involvement is an important aspect of the Project. Public involvement includes communicating to all interested persons, groups, and government organizations information regarding the development of the Project. The Department, or its designated representative, will serve as the Public Involvement Consultant (PIC) to carry out an exhaustive Public Involvement Campaign and a marketing effort. The Design-Build Firm will assist the Department in the Public Involvement effort as described below.

The Design-Build Firm shall provide weekly advance MOT changes for roadways to the Department's CEI no later than noon each Thursday. For the upcoming week (Sunday through Saturday) which will be used to notify the public of impacts.

2. Community Awareness:

The Design-Build Firm will review and comment on a Community Awareness Program if requested by the Department.

3. Public Meetings:

The Design-Build Firm shall provide all supporting materials necessary for various public meetings, which may include:

- Kick-off or introductory meeting
- Metropolitan Planning Organization (MPO) Citizens Advisory Committee Meetings
- MPO Transportation Technical Committee Meetings
- MPO Meetings
- Public Information Meetings
- Elected and appointed officials
- Special interest groups (private groups, homeowners associations, environmental groups, minority groups and individuals)
- Open Houses
- Virtual Public Hearings

The Design-Build Firm shall include attendance at two meetings per month for the term of the contract to support the public involvement program. The Department anticipates having a minimum of one Construction Public Meeting for the Project.

For any of the above type meetings the Design-Build Firm shall provide all technical assistance, data and information, display boards, printed material, video graphics, computerized graphics, etc., and information necessary for the day-to-day exchange of information with the public, all agencies and elected officials in order to keep them informed as to the progress and impacts that the proposed Project will create. This includes workshops, information meetings, open houses, and public hearings. The Design-Build Firm shall provide display boards using aerials for the Construction Public Meeting to the same level of quality or better than the graphics utilized for the PD&E public meeting. The Design-Build Firm shall provide information for the various public meetings at a minimum of one (1) month prior to the meeting for Department review and approval.

The Design-Build Firm shall provide a computer animated display for the public meeting that details how traffic will utilize the new interchange, roundabout and adjacent roadway tie ins.

The Design-Build Firm shall, as determined by the Department, attend the meetings with an appropriate number of personnel to assist the CEI/Department. The Design-Build Firm shall forward all requests for group meetings to the CEI/Department. The Design-Build Firm shall inform the CEI/Department of any meetings with individuals that occur without prior notice.

4. Public Workshops, Information Meetings:

The Design-Build Firm shall provide all the support services listed in No. 3 above.

All legal/display advertisements announcing workshops, information meetings, and public meetings will be prepared and paid for by the Department.

The Department will be responsible for the legal/display advertisements for design concept acceptance. The Department will be responsible for preparing and mailing (includes postage) for all letters announcing the associated workshops and information meetings.

5. Public Involvement Data:

The Design-Build Firm is responsible for the following:

- Coordinating with the Department.
- Identifying possible permit and review agencies and providing names and contact information for these agencies to the Department.
- Providing required expertise (staff members) to assist the Department on an as-needed basis.
- Preparing color graphic renderings and/or computer generated graphics to depict the proposed improvements for coordination with the Department, local governments, and other agencies.
- Providing information to the Department to keep the Department website or social media platforms up to date.

The Design-Build Firm shall provide records of all public correspondence, written or verbal, to the Department throughout the life of the Project.

The Design-Build Firm may be asked by the CEI/Department to prepare draft responses to any public inquiries as a result of the public involvement process.

P. Quality Management Plan (QMP):

1. **Design:**

The Design-Build Firm shall be responsible for the professional quality, technical accuracy and coordination of all surveys, designs, drawings, specifications, geotechnical and other services furnished by the Design-Build Firm under this contract.

The Design-Build Firm shall provide a Design Quality Management Plan, which describes the Quality Control (QC) procedures to be utilized to verify, independently check, and review all design drawings, specifications, and other documentation prepared as a part of the contract. In addition, the QMP shall establish a Quality Assurance (QA) program to confirm that the Quality Control procedures are followed. The Design-Build Firm shall describe how the checking and review processes are to be documented to verify that the required procedures were followed. The QMP may be one utilized by the Design-Build Firm, as part of their normal operation or it may be one specifically designed for this Project. The Design-Build Firm shall submit a QMP within fifteen (15) working days following issuance of the written Notice to Proceed. A marked up set of prints from the Quality Control review will be sent in with each review submittal. The responsible Professional Engineers or Professional Surveyor that performed the Quality Control review, as well as the QA manager will sign a statement certifying that the review was conducted.

The Design-Build Firm shall, without additional compensation, correct all errors or deficiencies in the surveys, designs, drawings, specifications and/or other services.

2. **Construction:**

The Design-Build Firm shall be responsible for developing and maintaining a Construction Quality Control Plan in accordance with Section 105 of Standard Specifications which describes their Quality Control procedures to verify, check, and maintain control of key construction processes and materials.

The sampling, testing and reporting of all materials used shall be in compliance with the Sampling, Testing and Reporting Guide (STRG) provided by the Department. The Design-Build Firm will use the Department's database(s) to allow audits of materials used to assure compliance with the STRG. The

Department has listed the most commonly used materials and details in the Department's database. When materials being used are not in the Department's database list, the Design-Build Firm shall use appropriate material details from the STRG to report sampling and testing. Refer to the State Materials Office website for instructions on gaining access to the Department's databases: http://www.fdot.gov/materials/quality/programs/qualitycontrol/contractor.shtm

Prepare and submit to the Engineer a Job Guide Schedule (JGS) using the Department database in accordance with Section 105 of Standard Specifications.

The Department shall maintain its rights to inspect construction activities and request any documentation from the Design-Build Firm to ensure quality products and services are being provided in accordance with the Department's Materials Acceptance Program.

Q. Liaison Office:

The Department and the Design-Build Firm will designate a Liaison Office and a Project Manager who shall be the representative of their respective organizations for the Project.

R. Engineers Field Office: N/A

S. Schedule of Values:

The Design-Build Firm is responsible for submitting estimates requesting payment. Estimates requesting payment will be based on the completion or percentage of completion of tasks as defined in the schedule of values. Final payment will be made upon final acceptance by the Department of the Design-Build Project. Tracking DBE participation will be required under normal procedures according to the Construction Project Administration Manual. The Design-Build Firm must submit the schedule of values to the Department for approval. No estimates requesting payment shall be submitted prior to Department approval of the schedule of values.

Upon receipt of the estimate requesting payment, the Department's Project Manager will make judgment on whether or not work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

T. Computer Automation:

The Project shall be developed utilizing computer automation systems in order to facilitate the development of the contract plans. Various software and operating systems were developed to aid in assuring quality and conformance with Department policies and procedures. The Department supports MicroStation and GEOPAK as its standard graphics and roadway design platform as well as Autodesk's AutoCAD Civil 3D as an alternate platform. Seed Files, Cell Libraries, User Commands, MDL Applications and related programs developed for roadway design and drafting are in the FDOT CADD Software Suite. Furnish As-Built documents for all building related components of the Project in AutoCAD format. It is the responsibility of the Design-Build Firm to obtain and utilize current Department releases of all CADD applications.

The Design-Build Firm will be required to furnish the Project's CADD files after the plans have been Released for Construction. The Design-Build Firm's role and responsibilities are defined in the Department's CADD Manual. The Design-Build Firm will be required to submit final documents and files which shall include complete CADD design and coordinate geometry files in MicroStation and/or

AutoCAD design files format.

As part of the As-Built Set deliverables, field conditions shall be incorporated into MicroStation and/or AutoCAD design files. Use the cloud revision utility as well as an "AB" revision triangle to denote field conditions on plan sheets.

U. Construction Engineering and Inspection:

The Department is responsible for providing Construction Engineering and Inspection (CEI) and Quality Assurance Engineering.

The Design-Build Firm is subject to the Department's Independent Assurance (IA) Procedures.

V. Testing:

The Department or its representative will perform verification and resolution sampling and testing activities at both on site, as well as, off site locations such as pre-stress plants, batch plants, structural steel and weld, fabrication plants, etc. in accordance with the latest Specifications.

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W. Value Added:

The Design-Build Firm may provide Value Added Project Features, in accordance with Article 5-14 of the Specifications for the following features:

- Roadway features
- Roadway drainage systems
- Retaining Walls
- Approach slabs
- Superstructure
- Substructure
- Concrete defects
- Structural steel defects
- Post-tensioning systems, if applicable
- And any other products or features the Design-Build Firm desires.

The Design-Build Firm shall develop the Value Added criteria, measurable standards, and remedial work plans in the Design-Build Firm's Technical Proposal for features proposed by the Design-Build Firm.

The Design-Build Firm shall provide at a minimum the three (3) year warranty period as defined by Article 338, Value Added Asphalt Pavement, Division II, Standard Specifications. The Design-Build Firm may provide a longer warranty period than the three (3) year minimum.

X. Adjoining Construction Projects:

The Design-Build Firm shall be responsible for coordinating all design, permitting, and construction activities with other construction Projects that are impacted by or impact this Project. This includes Projects under the jurisdiction of local governments, the Department, other regional and state agencies, or private

entities.

The Design-Build Firm shall consider and include in the Construction Plans and Bid Price Proposal, any and all temporary detours or diversions required to facilitate traffic movements into and out of the project limits; notwithstanding the alignment, lane positioning and/or grade differences of traffic conditions on those adjacent projects.

Y. Issue Escalation:

In the event issues arise during prosecution of the work, the resolution of those issues will be processed as described below unless revised by a Project specific Partnering Agreement:

The escalation process begins with the Construction Project Manager. All issues are to be directed to the Construction Project Manager. If the issue cannot be resolved by the Construction Project Manager in coordination with the Resident Engineer and Design Project Manager as applicable, the Construction Project Manager shall forward the issue to the District Construction Engineer who will coordinate with the District Design Engineer, and the District Utility Administrator, as applicable. Each level shall have a maximum of five (5) calendar days (excluding weekends and Department observed holidays) to answer, resolve, or address the issue. The Design-Build Firm shall provide all supporting documentation relative to the issue being escalated. The five (5) calendar day period (excluding weekends and Department observed holidays) begins when each level in the issue escalation process has received all required supporting documentation necessary to arrive at an informed and complete decision. The five (5) calendar day period (excluding weekends and Department observed holidays) is a response time and does not infer resolution. Questions asked by the Department may be expressed verbally and followed up in writing within one (1) calendar day (excluding weekends and Department observed holidays). Responses provided by the Design-Build Firm may be expressed verbally and followed up in writing within one (1) working day. Once a response is received from the District Construction Engineer, the Construction Project Manager will respond to the Design-Build Firm in a timely manner but not to exceed three (3) calendar days (excluding weekends and Department observed holidays).

The Design-Build Firm shall provide a similar issue escalation process for their organization with personnel of similar levels of responsibility.

Should an impasse develop, the Dispute Review Board shall assist in the resolution of disputes and claims arising out of the work on the Contract.

VI. Design and Construction Criteria.

A. General:

All design and construction work completed under the Contract shall be in accordance with the United States Standard Measures.

B. Vibration and Settlement Monitoring:

The Department has identified vibration sensitive sites along the Project corridor. The Design-Build Firm shall be responsible for the identification of and coordination with vibration sensitive sites impacted by the Work for the duration of the construction period.

The Design-Build Firm is responsible for evaluating the need for, design of, and the provision of any necessary precautionary features to protect existing structures from damage, including, at a minimum, selecting construction methods and procedures that will prevent damage. The Design-Build Firm shall submit for Department acceptance a Settlement and Vibration Monitoring Plan (SVMP) as part of the 90% plans submittal and update the SVMP throughout the Construction Period. The Design-Build Firm is responsible for establishing maximum settlement and vibration thresholds equivalent to or lower than the Department Specification requirements for all construction activities, including vibratory compaction operations and excavations.

Submittals for Settlement and Vibration Monitoring Plan (SVMP) shall include the following as a minimum:

- Identify any existing structures that will be monitored for vibrations during the construction period.
- Establish the maximum vibration levels for the existing structures shall not be exceeded.
- Identify any existing structures that will be monitored for settlement during the construction period.
- Establish the maximum settlement levels for the existing structures that must not be exceeded.
- Identify any existing structures that require pre-construction and post-construction surveys.

The Department will perform the review of Vibration and Settlement submittals in accordance with Department Specifications.

C. Geotechnical Services:

Driven Pile Foundations for Bridges and Major Structures

The Design-Build Firm shall determine whether the resistance factors used for pile design will be based on static/statnamic load testing. Prepare a Technical Special Provision (TSP) for tests other than the Modified Quick Test, such as Bidirectional (Osterberg Cell) Load Test or Statnamic Load Test. For Bidirectional Load Tests use the same loading and unloading intervals, as well as the same loading times specified for the Modified Quick Test. Comply with the instrumentation requirements of 455-2.4. Before the resistance factors for static/statnamic load testing may be used for pile foundations in any of the following areas of the Project, a minimum number of successful load tests must be performed in representative locations of that area:

- Station 673+00 to Station 674+60 Eastbound (BL of Survey), (minimum 1test)

- Station 673+00 to Station 674+60 Westbound (BL of Survey), (minimum 1test)

Limits of these areas may be modified by the Design-Build Firm if the modifications are justified by additional subsurface information and concurred with by the Department. Furthermore, resistance factors for static/statnamic load testing may only be used for production piles which have the same tip elevations in the same material as the representative static/statnamic load test pile. Deviations in tip elevations or bearing material will require additional static/statnamic testing if the static/statnamic load test resistance factors will be used.

There shall be at least one test pile in every pier/bent. Production piles for a pier/bent shall not be cast or

driven until the test pile in that pier/bent has been successfully driven and has achieved the required NBR.

The Design-Build Firm shall be responsible for the following:

1. Evaluating geotechnical conditions concerning the use of Driven Piling.
2. Conducting additional subsurface investigation (if believed needed).
3. Selection of pile type and size.
4. Selection of test pile lengths, locations and quantity of test piles.
5. Selection of pile testing methods.
6. Determining the frequency of such testing unless otherwise stated herein.
7. Performance of the selected test pile program, including dynamic load test personnel and equipment. The Department may observe the installation of test piles and all pile testing.
8. Preparing and submitting a Pile Installation Plan for the Department's acceptance.
9. Selection of production pile lengths.
10. Development of the driving criteria.
11. Driving piles to the required capacity and minimum penetration depth.
12. Inspecting and Recording the pile driving information.
13. Submitting Foundation Certification Packages.
14. Providing safe access, and cooperating with the Department in verification of the piles, both during construction and after submittal of the certification package.

Drilled Shaft Foundations for Bridges and Miscellaneous Structures

The Design-Build Firm shall determine whether the resistance factors used for drilled shaft design will be based on static/statnamic load testing. Prepare a Technical Special Provision (TSP) for tests other than the Modified Quick Test, such as Bidirectional (Osterberg Cell) Load Test or Statnamic Load Test. For Bidirectional Load Tests use the same loading and unloading intervals, as well as the same loading times specified for the Modified Quick Test. Comply with the instrumentation requirements of 455-2.4. Before the resistance factors for static/statnamic load testing may be used for drilled shafts in any of the following areas of the Project, a minimum number of successful load tests must be performed in representative locations of that area:

- Station 672+80to Station 674+20Eastbound (BL of Survey), (minimum 1test)
- Station 672+80 to Station 674+20 Westbound (BL of Survey), (minimum 1test)

Limits of these areas may be modified by the Design-Build Firm if the modifications are justified by additional subsurface information and concurred with by the Department. Furthermore, resistance factors for static/statnamic load testing may only be used for production piles/shafts which have the same tip elevations in the same material as the representative static/statnamic load test pile/shaft. Deviations in tip elevations or bearing material will require additional static/statnamic testing if the static/statnamic load test resistance factors will be used.

The Design-Build Firm shall be responsible for the following:

1. Evaluating geotechnical conditions to determine the drilled shaft diameter and length and construction methods to be used.
2. Conducting additional subsurface investigation (if believed needed).
3. Performing the subsurface investigation and drilling pilot holes prior to establishing the drilled shaft tip elevations and socket requirements. For redundant drilled shaft bridge

foundations, perform at least one test boring in accordance with the Soils and Foundations Handbook at each bent/pier.

4. Determining the locations of the load test shafts and the types of tests that will be performed.
5. Performing pilot borings for test holes (also known as test shafts or method shafts) and load test shafts and providing the results to the Department at least one (1) working day before beginning construction of these shafts.
6. Preparing and submitting a Drilled Shaft Installation Plan for the Department's acceptance.
7. Constructing the method shaft (test hole) and load test shafts successfully and conducting thermal integrity tests on these shafts.
8. Providing all personnel and equipment to perform a load test program on the load test shafts.
9. Determining the production shaft lengths.
10. Documenting and providing a report that includes all load test shaft data, analysis, and recommendations to the Department.
11. Constructing all drilled shafts to the required tip elevation and socket requirement in accordance with the specifications.
12. Inspecting and documenting the construction of all drilled shafts in accordance with the specifications.
13. Performing Cross-Hole Sonic Logging (CSL) or Thermal Integrity tests on all nonredundant drilled shafts supporting bridges. For redundant drilled shaft bridge foundations and drilled shafts for miscellaneous structures, perform CSL or Thermal Integrity testing on any shaft suspected of containing defects.
14. Repairing all detected defects and conducting post repair integrity testing using 3D tomographic imaging and gamma-gamma density logging.
15. Submitting Foundation Certification Packages in accordance with the specifications.
16. Providing safe access, and cooperating with the Department in verification of the drilled shafts, both during construction and after submittal of the certification package.

