

Florida Department of Transportation
Florida's Turnpike Enterprise

**DRAFT DESIGN-BUILD
REQUEST FOR PROPOSAL**

for

**SR 417 (Seminole Expressway) Widening from Orange
County Line to North of SR 434
Seminole County**

Financial Projects Number(s): 417545-1-52-01

Federal Aid Project Number(s): N/A

Contract Number: E8U08

Draft January 30, 2023

Table of Contents

I.	Introduction.....	1
A.	Design-Build Responsibility	9
B.	Department Responsibility	10
II.	Schedule of Events.....	10
III.	Threshold Requirements.....	13
A.	Qualifications.....	13
B.	Joint Venture Firm	13
C.	Price Proposal Guarantee.....	14
D.	Pre-Proposal Meeting	14
E.	Technical Proposal Page-Turn Meeting.....	14
F.	Question and Answer Written Responses.....	15
G.	Protest Rights.....	15
H.	Non-Responsive Proposals	16
I.	Waiver of Irregularities.....	17
J.	Modification or Withdrawal of Technical Proposal	17
K.	Department's Responsibilities	17
L.	Design-Build Contract	18
M.	Financial Qualifications and Project Financial Plan (Financial Proposal): ..	Error!
	Bookmark not defined.	
IV.	Disadvantaged Business Enterprise (DBE) Program.....	18
A.	DBE Availability Goal Percentage:	18
B.	DBE Supportive Services Providers:	18
C.	Bidders Opportunity List:	19
V.	Project Requirements and Provisions for Work.....	19
A.	Governing Regulations:	19
B.	Innovative Aspects:.....	22
C.	Geotechnical Services:.....	27
D.	Department Commitments:	27
E.	Environmental Permits:	30
F.	Railroad Coordination:	32
G.	Survey:	32
H.	Verification of Existing Conditions:.....	32
I.	Submittals:	32
J.	Contract Duration:	37
K.	Project Schedule:	37
L.	Key Personnel/Staffing:	39

M.	Partner/Teaming Arrangement:	40
N.	Meetings and Progress Reporting:	40
O.	Public Involvement:	41
P.	Quality Management Plan (QMP):	42
Q.	Liaison Office:	43
R.	Engineers Field Office:	44
S.	Schedule of Values:	44
T.	Computer Automation:	44
U.	Construction Engineering and Inspection:	44
V.	Testing:	45
W.	Value Added:	45
X.	Adjoining Construction Projects:	45
Y.	Issue Escalation:	46
VI.	Design and Construction Criteria.	47
A.	General:	47
B.	Vibration and Settlement Monitoring:	47
C.	Geotechnical Services:	48
D.	Utility Coordination:	53
E.	Roadway Plans:	59
F.	Roadway Design:	60
G.	Geometric Design:	63
H.	Design Documentation, Calculations, and Computations:	64
I.	Structure Plans:	64
J.	Specifications:	69
K.	Shop Drawings:	70
L.	Sequence of Construction:	70
M.	Stormwater Pollution Prevention Plans (SWPPP):	71
N.	Transportation Management Plan:	71
O.	Environmental Services/Permits/Mitigation:	79
P.	Signing and Pavement Marking Plans:	81
Q.	Lighting Plans:	82
R.	Signalization and Intelligent Transportation System Plans:	83
S.	Landscape Opportunity Plans:	92
VII.	Technical Proposal Requirements:	93
A.	General:	93
B.	Submittal Requirements:	93
C.	Evaluation Criteria:	95
D.	Final Selection Formula:	97
E.	Final Selection Process:	98
F.	Stipend Awards:	98
VIII.	Bid Proposal Requirements.	99
A.	Bid Price Proposal:	99

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. These documents have been prepared for or by the Department utilizing registered professionals in their fields of practice, so the information contained therein can be construed as a sample representation of field conditions or statement of facts upon which the Design-Build Firm can rely. It is incumbent upon the Design-Build firm to determine whether the information provided in these documents is sufficient and current enough to develop an informed Technical Proposal and Bid Price Proposal or if further investigation is needed.

- Attachment No. 1** **Bid Blank (375-020-17)**
- Attachment No. 2** **Design-Build Proposal of Proposer (375-020-12)**
- Attachment No. 3** **Design-Build Bid Proposal Form (700-010-65)**
- Attachment No. 4** **Design-Build Bid or Proposal Bond (375-020-34)**
- Attachment No. 5** **DBE Forms (As Applicable)**
- Attachment No. 6** **Design-Build Contract (375-020-13)**
- Attachment No. 7** **Design-Build Contract Bond (375-020-14)**
- Attachment No. 8** **Contract Affidavit (375-020-30)**
- Attachment No. 9** **Division I Design-Build Specifications**
- Attachment No. 10** **Division II and III Special Provisions**
 - a.** **Mobilization (SP1010000DB)**
 - b.** **Contractor Quality Control General Requirements (SP1050813DB)**
 - c.** **Structures Foundations (SP4550000DB)**
- Attachment No. 11** **Value Added Specifications**
 - a.** **Value Added Bridge Components**
- Attachment No. 12** **Developmental Specifications**
- Attachment No. 13** **Project Advertisement**
- Attachment No. 14** **Florida's Turnpike Enterprise Design Requirements**
 - a.** **General Tolling Requirements (GTR)**
 - b.** **Landscape BRAND Guidelines**
- Attachment No. 15** **Florida's Turnpike Enterprise Field Operations Guide**
- Attachment No. 16** **Typical Section Package**
- Attachment No. 17** **Final Noise Wall Analysis Report**
- Attachment No. 18** **Design Variations and Exceptions**
 - a.** **Design Variation – Horizontal Curve Length**
 - b.** **Design Variation – Horizontal Curve Radius**
 - b.** **Design Variation – Horizontal Stopping Sight Distance**
 - c.** **Design Variation – Vertical Alignment**
 - d.** **Design Variation – Shoulder Width**
 - e.** **Design Exception – Horizontal Stopping Sight Distance**
 - f.** **Design Exception – Cross-Slope**
- Attachment No. 19** **SR 417 (Seminole Expressway) PD&E Study Documents**
- Attachment No. 20** **Applicable Permits**
 - a.** **DEP ERP Permit**
 - b.** **DEP Section 404 Permit**
 - c.** **Bald Eagle Permit**

Attachment No. 21	Existing Bridge Repair List
Attachment No. 22	Contamination Impact Certification for Existing Bridges
Attachment No. 23	Right of Way Maps
Attachment No. 24	Project Network Control Survey
Attachment No. 24	Project Traffic Forecast Memorandum
Attachment No. 25	Approved Pavement Design
a.	SR 417 Pavement Design
b.	Cross Street Pavement Design
Attachment No. 26	Seminole Expressway (SR 417) Lane Closure Traffic Memorandum
Attachment No. 27	FTE Lane Closure Policy
Attachment No. 28	SR417_Pipe Repair Table_042922
Attachment No. 29	KMZ Standards
Attachment No. 30	Central Florida Expressway Authority (CFX) Design Standards
Attachment No. 31	Selective Clearing and Grubbing Plan
Attachment No. 32	Construction Agreements
a)	Seminole County
b)	City of Oviedo
Attachment No. 33	FTE Minimum Technical Requirements for ITS
Attachment No. 34	Turnpike Shop Drawing Review Process
Attachment No. 35	Project Aesthetic Requirements
Attachment No. 36	Seminole County Standard Mast Arm Drawings
Attachment No. 37	CFX TROE Permit Form

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.

1. Conceptual Roadway Plans
2. Conceptual Signing and Pavement Marking Plans
3. Conceptual ITS Plans
4. Conceptual Signalization Plans
5. Conceptual Landscape Opportunity Plans
6. Conceptual TCP Roll Plots
7. Conceptual Lighting Plans
8. Existing Record / As-built Plans
9. Roadway Design Documentation
10. Drainage Design Report

11. Hydroplaning Technical Memo
12. Lighting Design Conceptual Report
13. Lane Closure and Traffic Pacing Analysis
14. Concept of Operations
15. Systems Engineering Management Plan
16. Adjacent/Relevant Project Plans
17. 2009 SR 417 6-Lane Design Project Information
18. CADD Files
19. Crash Data
20. Contamination Impact Surveys for Existing Bridges
21. Existing Bridge Inspection Reports
22. Advance Utility Coordination Documentation
23. Geotechnical Data
24. SR 417 Widening Community Awareness Plan
25. Design Traffic Report
26. Vehicular Collision Force Calculations for Existing Bridge Piers
27. Load Ratings for Existing Bridges

Draft

I. Introduction.

Florida's Turnpike Enterprise (FTE), a District of the Florida Department of Transportation (Department), has issued this Request for Proposal (RFP) to solicit competitive bids and proposals from Proposers for the widening of SR 417 (Seminole Expressway) from the Orange County Line to north of SR 434.

SR 417 (Seminole Expressway) is part of Florida's Turnpike System and is a limited access freeway with a design speed of 70 mph. It extends from Interstate 4 in northwestern Osceola County to Interstate 4 in northwestern Seminole County. This Design-Build Project is approximately 6.63 miles long on SR 417 from the Orange/Seminole County line to north of SR 434. The primary objective of this Design-Build Project, identified throughout this RFP as the "Project," is to improve traffic flow, safety and operations on SR 417 (Seminole Expressway) by widening the existing 4-lane mainline to eight lanes (four in each direction)-

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.

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.

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 Alternative Technical Concept (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. 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.

Any Right of Way acquisition required for/proposed by a Design-Build Firm Technical Proposal will require a re-evaluation of the PD&E Study. The Design-Build Firm shall coordinate with the District Environmental Management Office and provide any required information so that the District can complete the re-evaluation for approval. Right of way acquisition cannot begin until the PD&E re-evaluation has been completed and approved. Any time delays or costs associated with processing this re-evaluation will be the sole responsibility of the Design-Build Firm.

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 and/or a Letter of Credit meeting the requirements of Section 14-116.002, Florida Administrative Code, and approved by the Department's Comptroller 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 funds and/or 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.

Description of Work

For clarity in communication, the following project/work description is broken down as follows:

1. Overview
2. Roadway
3. Structures
4. Drainage
5. Geotechnical
6. Traffic Control
7. Utilities
8. Survey
9. Right of Way
10. Permitting and Environmental
11. Signing & Pavement Marking
12. Intelligent Transportation Systems (ITS)
13. Signalization
14. Lighting
15. Landscaping

Overview

The scope of work includes all investigation, design, permitting, coordination, final approved construction documents, and construction activities necessary for the construction of additional lanes on SR 417 (Seminole Expressway) from the Orange/Seminole County line to north of SR 434 and additional improvements specified herein. The anticipated project limits extend from the Orange County line (Section 77470; milepost 37.945) to north of SR 434 (Section 77470; milepost 44.333). The following sections describe the general work scope of the project. Additional requirements are listed in this RFP and the Attachments.

The Department has produced preliminary Concept Plans for this project. The Concept Plans are included in the Reference Documents and are supplied to the Design-Build Firm for informational purposes only. The Design-Build Firm, as Engineer of Record, is responsible for providing all final approved construction documents. In addition to final construction documents, the Design-Build Firm shall provide and furnish all construction activities, utility coordination, , equipment, supervision, labor, materials, rentals, subcontractors, system integration, testing, profit, overhead, and any other costs related to the project. ~~Due to the dynamic nature of the RFP criteria development, the Concept Plans have not been revised to comply with every requirement of this RFP.~~

Roadway

The Design-Build Firm shall design and construct the following roadway improvements:

SR 417:

1. Perform widening, full reconstruction, and/or milling (including deep milling where called for in the pavement design report) and resurfacing of SR 417 to provide two additional lanes which will provide four toll lanes in each direction within the limits depicted in the signed and sealed Typical Section Package. Ramp reconstruction, widening and resurfacing is depicted in the concept plans, pavement design and other attachments and reference files. No work within the concrete pavement area surrounding the Ramp Toll Facilities shall be allowed.
2. At the south end of the project, the pavement transitions from the CFX 6 lane typical plus auxiliary lanes to the full 8-lane typical section on SR 417 south of the Aloma overpass.
3. At the north end of the project, the pavement to accommodate the full 8-lane typical section shall be constructed to Sta. 620+26.40. The pavement marking shall be such that the 8-lane typical is transitioned to the existing 4-lane section.
4. Required breaks in the guardrail for maintenance at locations include approximately Sta 270+50 LT, Sta 490+00 RT, Sta 498+00 LT, and Sta 550+00 LT.

SR 426 (Aloma Avenue) Interchange:

1. Widen the eastbound to southbound on-ramp (Ramp A) to two lanes.
2. Widen the northbound off-ramp (Ramp B) terminal intersection to include triple left-turn lanes and dual right-turn lanes at the northbound approach.
3. Widen westbound Aloma Avenue to four lanes through the interchange to include three through lanes and a single left turn lane to the southbound on-ramp (Ramp A), a 7 foot buffered bike lane and 8 foot sidewalks.
4. Widen eastbound Aloma Avenue to four lanes through the interchange to include two through lanes and two left turn lanes to the northbound on-ramp (Ramp C), An additional right turn lane onto the southbound on-ramp (Ramp A), a 7 foot buffered bike lane and 8 foot sidewalks.
5. Widen eastbound to northbound on-ramp (Ramp C) to two lanes
6. Reconstruct portions of the southbound off-ramp (Ramp D) and northbound on-ramp (Ramp C) as required by design.
7. Widen the southbound off-ramp (Ramp D) terminal intersection to include triple right turn lanes at the southbound approach.
8. Milling and resurfacing on Aloma avenue to the limits detailed in the pavement design (including deep milling where called for).

Red Bug Lake Road Interchange:

1. Widen the northbound off ramp (Ramp F) to two lanes, include additional right turn for a total of two right turn lanes
2. Widen eastbound Red Bug Lake Road to include dual left-turn lanes to the northbound on-ramp (Ramp G).
3. Widen northbound Ramp G) to accommodate dual left turn lanes from Red Bug Lake Road.
4. Milling and resurfacing to accommodate the widening and concept restriping.

SR 434 Interchange:

1. Mill and resurface the existing pavement under the bridge on the eastbound approach to the northbound on-ramp (Ramp K) terminal intersection to accommodate the proposed improvements.
2. Modify the southbound off-ramp (Ramp L) terminal intersection to include dual left-turn lanes and dual right turn lanes at the southbound off-ramp to SR 434.
3. Modify the eastbound approach to the northbound on-ramp (Ramp K) terminal intersection to include two left-turn lanes.
4. Milling and resurfacing to accommodate the concept restriping.

Structures

The Design-Build Firm shall design and construct the following new bridge crossings:

1. Ramp D over S. Cross-Seminole Trail [Proposed Bridge No. 770621]

The Design-Build Firm shall design and construct the replacement of the following existing bridges:

1. SR 417 SB over SR 426 (Aloma Avenue) (Bridge No. 770049) [Proposed Bridge No. 770619]
2. SR 417 NB over SR 426 (Aloma Avenue) (Bridge No. 770050) [Proposed Bridge No. 770620]
3. SR 417 SB over South Cross Seminole Trail (Bridge No. 770051) [Proposed Bridge No. TBD001]
4. SR 417 NB over South Cross Seminole Trail (Bridge No. 770052) [Proposed Bridge No. TBD002]
5. SR 417 SB over Slavia Road (Bridge No. 770060) [Proposed Bridge No. 770622]
6. SR 417 NB over Slavia Road (Bridge No. 770061) [Proposed Bridge No. 770622]
7. Ramp C over S. Cross-Seminole Trail (Bridge No. 770053) [Proposed Bridge No. 770618]

The proposed improvements will require widening, retrofitting and repairs the following existing bridges:

1. SR 417 SB over Red Bug Lake Road (Bridge No. 770062)
2. SR 417 NB over Red Bug Lake Road (Bridge No. 770063)
3. SR 417 SB over Lightwood Knox Canal (Bridge No. 770064)
4. SR 417 NB over Lightwood Knox Canal (Bridge No. 770065)
5. SR 417 SB over Winter Springs Blvd. (Bridge No. 770067)
6. SR 417 NB over Winter Springs Blvd. (Bridge No. 770068)
7. SR 417 SB over N. Cross-Seminole Trail (Bridge No. 770058)
8. SR417 NB over N. Cross-Seminole Trail (Bridge No. 770059)
9. SR 417 SB over SR 434 (Bridge No. 770056)
10. SR 417 NB over SR 434 (Bridge No. 770057)

The proposed improvements will require replacement of the following existing bridge approach slabs:

1. SR 417 SB over Red Bug Lake Road (Bridge No. 770062) – north and south approach slabs
2. SR 417 NB over Red Bug Lake Road (Bridge No. 770063) – north and south approach slabs
3. SR 417 NB over Lightwood Knox Canal (Bridge No. 770065) – south approach slab
4. SR 417 SB over Winter Springs Blvd. (Bridge No. 770067) – north and south approach slabs
5. SR 417 NB over Winter Springs Blvd. (Bridge No. 770068) – north and south approach slabs
6. SR 417 SB over N. Cross-Seminole Trail (Bridge No. 770058) – north and south approach slabs
7. SR417 NB over N. Cross-Seminole Trail (Bridge No. 770059) – south approach slab
8. SR 417 SB over SR 434 (Bridge No. 770056) – north approach slab
9. SR 417 NB over SR 434 (Bridge No. 770057) – south approach slab

Retaining walls, noise walls, and miscellaneous structures for drainage, lighting, signing, signalization, and ITS features shall be constructed as required by design.

Culvert No. 77Q005 (Sta. 450+50 +/- SR417 Centerline of Construction), located at MP 41.8 on the north side of Oviedo Marketplace Blvd., shall be replaced either in its existing location or at an alternate location.

Drainage

The Design-Build Firm shall be responsible for drainage and stormwater treatment design meeting all project requirements. All systems will be designed to meet the typical and customary Department standard level of maintenance.

Geotechnical

The Department, under separate contract, has produced soil borings. The soil borings are included in the Reference Documents and are supplied to the Design-Build Firm for informational purposes only. The borings provided are not comprehensive. The Design-Build Firm is responsible for its own geotechnical investigation, reporting, and implementation.

The Design-Build Firm shall verify the stability of all proposed slopes, particularly those to be constructed on weak foundation soils.

Traffic Control

The Design-Build Firm will be responsible for developing a Traffic Control Plan (TCP) meeting Department criteria and executing it accordingly.

Utilities

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.

The Design-Build Firm shall minimize and, to the greatest extent possible, avoid impacts to existing

utilities within the project limits.

Advance utility coordination information is provided in the Reference Documents for information only.

Survey

The Design-Build Firm shall be responsible for providing all survey activities necessary to support the Project.

Right of Way

Right of Way maps are included in Attachment No. 23. Certain Right of Way parcels may be acquired by the Department after award of the Design-Build contract. Parcels 100 and 101, which are required for the construction of the Lightwood Knox Canal bridge widening, are anticipated to be certified by the Department on or before September 28, 2022. No work can be performed within these parcels until such time as the right of way is certified. The Design-Build Firm shall account for this anticipated parcel certification date in its construction schedule and phasing.

Permitting and Environmental

The Design-Build Firm shall be responsible for all permitting in accordance with Section VI.N of this RFP.

Signing & Pavement Marking

The Design-Build Firm will be responsible for developing an acceptable signing & pavement marking plan and executing it accordingly. A Conceptual Signing Plan is provided in the RFP Reference Documents. At a minimum, the Signing & Pavement Marking improvements shall address the following:

1. SR 417 mainline
2. SR 417 on-ramps and off-ramps at the SR 426 interchange, Red Bug Lake Road interchange, and SR 434 interchange
3. SR 426, Red Bug Lake Road, and SR 434

Intelligent Transportation Systems

The Design-Build Firm will be responsible for developing an acceptable integrated ITS plan and executing it accordingly. A Conceptual ITS Plan is provided in the RFP Reference Documents and the MTR is included in the RFP Attachments. At a minimum, the ITS improvements shall include:

1. Fiber Optic Communications System
2. CCTV subsystem
3. Microwave Vehicle Detection subsystem
4. Connected and Automated Vehicles/Roadside Unit subsystem
5. Wrong Way Vehicle Detection subsystem
6. Dynamic Message Sign subsystem
7. Travel Time and Bluetooth subsystem

Communications requirements for toll facilities are provided in the FTE GTR.

Signalization

The Design-Build Firm will be responsible for developing an acceptable Signalization plan and executing it accordingly. At a minimum, the Design-Build Firm shall be responsible for signalization plans to address the following signalized intersections:

1. SR 426 at SR 417 Southbound Ramps intersection
2. SR 426 at SR 417 Northbound Ramps intersection
3. Red Bug Lake Road at SR 417 Southbound Ramps intersection
4. Red Bug Lake Road at SR 417 Northbound Ramps intersection
5. SR 434 at SR 417 Southbound Ramps intersection
6. SR 434 at SR 417 Northbound Ramps intersection

Lighting

The Design-Build Firm shall be responsible for developing an acceptable lighting plan in accordance with Department guidelines. Provide underdeck lighting in accordance with FDM criteria in all bridge spans crossing roadways or pedestrian facilities. At a minimum, the Lighting improvements shall include:

1. SR 417 mainline including
2. SR 417 on-ramps and off-ramps at the SR 426 interchange, Red Bug Lake Road interchange, and SR 434 interchange including the signalized intersections
3. SR 426, Red Bug Lake Road, and SR 434

Tolling Infrastructure

No tolling infrastructure is contemplated for this project. General Tolling Requirements are in the Florida's Turnpike Enterprise General Tolling Requirements (FTE GTR) in Attachment No. 14.