Spread Footings Foundations

The Design-Build Firm shall be responsible for the following:

1. Evaluating geotechnical conditions and conducting additional subsurface investigations if needed for the design the spread footing.
2. Evaluating geotechnical conditions and designing the spread footing.
3. Constructing the spread footing to the required footing elevation, at the required soil or rock material, and at the required compaction levels, in accordance with the specifications.
4. Inspecting and documenting the spread footing construction.
5. Submitting Foundation Certification Packages in accordance with the specifications.
6. Providing safe access, and cooperating with the Department in verification of the spread footing, both during construction and after submittal of the certification package.

Auger Cast Piles for Sound Barrier Walls

The Design-Build Firm shall be responsible for the following:

1. Evaluating geotechnical conditions and conducting additional subsurface investigations, if needed.
2. Design the foundations, including diameter and lengths..
3. Constructing all auger cast piles to the required tip elevation and socket requirements, in accordance with the specifications.

4. Preparing and submitting an Auger Cast Pile Installation Plan for the Department's acceptance.
5. Inspecting and documenting the auger cast pile installation.
6. Submitting Foundation Certification Packages in accordance with the specifications.
7. Providing safe access, and cooperating with the Department in verification of the auger cast piles, both during construction and after submittal of the certification package.

Specialty Geotechnical Services Requirements

Specialty geotechnical work is any alternative geotechnical work not covered by Department Specifications and requires the development of a Technical Special Provision (TSP). Any TSP for geotechnical work shall include the following:

- Criteria of measurable parameters to be met in order to accept the specialty geotechnical work,
- A field testing and instrumentation program to verify design assumptions and performance,
- A quality control program to be performed by the Design-Build Firm that includes sampling and testing to ensure the material quality, products, and installation procedures meet , requirements,
- A verification testing program to be performed by the Geotechnical Foundation Design Engineer of Record (GFDEOR) that includes inspection, sampling, and testing to verify the material, products, and procedures meet requirements. The TSP shall include language providing separate lab samples to be used for the Department's independent verification.
- A certification process

After construction of the specialty geotechnical work, the Design-Build Firm shall submit a certification package for Department's review within 15 business days. The certification package shall include the results of all the field testing, instrumentation and lab testing performed and a signed and sealed letter by the GFDEOR certifying that the specialty geotechnical work meets the requirements. The Department may issue comments and require additional verification testing.

D. Utility Coordination:

The Design-Build Firm shall utilize a single dedicated person responsible for managing all utility coordination. This person shall be contractually referred to as the Utility Coordination Manager (UCM) and shall be identified in the Design-Build Firm's proposal. The Design-Build Firm shall notify the Department in writing of any change in the identity of the Utility Coordination Manager. The Utility Coordination Manager shall have the following knowledge, skills, and abilities:

1. A minimum of 4 years of experience performing utility coordination in accordance with Department standards, policies, and procedures.
2. Knowledge of the Department plans production process and utility coordination practices,
3. Knowledge of Department agreements, standards, policies, and procedures.
4. Ability to physically reach the project site within three (3) hours.

The Design-Build Firm's Utility Coordination Manager shall be responsible for managing all utility coordination, including, but not limited to, the following:

1. Ensuring that all utility coordination and activities are conducted in accordance with the requirements of the Contract Documents.

2. Identifying all existing utilities and coordinating any new installations.
3. Reviewing proposed utility permit application packages and recommending approval/disapproval of each permit application based on the compatibility of the permit as related to the Design-Build Firm's plans.
4. Scheduling and conducting utility meetings, preparing and distributing minutes of all utility meetings, and ensuring expedient follow-up on all unresolved issues. The utility meetings shall be monthly during the design phase, but once construction commences (any element of construction), the meetings shall be held biweekly. Meetings will be required to remain on biweekly status until all conflicts are resolved and utilities are fully relocated.
5. Distributing all plans, conflict matrices and changes to affected Utility Agency/Owners and making sure this information is properly coordinated.
6. Identifying, preparing, reviewing and facilitating any agreement required for any utility work needed through final approval and execution. The UCM shall also be responsible for monitoring and reporting the performance of all involved parties under said agreement.
7. Preparing, reviewing, approving, signing, and coordinating the implementation of and submitting to the Department for review, all Utility Agreements. Provide copies to the Department Area Utility Manager.
8. Resolving utility conflicts.
9. Obtaining and maintaining all appropriate "*Sunshine State One Call of Florida*" tickets.
10. Performing Constructability Reviews of plans prior to construction activities with regard to the installation, removal, temporary removal, de-energizing, deactivation, relocation, or adjustment of utilities.
11. Providing periodic Project updates to the Department Project Manager and District Utility Office as requested. Copy the Department Area Utility Manager on all correspondence regarding utilities.
12. Coordination with the Department on any issues that arise concerning reimbursement of utility work costs between the Department and the utility.

The following Utility Agency/Owners (UA/O's) have been identified by the Department as having facilities within the Project corridor for which the Department contemplates an adjustment, protection, or relocation is possible. Also provided below is a determination made by the Department as to the eligibility of reimbursement for each UA/O. The UA/O's will be responsible for any necessary relocations for the project except where a UA/O is specifically identified in this RFP for the Design-Build Firm to perform the design and construction of the UA/O's relocation. **The Design-Build Firm will be responsible for including in their Bid Price Proposal a bid for the City of Crestview water and sewer relocations as indicated below. The remainder of the required utility relocations will be paid via reimbursable agreements by the Department outside of the Design-Build contract.** The Design-Build Firm is responsible for all other utility coordination for the project.

Table A – Summary of Department Contemplated Adjustment, Protection, or Relocation

UA/O	Utility Relocation Type	Cost Estimate	Eligible for Reimbursement	Work to be Bid in this D/B contract
AT&T Corp. (Transmission)	No conflicts	N/A	N/A	No
AT&T Metro (Transmission)	UA/O performing utility work	$350,000	Yes	No
CenturyLink	UA/O performing utility work	$330,000	Yes	No
Crestview, City of (Water & Sewer)	**Design-Build Firm performing utility work**	**$867,150**	**Yes**	**Yes**
Cox Communications	UA/O performing utility work	$135,000	Yes	No
Gulf Power (Distribution)	UA/O performing utility work	$1,500,000	Yes	No
Okaloosa County Water & Sewer	UA/O performing utility work	$1,052,982	Yes	No
Okaloosa Gas District	UA/O performing utility work	$200,000	Yes	No
Verizon Business (MCI)	UA/O performing utility work	$110,000	Yes	No

Table B - Summary of UAO having facilities within the Proposed Project Limits

Company	Contact Person	Contact Number	Email Address
AT&T Corp. *(Transmission)*	Steve Hamer	(813) 888-8300 ext. 201	shamer@sdt-1.com
AT&T Metro *(Transmission)*	Joel McKinney	(770) 335-9816	jm2814@att.com
CenturyLink	Amber Gilson	(850) 815-3131	amber.gilson@centurylink.com
Crestview, City of (Water & Sewer)	Wayne Steele	(850) 682-6132 ext. 102	steele@cityofcrestview.org
Gulf Power Company *(Distribution)*	Chad Swails	(850) 429-2446	chad.swails@nexteraenergy.com
Okaloosa County Water & Sewer	Jon Kanak	(850) 609-5098	jkanak@myokaloosa.com

Okaloosa Gas District	Lars Sullivan	(850) 729-4870	larssullivan@okaloosagas.com
Verizon Business (MCI)	**Thom Broyles**	**Office – 850-475-7465 Cell – 850-375-1877**	**Thomas.broyles@verizon.com**
~~**Verizon Business *(MCI)***~~	~~**Chuck Brunick**~~	~~**(407) 257-6135**~~	~~**chuck.brunick@verizon.com**~~

The Design-Build Firm may request the utility to be relocated to accommodate changes from the conceptual plans; however, these relocations require the Department's approval and the Department will not pay the Utility Agency/Owner (UA/O) or the Design-Build Firm for the utility relocation work regardless of the UA/O's eligibility for reimbursement.

For a reimbursable utility relocation where the UA/O desires the work to be done by their contractor, the UA/O will perform the work in accordance with the utility work schedule and permit, and bill the Department directly.

DEVIATION FROM THE CONCEPTUAL UTILITY RELOCATION PLAN: If the Design-Build Firm chooses to deviate from the conceptual plans and the scope of the impact to a utility depicted in the Reference Document section of the RFP, and thereby causes a greater impact to a utility, the Design-Build Firm shall be solely responsible for all increased costs incurred by the utility owner associated with the increase in the scope of the impact to a utility from that depicted in the conceptual plans. The Design-Build Firm shall obtain an agreement from the utility owner being impacted which outlines the changes to the scope of the impact to a utility from that depicted in the conceptual plans. The agreement shall also address the Design-Build Firm's obligation to compensate the utility owner for the additional costs above the costs which would have been incurred without the Design Build Firm's increase in the scope of the impact to a utility from that depicted in the conceptual plans. The Design-Build Firm shall also provide a draft utility permit application acceptable to the Department for the placement of the utility owner's facilities based on the final design. The Department shall not compensate or reimburse the Design-Build Firm for any cost created by a change in scope of the impact to a utility from that depicted in the conceptual plans, or be liable for any time delays caused by a change in scope of the impact to a utility from that depicted in the conceptual plans.

The Design-Build Firm shall forward the relocation agreements, plans, work schedules and permit application to the Department for review by the District Utility Office (DUO) and the Department's Project Manager. The DUO and Department's Project Manager will review the documents. Once reviewed, the utility permit application will be forwarded to the District Maintenance office for the permit to be signed and recorded or submitted through the One Stop Permitting (OSP) system.

E. Roadway Plans:

General:

The Design-Build Firm shall prepare the Roadway Plans Package. This work effort includes the roadway design and drainage analysis needed to prepare a complete set of Roadway Plans, Temporary Traffic Control Plans, Environmental Permits and other necessary documents.

Design Analysis:

The Design-Build Firm shall either utilize the signed and sealed Approved Typical Section Package (see Attachments) and comply with the same, or via the ATC process, develop and submit a different signed and sealed Typical Section Package for review and concurrence by the Department. The Design-Build Firm

shall develop and submit a signed and sealed Pavement Design Package (if changed from the minimum pavement design in the RFP) and project design documentation for review and concurrence by the Department.

Any deviation from the Department's design criteria will require a Design Variation and any deviation from AASHTO will require a Design Exception. All such Design Variations and Design Exceptions must be approved.

These packages shall include the following:

F. Roadway Design:

See FDM Part 3; Chapter 301 for Roadway Design sheets, elements and completion level required for each submittal.

1. **Typical Section Package:**

- Transmittal letter
- Location Map
- Roadway Typical Section(s)
    1. Pavement Description (Includes milling depth)
    2. Minimum lane, shoulder, median widths
    3. Slopes requirements
    4. Barriers
    5. Right-of-Way
- Data Sheet
- Design Speed

2. **Pavement Design Package:**

The recommended pavement design attached to this document is the minimum required pavement design for the contract. The pavement designs detailed in the conceptual plans may NOT be accurate and are overruled by the recommended pavement designs included in this RFP. If alternate pavement designs are proposed, the following submittal requirements should be provided to the Department for review.

- Pavement Design
    1. Minimum design period
    2. Minimum ESAL's
    3. Minimum design reliability factors
       Resilient modulus for existing and proposed widening (show assumptions)
    4. Roadbed resilient modulus
    5. Minimum structural asphalt thickness
    6. Cross slope
    7. Identify the need for modified binder
    8. Pavement coring and evaluation
    9. Identify if ARMI layer is required
    10. Minimum milling depth

Use of the Mechanistic-Empirical Pavement Design Guide (MEPDG) for pavement design shall not be allowed.

3. **Drainage Analysis:**

The Design-Build Firm shall be responsible for designing the drainage and stormwater management systems. All design work shall be in compliance with the Department's Drainage Manual; Florida Administrative Code, chapter 14-86; Federal Aid Policy Guide 23 CFR 650A; and the requirements of the regulatory agencies. This work will include the engineering analysis necessary to design any or all of the following: cross drains, French drains, underdrains, edge drains, roadway ditches, outfall ditches, storm sewers, retention/detention facilities, interchange drainage and water management, other drainage systems, temporary drainage design for all MOT phases and elements of systems as required for a complete analysis. Full coordination with all permitting agencies, the District Environmental Management Office and Drainage Design Engineer will be required from the outset. Full documentation of all meetings and decisions are to be submitted to the District Drainage Design Engineer, District Environmental Permits Coordinator and Department's Project Manager. These activities and submittals shall be coordinated through the Department's Project Manager.

The exact number of drainage basins, outfalls and water management facilities (retention/detention areas, weirs, etc.) will be the Design-Build Firm's responsibility. ~~**The Department has developed preliminary pond designs as depicted in the conceptual plans.**~~ **The Department has developed preliminary pond designs as follows and depicted in the conceptual plans:**

There are five (5) ponds associated with the proposed roadway improvements. Three (3) ponds are anticipated to be constructed/modified by the Design-Build Firm as follows:

***Pond 1* – Construct a new pond North of I-10**

***Pond 2* - Construct a new pond at the Antioch Road/PJ Adams Parkway Intersection**

***Pond 3* - Modify the existing pond at the Taylor Farms/PJ Adams Parkway**

The remaining two ponds are anticipated to be constructed by others as follows:

***Pond 4* - An existing pond located at the Addison Place apartments is anticipated to need modification to accommodate the roadway improvements. The property owner will be responsible for designing, permitting and constructing the pond modifications. No stormwater from the roadway will be directed to this pond as this is private property pond.**

***Pond 5* – This pond is located at the intersection of PJ Adams Parkway and Old Antioch Road. This pond is being constructed by Okaloosa County as part of the PJ Adams Parkway improvements to the east.**

The Design-Build Firm shall complete the design and permitting for any required pond locations**, modify any permit that may be necessary that the Department started the permitting process on** and **ultimately obtain all permits** for the full project. The objective is to obtain approved stormwater treatment/attenuation design. The drainage design shall ensure that no adverse impacts occur to adjacent properties as a result of the design. The drainage design detailed in the conceptual plans may be modified by the Design-Build Firm as necessary for the project.

The assumed velocity method will NOT be allowed for crossdrain analysis.

Perform design and generate construction plans documenting that the permitted systems function to criteria.

The Design-Build Firm will consider optional culvert materials in accordance with the Department's

Drainage Manual Criteria.

Prior to proceeding with the Drainage Design, the Design-Build Firm shall meet with the District Drainage Engineer and District Environmental Permits Coordinator. The purpose of this meeting is to provide information to the Design-Build Firm that will better coordinate the Preliminary and Final Drainage Design efforts. This meeting is Mandatory and is to occur fifteen (15) calendar days (excluding weekends and Department observed holidays) prior to any submittals containing drainage components.

The Design-Build Firm shall provide the Department's District Drainage Engineer a signed and sealed Drainage Design Report. It shall be an As-Built Plan of all drainage computations, both hydrologic and hydraulic. The engineer shall include all necessary support data.

G. Geometric Design:

The Design-Build Firm shall prepare the geometric design for the Project using the Standard Plans and criteria that are most appropriate with proper consideration given to the design traffic volumes, adjacent land use, design consistency, aesthetics, ADA requirements, and this document.

The design elements shall include, but not be limited to, the horizontal and vertical alignments, lane widths, shoulder widths, median widths, cross slopes, borders, sight distance, side slopes, front slopes and ditches. The geometric design developed by the Design-Build Firm shall be an engineering solution that is not merely an adherence to the minimum AASHTO and/or Department standards.

H. Design Documentation, Calculations, and Computations:

The Design-Build Firm shall submit to the Department design documentation, notes, calculations, and computations to document the design conclusions reached during the development of the construction plans.

The design notes and computation sheets shall be fully titled, numbered, dated, indexed, and signed by the designer and the checker. Computer output forms and other oversized sheets shall be folded to a standard size 8½" x 11". At the Project completion, a final set of design notes and computations, signed by the Design-Build Firm, shall be submitted with the As-Built Plans and tracings.

The design documentation, notes, calculations and computations shall include, but not be limited to the following data:

1. Standards Plans and criteria used for the Project
2. Geometric design calculations for roadway alignments
3. Vertical geometry calculations
4. Documentation of decisions reached resulting from meetings, telephone conversations or site visits
5. Design Standards and criteria used for the Project
6. Power service voltage drop calculations to verify proper wire size for an electrical circuit based on voltage drop and current carrying capacity is sufficient at all proposed new equipment locations.
7. CCTV citing survey video files and pictures.

Prior to final acceptance, furnish the District with two copies of the following documentary items obtained from the manufacturer for all of the electronic equipment:

1. Operation Manual

2. Troubleshooting and Service Manual
3. Assembly and installation instructions
4. Pictorial layout of components and schematics for circuit boards
5. Parts list
6. Diagram of the field installation wiring
7. Warranty information

I. Structure Plans:

1. **Bridge Design Analysis:**

a. The Design-Build Firm shall submit to the Department final signed and sealed design documentation prepared during the development of the plans.

b. The Design-Build Firm shall insure that the final geotechnical recommendations and reports required for structures design are submitted with the 90% plans.

c. The Design-Build Firm shall "Load Rate" all bridges in accordance with the Department Procedure 850-010-035 and the Structures Manual. The Bridge Load Rating Calculations, the Completed Bridge Load Rating Summary Detail Sheet, and the Load Rating Summary Form shall be submitted to the Department for review with the 90% superstructure submittal. The final Bridge Load Rating Summary Sheet and Load Rating Summary Form shall be submitted to the Department for review with the Final superstructure submittal. A final, signed and sealed Bridge Load Rating, updated for as-built conditions, shall be submitted to the Department for each phase of the bridge construction prior to placing traffic on the completed phase of the bridge. A final, signed and sealed Bridge Load Rating, updated for the as-built conditions as part of the As-Built Plans submittal shall be submitted to the Department before any traffic is placed on the bridge. The Bridge Load Rating shall be signed and sealed by a Professional Engineer licensed in the State of Florida.

d. The Design-Build Firm shall evaluate scour on all bridges over water using the procedures described in HEC 18.

e. The Engineer of Record for bridges shall analyze the effects of the construction related loads on the permanent structure. These effects include but are not limited to: construction equipment loads, change in segment length, change in construction sequence, etc. The Engineer of Record shall review all specialty engineer submittals (camber curves, falsework systems, etc.) to ensure compliance with the contract plan requirements and intent.