Landscaping

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.

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 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.

The Design-Build Firm shall replace the landscaping in the raised median of Winter Springs Blvd. within the footprint of the widening of the NB and SB SR 417 bridges over Winter Springs Blvd. with hardscaping matching the existing material in the median of Winter Springs Blvd. within the footprint of the existing SR 417 bridges over Winter Springs Blvd.

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.

In the performance of professional services, the Design-Build Firm shall use that degree of care and skill ordinarily exercised by other similar professional in the field under similar conditions in similar localities. The Design-Build Firm will use due care in performing its services and will have due regard for acceptable engineering standards and principles. The Design-Build Firm's standard of care shall not be altered by the application, interpretation, or construction of any other provision of this Agreement.

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 PD&E Study, Technical Documents supporting the PD&E Study, and subsequent re-evaluations included in the Reference Documents. The Design-Build Firm may propose changes which differ from the approved PD&E Study and/or re-evaluation(s). An approved re-evaluation to document changes proposed by the Design-Build Firm is required prior to construction of the specific activity as required in Section V.I.3

The Design-Build Firm is responsible for coordinating with the District Environmental Management Office any engineering and environmental (e.g., social, cultural, natural, and physical) information required to complete the re-evaluations of the PD&E Study. The Design-Build Firm will not be compensated for any additional costs or time associated with re-evaluation(s) resulting from proposed design changes.

The Design-Build Firm may propose changes which differ from the approved Interchange Access Request. If changes are proposed to the interchange 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, FHWA. IAR approval is required prior to approval of the PD&E Study re-evaluation. The Design-Build Firm will not be compensated for any additional costs or time associated with the IAR approval process resulting from proposed design 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 facie 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 PD&E Study re-evaluations. For federal projects, re-evaluations will be processed by the District Environmental Management Office for approval by the Department's Office of Environmental Management 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.

Risk Register submittals can be included as part of the ATC meetings. Standalone Risk Register meetings are recommended for large, complex projects \$100 million or greater with higher risk elements.

Date	Minimum # of Days	Event
<u>01/09/2023</u>	0	Planned Advertisement
<u>02/01/2023</u>	10	Current Advertisement
<u>02/22/2023</u>	21	Letters of Interest for Phase I of the procurement process due in District Office by 5:00 pm local time
<u>03/22/2023</u>	28	Proposal Evaluators submit Letter of Interest Scores to Contracting Unit 5:00 pm local time
<u>3/28/2023</u>	3	Contracting Unit provides Letter of Interest scores and Proposal Evaluators comments to Selection Committee 5:00 pm local time
<u>04/04/2023</u>	4	Public Meeting of Selection Committee to review and confirm Letter of Interest scores 9:00 am local time
<u>04/04/2023</u>	0	Shortlist Posting Date
04/04/2023	5	Final RFP provided to Design-Build Firms continuing to Phase II of the procurement process 5:00 pm local time
04/17/2023	7	Mandatory Pre-Proposal meeting at 9:00 am local time in District Office. 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.
<u>04/17/2023</u>	0	Utility Pre-Proposal Meeting facilitated by the District Utility Engineer at TBD .
<u>04/24/2023</u>	7	Deadline for Design-Build Firm to request participation in Risk Register and One-on-One Alternative Technical Concept Discussion Meeting No. 1 xx:xx am/pm local time
<u>05/01/2023</u>	7	Deadline for Design-Build Firm to submit preliminary list of Risk Register Items and Alternative Technical Concepts prior to Risk Register and One-on-One Alternative Technical Concept Discussion Meeting No. 1 xx:xx am/pm local time
<u>05/08/2023</u>	7	Risk Register and One-on-One Alternative Technical Concept Discussion Meeting No. 1. 90 Minutes will be allotted for this Meeting.
<u>05/08/2023</u>	0	Deadline for Design-Build Firm to request participation in Risk Register and One-on-One Alternative Technical Concept Discussion Meeting No. 2, xx:xx am/pm local time
<u>05/15/2023</u>		Deadline for Design-Build Firm to submit preliminary list of Risk Register items and Alternative Technical Concepts prior to Risk Register and One-

	7	on-One Alternative Technical Concept Discussion Meeting No. 2. xx:xx am/pm local time
<u>05/26/2023</u>		Risk Register and One-on-One Alternative Technical Concept Discussion Meeting No. 2. 90 Minutes will be allotted for this Meeting.
	7	
<u>06/05/2023</u>		Deadline for submittal of Risk Register items and Alternative Technical Concept Proposals 5:00 pm local time.
	14	
<u>06/05/2023</u>		Final deadline for submission of requests for Design Exceptions or Design Variations. xx:xx am/pm local time
	0	
<u>07/10/2023</u>	21	Addendum issued for approved Design Exceptions. xx:xx am/pm local time
<u>07/17/2023</u>	7	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 3 xx:xx am/pm local time
<u>07/28/2023</u>		One-on-One Alternative Technical Concept Discussion Meeting No. 3. 60 Minutes will be allotted for this Meeting. This ATC meeting is for continuing discussion on ATCs submitted prior to 06/05/2023 for which the Department requested additional information and were not approved or for new ATCs that are a direct response to an Addendum issued on or after 05/23/2023
	7	
<u>08/04/2023</u>		Deadline for submittal of Alternative Technical Concept Proposals for which the Department requested additional information and were not approved or for new ATCs that are a direct response to an Addendum issued on or after 05/23/2023. Deadline is 5:00 pm local time.
	7	
<u>08/16/2023</u>	14	DDE completes review of ATCs and notifies Design-Build Firms.
<u>08/28/2023</u>		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.
	14	
<u>09/04/2023</u>		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.
	7	
<u>09/06/2023</u>		Technical Proposals due in District Office by 5: 00 p.m. local time
	2	
<u>09/06/2023</u>		Deadline for Design-Build Firm to “opt out” of Technical Proposal Page Turn meeting.
	0	
<u>09/13/2023</u>		Technical Proposal Page Turn Meeting. Times will be assigned during the Pre-Proposal Meeting. 30 Minutes will be allotted for this Meeting.
	7	
<u>10/13/2023</u>		Question and Answer Written Responses. Deadline for the Department to provide a list of questions/clarifications for the Design-Build Firm to answer.
	27	
<u>10/20/2023</u>		Deadline for submittal of Question and Answer Written Responses to the Department’s questions/clarifications from the Design-Build Firm. xx:xx am/pm local time
	7	

<u>10/27/2023</u>	7	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. 5x:00 pm local time
<u>11/03/2023</u>	7	Deadline for submittal of Question and Answer Written Responses to the Department's follow up questions. xx:xx am/pm local time.
<u>11/03/2023</u>		Deadline for the Department to respond to Risk Register submittals xx:xx am/pm local time
<u>11/03/2023</u>	0	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.
<u>11/09/2023</u>	5	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.
<u>11/09/2023</u>	0	Deadline for the Design-Build Firm to submit a written statement per Section III. Threshold Requirements, F. Question and Answer Written Responses
<u>11/14/2023</u>	2	Price Proposals due in District Office by 2:30 pm local time
<u>11/14/2023</u>	0	Public announcing of Technical Scores and opening of Price Proposals at xx:xx am/pm local time in <i><location with address></i>
<u>11/21/2023</u>	7	Public Meeting Date of Selection Committee to determine intended Award
<u>11/21/2023</u>	0	Final Selection Posting Date
<u>12/05/2023</u>	14	FHWA Concurrence to Award
<u>12/11/2023</u>	6	Anticipated Award Date
<u>12/26/2023</u>	10	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, Critical Path Method (CPM) schedule, and 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, the Design and Construction Criteria, or any other document, the Department will issue a written addendum to this Request for Proposals 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. Proposers shall direct all questions to the Departments 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. 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. The use of the electronic screen will be permitted for display of the Technical Proposal, roll plots, and unmodified aerial or map of the project limits. 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. In the event the Design-Build Firm includes additional information in the written response which was not discussed as part of the Department's questions and is otherwise not included in the Technical Proposal, such additional information will not be considered by the Department during the evaluation of the Technical Proposal.

One (1) week prior to the Price Proposal due date 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 Design and Construction Criteria. 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 Design and Construction Criteria.
4. The Proposer who is selected for the Project will be required to fully comply with the Design and Construction Criteria for the price bid, regardless that the proposal may have been based on a variation from the Design and Construction Criteria.
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.
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 consultants, one is referred to as DBE Supportive Services provider (DBE/SS), to provide managerial and technical assistance to DBE's. This consultant works with potential DBEs, certified DBEs and prime contractors and consultants in an effort to increase DBE utilization. The other consultant is referred to as the Specialized Development Program provider (SDP). This consultant works with short-listed Design Build firms prior to award, on projects over \$50 million dollars in an effort to identify DBE's with capacity to perform on the Project. The successful Design-Build Firm should meet with the DBE DBE/SS or SDP to discuss the DBE's that are available to work on this Project. The current Providers for the

State of Florida can be found on 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.

All Contractors must enter their bid opportunity information in the Equal Opportunity Compliance (EOC) system within three business days of submission of the bid or proposal. The link to the EOC system is located in Chapter 1 Section 1.4, Directory of Compliance Websites & Addresses. Failure of bidders to enter Bid Opportunity List information is a violation of 49 C.F.R. 26.11 and grounds for compliance actions up to and including withholding of progress payments. Note: All registered primes submitting a bid will need to apply for EOC User ID and Password to gain access to the EOC system.