2. **Criteria**

The Design-Build Firm shall incorporate the following into the design of this facility:

a. All plans and designs are to be prepared in accordance with the Governing

Regulations of Section V. A.

b. Critical Temporary Retaining Walls: Whenever the construction of a component requires excavation that may endanger the public or an existing structure that is in use the Design-Build Firm must protect the existing facility and the public. If a critical temporary retaining wall is, therefore, required during the construction stage only, it may be removed and reused after completion of the work. Such systems as steel sheet pilings, soldier beams and lagging or other similar systems are commonly used. In such cases, the Design-Build Firm is responsible for designing and detailing the wall in the set of contract plans. These plans must be signed and sealed by the Structural Engineer in responsible charge of the wall design.

c. Wall height shall not exceed a maximum of 40'.

d. Pier Design: Bridge piers shall be evaluated and designed for vehicle collision, if applicable.

e. Footing Design: Pier Foundation Caps shall be placed at an elevation to allow clearance for future crash walls.

f. Structure Numbers: Identification numbers have not been obtained. Design-Build Firm shall apply for bridge, sign, mast arm and high mast lighting identification numbers as appropriate.

g. The drainage design shall comply with Drainage Manual requirements for wall zones. The concept plans do not accurately reflect this requirement.

Sound wall surface finish requirements:

The Design-Build Firm shall seal the surfaces of the concrete noise walls using an opaque Silicone Acrylic Sealer shall include appropriate surface preparation and application of two coats of the sealer for exterior concrete surfaces. The Design-Build Firm shall develop a TSP subject to Department approval for the sealer to be utilized. The Design-Build Firm shall also provide to the Department during the design phase the specific proposed sealer product to be utilized and the plan for utilizing staff qualified for completing the sealer application. Prefinished items should not be coated. The proposed TSP shall include similar information as detailed below:

- Source Limitations
- Certificates of Compliance
- Material List
- Manufacturer's Information
- Approval of Materials
- Pollution Control Plan
- Delivery and Storage

The Design-Build Firm shall provide a written plan outlining the surface preparation and application of the sealer and include the following:

- **Examination of Surfaces.** Before starting any Work, surfaces to receive sealer finish shall be examined carefully for defects which cannot be corrected by the procedures specified below under "Surface Preparation" and which might prevent satisfactory sealing results. Should such conditions

be encountered, the Engineer shall be notified immediately so that the extent of the problem and a solution can be identified. Commencing of work shall be construed as acceptance of the surfaces, and thereafter, the Contractor shall be fully responsible for satisfactory work as required herein.

- **Field Area "Sample".** Provide a full two (2) coat "sample" at the Field Sample Area using type of sealer proposed for use on this Project.

  For a noise wall structure including a minimum of one (1) post, and a minimum of one (1) full wall panel (from ground to top of structure) to represent surfaces and conditions for sealer and substrate to be sealed.

  Final approval of sealer system and color will be from Field Sample Area.
- **Protection.** Protect from surface preparation operations and contamination by sealing materials all surfaces not to be sealed. Restore surfaces which are contaminated by sealing materials to their original condition.
- **Surface Preparation.** All surfaces shall be clean, dry and free of grease, oil, paint, sealers, coatings, etc. Concrete surfaces shall be hydro-silica blasted at the direction of the Engineer as follows:
  1. Hydro-silica blasting shall be capable of pressures in excess of 2500 psi in order to effectively remove all existing applied finishes, sealers, curing compounds, and other surface residues. Dry sandblasting shall not be employed without express written approval of the Engineer.
  2. Prior to blasting, use a manufacturer recommended de-greasing agent if required, following label directions, rinse thoroughly and allow the surface to dry. If mold mildew or fungus are present, kill and remove by cleaning with a solution.
  3. If concrete surface feels like 120-grit sandpaper, the pores are open enough for the sealer to properly bond. If concrete does not have this texture, etch surface with a manufacturer recommended concrete etching solution following label instructions.
  4. Prepared concrete shall have a pH between 7 and 10. If a high pH reading (11-13) is detected, neutralize the surface by acid etching the surface with a manufacturer recommended concrete etching solutions, following label instructions. If after the process the surface pH is high, then notify the Engineer before proceeding with the Work.
- **Environmental Conditions.** Do not apply sealer in foggy or rainy weather or when the temperature of the air at the surface is below 50 degrees F or over 95 degrees F, unless approved by the Engineer. Under no circumstances shall any sealer be applied when the dew point and the temperature are within three (3) degrees C of each other or otherwise when surfaces are wet or contaminated in any way.
- **Inspection.** Contractor shall arrange to have sealer manufacturer's representative inspect and approve prepared (unsealed) surface and, prior to commencement of application, each succeeding coat.
- **Cleanup.** Clean spills and spatters and tools immediately with a manufacturer recommended solvent, Xylene, or Toluene. Follow manufacturer's instructions and safety recommendations when using any solvent.

J. Specifications:

Department Specifications may not be modified or revised. Technical Special Provisions shall be written only for items not addressed by Department Specifications and shall not be used as a means of changing Department Specifications.

The Design-Build Firm shall prepare and submit a signed and sealed Construction Specifications Package for the Project, containing all applicable Division II and III Special Provisions and Supplemental Specifications from the Specifications Workbook in effect at the time the Bid Price Proposals were due in the District Office, along with any approved Developmental Specifications and Technical Special Provisions, that are not part of this RFP. Any subsequent modifications to the Construction Specifications Package shall be prepared, signed and sealed as a Supplemental Specifications Package. The Specifications Package(s) shall be prepared, signed and sealed by the Design-Build Firms Engineer of Record who has successfully completed the mandatory Specifications Package Preparations Training.

The website for completing the training is at the following URL address:

http://www2.dot.state.fl.us/programmanagement/PackagePreparation/TrainingConsultants.aspx

Specification Workbooks are posted on the Department's website at the following URL address:

https://fdotewp1.dot.state.fl.us/SpecificationsPackage/Utilities/Membership/login.aspx?ReturnUrl=%2fSpecificationsPackage%2fdefault.aspx

Upon review and approval by the Department, the Construction Specifications Package will be stamped "Released for Construction" and initialed and dated by the Department.

K. Shop Drawings:

The Design-Build Firm shall be responsible for the preparation and approval of Shop Drawings. Shop Drawings shall be in conformance with the FDM. Shop Drawing submittals must be accompanied by sufficient information for adjoining components or areas of work to allow for proper evaluation of the Shop Drawing(s) submitted for review. When required to be submitted to the Department, Shop Drawings shall bear the stamp and signature of the Design-Build Firm's Engineer of Record (EOR), and Specialty Engineer, as appropriate. All "Approved" and "Approved as Noted" Shop Drawings submitted to the Department for review shall also include Engineer of Record QA/QC Shop Drawing check prints along with the EOR stamped set(s). The Department shall review the Shop Drawing(s) to evaluate compliance with Project requirements and provide any findings to the Design-Build Firm. The Department's procedural review of Shop Drawings is to assure that the Design-Build Firm's EOR has approved and signed the drawing, the drawing has been independently reviewed and is in general conformance with the plans. The Department's review is not meant to be a complete and detailed review. Upon review of the Shop Drawing, the Department will initial, date, and stamp the drawing "Released for Construction" or "Released for Construction as Noted".

L. Sequence of Construction:

The Design-Build Firm shall construct the work in a logical manner and with the following objectives as guides:

1. Maintain or improve, to the maximum extent possible, the quality of existing traffic operations, both in terms of flow rate and safety, throughout the duration of the Project.
2. Minimize the number of different Temporary Traffic Control Plan (TTCP) phases, i.e., number of different diversions and detours for a given traffic movement.
3. Take advantage of newly constructed portions of the permanent facility as soon as possible when it is in the best interest of traffic operations and construction activity.

4. Maintain reasonable direct access to adjacent properties at all times, with the exception in areas of limited access Right-of-Way where direct access is not permitted.
5. Coordinate with adjacent construction Projects and maintaining agencies.

M. Stormwater Pollution Prevention Plans (SWPPP):

The Design-Build Firm shall prepare a Storm Water Pollution Prevention Plan (SWPPP) as required by the National Pollution Discharge Elimination System (NPDES). The Design-Build Firm shall refer to the Department's Project Development and Environment Manual and Florida Department of Environmental Protection (FDEP) Rule 62-621.300(4)(a) for information in regard to the SWPPP. The SWPPP and the Design-Build Firm's Certification (FDEP Form 62-621.300(4)(b) **NOTICE OF INTENT (NOI) TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES)** shall be submitted for Department review and approval. Department approval must be obtained prior to beginning construction activities.

N. Transportation Management Plan:

The Design-Build Firm must develop a Transportation Management Plan in accordance with the Department's FDOT Design Manual.

1. Traffic Control Restrictions:

There will be NO LANE CLOSURES on SR 8 (I-10) between the hours of 6:00 AM to 8:00 PM Monday through Thursday and from 6:00 AM Friday to 8:00 PM Sunday. No lane closure will be allowed on PJ Adams Parkway **and Antioch Road** between 8:00 AM and 6:00 PM Monday through Friday All lane closures, including ramp closures, must be reported to the local emergency agencies, the media and the District Three Public Information Office. Also, the Design-Build Firm shall develop the Project to be able to provide for all lanes of traffic to be open in the event of an emergency.

Any requests for local road closures proposed for 24 hours or more in duration will require County Commission resolution in support of the closure and District Secretary approval. The Design-Build Firm shall obtain approval at least 30 days in advance of the requested closure.

SR 8 (I-10) shall not be closed at any time with the exception of the bridge construction above SR 8 (I-10). The Design-Build Firm shall minimize closures on SR 8 (I-10) to the greatest extent possible. Pacing operations will be allowed for certain work activities (i.e. beam placement, etc.) contingent upon Department approval of the work effort, day of week, time of day and duration.

No special events have been identified for this project.

O. Environmental Services/Permits/Mitigation:

The Design-Build Firm will be responsible for preparing designs and proposing construction methods that are permittable. The Design-Build Firm will be responsible for any required permit fees. All permits required for a particular construction activity will be acquired prior to commencing the particular construction activity. Delays due to incomplete or erroneous permit application packages, agency rejection, agency denials, agency processing time, or any permit violations, except as provided herein, will be the responsibility of the Design-Build Firm, and will not be considered sufficient reason for a time extension or additional compensation.

As the permittee, the Department is responsible for reviewing, approving, and signing the permit application package including all permit modifications, or subsequent permit applications.

The Department has conducted an investigation of the Project site and determined that potential gopher tortoise habitats could be impacted by the Project. All coordination by the Design-Build Firm with the Department regarding gopher tortoises will be completed through the District Environmental Management Office. The Department has determined that suitable gopher tortoise habitat exists in the project area and the Design-Build Firm shall be responsible for conducting the gopher tortoise burrow survey for the purpose of identifying potential gopher tortoise habitats that could be impacted by the Project including any areas to be used for construction staging. The habitat will be systematically surveyed according to the current Gopher Tortoise Permitting guidelines published by the Florida Fish and Wildlife Conservation Commission (FWC). The Department must verify the completeness and accuracy of the assessment prior to commencement of any permitting or construction activities. Any areas where the Design-Build Firm proposes to protect burrows to remain on-site with "exclusionary fencing" shall be reviewed and approved by the Department. The Design-Build Firm shall submit an "exclusionary fencing" plan for review prior to any "exclusionary fencing" installation. If there are unavoidable impacts to gopher tortoise burrows, the Design-Build Firm shall be responsible for preparing required documentation for the Department to obtain a FWC permit for the relocation of gopher tortoises and commensals from burrows which cannot be avoided. Preparation of complete permit packages will be the responsibility of the Design-Build Firm. As the "permittee", the Department is responsible for reviewing and approving the permit application package including all permit modifications, or subsequent permit applications. This applies whether the project is Federal or state funded. Once the Department has approved the permit application, the Design-Build Firm is responsible for submitting the permit application to FWC. A copy of the permit and any subsequent reports to FWC must be provided to the District Environmental Management Office. If FWC rejects or denies the permit application, it is the Design-Build Firm's responsibility to make whatever changes necessary to ensure the permit application is approved. Once the permit is obtained, the Design-Build Firm shall notify the Department at least one week prior to the relocation of gopher tortoises. If gopher tortoise relocations are phased throughout the construction, the Design-Build Firm shall notify the Department at least one week prior to each relocation phase. The Department will provide oversight of the relocations and ensure permit compliance. The Design-Build Firm shall be responsible for any necessary permit extensions or re-permitting in order to keep the relocation permit valid throughout the construction period. The Design-Build Firm shall provide the Department with draft copies of requests to modify the permits and/or requests for permit extensions, for review and approval by the Department prior to submittal to the Agencies. The Design-Build Firm shall provide the appropriate reports as required by the permit conditions, including closing out the permit. The Design-Build Firm shall note that permits for gopher tortoise relocation for areas outside of the Department owned Right of Way (i.e. utility easements; license agreements) cannot be obtained with the Department as the "permittee", per FWC requirements. Should permits in areas outside of the Right of Way be required, the Department will still perform the oversight of the process as described above. The Design-Build Firm will be required to pay all permit fees including any and all fees associated with the relocation of gopher tortoises. Any fines levied by permitting agencies shall be the responsibility of the Design-Build Firm.

The following Project specific Environmental Commitments have been identified as specific requirements for this project:

1. **Gopher Tortoise** – the gopher tortoise requirements previously listed above shall apply for this contract.
2. **Bald Eagle** - The FDOT will re-survey for bald eagle nests within one (1) year of construction. If a nest is found within 660 feet of the project, the FDOT Environmental Office will coordinate with USFWS regarding additional avoidance measures and possible additional commitments.

3. **Florida Black Bear -** Due to the presence of Black Bears in the area, the construction contractor will be required to have bear-proof garbage containers on site or be required to remove garbage and food debris from the project daily.
4. **Eastern Indigo Snake** - The Design-Build Firm shall implement the Standard Protection Measures for the Eastern Indigo Snake during construction.
5. **Noise Abatement** - The FDOT is committed to the construction of feasible and reasonable noise abatement measures at the noise-impacted locations as identified in the 2020 Final Noise Study Report Addendum. Noise walls shall be installed in accordance with the requirements of this RFP and the 2020 Noise Study Report Addendum.

P. Signing and Pavement Marking Plans:

The Design-Build Firm shall prepare signing and pavement marking plans in accordance with Department criteria. Final pavement markings shall be thermoplastic.

A Conceptual Signing Plan has been provided by the Department identifying sign locations and messages within the Project limits. No structural analysis was performed for the Conceptual Signing Plan.

The Design-Build Firm shall be responsible for the design of all new or retrofit sign supports (post, overhead span, overhead cantilever, bridge mount and any applicable foundations). The Design-Build Firm shall show all details (anchor bolt size, bolt circle, bolt length, etc.) as well as all design assumptions (wind loads, support reactions, etc.) used in the analysis.

All existing signs shall be removed and new signs designed and installed within the project limits.

It shall be the Design-Build Firm's responsibility to field inventory and show all existing signs within the Project limits and address all signage within the Project limits.