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 2023 edition of the MUTCD. 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
<https://www.fdot.gov/programmanagement/Implemented/SpecBooks/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 - 2023
<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 Project Development and Environment Manual, Parts 1 and 2
<http://www.fdot.gov/environment/pubs/pdeman/pdeman1.shtm>
32. Florida Department of Transportation Driveway Information Guide
<http://www.fdot.gov/planning/systems/programs/sm/accman/pdfs/driveway2008.pdf>
33. AASHTO Highway Safety Manual
<http://www.highwaysafetymanual.org/>
34. Florida Statutes
<http://www.leg.state.fl.us/Statutes/index.cfm?Mode=View%20Statutes&Submenu=1&Tab=statutes&CFID=14677574&CFTOKEN=80981948>
35. 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 alternative innovative technical solutions for the Department's approval which meet or exceed the goals of the project. Alternative Technical Concepts (ATC) may include but are not limited to: alternative geometric designs, foundation types, materials or alternative solutions. The process involves the submission of an 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. If a Design-Build Firm introduces any Category 2 structural elements into an ATC, those must be presented during the first ATC meeting, unless as a result of an addendum.

The following are not permitted to be changed by the Design-Build Firms except where specifically allowed for in the RFP:

- Deck girders with longitudinal deck joints for bridges with two or more spans;
- Full-depth precast deck panels for interstate bridges.
 - ATC proposals for full-depth precast deck panels on non-interstate bridges shall include detailed connection details, step-by-step construction sequences, grout/UHPC material requirements, connection mock-up requirements including mock-up acceptance criteria.
- Partial-depth precast deck panels;
- Reinforcing steels other than allowed by SDG 1.4.1.B except in drilled shafts and auger-cast piles. This is not intended to include non-corrosive materials that are allowed for by the RFP.
- Elimination of deck grooving;
- Replacing transverse bridge deck grooving with longitudinal bridge deck grooving;
- Elimination of deck planing;
- The elimination of cross frames in bays of steel bridges that are phase constructed;

- Partial depth deck removal of outside bays on steel bridge widenings in order to provide transverse reinforcing per SDG Table 4.2.5-1. Full depth removal is required to avoid unwanted deck stresses induced by the girder rebounding upward as it is unloaded;
- Non-framed, non-integral straddle pier caps that are not permanently anchored or stabilized on one end (e.g. pinned bolsters, sole plate and anchor bolts, pot or disc bearings etc.).
- full height MSE Wall panels (piano walls).

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 or modifications to Department approved Design Exceptions already provided in the Attachments.
- 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.

- **LIST ELEMENTS**
- Modifications to the horizontal and/or vertical geometry greater than 2 feet from the Concept Plans
- Modifications to the Typical Section Package directly related to the horizontal and/or vertical geometry

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. 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 (including social, cultural, natural and physical) which outline the requirements to address the PD&E Study re-evaluation and any effects on previously issued environmental permits, mitigation requirements or environmental commitments, 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.

6. Risk Register submittal with ATCs

Based on their review of the scope of work and concept plan, the Design-Build Firm may submit a list of risk register items at the One-on-One Alternative Technical Concept Discussion Meeting No. 1. Risk register items are project specific issues of concern the Design Build Firm would like the Department to review and discuss potential ways to mitigate those risks as the job moves forward. Risk Register submittals should include:

- a) Description: A description of the project specific risk item and conceptual drawings of the risk element if applicable;
- b) Impacts: A preliminary analysis of potential impacts of the risk element on design costs, construction costs, construction time impacts, environmental impacts, safety, and life-cycle Project and infrastructure costs, including impacts on the cost of repair, maintenance, and operation;

- c) Analysis: A detailed recommendation of measures available to the Department to mitigate the risk element to a level acceptable to the Design Build firm or eliminate the risk completely.;

7. Review and Approval of Risk Register Submittals

After receipt of all the Risk Register submittals from all Design Build firms pursuing the project, 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, to determine whether or not the Department will pursue risk mitigation efforts. If the DDE, or designee, determines that more information is required for the review of the submittals, questions should be prepared by the DDE, or designee, to request and receive responses from the Design-Build Firm.

Risk Register submittal reviews and Department initiated risk mitigation efforts, if any, will be completed and incorporated into the RFP via Addendum prior to the Price Proposal submittal deadline. Risk Register submittals are accepted by the Department at the Department's discretion and the Department reserves the right to reject and Risk Register submittal or undertake mitigation efforts as the result of a Risk Register submittal.

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. Design Build firm shall also be responsible for identifying adjacent structures susceptible to vibration and settlement and develop a settlement and vibration monitoring plan (SVMP).

D. Department Commitments:

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

1. PD&E commitments (see Attachment No. 19).
2. The Design-Build Firm shall provide to CFX the ITS design if within CFX right of way and design information for any sign panels to be installed on sign structures constructed by CFX.

PD&E Commitments and Status

Agency Coordination

The Orlando-Orange County Expressway Authority (OOCEA) owns and maintains the portion of SR 417 south of the project study area that ties into the Preferred Alternative. As part of this PD&E Study, OOCEA was contacted to

coordinate the transition between the two roadway segments. Based on this coordination, no improvements from University Boulevard north to the Seminole County line are planned at this time. The proposed improvements associated with the Seminole Expressway Widening PD&E Study are consistent with the proposed six-lane typical section south of University Boulevard. Florida's Turnpike Enterprise commits to additional coordination with OOCEA during the design phase to finalize the transition from the Seminole County line south to the connection with OOCEA's facility.

Seminole County is currently studying operational improvements along Aloma Avenue west of the SR 417 interchange. Coordination has occurred throughout the PD&E Study with Seminole County during the development of the Preferred Alternative. Florida's Turnpike Enterprise remains committed to coordinating with Seminole County during subsequent project development phases to address any proposed modifications to the Preferred Alternative based on the coordination.

Status Update: This commitment remains unchanged. OOCEA is now known as Central Florida Expressway Authority (CFX). CFX has widened SR 417 to six lanes plus auxiliary lanes from University Boulevard to the Seminole County line. An efficiency project has been constructed by the Florida's Turnpike Enterprise addressing some of the operational improvements studied by Seminole County. Additional operational improvements will be coordinated with Seminole County and FDOT District 5.

Noise Abatement

Florida's Turnpike Enterprise is committed to the construction of noise abatement measures at the identified reasonable and feasible noise sensitive areas contingent upon the following conditions:

1. A detailed final design noise analysis supports the need for abatement.
2. Reasonable cost analysis indicates that the economic cost of the barrier will not exceed published guidelines.
3. Community input regarding desires, types, heights and locations of barriers has been solicited by Florida's Turnpike Enterprise.
4. Local officials have addressed preferences regarding compatibility with adjacent land uses.
5. Safety and engineering aspects as related to the roadway user and the adjacent property owner have been reviewed.

A final decision on the location and height of the barrier will be determined upon gaining sufficient information during the final design, completion of the public involvement program, and the input of the benefited residents. A land use review will also be implemented during the design phase to identify noise sensitive sites that may have received a building permit subsequent to the noise study but prior to the date of public knowledge (i.e., date that the SEIR was signed). If the review identifies noise sensitive sites that have been permitted prior to the date of public knowledge, then those noise sensitive sites will be evaluated for traffic noise and abatement considerations.

Status Update: This commitment remains unchanged. The Noise Study Report includes the land use review and updated recommendations on noise abatement measures. A public information meeting was conducted on September 1, 2022 to seek input from benefited residents.

Roadway

Minimal right-of-way is required at the Aloma Avenue interchange for the reconstruction of the interchange and to support the traffic recommendations included in the Preferred Alternative along Aloma Avenue within the study area. Florida's Turnpike Enterprise is committed to evaluating opportunities to further minimize the property impacts during the design phase through the consideration of the following measures:

- Reducing the proposed right-of-way once detailed survey information is available to establish more precise construction limits;
- Reducing the lane width on Aloma Avenue from twelve feet to eleven feet; and
- Application for Design Variation to reduce border width.

Status Update: This commitment remains unchanged. No right of way is required at Aloma Avenue as part of this project.

Stormwater Management Systems

Modifications to the existing stormwater treatment facilities (reducing pond berms, adjusting pond grading, and/or providing gravity or retention walls) were recommended as part of this PD&E Study to provide the required stormwater treatment capacity for the proposed improvements while avoiding right-of-way acquisition. Florida's Turnpike Enterprise remains committed to minimizing impacts to property owners through the use of these recommendations to the extent feasible during the design phase.

Because only a portion of the proposed improvements to the Lake Jesup Bridge can be treated within existing facilities, Florida's Turnpike Enterprise evaluated alternative methods to provide treatment and/or compensation for the additional pavement proposed for the bridge widening. As part of this evaluation, coordination with the Florida Department of Environmental Protection (FDEP) and Friends of Lake Jesup has been ongoing in order to provide feasible, practical, affordable, and satisfactory solutions. Florida's Turnpike Enterprise remains committed to continued coordination throughout subsequent project development phases to ensure that adequate treatment and/or compensation for stormwater runoff is provided for the proposed improvements. The following methods will be evaluated further in the design phase of project development:

- Provide compensating treatment by providing treatment for existing untreated pavement within the Lake Jesup Basin;
- Explore non-traditional best management practices typically used to retrofit and provide treatment for roadway runoff to modify and treat the bridge deck runoff; and
- Provide funding for projects designed to improve the water quality of the Lake Jesup Basin through coordination with agencies such as FDEP, SJRWMD, FFWCC, Florida Department of Transportation (FDOT) District Five, and/or Seminole County.

Florida's Turnpike Enterprise will continue to coordinate with FDEP to address any additional drainage concerns or issues during the design phase of project development.

Status Update: This commitment remains unchanged. However, the segment of the highway being advanced at this time does not include the Lake Jesup aspect of this commitment.

Threatened and Endangered Species

Florida's Turnpike Enterprise remains committed to further coordination, as required, with FDEP, U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and Florida Fish and Wildlife Conservation Commission (FWC) to protect the existence of federally listed or state-listed endangered and threatened species or species of special concern and their habitat. Prior to commencement of construction of the proposed improvements, Florida's Turnpike Enterprise will resurvey the project area to identify the existence or the potential for occurrence of Federal and State-listed wildlife species. Particular focus will include the bald eagle, eastern indigo snake, wood storks, and the Florida manatee. If threatened, endangered species, or species of special concern are identified within the construction area during subsequent phases of project development, coordination will be initiated with the appropriate resource agencies to avoid or mitigate impacts.

The agency coordination may include one or more of the following items:

- Florida's Turnpike Enterprise will coordinate with FWC/USFWS prior to all construction related activities in or near the road right-of-way that are within 660 feet of a bald eagle nest. As required by the FWC/USFWS these construction related activities will be conducted, if at all possible, during the non-nesting season: the 21-week period beginning after May 15 and ending before October 1. If construction activities are necessary during the nesting season, then Florida's Turnpike Enterprise will conduct the standard biological monitoring and reporting protocol.
- Florida's Turnpike Enterprise will require the contractor to comply with the Standard Protection Measures for the Eastern Indigo Snake during construction of the project as promulgated by the USFWS.
- The construction contractor will be required to comply with the Standard Conditions for protection of manatees during construction of the portions of the project that cross waters that manatees may inhabit as promulgated by the USFWS.