Q. Lighting Plans:

~~**The Design-Build Firm shall provide a Light-Emitting Diode (LED) lighting design and a lighting analysis and prepare lighting plans in accordance with Department criteria. The Design-Build Firm shall be responsible for the design, furnish/install and testing of all lighting for the roadway, including roadway bridges, within the limits of construction. The Design-Build Firm shall design, furnish, install and test LED high-mast lighting for SR 8 (I-10), the I-10 interchange, I-10 ramps to PJ Adams Parkway and conventional LED lighting along PJ Adams Parkway and Antioch Road within the limits of the project. The Design-Build Firm shall design, furnish, install and test LED underdeck lighting for the new bridge over SR 8 (I-10) and the existing Antioch Road bridge as per standards to illuminate the I-10 roadway. All the lighting elements provided shall meet or exceed the requirements of all current codes and all applicable standards and criteria. At minimum, the Design-Build Firm shall provide 11 high-mast poles with minimum four luminaires per pole with more than 74,375 lumens per fixture and a minimum of 120' mounting height for I-10, and I-10 interchange, I-10 ramps to PJ Adams Parkway. At minimum, the Design-Build Firm shall provide 12 underdeck LED luminaires with more than 9,275 Lumens on the piers at each bridge over I-10. Provide a separate load center(s) for the I-10 high mast lighting system and a separate load center(s) for underdeck LED lighting. Provide a separate load center(s) for each maintaining agency for the conventional lighting system on PJ Adams Parkway and Antioch Road.**~~

The Design-Build Firm shall provide a Light-Emitting Diode (LED) lighting design and lighting analysis and prepare lighting plans in accordance with Department criteria. The Design-Build Firm

shall be responsible for the design, furnish, install and testing of all LED high-mast lighting for the roadway, including roadway bridges, within the limits of construction on the SR 8 (I-10) mainline, SR 8 (I-10) ramps to PJ Adams Parkway. The Design-Build Firm shall design, furnish, install and test LED underdeck lighting for the new bridge over SR 8 (I-10) and the existing Antioch Road bridge to illuminate the I-10 roadway. The Design-Build Firm shall coordinate with Gulf Power Company and provide the Department approved conventional LED lighting design and lighting analysis and prepare lighting plans in accordance with Department criteria for PJ Adams Parkway from PJ Adams Parkway and Antioch Road intersection to the end of the Department right of way north of SR 8 (I-10) ramp intersection (Ramps D & B) (including but not limited to PJ Adams Parkway and Antioch Road intersection, south of SR 8 (I-10) ramp intersection (Ramps A & C) until the PJ Adams Parkway and Antioch Road intersection, SR 8 (I-10) ramp intersections (Ramps A & C and Ramps D & B), between two (2) SR 8 (I-10) ramp intersections (Ramps A & C and Ramps D & B), and north of SR 8 (I-10) ramp intersection (Ramps D & B) until the end of the Department right of way)) and lighting design shall use Gulf Power utility poles to mount LED lighting. The Design-Build Firm shall develop and submit lighting design plans and lighting analysis report of the lighting project limit for Antioch Road from the roundabout (including the roundabout) to Antioch Road and PJ Adams intersection and lighting design shall use Gulf Power utility poles to mount LED lighting. The Design-Build Firm shall submit the lighting design to the Gulf Power Company for review and approval along with 90% phase submittal and Final submittal. The Design-Build Firm shall coordinate and facilitate Gulf Power Company to install and test the conventional LED lighting along Antioch Road and PJ Adams Parkway during and along with other construction activities of the project. The Design-Build Firm shall provide Maintenance of Traffic (MOT) for the Gulf Power Company to install and test the conventional LED lighting along Antioch Road and PJ Adams Parkway. All the lighting elements provided shall meet or exceed the requirements of all current codes and all applicable standards and criteria. At minimum, the Design-Build Firm shall provide 11 high-mast poles with minimum four luminaires per pole with more than 74,375 lumens per fixture and a minimum of 120' mounting height for I-10, and I-10 interchange, I-10 ramps to PJ Adams Parkway. At minimum, the Design-Build Firm shall provide 12 underdeck LED luminaires with more than 9,275 Lumens on the piers at each bridge over I-10. At minimum, design lighting to provide a separate load center(s) and power meter for each maintaining agency. At minimum, provide a separate load center(s) and power meter for: a) the I-10 high mast lighting system, b) for the underdeck LED lighting, and design for separate load center(s) and power meter for a) for the conventional LED lighting system on Antioch Road, b) for the conventional LED lighting system on PJ Adams Parkway south of Ramps (A & C) to Antioch Road intersection, c) for the conventional LED lighting system on PJ Adams Parkway north of Ramps (B & D) until end of the Department right of way, and d) for the conventional LED lighting on PJ Adams Parkway between Ramps (A & C) and Ramps (B & D) including the intersections.

The Design-Build Firm shall coordinate with the Department's Area Utility Manager and the project area power provider (Gulf Power) in order to maximize the use of the UAO's poles and service. The Design-Build Firm shall design the lighting and utilize the UAO (Gulf Power) for required Gulf Power lighting installations for the project. For new LED lighting installations to be performed by the Gulf Power use Gulf Power utility poles. The Gulf Power lighting installations will be compensated directly to Gulf Power by the Department through a separate agreement. The Design-Build Firm shall assist and facilitate coordination between Gulf Power and the Department for a separate agreement and compensation plan of lighting furnish and installation activities from Gulf Power. The Design-Build Firm shall coordinate with the Department in design and construction to insure all the project Department agreements are executed in time and not to cause any adverse effect on timely project delivery.

In the bid of the RFP, the Design-Build Firm shall include the design, furnish, install, and test cost of all lighting NOT being installed on Gulf Power poles and the cost of design of all lighting required as per this RFP.

The Design-Build Firm shall develop and submit a lighting design analysis report (LDAR) of entire lighting project limit to the Department for review and approval. **The Design-Build Firm shall develop and submit a lighting design analysis report (LDAR) of the lighting project limit of Antioch Road and PJ Adams Parkway to the Gulf Power Company for review and approval.** The LDAR shall be based on FDOT guidelines and current lighting design criteria listed in the FDM. The LDAR shall include typical sections photometric calculations to establish the proper spacing and show compliance of the Veiling Ratio criteria as established in the FDM. Each lighting calculation zone shall be properly identified with the area that it covers. With the results of the typical sections photometric calculations, prepare point to point photometric calculations modeling the actual roadway layout, including all the lighting poles required to meet the lighting criteria established in the FDM for the entire corridor. The LDAR shall be submitted under a separate cover and approved **by the Department** prior to the 90% submittal. **The LDAR shall be submitted under a separate cover and approved by the Gulf Power Company prior to the 90% submittal.** After approval of the preliminary report, the Design-Build Firm shall submit a revised report including a detailed lighting design analysis for each submittal.

A preliminary LDAR has been provided by the Department as a Reference Document identifying preliminary lighting locations within the Project limits. No electrical analysis was performed for the preliminary LDAR. The report does not cover entire lighting project limits.

All lighting within the project limits shall be LED lighting. New light poles, luminaire arms, and luminaires shall be provided for all new and reconstruction areas for this Project. After permanent lighting is installed, active, and operational, all permanent lighting shall be consistent and lighting levels shall be maintained at all times during construction.

The Design-Build Firm shall develop and submit for approval from the Department and lighting maintaining agency, a Load Center/Circuit/Pole Number identification plan that is compatible with the existing lighting systems maintenance identification scheme.

Where existing roadway lighting circuit sources (services, load centers, etc.) are being removed, the Design-Build Firm shall either:

1. Provide a new load center per current codes and all applicable standards and criteria.
2. Identify an existing load center capable of feeding the existing and proposed lighting while meeting all current codes and all applicable standards and criteria.

All modified load centers shall comply with all applicable criteria and shall be in like new condition.

Existing light poles, luminaire arms, luminaires, and load centers identified for removal shall be coordinated with the Department and the Maintaining Agency as to whether these features or part of these features will become the property of Design-Build Firm or salvaged, transported, and delivered to the Maintaining Agency for future use. The Design-Build Firm shall coordinate with each and all maintaining agencies in the project limit.

The Design-Build Firm shall perform detailed field reviews. Review and document all lighting (poles/luminaires, sign luminaires, etc.), circuiting, load centers, service points, utility transformers, etc., within the limits of lighting construction. This review includes, **but is not limited to**: conductors, conduit,

grounding, enclosures, voltages, mounting heights, pullboxes, etc. This review also includes circuits outside the limits of lighting construction that originate **and ~~or~~** touch this Project's scope of work.

All deficiencies within the limits of lighting construction shall be identified and corrected. Any deficiencies outside the limits of lighting construction shall be brought to the attention of the Department.

After the field reviews are completed, a list of all damaged and/or non-functioning equipment shall be documented and forwarded to the Department prior to the start of construction. All damaged and/or non-functioning equipment within the limits of lighting construction are required to be replaced or repaired to meet all applicable criteria and shall be in like-new condition. At the end of construction and prior to acceptance by the Department, all roadway lighting elements and fixtures that were modified during construction outside of the project limits shall be functioning as intended.

Where new electrical services are required, the Design-Build Firm shall coordinate the final locations of distribution transformer and service poles to minimize service and branch circuit conductors and conduit lengths. Preliminary electrical service locations shall be coordinated with and provided by Gulf Power. Each service point shall be separately metered. Separate power service meter(s) to be provided for lighting infrastructure.

The Design-Build Firm shall comply with the requirements of each jurisdictional authority within the Project limits. Compliance with the jurisdictional authority includes but is not limited to: field reviews, technical meetings, special deliverable, etc. It is the Design-build Firm's responsibility to verify and comply with all jurisdictional authority's requirements.

All lighting fixtures shall include "bird spikes" or "bird deterrent devices" to avoid birds landing on the fixtures and therefore extend the useful life of the housing. The Design-Build Firm is required to provide a consistent lighting mounting height on Department poles throughout the Project limits.

The Design-Build Firm is responsible for submitting Roadway Lighting Design Documentation with each lighting plans submittal under a separate cover and not part of the roadway documentation. At a minimum, the design documentation shall include:

- Phase submittal checklist
- Structural calculations for special conventional pole concrete foundations
- Letter to the power company stating the total electrical load, and requesting service and the available fault current of transformers
- Power company confirmation letter on the requested services
- Voltage drop calculations
- Load analysis calculations
- Coordination emails, letters, and/or telephone conversation records with the Department, Cities, Counties, Power Companies, and their maintenance department.

The Design-Build Firm shall perform electrical analysis to determine the wire sizes and ensure each proposed circuit meets the required voltage drop per FDM and meeting or exceeding all current codes and all applicable standards and criteria. Submit voltage drop calculations showing the equation(s) used along with the number of luminaires per circuit, the length of each segment in the circuit, the conductor size, the conductor ohm resistance values, and the source of these values. The voltage drop incurred on each service feeder from the service source (transformer) to the load center and the voltage drop of each circuit from the load center to farthest load (luminaire) shall be calculated. The maximum allowable voltage drop as per all current codes and all applicable standards and criteria calculated from the service source (transformer) to

the farthest luminaire on each circuit. All work necessary to calculate the voltage drop values for each circuit should be presented in such a manner that it can be duplicated by the Department. Along with the voltage drop calculations, submit load analysis calculations for each branch circuit breaker and main breaker.

The existing lighting system and subsystems shall be shown in the plans along with the required construction scope (e.g. poles to be removed, load centers to be removed or re-worked, conductors to be removed, etc.).

The Design-Build Firm will be responsible for the development of the proposed lighting system via a LDAR, maintenance, and transition of existing lighting within the project limits.

The Design-Build Firm must use conductors that are resistant to any form of corrosion suitable for direct burial, and spliced with submersible rated splice kits. All conductors must be placed inside conduits. Perform insulation-test resistance on each conductor with respect to ground and adjacent phase conductors. Applied potential shall be 1000 volts dc for 600V rated cable. Minimum test duration shall be 1 minute. Insulation resistance values should not be less than 100 mega ohms. Replace all cables with insulation where resistance values are less than 100 mega ohms, with no additional costs to the Department. Test that all splices waterproof and inspect for physical damage.

The Design-Build Firm shall analyze the impact to surrounding environment and impacts to residential areas and shall show that the lighting design includes measures to minimize those adverse impacts. The lighting system shall have proper shielding to prevent lighting spillage into adjacent residences.

R. Signalization and Intelligent Transportation System Plans:

1. General

The Design-Build Firm shall prepare Signalization and Intelligent Transportation Plans in accordance with Department criteria.

The Design-Build Firm shall prepare design plans and provide necessary documentation for the procurement and installation of the Signalization and Intelligent Transportation System devices as well as overall system construction and integration.

Signalization plans shall be separate from the ITS plans. Signals shall be installed at the two ramp terminal intersections, the new Arena Road/Antioch Road intersection, and the new P.J. Adams Boulevard/Antioch Road intersection. A Conceptual Signalization Plan has been provided as a Reference Document in this RFP identifying signal locations within the Project limits. No structural analysis was performed for the Conceptual Signalization Plans.

The ITS construction plan sheets shall be in accordance with Department requirements and include, but not be limited to:

- Project Layout / Overview sheets outlying the locations of field elements
- Detail sheets on:
  - DMS Structure, DMS attachment, DMS display/layout
  - CCTV structure, CCTV attachment, CCTV operation/layout
  - MVDS structure, MDVS attachment, MDVS operation/layout

- Fiber optic cables, conduit, pull boxes splice vault, and splice enclosure
- Bluetooth structure, Bluetooth attachment, Bluetooth operation/layout
- Managed Field Ethernet Switches (MFES)
- Grounding and Grounding Array details
- Surge Protection
- Lightning protection, air terminals and dissipation
- Directional Bore Details
- System Overview Sheets of District and fiber Ring
- Commercial electric power service
- Connection to existing ITS electrical services
- Overall Power Service Distribution diagram
- Wiring and connection details
- Power, conduit, pull box, and cable installation
- Communication Hub and Field Cabinets
- System-level block diagrams
- Device-level block diagrams
- Device and facility access plans for all stage of construction and as-built condition
- Field hub/router cabinet configuration details
- Fiber optic splicing diagrams
- System configuration/Wiring diagram/Equipment Interface for field equipment at individual locations and communications hubs.
- Maintenance of Communications (MOC) Plan

Anticipated DMS features and details:

DMS Feature	Approximate Location	Direction	Notes
Full Color Walk In DMS	MM 52.6	EB	Cantilever Structure
Full Color Walk In DMS	MM 54.8	WB	Cantilever Structure

The Design-Build Firm is responsible for ensuring project compliance with the Regional ITS Architecture and Rule 940 as applicable. This includes, but is not limited to, the development of a concept of operations, the development or update of a system engineering master plan (SEMP), and requirement traceability verification (RTVM) as well as coordination of document review. **FDOT system engineering documents can be found at the following link: https://www.fdot.gov/traffic/its/projects-deploy/semp.shtm.**

The Design-Build Firm shall detail existing Signalization and Intelligent Transportation System equipment and report which devices will be removed, replaced, recovered, or impacted by project work.

2. Design and Engineering Services:

The Design-Build Firm shall be responsible for all Signalization and ITS design and engineering services relating to the Project. All signalization and ITS system components shall be new unless otherwise identified for relocation. No mounting, installing or integrating of ITS, traffic and signalization components to existing or new light poles, lighting structures, sign structures, etc. shall be permitted. Do not mix ITS, signalization and lighting infrastructure.

The design of the new system shall integrate with the existing devices**, systems, software and services**. The design shall include the necessary infrastructure and components to ensure proper connection of the new ITS components. This shall include but not be limited to all proposed ITS components of this project as well as existing subsystems that remain or are re-deployed as the final project.

At a minimum, the signal work in this project consists of the following major components:

- The Design-Build Firm shall design, furnish, install, integrate and test, traffic signals at the following intersections:
  - PJ Adams Parkway / Antioch Road (To be owned by County)
  - PJ Adams Parkway / Ramps A & C (To be maintained by FDOT)
  - PJ Adams Parkway / Ramps D & B (To be maintained by FDOT)
  - PJ Adams Parkway / Arena Road (To be owned by County)
- The Design-Build Firm shall prepare Signalization Plans in accordance with all applicable standards and Department criteria. In addition, the Design-Build Firm shall incorporate all aspects of the District 3 Signalization General Notes that can be obtained from the District Design Office.
- The Design-Build Firm is required to provide all data collection and analysis for the signalized intersection designs and any specific maintenance of traffic needs.
- The design shall be submitted to the Department for review early in the signalization design process, as the Department design review may affect eventual mast arm placement and structural design.
- The design will provide for signalized pedestrian crossings at all signalized intersections.
- The permanent traffic signals shall be oriented horizontally and supported by mast arms with underground electrical power service. The mast arm layout design shall provide for far-side signal head indications (as opposed to near-side indications) and may dictate installation of refuge islands in which to install mast arms to meet stop bar-to-signal head spacing criteria. Mast arm length shall be sufficient to provide for protected-only signal heads in the future if protected-permissive operation is deployed initially as part of the permanent design. ~~**Each protected only signal heads will have an additional flashing yellow arrow signal head.**~~ Overhead street name signs shall be provided for all approaches.
- Temporary signal(s) shall be designed, installed and maintained at the Design-Build Firm's discretion and as directed by the Department anytime during the course of the project.
- Detection at existing, temporary, or new signals shall be established and maintained by the Design-Build Firm throughout the duration of the project with no lapse in operation of the detection greater than 48-hours. Temporary detection shall be accomplished by use of video, microwave, or conventional loops at the Design-Build Firm's discretion.
- Timing and phasing plans shall be developed and maintained by the Design-Build Firm for maintenance of traffic throughout the duration of the project in consideration of prevailing traffic conditions. It is anticipated that multiple timing plans will need to operate on a time-of-day basis to accommodate differing traffic conditions during AM peak, PM peak, off-peak, night-time, and weekend periods. In addition to interim timing plans developed and maintained during the construction operation, the Design-Build Firm shall establish a permanent set of timing plans, time-of-day settings, and day-of-week settings that are to remain in the traffic signal equipment at the conclusion of the construction project. The permanent timings discussed above are to be summarized and documented in a signed and sealed report to the department for review and approval.
- The Design-Build Firm shall replace existing traffic controller cabinet assemblies with new traffic controllers and cabinet assembly compatible with Okaloosa County computerized traffic system. The proposed traffic controller cabinet assembly shall be approved by maintaining agency.

Provide a 48 Count SMFOC traffic signal fiber drop cable along PJ Adams Parkway from the intersection of Antioch Road and PJ Adams Parkway to the end of the Department right of way north of SR 8 (I-10) ramp intersection (Ramps D & B). ~~**Provide fiber optic drops to each proposed at the new signal cabinets, each fiber optic drop cable shall be at minimum 48 count SMFOC.**~~ The **48 count SMFOC** traffic signal fiber optic drop cable shall connect with144 count SMFOC ITS backbone fiber on I-10. **Provide a 24 Count SMFOC fiber optic drops to each proposed traffic signal cabinets on the project from the 48 Count SMFOC traffic signal fiber drop cable along the PJ Adams Parkway.**

- All traffic signal controllers provided shall be new at each intersection with connected vehicle (CV) compatible controllers. The traffic control cabinet associated peripheral equipment, and electrical power service assembly shall be strategically located in a protected area not vulnerable to damage by vehicular impact. The traffic signal controller cabinet shall be of sufficient size to afford 30% usable free space when populated with all required equipment. The traffic signal installation shall be equipped with an Uninterruptible Power Supply (UPS) capable of providing at minimum 2-Hours of normal stop-and-go operation. Grounding **and testing** of the new controller shall be included with the installation of every cabinet.

- The Design-Build Firm shall design, furnish, install and integrate ethernet repeaters and Power over Ethernet (PoE) injectors as recommended by the camera **and/or any device** manufacturer when the distance, including cable slack, between the camera **(any device)** and the equipment panel is more than 100 meters (approximately 320 feet). The ethernet repeaters and the PoE injectors shall be outdoor rated and rugged for field installation. The ethernet repeaters shall be installed within a cable manufacturer approved NEMA 6P/IP 67 rated equivalent enclosure. The location of the enclosure shall be determined and shown during the all phases of design plans.

- ~~**Video cameras – The Design-Build Firm shall upgrade the existing detection at the signalized intersection to video detection. The Design-Build Firm shall design, furnish, install, integrate and test a new video detection system for all project signalized intersections. At minimum each traffic signal intersection shall have one (1) fish-eye traffic detection camera. Each fish-eye traffic detection camera shall be mounted at a height as per camera manufacturer mounting height recommendation. Each fish-eye camera shall provide accurate traffic detection at each detection zone for safe and effective traffic signal operation. The video detection system shall provide and activate vehicle detection for all the approaches, all lanes and all the turn lanes at the intersections. The video detection cameras shall be mounted on the mast arm structure with camera manufacturer and Department approved mounting attachments.**~~

- ~~**In addition, the Design-Build Firm shall design, furnish, install, integrate and test inductive loops with loop amplifier modules on approaches where video detection is unable to detect vehicles due to occlusion. The Design-Build Firm shall ensure that all approaches, all the lanes and all the turn lanes have full vehicle detection coverage using both video detection cameras and loop detectors. Inductive system loops shall be terminated on the cabinet loop panel. Placement of the loops shall not conflict with driveways or side streets. Loops shall be saw cut to the edge of pavement to a loop window, run through 2" conduit to a pull box adjacent to the loops and thru new 2" conduit to the controller. All wiring, programming, transfer of controller timings and operations shall be the responsibility of the Design-Build Firm.**~~

- The Design-Build Firm shall submit a vehicle detection coverage plan for all locations and seek approval from the Department and maintaining agency. Based on the vehicle detection coverage plan, the Department may require the Design-Build Firm to install additional ~~**video detection cameras and**~~ loop detectors as needed to obtain the necessary coverage for each detection zone.

The Design-Build Firm shall provide the required vehicle detection coverage as per the Department requirement.

- ~~The Design-Build Firm shall design, furnish, install and integrate all communications and power cabling for the video detection system. The Design-Build Firm shall allow sufficient slack for cables as per cable manufacturer requirements and all current codes and all applicable standards and criteria.~~

- ~~Permanent video detection design shall provide for advance vehicular detection on the main street through movements upstream of the stop bar of at least 330' and shall provide presence detection zones of at least 50' at all other stop bar locations.~~

- The Design-Build Firm shall establish the power service addresses and the necessary commercial electrical power service. Once power service has been established by the Design-Build Firm, the Department or its designee will inspect the power service for compliance with Department, NFPA, and NEC standards, and all Contract Documents. Power distribution for each traffic signal cabinet and ITS device shall include coordination and applicable fees by Utility Companies until Final Acceptance. New power service and panels shall have a minimum of 1 spare breaker slot for future use. No ITS device shall have voltage drop greater than 4% with a worst case assumption of 9 amp load at the furthest point of each link documented in the required power load calculations. All electrical distribution to ITS devices shall be underground and shall not mix power for separate/different ITS devices. Aluminum wound electrical products shall not be installed or used, all wiring shall be new and free of damage. Separate power service meter(s) shall be provided for the traffic signal infrastructure.

- Overhead street name signs – The Design-Build Firm shall design, furnish, **and** install ~~**and test**~~ Signal Mounted Overhead ~~**Illuminated**~~ Street Name Signs at minimum for each leg of the intersection.

- Mast Arms – The Design-Build Firm shall design, furnish and install all mast arm assemblies, mast arm mounting assemblies and pedestrian poles or pedestals. The Design-Build Firm shall design, furnish and install mast arm signal structures including but not limited to arms, upright, arm/upright connection(s), baseplate, cover plates, caps, clamps, blank sign panel, luminaire bracket, anchor bolts, foundation, and any other details necessary for fabrication and construction and shall provide all labor, equipment, miscellaneous materials and hardware necessary for a complete and acceptable installation. The design shall be based on Department Cantilever Signal Structure Standards using standard Department plan sheets. Calculations for the structure shall be performed using the Department approved software.

- The Design-Build Firm shall design, furnish, install, integrate and test an intelligent emergency vehicle pre-emption system at each newly signalized intersection. The emergency vehicle pre-emption system to be activated when either the Chipley RTMC or an Okaloosa County first responder vehicle(s) equipped with emergency vehicle pre-emption system activates the system. The Design-Build Firm shall provide all necessary system integration with the Chipley RTMC facility and shall verify compliance through performance measures and tests developed by the Design-Build Firm and approved by the Department. When the emergency vehicle pre-emption system is activated, the pre-emption system shall provide automated traffic signal timing adjustments to the traffic signal intersection for enhancing the traffic flow along the first responder vehicle approach intersection leg of the intersection. The signal pre-emption system shall allow first responder vehicles to disrupt a normal signal cycle in order to proceed through the intersection more quickly and under safer conditions. The pre-emption systems shall extend the green on a first responder vehicle's approach and shall replace the phases and timing for the whole cycle. The traffic signal pre-emption device must be able to request priority early enough

for first responder vehicle(s) traverse the intersection without stopping at higher than post speed limit, regardless of obstacles that can interfere with communications. The pre-emption system shall provide adequate signal range and reliability for first responder vehicle(s) travelling higher than posted speed limit can activate the pre-emption system. The Design-Build Firm shall coordinate implementation integration activities with the Department and maintaining agency and compatibility of equipment and technology, as well as operational policies. The Design-Build Firm shall provide all power and communication equipment/infrastructure necessary to connect emergency vehicle pre-emption system equipment to the Chipley RTMC.

- The Design-Build Firm shall submit to the Department and maintaining agency list of existing signalization system components, equipment and material to be removed. Existing signalization system components, equipment and material shall not be removed without the advanced approval from the Department and maintaining agency. All existing signal equipment and mast arm structures (without the foundations) removed from the Project in working condition shall be the delivered to the Department or the maintaining agency. Care shall be taken in the removal and disassembly of all parts to avoid damage. The Design-Build Firm shall conduct a field walk through with the Department and maintaining agency Signal Technician to determine the field conditions of the equipment and mast arms and to identify the items to be returned to the Department and maintaining agency. Once the equipment and mast arm list ~~is~~ **are** approved by the Department and maintaining agency, the Design-Build Firm shall return the removed equipment and mast arms in an operable and undamaged condition to the Owner identified facility within 50 miles of the Project limits. Any removed devices to be delivered to the Department shall be verified, inventoried and delivered to the Department with a transmittal letter. The transmittal letter shall be signed by a minimum of two Department representatives. The Design-Build Firm shall take ownership of remainder of unclaimed signal elements. The existing mast arms and any existing signalization equipment shall NOT be utilized for the new signalized intersections.
- Vehicular traffic and pedestrian signal assembly – The Design-Build Firm shall design, furnish, install and test, the traffic signal and pedestrian signal and all components necessary to make a complete unit, including mounting assemblies, backplates, visors, LED modules, labor, and materials necessary for a complete and acceptable installation.

The Design-Build Firm shall design and implement the Project to keep the Department's standard Traffic Signal Maintenance and Compensation Agreement in good standing.

At a minimum, the ITS work in this project consists of the following major components:

- Replacement of any ITS System components that are impacted by the Design-Build Firm's scope of work as approved by the Department. All equipment shall be new unless otherwise specified.
- ITS Cabinet Installation – All new ITS cabinets shall be mounted at a maximum of 72" from top of the cabinet to technician pad. All ITS cabinets shall have a technician pad. Each cabinet shall be provided for safe and efficient maintenance access. Provide safe and efficient accessibility to each device cabinet and device for built condition and for construction duration. Submit device and cabinet accessibility plan for approval of the Department. This cabinet shall meet the technical requirements of FDOT. Separate breakers shall be installed for the new equipment and not piggybacked off the existing ITS system power configuration. Breakers, grounding and other electrical connections shall comply with all applicable standards including the latest National Electric Code (NEC) at the time of bid proposal. A concrete technician or service pad shall be provided, and spare conduit installed as required **for all cabinets**. The technician or service pad shall extend at least 30" from each cabinet door and from each side of the cabinet to provide

adequate space for maintenance technician to stand and perform maintenance activity safely. Existing ITS device cabinets shall be furnished with concrete service pad. Two (2) cabinets placed side by side shall be separated at minimum by 6 feet. **If a cabinet relocation is needed to protect from construction activities, then relocate the cabinet with Department approved cabinet relocation MOC plan.**

- ~~**The Design-Build Firm shall install an**~~ Uninterruptible Power Supply (UPS) – **The Design-Build Firm shall install an UPS and Power Distribution Unit (PDU)** at each ITS device cabinet and traffic signal cabinet as required in the RFP document. At minimum, each UPS shall be sized according to the maximum expected load for each cabinet plus 50 additional watts. The service outlets shall not be connected to the UPS. The UPS shall provide commercial power pass through during all failures of UPS. The Design-Build Firm shall ensure that the UPS is generator compatible to ensure clean, uninterrupted power to protected equipment when generator power is used. The UPS shall be environmentally rated for the environment that the UPS is installed in. The recharging of all the UPS batteries which may be drained shall be included within the power design calculations. The Design-Build Firm shall supply a Simple Network Management Protocol (SNMP) network management interface to determine the operational status of the UPS, the internal UPS temperature, the external temperature as recorded by a remote sensor mounted elsewhere in the cabinet, the state of the cabinet door switch(es) (open or closed), and surge protection device (SPD) failures (open or closed SPD alarm contacts). All UPS shall be designed and integrated to email events over the ITS and traffic engineering ethernet network, such as: power loss, battery levels, and alarms. Any software required to monitor the UPSs shall be furnished, configured, and integrated into the RTMC monitoring computer and any applicable Traffic Signal Operation Control (TSOC) monitoring system. During construction duration protect the cabinets in the project. ~~**If a cabinet relocation is needed to protect from construction activities then relocate the cabinet with department approved cabinet relocation MOC plan.**~~
- Conduit and Pull Boxes –Use cap and seal and abandon existing conduit in place. Any existing copper cable inside the conduit shall not be removed without the advanced approval from the Department. Any removed copper cable shall be inventoried and delivered to the Department with a transmittal letter. The transmittal letter shall be signed by a minimum of two stakeholders. All new underground and directional bored communications conduit shall be HDPE SDR 11 rated or thicker and smooth wall interior. A spare conduit shall be provided for each newly installed conduit. There shall be a separate spare conduit each for communication and power. Open trench and bored communication conduit consist of a 4" gray outer duct, one 1 ¼" white innerduct, one 1 ¼" orange innerduct, and one 1" gray innerduct. Install locate wire inside the outer duct, but outside the innerducts. Open trench and bored power conduit consist of two 2-inch gray conduit. Every drop or laterals, new conduit runs shall have two 2-inch conduit runs. All conduits shall have "jet-line" or equal pull string installed in each spare conduit run for future use. Electrical pull boxes shall not be spaced further than 500 feet apart in any power run. All pull boxes shall be a minimum Tier 15 and rated at 20K or more test static load. A splice vault shall be provided at each signalized intersection along the corridor. Provide safe and efficient accessibility to each facility for built condition and for construction duration. Submit facility accessibility plan for approval of the Department. Use of existing conduit is allowed for fiber connection to west side of the project splice vault at mile marker 50.9 and east side of the project splice vault at mile marker 56.3. The Design-Build Firm shall verify the condition of the existing conduit and rectify deficiencies in any existing conduit before use. The Design-Build Firm shall gather approval from the FDOT district three TSM&O manager before using an existing conduit on this project. At minimum, provide a splice vault at the beginning and end of the project limit and at the roadway interchange. For the entire project limit provide bored conduit for SMFOC

back bone along the right of way and place the SMFOC back bone conduit at least 3 feet inside the right of way. The Design-Build Firm shall propose the backbone conduit location to have none to minimum impact from proposed construction activities. Provide drop conduits to each proposed devices and provide drop conduits to each existing device being operational during construction.

- DMS – Includes sign support structures, mounting brackets, catwalk, and 3 line walk in full color, 96x416 full matrix DMS. Each DMS shall have its own splice vault for connection to the fiber trunk line.
- Existing Dynamic Message Sign (DMS) – During construction phase of the project perform complete integration **and testing** of existing DMS in the project corridor to accommodate roadway widening activities. The Design-Build Firm shall verify current working condition of the DMS and submit the report to the Department for verification. Any equipment, device(s), cabinet(s), ~~**ADMS**~~ **DMS** and structure(s) damaged during integration process shall be replaced in kind with new materials. Integrate DMS sign communication with proposed fiber optic communication system **and with the version of SunGuide software in use at Chipley RTMC at the time of DMS operational test**. Extreme care shall be taken not to damage DMS equipment, device, cabinet and structure during integration process. Protect all DMS device, cabinets, equipment and items from theft and vandalism until project completion. DMS signs shall be operational for the project duration. Any operation downtime of the DMS operation shall be approved in writing from the RTMC Manager in Chipley, FL.
- CCTV – Proposed cameras must demonstrate 100% visual coverage of the project corridor. In addition, the existing and proposed DMSs shall be verified with the proposed cameras. CCTV Cameras: shall be 1080p High Definition (HD), embedded encoder, H.264 stream, Pan, Tilt and Zoom (PTZ) IP-enabled. Provide 100% camera coverage areas using the SunGuide software at Chipley RTMC. Submit the camera siting survey of each proposed camera to the Department or its designated representative for approval. CCTV siting shall include local agency coordination to verify current and proposed landscaping, land development, lighting and signalization plans do not impact CCTV view, maintenance and operation. The Department approval of the CCTV siting survey does not exempt the Design-Build Firm from meeting the RFP requirements. The CCTV shall be mounted at a minimum height of forty (40) feet above the adjacent roadway surface. Each CCTV camera shall have a lowering device **and the lowering device cable shall be installed inside the CCTV prestressed concrete pole.** Provide 100% visual coverage of the entire project corridor from one end of the right of way to another for the complete construction duration of the project.
- CCTV Prestressed Concrete Pole – Provide concrete spun poles, camera lowering device, mountings, and concrete pad. All prestressed concrete poles shall be backfilled with FDOT approved Class I nonstructural concrete. The distance between a device cable weather head and the device shall not be more than four (4) feet. No steel CCTV poles are allowed on the project.
- MVDS - Includes concrete poles and mountings to detect all travel lanes and auxiliary lanes along the project corridor. MVDS devices shall be located at the exit ramps from SR 8 (I-10) and shall provide detection of all mainline lanes, entrance and exit ramps within the project limits.
- Removal of any ITS System components that are impacted by the Design-Build Firm's scope of work as approved by the Department.
- Single Mode Fiber Optic Cable (SMFOC) – All new 144 count SMFOC backbone fiber shall be installed and tested on entire project corridor. Use ~~**48 count SMFOC drop cable to connect each signalized intersection cabinet and use**~~ 24 count SMFOC drop cable to connect each ITS device cabinet **and traffic signal cabinet** on entire project corridor. Test all fiber strands before

installation and after delivery to the project site or yard or staging area and submit the test results for the Department to review. The SMFOC backbone fiber shall be efficiently designed to have minimum splices to SMFOC backbone fiber and each lateral fiber drop cable shall have at least four (4) live fiber strands. The Design-Build firm shall replace existing 144 count SMFOC truck line with new 144 count SMFOC truck line. On the west side the SMFOC cut over shall occur at splice vault at mile marker 50.9 and on the east end SMFOC cut over shall occur at splice vault at mile marker 56.3. The maximum time allowed for SMFOC cut over and connection shall be less than 4 hours. New splice canister shall be used for cut over and connection operation. The fibers shall be spliced color to color at each SMFOC cut over and connection site. **Between mile marker 50.9 to mile marker 56.3, remove existing ITS device(s) and communication hub fiber drop cable splice connection with existing 144 count SMFOC truck line and provide new splice connection with new 144 count SMFOC trunk line. Provide new splice enclosure and splice trays at each fiber splice locations.**

- Bluetooth – Co-locate Bluetooth with other ITS device location. Bluetooth device shall detect traffic on entire project corridor.
- Grounding, Surge Suppression, Lightning Protection – Protection shall be provided for all ITS **and traffic** field elements and ITS **and traffic** Field Cabinets. A surge suppression shall be provided on both sides of each circuit.
- ITS Communication – The Design-Build Firm shall design, furnish, install, integrate and test a new ITS Field Cabinets with power supply, Managed Field Ethernet Switch (MFES), and communication cable connection to the 144-count single mode fiber optic cable.
- Connection to Existing Electrical Systems: The Design-Build Firm shall perform power calculations and install connections to existing electrical services, to the extent possible. When connecting to existing electrical systems, the Design-Build Firm shall verify that the additional equipment will not overload the existing circuits. If the additional load required by this project overloads the existing circuit, the Design-Build Firm shall modify the power distribution as necessary. The Design-Build Firm shall submit the load calculation for Department approval before finalizing the power design. The new circuit shall utilize an existing spare branch circuit breaker. If no spare breaker is available, then a new branch circuit breaker shall be provided **by the Design-Build Firm**. At a minimum, all affected ITS field cabinets shall be calculated for 125% over peak electrical draw. Mixing of ITS power circuit to lighting/signal circuits is not allowed. **The Design-Build Firm shall submit a power design analysis report (PDAR) to the Department for review and approval.**
- New Electrical System – Where new electrical service points are required, the Design-Build Firm shall coordinate final locations of the distribution transformer and service pole to minimize the service and branch circuit lengths. The Design-Build Firm shall provide a new load center per current codes and all applicable criteria. The Design-Build Firm shall verify and comply with the requirements of each jurisdictional authority within the Project limits. Compliance with the jurisdictional authority includes, but is not limited to: field reviews, technical meetings, special deliverable, etc. Separate power service meter(s) shall be provided for the ITS infrastructure. **The Design-Build Firm shall submit a power design analysis report (PDAR) to the Department for review and approval.**
- Removal of any ITS System components – Existing ITS System components shall not be removed without the advanced approval from the Department/maintaining agency. Any removed devices shall be verified, inventoried and delivered to the Department with a transmittal letter. The transmittal letter shall be signed by a minimum of two stakeholders. Removal of the existing lateral drops from the backbone to the existing ITS facilities that will or may be removed as part

of this project. The lateral drops disconnected from the backbone shall be re-spliced "in-kind" to match respective fiber strand(s) and buffer tube(s) as approved by the Department. The existing lateral drop conduit(s), pull boxes and splice boxes shall be removed as described in Section C - Utility Coordination of this RFP.