- The construction contractor will be required to comply with the Standard Conditions for protection during construction of the project for osprey nests as promulgated by the FWC.

Status Update: This commitment remains unchanged.

Wetlands

The Preferred Alternative will impact approximately 5.52 acres of wetlands along the existing toe of slope and at cross drains, approximately 0.06 acres of wetlands at the Lake Jesup Bridge, approximately 9.62 acres of open water shading, and approximately 0.39 acres of marsh shading. Freshwater wetland impacts will be mitigated according to the 1990 Central Florida Beltway Mitigation Bill or Senate Bill 1986 pursuant to Section 338.250 and Section 373.4137 Florida Statutes (F.S.) to satisfy all mitigation requirements of Part VI, Chapter 373, F.S. and 33 United States Code (U.S.C.) Section 1344.

A Sovereign Submerged Lands easement was obtained for the original construction of the SR 417 Bridge over Lake Jesup. Florida's Turnpike Enterprise will coordinate with FDEP during subsequent project development phases to determine if a modification to the easement is required for widening the Lake Jesup Bridges.

Status Update: This commitment remains unchanged. However, the segment of the highway being advanced at this time does not include the Lake Jesup aspect of this commitment. This project will directly impact approximately 0.79 acres of wetlands requiring mitigation, with 1.69 acres of secondary wetland impacts. In addition, surface water impacts have been reduced to 10.91 acres, but will not require mitigation. Mitigation will take place pursuant to Section 373.4137, F.S. (aka, Senate Bill 1986).

E. Environmental Permits:

1. Storm Water and Surface Water:

Plans shall be prepared in accordance with Chapters 373 and 403 (F.S.) and Chapters 40 and 62 (F.A.C.).

2. Permits:

The Design-Build Firm shall be responsible for modifying the issued permits as necessary to accurately depict the final design. 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.

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. In addition to these Federal and State permitting requirements, any dredge and fill permitting required by local agencies shall be prepared in accordance with their specific 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 Office. 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 shall be responsible for any necessary permit 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 extensions, for review and approval by the Department prior to submittal to the agencies.

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 following documents : Environmental Resource Permit (ERP) No. 0274533-007-EM, Section 404 Permit No. SAJ-2009-03805, and pending ERP and State Section 404 permits. If any design modifications by the Design-Build Firm propose to increase the amount of wetland impacts such that 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(ies). 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.

The Department is also obtaining an Incidental Take Permit from the U.S. Fish and Wildlife Service (USFWS) concerning the Bald Eagle Nest SE095. The Design-Build Firm shall be responsible for complying with all permit conditions.

F. Railroad Coordination: N/A

G. Survey:

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.

The Design-Build Firm shall utilize the Department's existing Right of Way Maps and Surveys to establish the Right of Way lines as necessary to design and construct the Project.

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:

The current concepts do not include Category 2 bridge structures. However, if the Design-Build Team proposes bridge types/configurations that fall into Category 2, the Department will perform an Independent Department Review (IDR) of all Category 2 bridge structures. The Design Build Firm shall submit 60% structures plans for the Department to begin developing the modeling for the design review. The 60% Structures Plans shall contain sufficient information for each structure to begin developing the model for the Category 2 element(s) under consideration. For Category 2 bridges, each structure submission (60%,

90%, Final) can be broken down into “units” (defined as a stand-alone set of foundation, substructure and superstructure sheets) with each unit containing sufficient information to develop the models for the Category 2 element under consideration. The 60% Structures Plans submittal is not intended to be an ERC design review by the Department and formal review comments will not be provided at this stage. Lack of formal review comments at this stage should not be construed as acceptance or approval. When 90% plans are submitted, the Department will verify that the information contained in the 90% plans is consistent with the models that were developed based upon 60% plans and the model will be updated, as required, and the actual design review performed. The results of the review will be forwarded to the Design Build Firm for review and response. The Department will resolve all conflicts arising between the Design build Firm and Department’s IDR reviewer during the Independent Department Review process. The Department’s disposition of any such conflicts will be final.

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 Category 1 bridges are limited to foundation, substructure, and superstructure. For Category 2 structures, submittals for bridges are limited to "units" as previously described, or a complete bridge submittal.

For projects involving Category 2 structures, the Design-Build Firm shall submit a Category 2 Submittal Report summarizing the Category 2 elements included in the project as part of the Technical Proposal. Within fifteen (15) calendar days following Notice to Proceed, submit a prioritized preliminary submittal schedule for the plans including Category 2 structure elements. This submittal shall take place prior to the Independent Design Review Kickoff Meeting.

Category 1 and 2 bridge submittals shall contain the following:

- Plan sheets for the submittal under review developed to the specified level of detail (i.e. 90% plans, Final plans, etc.) as outlined in the FDM. Note for the 60% submittal on Category 2 Structures, provide the relevant sheets in accordance with the "60% Structures Plans" column of FDM Table 121.14.1. For the 90% and Final Submittals on Category 2 Structures, combine the required sheets for Foundation, Substructure, and Superstructure listed in FDM Table 121.14.3 to form the "unit" submittal.
- 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".

All comments shall be resolved to the Department's satisfaction prior to making the next phase submittal. 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.

60% Phase Submittal (Required for Category 2 structures)

- **1 copy of 11" x 17" Structures plans meeting the requirements of FDM Tables 121.14.1 and 121.14.2 for 60% Structures Plans**
 - 1 copy of draft geotechnical report
 - 1 copy of draft Bridge Hydraulic Report
 - 1 copy of design documentation (calculations not required)
 - 1 copy of draft Technical Special Provisions
 - 1 copy of Roadway Project Layout and TTCP plans
 - Any other information required for the Department to perform an Independent Department Review as discussed in the Independent Design Review Kickoff Meeting

90% Phase Submittal

- 1 copy of plans (all required components)
- 1 copy of signed and sealed geotechnical report
- 1 copy of signed and sealed geotechnical report
- 1 copy of Settlement and Vibration Monitoring Plan (SVMP) for Department acceptance and update throughout the construction period
- 1 copy of signed and sealed Bridge Hydraulic Report
- 1 copy of design documentation including calculations to design WWVDS, number of incoming detectors, and incoming detector type, and location of underground conduits.
- 1 copy of Technical Special Provisions
- Google Earth ready KMZ file will be developed and submitted for all plan or roll plot

submits to the Department. The file will have both existing and proposed information for each discipline. See Attachment No. 29 for the KMZ Standard to be used and Reference documents for Concept Plans.

- 1 copy of Landscape Opportunity Plans
- 1 copy of Bridge Load Rating Calculations
- 1 copy of Completed Bridge Load Rating Summary Detail Sheet
- 1 copy of Load Rating Summary Form
- 1 copy of all design changes introduced since the 60% plan submittal that affect the modeling or component design of various bridge components

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 plans (all required documents)
- 1 copy of signed and sealed plans
- 1 set of signed and sealed design documentation
- 1 copy of signed and sealed design documentation
- 1 copy of Settlement and Vibration Monitoring Plan (SVMP)
- 1 copy of Landscape Opportunity Plans
- 1 set of final documentation
- 1 signed and sealed copy of the Bridge Load Rating Summary Detail Sheet
- 1 signed and sealed copy of the Load Rating Summary Form
- 1 signed and sealed Construction Specifications Package or Supplemental Specifications Package
- 1 copy of signed and sealed copy of Construction Specifications Package or Supplemental Specifications Package
- 1 of electronic copy of Technical Special Provisions in .pdf format

Google Earth ready KMZ file will be developed and submitted for all plan or roll plot submits to the Department. The file will have both existing and proposed information for each discipline. See Attachment No. 29 for the KMZ Standard to be used and Reference documents for Concept Plans.

- 1 copy of all major design changes introduced since the 90% plan submittal that affect the modeling or component design of various bridge components
- 1 copy of all the Independent Department Review comments and the EOR's response

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) and/or ProjectSolve comments 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. No permanent structures work, including fabrication of bridge members, may begin without signed and sealed plans or shop drawings (whichever controls the design and details utilized to construct/erect the specific structural component) that have been Released for 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 or Supplemental Specifications Package; obtain regulatory permits as required for the specific activity; obtain a PD&E Study re-evaluation when 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 Departments 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
- ___ sets of 11 "X 17" copies of the signed and sealed As-Built plans, drawings and Certified Surveys (including as-built channel survey)
- ___ copy of Landscape Opportunity Plans
- 1 signed and sealed copy of the Bridge Load Rating Summary Form and Calculations based on as-built conditions
- ___ sets of final documentation (if different from final component submittal)
- ___ sets of survey information, including electronic files and field books
- Deliver the final CADD.zip in accordance with the CADD Manual
- 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.

•

J. Contract Duration:

The Department has established a Contract Duration of _2,151___ 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 with the exception of Category 2 structures submittals. The review of Category 2 structures submittals requires Central Office involvement and the Schedule shall allow for up to 30 calendar days (excluding weekends and Department observed Holidays) for these reviews. The Design-Build Firm shall allow at least 60 calendar days between the 60% phase submittal and the 90% phase submittal for any Category 2 structures component to allow for the initial development of the IDR. IDR durations are subject to change based on the Design Build Firm's Technical Proposal submittal. Upon review of each Firm's Technical Proposal, new IDR review times may be provided to each Firm as part of the Question and Answer Written response session. For the review of all additional Category 2 structures resubmittals the Schedule shall allow for up to twenty (20) calendar days (excluding weekends and Department observed Holidays) for these reviews. Category 2 structure resubmittals must include all required submittal documentation per Section V.I (Submittals). The Independent Department Review of Category 2 structures will be performed concurrently, and of similar duration, with the normal Department review of submittals. Review will not begin until submittals are deemed complete by the Department.

The Department will perform the review of Foundation Construction submittals in accordance with Section 455.

The following Special Events have been identified in accordance with Specification 8-6.4:

In addition to non-working holidays identified in FDOT Specifications Subarticle 8-6.4, the following special event days are included for this Proposal:

- 1) Friday, Saturday & Sunday of Martin Luther King Jr. Day weekend
- 2) Before/After Independence Day July-3 & July-5
- 3) Friday Before Memorial Day
- 4) Friday, Saturday & Sunday of Easter weekend.