- Installation or modification of electrical service panels, transformers and disconnect switches to provide electrical service to the ITS devices within the project limits. All electrical work will comply with the latest NEC standards and requirements at the time of bid proposal.
- Testing of fiber optic backbone and lateral drops furnished and installed or modified by the Design-Build Firm. **The Design-Build Firm shall perform bi-directional power meter light source test and submit all test results. Submit the results of each Optical Time Domain Reflectometer (OTDR) testing to the Department in .pdf format and OTDR file format along with software to read and review OTDR files. Submit the results of the OTDR traces for each fiber with a loss table showing details for each splice and/or termination tested to in Microsoft Excel format to the Department for review and approval.** If a backbone fiber is modified, bi-directional testing shall occur to/from the nearest fiber hub shelter/cabinet, or current splice point upstream and downstream from the point of modification **before and after modification.** Modification includes, but is not limited to, fiber splices, terminations, or relocations. Bi-directional testing of fiber optic backbone and active lateral drops furnished and installed or modified by the Design-Build Firm. The Design-Build Firm to perform bi-directional test dark lateral drops furnished and installed or modified by the Design-Build Firm.
- New fiber optic cable shall not be run in any conduit with energized (low or high voltage) conductors. New fiber optic cable shall be installed in its own pull box and its pull box shall only be shared with other di-electric fiber optic cables. Only di-electric, loose tube, non-gel single mode fiber optic cable shall be used to interface with the system fiber optic patch panels.
- Locate wire or tone wire shall not be placed in a conduit with communications or power but shall be furnished and installed inside the outer duct and shall be placed outside of any inner ducts. At all lateral or drop cable conduit locations, the locate wire shall be furnished and installed as per FDOT design standards conduit installation details.
- ITS System Access – Any project(s) for construction and/or maintenance requiring access to the existing ITS system including, but not limited to, fiber optic cable (handholes and pull boxes); ITS equipment control cabinet(s); ITS power facilities; ITS specific equipment (CCTV, MVDS, etc.); and/or the RTMC and TSOC will require a submitted and approved access schedule. ~~**This document**~~ **The Design-Build Firm shall develop and submit the document to the Department for review and approval. The Design-Build Firm shall coordinate with District Three Traffic Operation's ITS Program Manager and D3 ITS Maintenance Contractor, for any preventative maintenance schedule and potential repairs. This document** will identify access necessities, schedule expectation(s), specific ITS facilities to be accessed, and an action plan for potential failure. ITS system access plan shall not include crossing a fence and/or going through water body. This document will be submitted thru District Three Traffic Operation's ITS Program Manager for approval within 60 days of project construction start or 90 days prior to system access for long duration project(s).
- Gathering all new infrastructure information by GPS (sub-foot accuracy) and providing the information necessary for populating the **Intelligent Transportation System Facilities Management (ITSFM)** ~~**ITSFM**~~ GIS informational map. The Design-Build Firm shall be responsible for providing the information necessary to populate all new and existing equipment.
- Testing of the Intelligent Transportation System.

Each ITS device location shall be designed with a local hub cabinet which includes at a minimum a 336 cabinet, layer 2 switch, required media converters, **grounding/**surge suppression devices, a UPS system and a 15 Amp auxiliary maintenance outlet. The voltage drop analysis shall use a maintenance load of 10A applied to the last cabinet on each branch circuit and consider the UPS to be set at a max recharge rate. The maximum allowable voltage drop along any circuit shall be 5% from point of electrical service to the last Local Hub on that circuit. The maximum allowable electrical service to be utilized shall be a 480V for electrical distribution design.

The Design-Build Firm shall prepare a Maintenance of Communications (MOC) plan depicting the methods in which the existing ITS devices and communications system will be maintained in full operation during construction while meeting the required accuracy requirements in the specifications. The MOC plan shall include replacing existing 144 count SMFOC truck line with new 144 count SMFOC truck line. On the west side the cut over shall occur at splice vault at mile marker 50.9 and on the east end cut over shall occur at splice vault at mile marker 56.3. The maximum time allowed for SMFOC cut over and connection shall be less than 4 hours. A Maintenance of Communication Plan (MOC) shall be presented in writing to the Department **for review and approval** fourteen (14) days prior to any planned network outages and construction activities. Down time is permitted for network splicing or maintenance as approved by the Department. Part of the MOC plan will include a CEI present to witness the procedure and document start time and end time of any network outage. The MOC shall include repair procedures in the event the existing ITS network or power service is damaged.

Coordinate with the Design-Build Firm to avoid conflicts with landscape plans within the Department Right-of-Way. While procedures are being revised to facilitate this increased collaboration and cooperation, the Design-Build Firm is required to ensure that the design and construction of each ITS project and each landscape project is entirely coordinated with existing and proposed ITS facilities and landscapes. Both programs have been determined to be important components of the state transportation system.

3. Construction and Integration Services:

The Design-Build Firm shall be responsible for all Signalization and ITS construction and integration services as described in this RFP as a part of the Project.

4. Testing and Acceptance:

All equipment furnished by the Design-Build Firm shall be subject to monitoring and testing to determine conformance with all applicable requirements. The Design-Build Firm is responsible for the coordination and performance of material inspection and testing, field acceptance tests, and system acceptance tests. The times and dates of tests must be accepted in writing by the CEI. The Design-Build Firm shall conduct all tests in the presence of the CEI or designated representative.

Final acceptance of the project as determined by the Department will be made after satisfactory completion of the following:

- **Pre-Installation test**, Stand-alone, ~~**subsystem**~~ and ~~**system**~~ **Subsystem** tests
- 30-Day ~~**Burn-In**~~ Operational **(burn-in) system acceptance test period** ~~**Test Period**~~ of ITS and traffic signal devices
- Department approval of all test reports and results
- Approval of all delivered project submittals, including documentation final field inspection

- All the communication network documents
- Assignment of all warranties to the Department and delivery of warranty documentation
- Approval and delivery of all documentation required under this contract including as-built documentation.
- Demonstration that the system is stable and any failures are within predicted mean time between failures and no intermittent operational conditions.
- All spares parts ordered by the Department under this contract that have not been installed shall be turned over to the Department's representative.
- All testing to be completed after construction is complete. No access to system during burn-in test is allowed.

Upon completion of successful final acceptance testing, document the acceptance date and project identification information and provide two (2) copies to the Department. Final ITS and traffic acceptance notification shall be provided in writing from the Department.

The Design-Build Firm shall ensure the device and device components are in proper working condition before testing can begin. During testing, Design-Build Firm shall provide all necessary qualified personnel to conduct the test.

The Design-Build Firm shall meet the following requirements:

- Develop and submit a test plan for this Project, a corresponding testing schedule, and an updated RTVM to the Department for review and approval at least 60 calendar days in advance of the Design-Build Firm's scheduled testing dates.
- If the Department rejects or requests modifications to the test plan, the Design-Build Firm shall update and resubmit a revised test plan and RTVM to the Department for review and approval.
- The Design-Build Firm shall allow 21 calendar days for the Department's review and approval of the revised test plan and RTVM.
- No testing will commence until the Department has reviewed and approved the test plan.
- Request in writing to the Department for approval to start each testing activity a minimum of 15 calendar days prior to the requested start date. The Department reserves the right to reschedule the start date if needed. The start date for each testing activity cannot be prior to the successful completion of all previous testing activities unless otherwise approved by the Department.
- Provide test plans that are based on the following items:
    - The PSEMP template
    - The updated RTVM
    - A step-by-step outline of the test procedures and sequence to be followed demonstrating compliance with the Project ITS requirements
    - A test set-up/configuration diagram showing what is being tested
    - A description of expected operation, output, and test results (pass/fail criteria)
    - An estimate of the test duration and proposed testing schedule
    - A data form to be used to record all data and quantitative results obtained during the tests
    - A description of any special equipment, setup, test software, manpower, and/or conditions required for each respective test
    - The number of test cases must reflect the complexity of each ITS device or subsystem and the content of test cases must cover all functionalities and requirements
- All provided test plans shall have the signed approval of the EOR.
- Conduct the following tests on all ITS devices and subsystems:

  - Pre-Installation Tests
  - Installed Site Test \ Stand Alone Tests (SAT's)
  - Fiber Optic Cable End-to-End Tests
  - Subsystem Tests
  - 30-Day Operational System Acceptance Test (OSAT)
  - ITS Close-Out and Final ITS Acceptance
- Provide maintenance of traffic (MOT) **and MOC** during all testing activities as required.
- Provide and maintain all test equipment and software, made ready for use by the Design-Build Firm and/or the Department.
- Provide up-to-date calibration certification with dates and test parameters for all test equipment utilized in accordance with the manufacturer's recommended procedures.
- Conduct all tests in the presence of the Department, unless otherwise approved in writing by the Department. The Department reserves the right to waive the right to witness certain tests. Neither witnessing of the tests by the Department, nor the waiving of the right to do so shall relieve the Design-Build Firm of the responsibility to comply with the ITS Project requirements.
- Document and submit all test results to the Department 15 calendar days after the completion of the tests for review and approval by the Department. Test results must include documentation of:
  - Test results with pass/fail criteria and test objectives
  - Cross reference to what ITS Project requirement(s) were tested using the RTVM
  - Date of test
  - Start/end times of test
  - Location of test
  - Names and signatures of testers and witnesses of the test
  - Sketch of test location and set-up
  - Conditions during the test (i.e., weather conditions, etc.)
  - Any and all field notes provided by the tester
  - Any discrepancies found during testing
  - Equipment serial numbers
  - Equipment IP addresses (if applicable)
  - Equipment MAC addresses (if applicable)

Replace, repair, and retest all ITS devices that failed testing at no additional cost to the Department. Time extensions for replacement, repair, and retesting, even if the manufacturer and other cause beyond the Design-Build Firm's control caused the failure, will not be granted.

Pre-Installation Tests:
The Design-Build Firm shall meet the following requirements:

- Document and submit the factory and reel fiber testing results for all fiber strands to the Department for review and approval 21 calendar days prior to any fiber installation.
- Inspect all ITS devices and materials delivered to the designated Design-Build Firm's Project field site for any damage as a result of shipping.
- Provide written documentation stating that all ITS devices and materials showed no signs of damage or compromise as a result of shipping. The Department reserves the right to inspect ITS devices and materials.

Stand Alone Test (SAT):

The Design-Build Firm shall meet the following SAT requirements:

- Field inspect and verify the following items:
  - All ITS devices and equipment, once installed at each field site, are undamaged and correctly installed, with correct cabling and wiring terminations, port settings, cable interconnections, good workmanship.
  - All ITS devices are functional, operational and can be controlled locally prior to connecting to the communication network.
  - All local ITS cabinet components and subsystems, including Ethernet switches, power supply voltages and outputs, are fully functional and operational.
  - All ITS devices are properly connected to their power source, and the lightning protection system which includes air terminal, down conductors, surge protection devices and grounding array has been installed.
  - Site grounding meets and/or exceeds the FDOT Standard Specifications and is compliant with this RFP.
- Replace any ITS device with the same make and model that fails its SAT more than twice. The entire SAT must be repeated for the replaced or repaired ITS device until proven successful.
- Perform SAT on every ITS **and traffic signal** device, including **CCTVs,** DMS, MVDS and components, ITS cabinets, Device servers, layer 2 Managed Field Ethernet Switches (MFES's), all fiber optic cables including splices, patch cords, connectors, **traffic signal controllers, video detection system, video cameras, vehicular traffic and pedestrian signal assembly, intelligent emergency vehicle pre-emption system** and power distribution units.
- Document and submit all test results to the Department 15 calendar days after the completion of the tests for review and approval by the Department. Test results must include documentation of any discrepancies found during testing, successful test completion dates, and equipment serial numbers.

Subsystem Tests:

The Design-Build **Firm** shall meet the following Subsystem Tests requirements:

- Perform subsystem tests to demonstrate that each subsystem meets the relevant sections of FDOT Standard Specifications and this RFP. No partial subsystem testing will be permitted.
- Begin subsystem tests only when the Design-Build Firm has satisfied the Department requirements that all Stand Alone tests along with all fiber optic facilities have been successfully completed and approved by the Department and that all work on the subsystem to be tested has been completed.
- Provide qualified personnel to support the diagnosis and repair of system equipment during the subsystem tests as required.
- Perform subsystem tests for the following subsystems:
  - ITS Communications subsystem
  - DMS subsystem
  - MVDS subsystem
  - **CCTV subsystem**
  - ITS Power distribution subsystem
- Perform subsystem tests consisting of two parts as follows:
  - Part 1 subsystem testing must include the following:
    - Verify network communications by 'pinging' each network device to verify connectivity.
    - Verify Layer 2 communications between ITS cabinet MFESs and the ITS equipment shelter distribution switches. All communications testing must be coordinated with the Department. If a problem is discovered

outside the Project limits, the Design-Build Firm will be required to identify the problem and coordinate with the Department in order for the Department to make the necessary repairs. A minimum of 45 calendar days must be included in the project schedule to allow the Department time to repair any potential problems along this path.
- Verify that individual ITS devices are operational and fully functional as a single subsystem using the software.
- Provide all the temporary central equipment, including the workstations or laptop computers, necessary for **all** the ~~**Part 1**~~ testing of the individual subsystems.
- Submit Part 1 subsystem test results with a comparison with the RTVM for review and approval by the Department prior to integration with SunGuide® software.

- Part 2 subsystem testing must include the following:
  - Demonstrate full control and functionality as specified herein of all ITS devices associated with the subsystem from the RTMC utilizing SunGuide® software.
  - Demonstrate that the functionalities of the local/remote trouble shooting/diagnostics perform as specified in the specific subsystem functional requirements.
  - Submit Part 2 subsystem test results for review and approval by the Department.
- Demonstrate the following subsystem central control and its functions include:
  - Verify full integration of all other ITS devices installed on this Project into District Three SunGuide® software, including the verification of all control and monitoring capabilities with the District Three SunGuide® software and configuration parameters.
  - Verify remote monitoring and control of all field devices, including network switches, UPS, and power distribution units.

Correct any problem in the event a subsystem fails and is rejected by the Department. The Design-Build Firm shall repeat the subsystem tests within seven calendar days after receiving direction from the Department that a retest can be conducted.

Operational System Acceptance Test (OSAT):

Prior to beginning OSAT, the Design-Build Firm shall submit the completed ITSFM data entry sheets to the Department. The Design-Build Firm shall meet the following OSAT requirements:

- Start OSAT testing once all subsystems tests have been completed and approved by the Department and all SunGuide® software integration work has been completed.
- Conduct the OSAT covering all subsystems, integrated together and fully operable as a single system with District Three SunGuide® software from the Chipley RTMC, for a period of 30 consecutive calendar days without failure of any ITS device or subsystem.
- The Design-Build Firm will not be allowed access to the system once testing has commenced.
- Perform OSAT to demonstrate that all subsystems operate together and meet the relevant sections of FDOT Standard Specifications and this RFP.
- Shutdown the OSAT in the event that an ITS device or subsystem failure is identified by

the Department and/or the Design-Build Firm. The Design-Build Firm will not be allowed access to the system once testing has commenced without OSAT shutdown. In the event of an OSAT suspension or shut down by the Department, provide qualified personnel to support the diagnosis and repair of system equipment during the OSAT as required.

- Diagnose and correct all deficiencies causing the OSAT shutdown. After the deficiency or deficiencies causing the OSAT shutdown have been corrected, the Design-Build Firm shall re- perform all applicable tests as directed by the Department.
- Restart tests at day zero for a new 30 consecutive calendar day test period as directed and approved by the Department, unless corrections are made within the maximum allowable outage times requirements for each ~~**ITS system**~~ **ITS Device and ITS subsystem** set by the Department project manager **and District Three Traffic Operation's ITS Program Manager** at the beginning of the OSAT test. If the maximum allowable outage times have been met, then the OSAT shutdown will be reclassified as an OSAT suspension and the test will recommence at the point it was stopped upon approval by the Department.
- Provide the following when the total number of OSAT shutdowns equals three for the same subsystem and/or ITS device:
    - Remove and replace the subsystem or ITS device with a new and unused unit as per the requirements of this RFP.
    - Perform again all applicable tests, **as stated in the RFP and** as deemed necessary by the Department.
    - Upon written approval from the Departments representative, restart the OSAT for a new 30 consecutive calendar day period.
- Repeat the OSAT as necessary to satisfy the Project requirements.
- Supply all test equipment, software, and software documentation required for diagnosing malfunctions of ITS device and software/firmware. Submit a description of all test equipment and software to be utilized within 21 calendar days prior to the start of the OSAT for review and approval by the Department.
- Submit diagnostic reports to demonstrate that errors were detected and corrected.
- Maintain a daily log for all operations after the start of the OSAT.
- Report in an OSAT daily log all activities associated with OSAT.
- Submit to the Department the required documentation to verify that all subsystems and ITS devices have been successfully integrated and configured.
- Perform tests with the District Three RTMC personnel managing, monitoring, and controlling the ITS devices in real-time to assure conformance to the Project requirements and the FDOT Standard Specifications.

5. Existing Conditions

This section is intended to provide a general overview of the existing conditions of the Department's ITS System and its components such as the fiber optic network (FON) communications infrastructure within the project limits. Refer to the concept plan for existing ITS equipment locations. In addition, the Design-Build Firm shall refer to the ITS As-Built Plans provided with this RFP as Reference Documents for additional information and shall be responsible for field verifying all existing site conditions within the project limits.

The ITS components shall be defined as follows:

- Closed Circuit Television (CCTV) Camera System: The CCTV Camera System consists of pan-tilt-zoom (PTZ) cameras along the corridor that are typically spaced at one (1) mile intervals.

The CCTV cameras are used by Department staff for incident management and traffic monitoring. The cameras are integrated and communicate with Local Hubs along the corridor via the single mode FOC communications backbone installed along the corridor.

- Dynamic Message Sign System (DMS). The DMS **system** consists of ~~**both**~~ mainline ~~**and arterial**~~ dynamic message signs (~~**A**~~DMS) and provide roadway information and travel times. The mainline DMS are located at select locations along the corridor. ~~**The ADMS are located on each approach of select major arterials throughout the roadway system.**~~ The mainline DMS are connected and communicate via the single mode FOC communications backbone installed along the corridor. ~~**The ADMS communicate with wireless radios to a hub site connected to the single mode FOC communications backbone installed along the corridor.**~~
- Vehicle Detection Systems (VDS): The VDS consists of non-intrusive, microwave technology sensors used to collect vehicle volume, speed and occupancy data from mainline travel lanes. The detectors are installed on stand-alone concrete poles and/or attached to other ITS device structures in a side-fired configuration to detect data on a lane by lane basis. The VDS is used for incident detection by Department staff and communicate with the single mode FOC communications backbone installed along the corridor.
- Fiber Optic Network (FON): The FON infrastructure provides communications for ITS components. The FON is composed of the FOC communications backbone, lateral connections and communications equipment including but not limited to field and HUB Ethernet switches, port servers, **media converters, device servers,** routers, fiber patch panels **and all auxiliary equipment** installed at the various ITS device(s) serving as a local HUB.
- For clarification purposes, any reference in this RFP to the mainline fiber optic backbone that is installed along the corridor shall be defined as the "backbone". The fiber optic cable between the backbone and ITS components shall be defined as the "ITS lateral".
- The FOC communications backbone consists of a single mode fiber optic cable and two (2), 1.25-inch HDPE conduit, locate tone wire, warning tape, fiber route markers, pull boxes, and splice boxes. One of the two (2), 1.25-inch HDPE conduits are spare conduits. The backbone provides access points for the various ITS components along the corridor for network connectivity as previously described.
- The majority of ITS components are connected to the backbone through a lateral twelve (12) count single mode fiber optic cable inside two (2), 1.25-inch HDPE conduits of which one is a spare.
- The Departments Communications Network includes but is not limited to the fiber optic drops from the backbone to each ITS device location.
- **The Department existing electrical systems connects commercial power systems to each ITS device. The existing electrical system has several power drop locations with commercial power meters. Each ITS device has surge suppression equipment, cables, transformers, disconnect brackets, and all auxiliary equipment for a complete power systems.**

S. Landscape Opportunity Plans:

It is the intent of this work item to preserve the opportunity to provide for significant landscape planting areas within the Project limits that meet the intent of FDOT Highway Beautification Policy. The landscape opportunity design shall adhere to the FDOT Highway Beautification Policy with the intent of creating a unified landscape theme for the project.

The Design-Build Firm shall provide the necessary site inventory and site analysis and shall prepare a "Landscape Opportunity Plan" (Opportunity Plan) as part of the roadway plan set. The Landscape Opportunity Plan shall consider the Design-Build Firm's proposed roadway improvements, utilities, setbacks and clear zone dimensions, ITS, Signalization, Lighting, community commitments and other Project needs in identifying future landscape planting areas. Landscape opportunity areas should be preserved in accordance with the Departments "Bold" initiative.

The Opportunity Plans shall include the following:

1. Proposed improvements and existing elements to remain as associated with the Project.
2. Vegetation disposition depicting existing plant material to be removed, relocated or to remain.
3. Wetland jurisdictional lines.
4. Proposed drainage retention areas and easements.
5. Proposed utilities and existing utilities to remain.
6. Graphically depicted on-site and off-site desired or objectionable views.
7. Locations of landscape opportunity planting areas in a bubble format which identifies various vegetation groupings in a hatched or colorized manner. Examples are: "trees/palms/shrubs", "shrubs only", "buffer plantings", etc.
8. Provided and labeled applicable clear zone, horizontal clearance, setback dimensions on the plans and in chart form which reflect AASHTO, FDOT and Department guidelines for landscape installation and maintenance operations, including those that have been coordinated with other disciplines
9. Identified outdoor advertising locations, owners and contacts and shown 1000 ft. view zone.
10. Indicated potential area(s) for wildflower plantings.
11. Identify existing and proposed ITS infrastructure.
12. Identify proposed signalization elements.
13. Identify roadway and pedestrian lighting locations.

The Opportunity Plan shall match the scale and format used for the proposed roadway sheets. Should this format not convey design intent that is clearly legible, an alternate format may be considered.

Landscape construction documents and landscape installation are not included in this contract and shall be provided by others.

Disciplines that will have greatest impact to preserving landscape opportunities include environmental, drainage, utilities, signing, lighting and ITS. The DBLA shall identify potential conflicts relating to preserving opportunity landscape areas and provide suggested resolutions to preserve them. If conflicts cannot be resolved by the Design-Build Firm and the DBLA, they shall be discussed with the Department's Project Manager and District Landscape Architect for coordination and resolution.

The DBLA shall research and confirm any legally permitted outdoor advertising billboard (ODA) within 1,000-feet of the Project limits. The ODA sign(s) and 1,000-feet maximum vegetation protection zone limit shall be indicated on the plans. The Design-Build Firm's Landscape Architect shall provide a copy of all correspondence and attachments to the Department's District Landscape Architect.

The DBLA shall conduct a visual survey of existing vegetation within and adjacent to the Right of Way of the project. General locations of existing vegetation that will remain after roadway and associated

improvements are completed shall be shown with notations of general plant species in each location on the Opportunity Plan. The DBLA shall identify proposed buffer areas as needed.

The DBLA shall meet with the District Landscape Architect prior to the beginning of work for the purposes of coordination and to discuss adherence to the Highway Beautification Policy. No proposed planting areas indicated on the Opportunity Plan can occur in: federal and/or state jurisdictional wetlands or other surface waters; within open water bodies; in the bottom of stormwater management facilities; or use obligate wetlands or facultative wetland species within 25 feet of the seasonal high water of wetlands or other surface waters. Limited plantings may occur on the slopes and bottom of stormwater management facilities once coordinated with the DEMO Office, District Drainage Engineer and the District Landscape Architect. Trees may not be planted within 5 feet of storm sewer pipes and utilities.

VII. Technical Proposal Requirements:

A. General:

Each Design-Build Firm being considered for this Project is required to submit a Technical Proposal. The proposal shall include sufficient information to enable the Department to evaluate the capability of the Design-Build Firm to provide the desired services. The data shall be significant to the Project and shall be innovative, when appropriate, and practical.

B. Submittal Requirements:

The Technical Proposal shall include the information, paper size and page limitation requirements as listed herein.

The written Technical Proposal must also be submitted electronically in PDF format including bookmarks for each section. Bookmarks which provide links to content within the Technical Proposal are allowed. Bookmarks which provide links to information not included within the content of the Technical Proposal shall NOT be utilized. No macros will be allowed. Minimum font size of ten (10) shall be used. Times New Roman shall be the required font type.

Only upon request by the Department, provide calculations, studies and/or research to support features identified in the Technical Proposal. This only applies during the Technical Proposal Evaluation phase.

Submit the Technical Proposal electronically in PDF format to: d3.designbuild@dot.state.fl.us

The minimum information to be included:

Section 1: Project Approach

- Paper size: 8½" x 11". The maximum number of pages shall be ten (10), single-sided, typed pages including text, graphics, tables, charts, and photographs. Double-sided 8½" x 11" sheets will be counted as 2 pages. 11”x17” sheets are prohibited in this section.
- Describe how the proposed design solutions and construction means and methods meet the project needs described in this RFP. Provide sufficient information to convey a thorough knowledge and understanding of the project and to provide confidence the design and construction can be completed as proposed.

- Provide the term, measurable standards, and remedial work plan for any proposed Value Added features that are not Value Added features included in this RFP, or for extending the Value Added period of a feature that is included in this RFP. Describe any material requirements that are exceeded.
- Provide a Written Schedule Narrative that describes the Design and Construction phases and illustrates how each phase will be scheduled to meet the Project needs required of this RFP. Bar or Gantt charts are prohibited.
- Provide a summary of your proposed Transportation Management Plan concept. Include your operational approach to opening the new interchange to traffic on the first day.
- Describe your public awareness ideas for the proposed roundabout and new interchange.
- Provide utility coordinator information (if not previously provided in your Letter of Interest).
- All approved ATCs the Design-Build Firm intends to utilize for the project shall be detailed in proposal plans as appropriate.
- Detail how accommodations will be made for the future 6-laning of SR 8 (I-10)
- Discuss drainage plan, construction phasing and ensuring offsite discharge does not affect downstream properties.
- Discuss design and construction considerations for the roundabout.

Section 2: Plans

- Plan and Profile views of the proposed improvements shall be submitted in roll-plot format. The maximum width of the roll-plots shall be 36". The maximum length of the roll-plot shall be 6'. No more than 6 roll plots will be allowed. Inclusion of additional information on the roll-plot, other than depictions of the Plan and Profile views, is allowed provided it clarifies the plan and profile views. However, the Department may determine that such additional information is excessive and may require the Design-Build Firm to revise and resubmit the roll-plots. If this occurs, the Design-Build Firm will have 2 business days to revise and resubmit the roll-plots upon notification by the Department. All other information not included on the roll plots, such as typical sections, special emphasis details, structure plans, etc., shall be provided on 11"x17" sheets. No more than 250 single sided plan sheets shall be submitted.
- Provide Landscape Opportunity Plan sheets that depict preserved planting locations for a Bold Landscape design for the entire project limits. The Landscape Plan shall show all preserved planting areas to be used for future Bold Landscaping designs. Paper size shall be 11"x17".
- Right of Way Maps and Legal Descriptions (including area in square feet) of any proposed additional Right of Way parcels if applicable and approved through the ATC process.
- Provide Technical Proposal Plans in accordance with the requirements of the FDOT Design Manual, except as modified herein.
- The Plans shall complement the Project Approach.
- Provide anticipated bridge, retaining wall and sound wall profile views.
- Provide anticipated stormwater treatment locations and size.

C. Evaluation Criteria:

The Department shall evaluate the written Technical Proposal by each Design-Build Firm. The Design-Build Firm shall not discuss or reveal elements of the price proposal in the written proposals. A technical score for each Design-Build Firm will be based on the following criteria:

Item	Value
1. Design	32
2. Construction	32
3. Innovation	10
4. Value Added	6
Maximum Score	**80**

The following is a description of each of the above referenced items:

1. Design (32 points)

The Design-Build Firm is to address the quality and suitability of the following elements in the Technical Proposal:

- Structures design
- Roadway design / and safety
- Drainage design
- Environmental Design
- ITS, lighting and Traffic design
- Design coordination plan minimizing design changes
- Geotechnical investigation plan
- Geotechnical load test program
- Minimizing impacts through design to:
  - Environment
  - Public
  - Adjacent Properties
  - Structures
- Temporary Traffic Control Plan
- Incident Management Plan
- Aesthetics
- Utility Coordination and Design
- Minimization of utility impacts
- Design considerations which improve recycling and reuse opportunities

The Design-Build Firm is to address the following in the Technical Proposal: aesthetics features of the design including but not limited to the following: considerations in the geometry, suitability and consistency of structure type, structure finishes, shapes, proportions and form throughout the limits of the project.

Architectural treatments such as tiles, colors, emblems, etc. will not be considered as primary aesthetic treatments.

The Design-Build Firm is to address the following in the Technical Proposal: design and utility coordination efforts that minimize the potential for adverse impacts and project delays due to utility involvement.

The Design-Build Firm is to address the following in the Technical Proposal: development of design approaches which minimize periodic and routine maintenance. The following elements should be considered: access to provide adequate inspections and maintenance, access to structure's lighting system, and impacts to long term maintenance costs.

2. **Construction (32 points)**

The Design-Build Firm is to address the quality and suitability of the following elements in the Technical Proposal:

- Safety
- Structures construction
- Roadway construction
- Drainage construction
- Construction coordination plan minimizing construction changes
- Minimizing impacts through construction to:
    - Environment
    - Public
    - Adjacent Properties
    - Structures
- Implementation of the Environmental design and Erosion/Sediment Control Plan
- Implementation of the Maintenance of Traffic Plan
- Implementation of the Incident Management Plan
- Utility Coordination and Construction

The Design-Build Firm is to address the following in the Technical Proposal: developing and deploying construction techniques that enhance project durability, reduce long term and routine maintenance, and those techniques which enhance public and worker safety. This shall include, but not be limited to, minimization of lane and driveway closures, lane widths, visual obstructions, construction sequencing, and drastic reductions in speed limits.

The Design-Build Firm is to address the following in the Technical Proposal: insuring all environmental commitments are honored.

The Design-Build Firm is to address the following in the Technical Proposal: construction and utility coordination efforts that minimize the potential for adverse impacts and project delays due to utility conflicts.

3. **Innovation (10 points)**

The Design-Build Firm is to address introducing and implementing innovative design approaches and construction techniques which address the following elements in the Technical Proposal:

- Minimize or eliminate Utility relocations
- Construction time savings techniques
- Enhance Design and Construction aspects related to future expansion of the transportation facility
- Minimize traffic disruption

4. **Value Added (6 points)**

The Design-Build is to address the following Value Added features in the Technical Proposal:

- Broadening the extent of the Value Added features of this RFP while maintaining existing threshold requirements
- Exceeding minimum material requirements to enhance durability of project components
- Providing additional Value Added project features proposed by the Design-Build Firm

The following Value Added features have been identified by the Department as being applicable to this project. The Design-Build Firm may propose to broaden the extent of these Value Added features.

Value Added Feature	Minimum Value Added Period
Value Added Asphalt	3 years
Value Added Bridge Components	5 years

D. Final Selection Formula:

The Department shall publicly open the sealed bid proposals and calculate an adjusted score using the following formula:

$$\frac{BPP}{TS} = \text{Adjusted Score}$$

BPP = Bid Price Proposal

TS = Technical Score (Combined Scores from LOI and Technical Proposal)

The Design-Build Firm selected will be the Design-Build Firm whose adjusted score is lowest.

The Department reserves the right to consider any proposal as non-responsive if any part of the Technical Proposal does not meet established codes and criteria.

E. Final Selection Process:

After the sealed bids are received, the Department will have a public meeting for the announcement of the Technical Scores and opening of sealed Bid Price Proposals. The Department will document the preliminary results of the meeting. At this meeting, the Department will announce the score for each member of the Technical Review Committee, by category, for each Proposer and each Proposer's Technical Score. Following announcement of the Technical Scores, the sealed Bid Price Proposals will be opened and the

adjusted scores calculated. The Department will document the preliminary bid results as presented in the meeting. The Selection Committee should meet a minimum of two (2) calendar days (excluding weekends and Department observed holidays) after the public opening of the Technical Scores and Bid Price Proposals. The Department's Selection Committee will review the evaluation of the Technical Review Committee and the Bid Price Proposal of each Proposer as to the apparent lowest adjusted score and make a final determination of the lowest adjusted score. The Selection Committee has the right to correct any errors in the evaluation and selection process that may have been made. The Department is not obligated to award the contract and the Selection Committee may decide to reject all proposals. If the Selection Committee decides not to reject all proposals, the contract will be awarded to the Proposer determined by the Selection Committee to have the lowest adjusted score.

F. Stipend Awards:

The Department has elected to pay a stipend to all non-selected Short-Listed Design-Build Firms to offset some of the costs of preparing the Proposals. The non-selected Short-Listed Design-Build Firms meeting the stipend eligibility requirements of the Project Advertisement and complying with the requirements contained in this section will ultimately be compensated. The stipend will only be payable under the terms and conditions of the Design-Build Stipend Agreement and Project Advertisement, copies of which are included with this Request for Proposal. This Request for Proposal does not commit the Department or any other public agency to pay any costs incurred by an individual firm, partnership, or corporation in the submission of Proposals except as set forth in the Design-Build Stipend Agreement. The amount of the stipend will be **$223,237** per non-selected Short-Listed Design-Build Firm that meets the stipend eligibility requirements contained in the Project Advertisement. The stipend is not intended to compensate any non-selected Short-Listed Design-Build Firm for the total cost of preparing the Technical and Price Proposals. The Department reserves the right, upon payment of stipend, to use any of the concepts or ideas within the Technical Proposals, as the Department deems appropriate.

In order for a Short-Listed Design-Build Firm to remain eligible for a stipend, the Short-Listed Design-Build Firm must fully execute the stipend agreement within one (1) week after the Short-List protest period for the Design-Build Stipend Agreement, Form No. 700-011-14. The Short-Listed Design-Build Firm shall reproduce the necessary copies. Terms of said agreement are non-negotiable. A fully executed copy of the Design-Build Stipend Agreement will be returned to the Short-Listed Design-Build Firm.

A non-selected Short-Listed Design-Build Firm eligible for stipend compensation must submit an invoice for a lump sum payment of services after the selection/award process is complete. The invoice should include a statement similar to the following: "All work necessary to prepare Technical Proposal and Price Proposals in response to the Department's RFP for the subject Project".