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

- Anticipated Award Date
- Kickoff meeting with the Department's Independent Review consultant
- Design Submittals
- Completed Category 2 bridge design for Independent Department review
- Shop Drawing Submittals
- Other Contractor-Initiated Submittals including Request for Information (RFI)'s, Request for Modification (RFM)'s, Request for Correction (RFC)'s, and Non-Conformance Report (NCR)'s
- Design Survey
- Submittal Reviews by the Department and FHWA
- Design Review / Acceptance Milestones
- Materials Quality Tracking
- Geotechnical Investigation

- Start of Construction
- Clearing and Grubbing
- Construction Mobilization
- Embankment/Excavation
- PD&E Study re-evaluation documentation
- Environment Permit Submittals
- Environmental Permit Acquisition
- Foundation Design (60%, 90%, Final,)
- Foundation Construction
- Substructure Design (60%, 90%, Final, RFC)
- Substructure Construction
- Superstructure Design (60%, 90%, Final, RFC)
- 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
- Pre-Installation Tests (PIT)
- Stand Alone Tests
- Wrong Way Driving Test
- 30-day Operational Test
- Holidays and Special Events (shown as non-work days)
- 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
- PD&E Study re-evaluation meeting
- Scoping Meetings
- System Integration 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.

System Integration Meetings will be held on mutually agreeable dates.

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.

2. Community Awareness:

The Design-Build Firm will cooperate with the PIC in development and delivery of a project Community Awareness Program.

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
- Public Hearings (based on the current guidance on the FDOT Public Involvement website: <https://www.fdot.gov/planning/policy/publicinvolvement/index>)

The Design-Build Firm shall include attendance at two meetings per month for the term of the contract to support the public involvement program.

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, 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 current.

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, and FHWA, as necessary, 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.

The Contractor shall notify the Turnpike Maintenance Office within two weeks of completion of this work. At that time, a final inspection will be scheduled prior to final acceptance of the work, with participation from the Turnpike, and the Contractor. The Contractor shall notify call sunshine and ALL other utilities prior to commencement of construction. The Contractor shall be responsible for designating, and physically exposing as necessary, all Turnpike-owned underground facilities (electric, ITS, telephone, water, sewer, etc.) The Contractor shall be responsible for the protection of all FDOT (Turnpike) facilities and structures within the area of this work, including, but not limited to existing drainage structures, concrete ditch protection, signs, delineators, and fencing. Any damage to Turnpike facilities or structures shall be reported to the District Maintenance office within 24 hours and repaired or replaced to the satisfaction of the FDOT Maintenance (Turnpike), and in compliance with current FDOT standards and specifications

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 Bentley's OpenRoads Designer ORD and/or 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 [Current Supported Versions \(fdot.gov\)](https://www.fdot.gov/Current-Supported-Versions). 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 as defined in the Department's CADD Manual 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 Bentley's OpenRoads Designer ORD and/or Autodesk's AutoCAD Civil 3D design files format.

As part of the As-Built Set deliverables, field conditions shall be incorporated into Bentley's OpenRoads Designer ORD and/or Autodesk's AutoCAD Civil 3D- 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.

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:

<< Do not list features for which the Standard Specifications require a warranty bond >>

- Roadway features
- Roadway drainage systems,
- Bearings (<< Delete if Section 475 is included >>)
- Expansion joints (<< Delete if Section 475 is included >>)
- Approach slabs
- Superstructure
- Substructure
- Structure drainage systems (<< Delete if Section 475 is included >>)
- Paint systems (<< Delete if Section 475 is included >>)
- Concrete defects
- Structural steel defects
- Post-tensioning systems
- 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.

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. Adjoining construction projects include, but are not limited to those listed in the following table:

Project Number	Project Description	Contact	Design Status	Construction Status
County Project No. PS 2552-19/GCM CIP No. 01785146	Slavia Road Improvements from Red Bug Lake Road to SR 426 (Aloma Ave.)	Rebecca Plumlee, PE	Underway	TBD
FPID 446491-1-38-01 CIP No. 01785145	SR 434 Roundabouts from West of Jetta Point to South of Artesia Street	Christopher Coleman, PE	Underway	TBD
FPID 445221-1-52-01	SR 426 from SR 417 to Eyrie Drive	Samuel Jumber, PE	Underway	March 2023

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.

- Utility Owner SSNOCWTA has stated some of their facilities are vibration sensitive. See reference files for preliminary utility coordination.

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:

The Design-Build Firm shall be solely responsible for all geotechnical aspects of the Project. The design and construction phase C services are described in the following sections.

General Conditions-Design:

The Design-Build Firm shall be responsible for identifying and performing any geotechnical field-testing laboratory testing, analysis and foundation design required to meet the needs of the Project. The geotechnical field investigation and laboratory testing shall be conducted in accordance with the Governing Regulations, except as noted herein.

If, during the design phase, a boring's location is determined to pose a significant risk to the traveling public or project personnel, the boring can be performed during the construction phase to lower the risk. However, all of the borings for the foundation unit must be completed and the geotechnical report accepted by FDOT prior to its installation.

For purposes of determining the frequency of roadway borings in accordance with SFH 3.2.1.b, the soil conditions shall be considered variable.

Soil classification testing for structure borings shall be performed at a minimum frequency of 1 test per 25 feet of boring and shall include, as a minimum, percent fines content for non-cohesive soil; percent fines content, organic content and natural moisture content for organic soil; and percent fines content, liquid limit, plastic limit and natural moisture content for cohesive soil. Soil consolidation and shear strength testing shall be performed for all cohesive and/or organic layers that require consolidation settlement calculations and stability analysis, respectively. Soil boring and sampling plans shall be presented to the District Geotechnical Engineer, or his representative, to verify compliance prior to conducting geotechnical field activities.

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:

- Aloma Avenue Bridge: Station 294+00 to Station 298+00 (BL of Survey), (minimum 2 tests)
- South Cross Seminole Trail Bridge: Station 312+00 to Station 317+00 (BL of Survey), (minimum 2 tests)
- Slavia Road Bridge: Station 430+00 to Station 434+00 (BL of Survey),(minimum 2 tests)
- Red Bug Lake Road Bridge: Station 463+00 to Station 467+00 (BL of Survey), (minimum 2 tests)
- Lightwood Knox Canal Bridge: Station 484+00 to Station 488+00 (BL of Survey), (minimum 2 tests)
- Winter Springs Blvd Bridge: Station 505+00 to Station 513+00 (BL of Survey), (minimum 4 tests)
- North Seminole Trail Bridge: Station 559+00 to Station 563+00 (BL of Survey),(minimum 2 tests)
- SR 434 Bridge: Station 590+00 to Station 594+00 (BL of Survey), (minimum 2 tests)

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

1. Selection of pile type and size.
2. Selection of test pile lengths, locations and quantity of test piles.
3. Selection of pile testing methods.
4. Determining the frequency of such testing unless otherwise stated herein.
5. 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.
6. Preparing and submitting a Pile Installation Plan for the Department's acceptance.
7. Selection of production pile lengths.
8. Development of the driving criteria.
9. Driving piles to the required capacity and minimum penetration depth.
10. Inspecting and Recording the pile driving information. Provide a pile inspection device that displays and stores electronically for every hammer blow along with a timestamp: stroke for open-ended diesel hammers and blows per foot and blows per minute for all hammers. The device must auto-generate the Department's Pile Driving Record form and export the non-editable electronic data in a format compatible with the Pile Driving Record form. Use this device during the inspection of test piles and production piles.
11. Submitting Foundation Certification Packages.

12. 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:

- Aloma Avenue Bridge: Station 294+00 to Station 298+00 (BL of Survey), (minimum 2 tests)
- South Cross Seminole Trail Bridge: Station 312+00 to Station 317+00 (BL of Survey), (minimum 2 tests)
- Slavia Road Bridge: Station 430+00 to Station 434+00 (BL of Survey),(minimum 2 tests)
- Red Bug Lake Road Bridge: Station 463+00 to Station 467+00 (BL of Survey), (minimum 2 tests)
- Lightwood Knox Canal Bridge: Station 484+00 to Station 488+00 (BL of Survey), (minimum 2 tests)
- Winter Springs Blvd Bridge: Station 505+00 to Station 513+00 (BL of Survey), (minimum 4 tests)
- North Seminole Trail Bridge: Station 559+00 to Station 563+00 (BL of Survey),(minimum 2 tests)
- SR 434 Bridge: Station 590+00 to Station 594+00 (BL of Survey), (minimum 2 tests)

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. 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.
3. Determining the locations of the load test shafts and the types of tests that will be performed.
 4. 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.
 5. Preparing and submitting a Drilled Shaft Installation Plan for the Department's acceptance.
 6. Constructing the method shaft (test hole) and load test shafts successfully and conducting thermal integrity tests on these shafts.
 7. Providing all personnel and equipment to perform a load test program on the load test shafts.
 8. Determining the production shaft lengths.
 9. Documenting and providing a report that includes all load test shaft data, analysis, and recommendations to the Department.
 10. Constructing all drilled shafts to the required tip elevation and socket requirement in accordance with the specifications.
 11. Inspecting and documenting the construction of all drilled shafts in accordance with the specifications.
 12. Performing Non-Destructive Drilled Shaft Integrity Testing in accordance with 455-17.6.
 13. Repairing all detected defects and conducting post repair integrity testing using 3D tomographic imaging and gamma-gamma density logging.
 14. Submitting Foundation Certification Packages in accordance with the specifications.
 15. 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 designing the spread footing.
2. 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.
3. Inspecting and documenting the spread footing construction.
4. Submitting Foundation Certification Packages in accordance with the specifications.
5. Providing safe access, and cooperating with the Department in verification of the spread footing, both during construction and after submittal of the certification package.
6. Design-Build Firm shall also be responsible for performing excavation of the subsurface material necessary for construction of the spread footings and developing a dewatering plan if needed.

Auger Cast Piles for Structures other than Bridges

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

1. Evaluating geotechnical conditions and designing the foundations, including diameter and lengths.
2. Constructing all auger cast piles to the required tip elevation and socket requirements, in accordance with the specifications.
3. Preparing and submitting an Auger Cast Pile Installation Plan for the Department's acceptance.
4. Inspecting and documenting the auger cast pile installation.
5. Submitting Foundation Certification Packages in accordance with the specifications.
6. 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.

Settlement Prone Locations

In locations prone to settlement, the Design-Build Firm shall establish soil improvement methods and establish construction sequences for roadways, walls, and bridges to satisfy the following requirements:

1. Soil improvements and construction sequences to densify and strengthen weak settlement prone subsoil at new bridges or at widened portions of existing bridges sufficient to limit movement within the bridge approach slab to no more than one (1) inch, relative to the bridge, for a period of 50 years from the time of bridge widening or for the design life of new bridges.
2. Design and construction techniques to limit differential settlement between the existing and proposed roadway to less than 0.5 inches.
3. The Design-Build Firm shall be responsible for providing instrumentation and/or monitoring to confirm that the settlement criteria is not exceeded during the contract period.

The existing roadway in the vicinity of existing Culvert No. 77Q005 is prone to settlement. The Design-Build Firm shall implement design and construction techniques to limit additional long-term settlement of the existing roadway between Sta. 489+00 and Sta. 492+00 to a maximum of 1-inch (measured from the beginning of the construction period for the proposed improvements) and to limit differential settlement between the existing and proposed roadway to less than 0.5 inches.

The existing roadway in the vicinity of a previously performed soil surcharge between approximate Station 399+00 to 405+00 is prone to settlement. The Design- Build Firm shall implement design and construction techniques to limit additional long-term settlement of the existing roadway between Sta. 399+00 and Sta. 405+00 to a maximum of 1-inch (measured from the beginning of the construction period for the proposed improvements) and to limit differential settlement between the existing and proposed roadway to less than 0.5 inches.

Artesian Conditions

Artesian conditions with approximate head elevation of up to +40 feet NAVD were encountered during the geotechnical field investigation. The Design-Build Firm shall be aware that the US Geological Survey map “Potentiometric Surface of the Upper Floridan Aquifer in the St. Johns River Water Management District and Vicinity” shows the potentiometric surface of the Floridan Aquifer to be approximately +35 feet NGVD for the project area. Since ground surface elevations range from between approximately +25 and +40 feet NAVD in the project vicinity, artesian conditions may be encountered during construction and the Design-Build Firm shall anticipate and be ready to handle artesian flows.

~~At the Winter Springs Boulevard bridge site, preforming and/or predrilling shall be limited to an elevation that will not penetrate the artesian zone. However, in no case shall preforming or predrilling be performed below an elevation of 40 feet NAVD at this bridge site.~~

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.

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. Contact information for Utility Agency/Owners (UAO's) is included in the Advance Utility Coordination information provided in the Reference Documents. The information provided is for informational purposes only. It is the responsibility of the Design-Build Firm to confirm the UAO contact information.
3. Reviewing proposed utility permit applications, utility or otherwise, and recommending approval / disapproval of permit application based on the compatibility of the permit as related to the Design-Build Firm's plans. Recommendation for approval or disapproval to be completed within one week of receipt of the permit application by the Design-Build Firm.
4. Scheduling and conducting utility meetings, preparing and distributing minutes of all utility meetings, and ensuring expedient follow-up on all unresolved issues.
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 Work Schedules.
8. Assist in resolving utility conflicts.
9. Obtaining and maintaining all appropriate "Sunshine 811" tickets as they apply to utility relocation work.
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.
12. Coordination with the Department on any issues that arise concerning reimbursement of utility work costs between the Department and the utility.
13. Verifying the electrical and communications requirements for toll facilities provided in the GTR.
14. Prepare utility certifications or statements for all Federal-Aid construction projects per 23 CFR 635.309(p)(1)(v).

The following Utility Agency/Owners (UAO'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 UAO identified herein along with an identification of whether the UAO or the Design-Build Firm will be responsible for performing the utility work. Although advanced utility coordination was performed, the Department makes no representation that the 'contemplated' table of utility work below is all encompassing and complete.

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

<u>UAO</u>	<u>Utility Relocation Type</u>	<u>Within Easement</u>	<u>By Permit</u>
AT&T Distribution	UAO Performing utility work	No	Yes
Centurylink	UAO Performing utility work	No	Yes
Charter Communications	UAO Performing utility work	No	Yes
City of Winter Springs	UAO Performing utility work	No	Yes
Duke Energy Distribution	UAO Performing utility work	No	Yes
Duke Energy Transmission	UAO Performing utility work	No	Yes
Verizon, fka, MCI	UAO Performing utility work	No	Yes
Seminole County Utilities	UAO Performing utility work	Yes/No	Yes
SSNOCWTA	UAO Performing utility work	Yes/No	Yes
TECO Peoples Gas	UAO Performing utility work	No	Yes

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

<u>UAO</u>	<u>Contact Information</u>	
AT&T Distribution	Shaun Purvis 5100 Steyr St. Orlando FL, 32810	SP761P@att.com
Centurylink	Eric Walls Terra Technologies	ewalls@terratechllc.net relocations@lumen.com
Charter Communications	Lazlo Wagner 3767 All American Blvd. Orlando, FL 32810	Lazlo.Wagner@charter.com
City Of Oviedo	Gloria Berges-RiCharde 400 Alexandra Blvd. Oviedo, FL 32765	Gberges@cityofoviedo.net
City Of Winter Park	Jason Riegler 401 Park Avenue South Winter Park, FL 32789-4386	jriegler@cityofwinterpark.org
City Of Winter Springs	Chris Mullis 1126 East SR 434 Winter Springs, FL 32708	cmullis@winterspringsfl.org
Crown Castle Ng	Chris Perkins 4511 North Himes Ave. Suite 210	christopher.perkins@crowncastle.com northfloridaplansreview@crowncastle.com

	Tampa, FL 33614	com
Duke Energy Distribution	Bret M. Gordon 2801 West SR 426, Oviedo, FL 32765	Bret.Gordon@duke-energy.com DEFDistributiongov@duke-energy.com
Duke Energy Transmission	Scott Vanvelzor 2189 Cleveland Street Suite 202 Clearwater, FL 33765	SVanvelzor@pike.com
Verizon, fka MCI	Timothy Cole 69 W. Concord St. Orlando, FL 32810	Timcole2@aol.com ASG.Investigationsteam@ASGInc.us
Seminole County Environmental Services	Paul Zimmerman 500 W Lake Mary Blvd. Sanford, FL 32773	pzimmerman@seminolecountyfl.gov
Smart City Telecom	David Cawley P.O. Box 22555 3100 Bonnet Creek Road Lake Buena Vista, FL 32830-2255	dcawley@smartcity.com
SSNOCWTA	Stefano Ceriana	sceriana@chacompanies.com
Summit Broadband	Michele Daniel 24017 Production Circle Bonita Springs, FL 34135	mdaniel@summit-broadband.com
TECO Peoples Gas	Shawn Winsor 600 West Robinson St. Orlando, FL 32801	SWinsor@tecoenergy.com
Uniti Fiber	James Mosley 107 St Francis Street Suite 1800 Mobile, AL 36602	james.mosely@uniti.com
Zayo Group	Bruce Herrington 1805 29th Street Suite 2050 Boulder, CO 80301	Bruce.Herrington@Cobbfendley.com

Advanced Utility Coordination:

The Department has conducted limited advanced utility coordination with the above UAOs. Information pertaining to this coordination is included in the Reference Documents.

The Design-Build Firm shall make every attempt in their design to avoid existing utilities and minimize impacts. During the design phase, Level A locates shall be completed for all existing, proposed new, and adjusted utilities at potential conflicts points in accordance with the FDOT FDM, Part 2, Chapter 221. 90% and Final plans shall be provided to the Department showing existing, adjusted, and proposed utility locations (based on Level A locates) and their relationship to the proposed construction.

For any 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 agreement, utility work schedule and permit, and invoice the Department directly.

Location of Existing Utilities:

The Design-Build Firm shall be responsible for determining the locations of UA/O facilities, CFX and Department owned facilities within the Project by Subsurface Utility Engineering during the design phase. Although the concept plans may depict certain Utility locations, actual locations are uncertain. The Design-Build Firm shall coordinate with each UA/O prior to any and all work impacting utilities. During the construction phase, Level A locates may be required and shall be performed by the Design-Build Firm to resolve conflicts.

Emergency Action Plan:

Within 30 days of contract execution, the Design-Build Firm shall coordinate with the Department and the UA/Os to develop and submit an action plan that addresses the steps and processes to follow in the advent of unforeseen events such as: encountering of unknown utilities; disruption of utility service; or the UA/O does not perform.

Permits:

The Design-Build Firm shall coordinate utility permit submittals with the UA/Os. For FDOT Utility permit submittals, the Design-Build Firm's Utility Coordinator Manager will coordinate with each UA/O to provide timely submittals for relocation permits into the online One-Stop Permitting (OSP) system. The Design-Build Firm's Utility Coordinator Manager shall submit a written assessment of the UA/O's permit request confirming that each UA/O permit submittal meets the requirements of the proposed design, or that modifications to the permit submittal are required. This assessment is to be sent to the UA/O for inclusion with the UA/O's permit package into the OSP system. Permit approval will not be provided until this confirmation is input into OSP.

The Design-Build Firm's Utility Coordinator Manager shall also provide written assessment to any non-FDOT facility owner regarding utility permit submittals.

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, 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. The Design-Build Firm shall obtain an agreement from the utility owner being impacted. 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. 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 or be liable for any time delays caused by a change in scope of the impact to a utility.

The relocation agreements, plans, and permit application are to be forwarded to the Department for review by the District Utility Office (DUO) and the Department's Construction Manager. The DUO and Department's Construction Manager only review the documents and are not to sign them. 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.

Duke Energy Transmission

Duke Energy Transmission (DET) will relocate their existing overhead electric lines at each side of Aloma Avenue. DET will develop final engineering plans for the effort to be provided to the Design-Build Firm as an Attachment to this RFP. DET's final engineering plans, which are based on the Concept Plans, shall be incorporated in the Design Build Contract. Any Design-Build firm that submits a design which requires DET to modify its Final Engineering Plans does so at its own risk and the Design-Build Firm's sole expense.

South Seminole & North Orange County Water Transmission Authority (SSNOCTWA)

SSNOCWTA's facilities within their easement along Aloma Ave shall not be impacted. The location of their easement will be included as a reference to this RFP. Any Design-Build firm that submits a design which requires SSNOCWTA to adjust or relocate their facilities within their easement does so at its own risk and the Design-Build Firm's sole expense.

Duke Energy Distribution

The Design-Build Firm shall set up their own electrical accounts, and all recurring monthly charges from Duke Energy Distribution during the 'burn-in' period of all new systems to be constructed (ITS, Lighting, etc.) shall be paid by the Design-Build Firm until the Final Acceptance by the Department, at which point the accounts will be transferred to the Department.

The Design-Build Firms is also responsible for establishing power service for signals, lighting, ITS and other roadway applications owned by the Department. All connection fees, required equipment, appurtenances, and costs for obtaining utility service drops to these facilities are to be paid by the Contractor including any Contribution-in-Aid-of-Construction (CIAC) costs requested by an UAO. CIAC costs to be reimbursed by the Department through the Do Not Bid Pay Item 639-8.

Removal of Department Owned Facilities:

The Design-Build Firm will be responsible for the removal of Department owned facilities, including service connections, and responsible to pay for any costs associated with having the abandoned portion of utility owned utilities removed.

None of the utility components (neither Department-owned nor utility-owned), such as poles, wiring, cables, conduits, pipes, duct banks, vaults, manholes, transformers, lift stations, water or sewer pipes, and storm drains shall be abandoned in place, except for empty utility components that are installed under an operational road as defined herein. Utility components that are installed under an operational road shall

have the contents removed from them and be grouted and capped at both ends using new materials listed or labeled for this purpose. The abandoned portion of the utility components shall not extend more than 4 feet past the paved edge of the road.

An operational road shall be defined as any active travel lane or ramp. Driveways and parking lots shall not be considered active roads.

The Design-Build Firm's EOR shall coordinate directly with the appropriate utility company(ies) to determine which portions of their utility(ies) laterals located outside of the Department's right of way will need to be removed as part of the demolition process.

Continuity and integrity of roadway lighting circuits, fiber optic cabling, and communications cabling must be maintained at all times. Refer to other sections of this RFP for specific requirements regarding these facilities.

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.

The following supplemental canal hazard criteria shall apply to FDM Section 215.3.2:

A water body is defined as a natural or manmade feature, such as a pond, lake, ditch or canal that has a depth of water of 3 feet or more for an extended period of time (24 hours or more), as measured from the seasonal high water level or control elevation, to the water feature's bottom elevation. Provide shielding for all water bodies within the interchange areas.

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 and Drainage Analysis Report 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 criteria on controlling design elements outlined in FDM 122.2.1 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 900 for Roadway Design sheets, elements and completion level required for each plans 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:

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

The following documents are Attachments provided by the Department and shall be used by the Design-Build Firm in the development of the pavement design:

- Attachment No. xx FDOT AADT Traffic Data and Equivalent Single Axle Loading (ESAL) values
- Attachment No. xx Resilient Modulus Recommendations and LBR
- Attachment No. xx GTR (Section 13)
- Reference Document No. xx FDOT Pavement Survey and Evaluation Report

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 drains, retention/detention facilities, interchange drainage and water management, other drainage systems and elements of systems as required for a complete analysis. Full coordination with all permitting agencies, the district Environmental Management section and Drainage Design section will be required from the outset. Full documentation of all meetings and decisions are to be submitted to the District Drainage Design section. These activities and submittals shall be coordinated through the Department's Design and Construction 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 Design-Build Firm shall obtain approval of the stormwater treatment/attenuation design,

The objective is to obtain approved stormwater treatment/attenuation design. This service shall include, but is not limited to the following.

- a) Rocking of the shoulder cross-slope to achieve positive drainage and minimum longitudinal grade is not allowed. Minimum longitudinal grade shall be 0.5% in areas of reconstruction.
- b) The Design-Build Firm shall prepare drainage plans in accordance with Department criteria. Both open (e.g. ditches) and closed (e.g. storm drains) drainage systems are anticipated. There are cross drains and storm drains on the Project that may require extensions. All stormwater management facilities shall be designed and constructed to accommodate the proposed typical section.
- c) The Department has applied for an Environmental Resource Permit (ERP) and State Section 404 permit from the Florida Department of Environmental Protection (FDEP) and both are pending. The permits obtained by the Department will reflect the designs as shown in the Conceptual Design Plans under "Reference Documents". When issued, the permit(s) and agency approved plans will be distributed as an Addendum to this RFP. The Design-Build Firm shall be responsible for modifying the issued permits as necessary to accurately depict the final design. It should be noted that the permits reflect the regulations and conditions present at their date of issuance and the Design-Build Firm is responsible for accommodating any changes thereto. Joint-use ponds or other stormwater management alternatives can be considered. However, the Design-Build Firm shall be responsible for the design, permitting, and construction of the alternative design(s) and all costs associated with these activities shall be borne solely by the Design-Build Firm. The Design-Build Firm shall include all necessary activities in their schedule and shall bear all risk of delays, regardless of cause or source. The Design-Build Firm shall design appropriate treatment and attenuation in accordance with FDEP and Department criteria for each existing basin outfall.
- d) The Design-Build Firm shall ensure that any proposed noise walls do not impact offsite or onsite drainage. All existing drainage flows are to be maintained at the noise wall locations. Noise wall openings (Index No. 5204) for conveyance of the offsite drainage may require a special design if the invert of the opening provided by the standard noise wall is not at the elevation which meets

the drainage requirements. If the noise walls impact any permitted storm drain facilities, it shall be the responsibility of the Design-Build Firm to obtain any permit modifications required.

- e) If deck drains are required on proposed bridges, they shall be closed systems with no direct discharge to highway or rail facilities below the bridge. All deck drain dimensions and pipe sizes shall be in accordance with Department criteria.
- f) The use of a trapezoidal berm style weir must be approved by FTE. The D-B Firm shall submit for FTE approval a structural design to support the loading of maintenance vehicles without failure for the life of the weir and a geotechnical design to prevent seepage through the pond or swale berm that may result in failure of the berm. All trapezoidal berm style weirs shall be designed and constructed to be traversable.
- g) Trench drains shall not be used for the final constructed condition unless approved by the District Drainage Engineer. Trench drains shall only be allowed for temporary drainage.
- h) Starting water surface elevations for pond routings shall begin at the control elevation unless the water management district requires otherwise.
- i) French drain will not be allowed.
- j) The Design-Build firm is to verify that there are no adverse drainage impacts to adjacent parcels.
- k) Resilient connectors will be required within walled embankments or connections to wall zone pipes.
- l) The bridge over the Lightwood Knox Canal will be widened to accommodate the roadway widening. A BHR will be required at this bridge for the 90% submittal. Scour must be addressed in the BHR.
- m) Placing storm drain pipes through MSE walls shall not be used when other options are available.
- n) Where a storm drain pipe needs to go through an MSE wall, the pipe external to the wall should not be attached to the pipe internal to the wall until the MSE embankment is at full depth.
- o) The Design-Build firm shall design the open conveyance system along the east side of SR 417 from Station 418+00 to Slavia Road to address an identified off-site flooding complaint. Department will review and must approve the proposed design solution to alleviate the SR 417 contribution to the off-site flooding.
- p) Storm drain desilting limits for project are from the Begin Project Station of 270+37.23 to the End Project Station 620+26.66. The existing and proposed storm drainage systems/cross drains are to be desilted upon completion of construction.

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.

The Design-Build Firm shall verify that all existing cross drains and storm drains that are to remain have adequate hydraulic capacity and design life. Culvert Material Applications and Design Service Life in the FDOT Drainage Manual. Flood flow requirements will be determined in accordance with the Department's procedures. If any of these existing cross drains or storm drains are found to be hydraulically inadequate or found to have insufficient design life, they must be replaced or supplemented in accordance with the drainage requirements of this RFP. If any existing cross drains or storm drains require repair but otherwise would have sufficient remaining design life, repairs shall be made in accordance with the requirements of this RFP. See Attachment No. 28 for required pipe repairs and replacements.

The Design-Build Firm shall permit any revisions in the floodplain areas with modification of the Environmental Permit with the Florida Department of Environmental Protection.

Prior to proceeding with the Drainage Design, the Design-Build Firm shall meet with the District Drainage Engineer. 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.

1. Roadway Widening

- a. Geometric vertical profiles shall be developed for all widening sections of SR 417 to correct existing cross-slope deficiencies and areas of settlement. Maintain minimum milling and overlay thicknesses of existing pavement per approved pavement designs.

2. Hydroplaning

- a. Curve C-8 shall be superelevated at 3% to mitigate hydroplaning risk.

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. If hard copies of documentation are submitted, Computer output forms and other oversized sheets shall be folded to a standard size 8½" x 11". The data shall be in a hard-back folder for submittal to the Department. 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 horizontal alignments
3. Vertical geometry calculations
4. Documentation of decisions reached resulting from meetings, telephone conversations or site visits

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 and hydraulic recommendations and reports required for bridge design are submitted with the 90% bridge 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. Load ratings have been computed in accordance with Section 7.1.1 of the Structures Design Guidelines using as-built plans for each of the existing bridges proposed to be widened. These load rating calculations have been provided as a Reference Document for use by the Design-Build Firm.
- 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.
- f. Wall heights, from the top of leveling pad to the top of wall coping, greater than 40' shall not be permitted, unless site specific locations have been approved by the Department through the ATC process.
- g. The Design-Build Firm shall refer to the Bridge Geotechnical Data Reports included in the Reference Documents for the environmental classifications for each bridge site. The Design-Build Firm may establish their own environmental classifications for each bridge site, but only if the Design-Build Firm's geotechnical data supports a more stringent classification.
- h. The Design-Build Firm shall coordinate with Turnpike Maintenance during final design to obtain Structure Numbers for all miscellaneous structures.

2. Criteria

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

Bridges

- a. All plans and designs are to be prepared in accordance with the Governing Regulations of Section V. A.
- b. Bridge Widening: The widened portions of existing bridges shall match the existing superstructure and substructure in type, span arrangement, and materials as outlined in the Structures Manual. For example, pile bents will not be allowed adjacent to a framed pier substructure or a steel girder adjacent to a prestressed beam. Substructures shall be generally in-line and on the same skew as the adjacent existing foundation, except in cases where minor variations in the skew angle are required to accommodate the alignment of the roadway or channel below or to satisfy the skew limitations defined in the RFP. Piles or drilled shafts are not required to match those of the existing foundations.

- c. New widened sections of bridge decks are not required to meet profilograph requirements, but shall be grooved in accordance with the FDOT Specifications to match the finish of the existing bridge deck surface.
- d. If bridge replacements are proposed in lieu of widening of an existing bridge, full horizontal and vertical clearances shall be provided. Horizontal clearance shall not require the use of roadside protection. These horizontal and vertical clearance requirements also apply to all bridge replacements shown in the concept plans and all new bridges shown in the concept plans.
- e. The maximum allowable skew angle at all bridge supports shall be 50° except for the bridges crossing the South Cross Seminole Trail, which shall have a maximum allowable skew angle of 60° at all bridge supports.
- f. Girder depth is to be held constant for all fascia girders for each bridge (i.e., no steps).
- g. For each bridge, all beams are to be constructed of a single material (i.e. all concrete beams or all structural steel). A combination of steel spans and concrete spans is not allowed.
- h. Open expansion joints are not allowed.
- i. New expansion joints for bridge widenings shall be Poured Joint with Backer Rod (Standard Plans Index No. 458-100).
- j. All permanent bridge drainage piping and/or utilities shall be hidden from view. Scuppers (