VIII. Bid Proposal Requirements.

A. Bid Price Proposal:

Bid Price Proposals shall be submitted on the Bid Blank form attached hereto and shall include one lump sum price for the Project within which the Proposer will complete the Project. The lump sum price shall include all costs for all design, geotechnical surveys, architectural services, engineering services, Design-Build Firms quality plan, construction of the Project, and all other work necessary to fully and timely complete that portion of the Project in accordance with the Contract Documents, as well as all job site and home office overhead, and profit, it being understood that payment of that amount for that portion of the Project will be full, complete, and final compensation for the work required to complete that portion of the Project.

Due to FDOT office closures, the Design-Build Firm shall submit the Bid Price Proposal electronically via email to D3.designbuild@dot.state.fl.us. Original hard copy bid documents, including the original bid bond shall be due to the D3 Procurement Office no later than **deadline shown in the Schedule of Events**. ~~**4:00pm on Wednesday, April 22, 2020**~~. One (1) hard copy of the Bid Price Proposal shall be mailed to the address below:

Ranae Dodson
FDOT D3 Procurement Manager
1074 Highway 90
Chipley, FL 32428

**PLEASE NOTE COURIERS WILL NOT GUARANTEE OVERNIGHT DELIVER TO THE FDOT OFFICE. DESIGN-BUILD FIRMS WILL NOT BE ABLE TO HAND DELIVER THE BID DUE TO STATE OFFICE CLOSURES CURRENTLY IN EFFECT.

The package shall indicate clearly that it is the Bid Price Proposal and shall identify clearly the Proposer's name, contract number, project number, and Project description. The Bid Price Proposal shall be secured and unopened until the date specified for opening of Bid Price Proposals.

Forms to be included with the Price Proposal:

- Design Build Bid Blank Form
- Design Build Bid Proposal Form
- Design Build Proposal Of (Proposer) Form
- Design Build Bid or Proposal Bond
- Vendor Certification Regarding Scrutinized Companies List

FLEXIBLE PAVEMENT DESIGN SUMMARY SHEET

Prepared By:	Hays Griffin, P.E. 73897	Date:	2/9/2021
FPID Number:	407918-5	US/SR No.:	SR8/I-10
Section No.:	57002000	Type of Work:	New Interchange
County:	Okaloosa	Begin MP:	11.154
Date of Last resurfacing :	NA	Ending MP:	11.654
Description:	New Interchange on I-10, east of existing Antioch Rd overpass		

Revision

***Existing Pavement:**

12" Stabilized Subgrade	@ .08 =	0.96
6" Sand Clay Base	@ .12 =	0.72
1.6" S3	@ .25 =	0.4
1" FC-3	@ .17 =	1.1875
	$SN_{Existing}$=	**3.2675**

* Existing pavement data is from cores taken from PJ Adams at SR85.

***Design Data:**

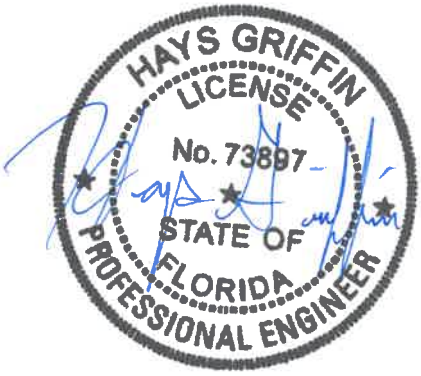
Year of Opening:	2024
Design Year:	2044
Loading:	1.59 Million ESALs
Reliability (%R):	95%
Resilient Modulus (MR):	9,100 psi
Change in PSI:	1.7
$SN_{Required}$:	**3.712**

Recommended Pavement Design:

Please see attached for backup Calcs

Resurfacing of PJ Adams

Mill 2"
Pave 1" Type SP, TL B
1" FC-9.5, TL B



2/9/21

Notes: 1. Use PG 76-22 asphalt binder in all asphalt mixes
2. This revision is to provide a resurfacing design for PJ Adams Parkway.
3. Severe alligator cracking and block cracking exists to 600' south of the existing southern approach slab for the existing overpass and 450' north of the northern approach slab. The resurfacing design should not be applied to these areas as they need to be reconstructed.
4. Due to the close proximity of the milling depth to the base, same operation cover (SP327) is recommended.

Florida DOT approval By:	Concurrence By:	FHWA Approval By:
Date: 2-9-2021	Date:	Date:

FLEXIBLE PAVEMENT DESIGN SUMMARY SHEET (CALCS)

$SN_{Existing}$				**3.2675**
SN_{Milled}	1"	@ .25	=	**0.25**
	1"	@ .17	=	**0.17**
SN_{New}	1" Type SP	@ .44	=	**0.44**
	1" FC-9.5	@ .44	=	**0.44**
		$SN_{Provided}$		**3.7275**

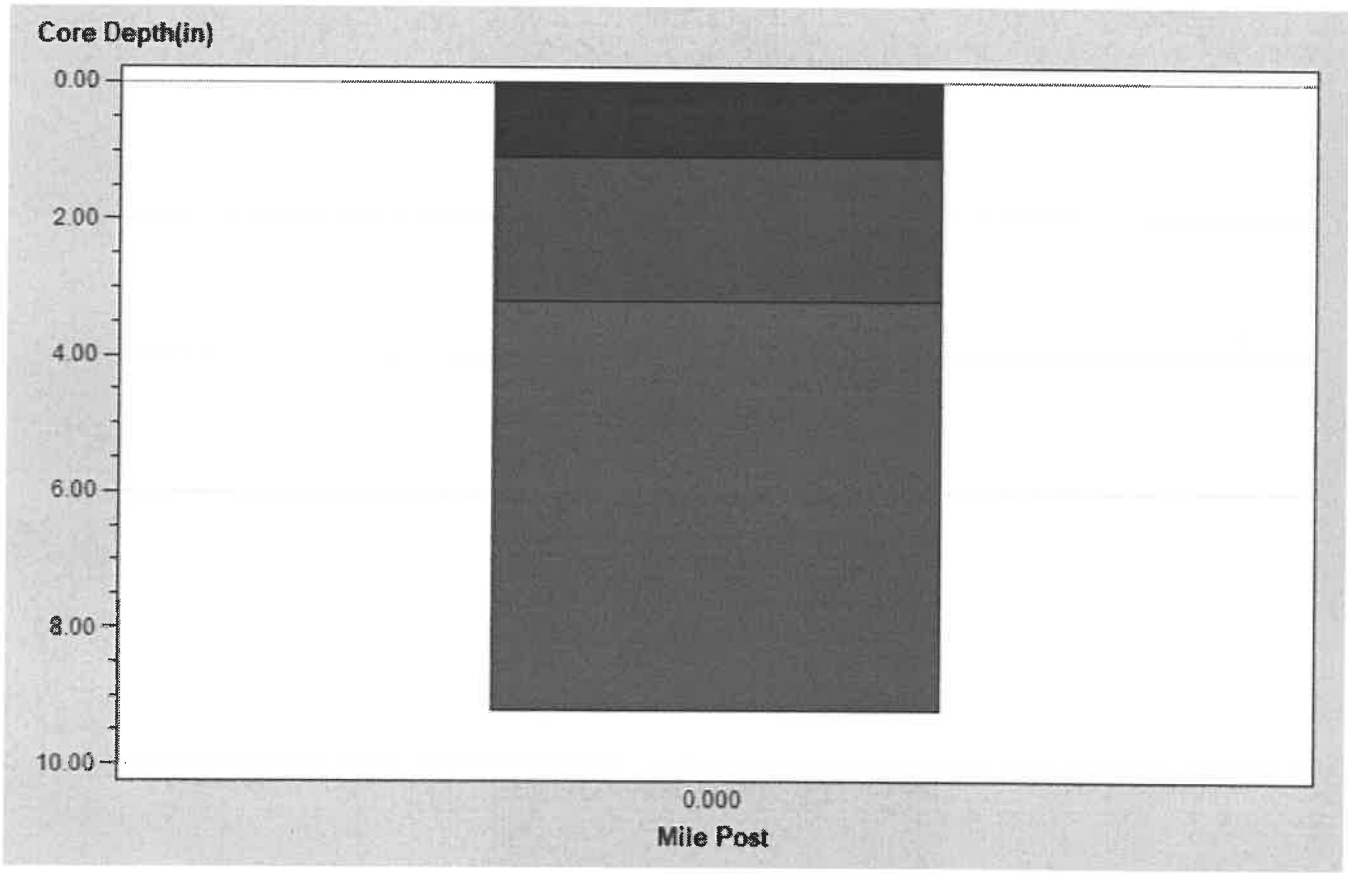
Narrative:

Prepared By:

2/9/21

Hays Griffin, P.E. 73897

Core Makeup
Project # 429675 -1 -31 -01 / Roadway ID # 57620000
Local Name: CR 4
Lane L1



Layer Types

FC3	S3	SCLY

Download Graph Data to Excel

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

PAVEMENT EVALUATION CORING AND CONDITION DATA

Cored By: TOOLE,SUGGS & CREW **Date:** 04/08/2013 **Typical Section No.** 57

Item: 429675		**Name:** CR 4	**Lanes:** 2
Fin. Proj. ID: 429675 -1 -31 -01		**From:** SR 85 S. FERDON BLVD	**Shoulder Type & Condition**
F.A. Proj. No.: 8886 195 A		**To:** SR 10 (US 90)	**Inside:**
County: 57	**SR No.:** CR 4	**Beg MP:** 0.000 **End MP:** 3.022 **Lgth:** 3.022	**Outside:**
Median Curbed: Paved:[ ] Lawn:[ ] Other:[ ]			**Curb & Gutter:**

Core No.	Mile Post or Sta. No.	Lane	Wheel	Path	Pavement Layer (in) FC3	S3					Core Lgth (in)	Base SCLY		Crack Depth (in)	Type	Class	Extent	Pvt	Cond	Rut Depth (in)	Crs Slope (%)	Comments
1	0.000	L1	Y		1.00	1.30					2.30	6.0		1.60	C	III	S	P		0.60	1.40	
2	0.000	R1	Y		1.00	1.40					2.40	6.0		2.40	C	III	S	P		0.35	0.50	
3	0.000	L1	N		1.10	2.10					3.20	6.0			C	III	S	P		0.40	1.40	

Comments

ROADWAY IS IN VERY POOR CONDITION.
FULL DEPTH COMBINATION CRACKING THROUGHOUT PROJECT.
DO NOT RECOMMEND MILLING.

Code Descriptions

Output produced by "pccd3.sas" program.

This request took 1.34 seconds of real time (v9.4 build 1519).

ESAL Location 2 - Analysis Information/Factors

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

FIN #: 407918-3
COUNTY: Okaloosa
ROADWAY ID: 570620501
PROJECT DESCRIPTION: I-10 at PJ Adams / Antioch Road Interchange

LOCATION #: 2

LOCATION DESCRIPTION: P J Adams Parkway- MP 1.583@ W of SR 85

GROWTH RATE FORMULA

A: Interpolation
B: Enter Growth Rate
C: Enter All AADTs
D: New Facility

If "A" select an interpolation function
If "B" enter rate as decimals (1%=1.01)
If ""C", or "D" continue to next section

Choose A, B, C, or D here: C

Linear Growth Rate ____ %
Compounded Growth Rate ____ %
Decaying Growth Rate ____ %
(select one)

DESIGN INFORMATION

		AADT
Existing Year	2017	16500
Opening Year	2024	17000
Mid-Design Year	2034	18500
Design Year	2044	20000

Note: AADT values have been rounded to the nearest 100

Daily Direction Split
(50% or 100%) 50%
Lanes in One Direction 2

T24 values
Existing to Opening Year 3.10%
Opening to Mid-Year 3.10%
Mid-Year to Design-Year 3.10%

1995 EQUIVALENCY FACTORS |u(1)|

(selected with an X)	FLEXIBLE PAVEMENT SN = 5/THICK		RIGID PAVEMENT SN = 12/THICK	
RURAL FREEWAY:	1.050		1.600	
URBAN FREEWAY:	0.900		1.270	
RURAL HIGHWAY:	0.960		1.350	
URBAN HIGHWAY:	0.890	X	1.220	X
OTHER (Enter Factor and X):				

(1) Equivalency Factors are based on Updated Pavement Damage Factors Memorandum, dated July 2, 1998.
Lane Factors developed by Copes equation

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Vanasse Hangen Brustlin, Inc.
225 East Robinson Street, Orlando,FL - 32801
Org. Unit or Firm
Ravi Sabbisetti, PE, PTOE
Name
Signature 8/4/2020
Date

Reviewed by: Vanasse Hangen Brustlin, Inc.
225 East Robinson Street, Orlando,FL - 32801
Name
Dante Gabriel, PE, PTOE
Title
Signature 8/4/2020
Date

Flexible Pavement 18 KIP ESAL Analysis - Location 2

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION 2

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2017 to 2044*

SECTION #: 570620501 **COUNTY:** Okaloosa **FIN #:** 407918-3

FLEXIBLE PAVEMENT URBAN HIGHWAY 0.890

SN=5/THICK P J Adams Parkway- MP 1.583@ W of SR 85 C

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2017	16500	69	0	0.5	3.10%	0.822	0.890
2018	16500	69	0	0.5	3.10%	0.822	0.890
2019	16600	69	0	0.5	3.10%	0.822	0.890
2020	16700	70	0	0.5	3.10%	0.821	0.890
2021	16700	70	0	0.5	3.10%	0.821	0.890
2022	16800	70	0	0.5	3.10%	0.821	0.890
2023	16900	70	0	0.5	3.10%	0.820	0.890
2024	17000	71	71	0.5	3.10%	0.820	0.890
2025	17100	71	142	0.5	3.10%	0.819	0.890
2026	17300	72	214	0.5	3.10%	0.818	0.890
2027	17400	72	286	0.5	3.10%	0.818	0.890
2028	17600	73	359	0.5	3.10%	0.817	0.890
2029	17700	73	432	0.5	3.10%	0.816	0.890
2030	17900	74	506	0.5	3.10%	0.815	0.890
2031	18000	74	580	0.5	3.10%	0.815	0.890
2032	18200	75	655	0.5	3.10%	0.814	0.890
2033	18300	75	730	0.5	3.10%	0.814	0.890
2034	18500	76	806	0.5	3.10%	0.813	0.890
2035	18600	77	883	0.5	3.10%	0.812	0.890
2036	18800	77	960	0.5	3.10%	0.811	0.890
2037	18900	78	1038	0.5	3.10%	0.811	0.890
2038	19100	78	1116	0.5	3.10%	0.810	0.890
2039	19200	79	1195	0.5	3.10%	0.810	0.890
2040	19400	79	1274	0.5	3.10%	0.809	0.890
2042	19700	81	1435	0.5	3.10%	0.807	0.890
2043	19800	81	1516	0.5	3.10%	0.807	0.890
2044	20000	82	1598	0.5	3.10%	0.806	0.890

Opening to Mid-Design Year ESAL Accumulation (1000s): 735

Opening to Design Year ESAL Accumulation (1000s): 1527

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Vanasse Hangen Brustlin, Inc.
225 East Robinson Street, Orlando,FL - 32801
Org. Unit or Firm
Ravi Sabbisetti, PE, PTOE
Name
8/4/2020
Signature Date

Reviewed by: Vanasse Hangen Brustlin, Inc.
225 East Robinson Street, Orlando,FL - 32801
Name
Dante Gabriel, PE, PTOE
Title
8/4/2020
Signature Date

FLEXIBLE PAVEMENT DESIGN SUMMARY SHEET

Prepared By:	Hays Griffin, P.E. 73897	Date:	2/8/2021
FPID Number:	407918-5	US/SR No.:	SR8/I-10
Section No.:	57002000	Type of Work:	New Interchange
County:	Okaloosa	Begin MP:	11.154
Date of Last resurfacing :	NA	Ending MP:	11.654
Description:	New Interchange on I-10, east of existing Antioch Rd overpass		

Revision

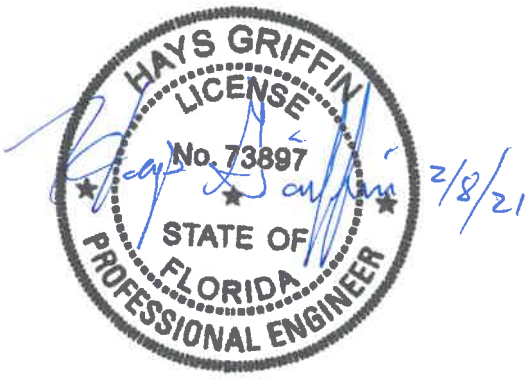
Existing Pavement:

Design Data:

Year of Opening:	2024
Design Year:	2044
Loading:	16.5 Million ESALs
Reliability (%R):	95%
Resilient Modulus (MR):	9,100 psi
Change in PSI:	1.7
$SN_{Required}$:	**4.49**

Recommended Pavement Design:

New Ramps		
12" Stabilized Subgrade	@ .08 =	0.96
OBG-9	=	1.8
2.5" Type SP, TL D	@ .44 =	1.1
1.5" FC-12.5, TL D	@ .44 =	0.66
	$SN_{Provided}$=	**4.52**



Notes: 1. Use PG 76-22 asphalt binder in all asphalt mixes
2. This revision is to revise the I-10 ramp pavement design. All other pavement designs from the previous pavement design package are still valid.
3. FC-5 will be needed adjacent to the existing I-10 travel lanes, good engineering judgement should be used with respect to drainage to establish the transition point from an open graded friction course to a dense graded friction course. Common practice in D3 has been to use the end of the gore are for this transition.

Florida DOT approval By:	Concurrence By:	FHWA Approval By:
Date: 2-9-2021	Date:	Date: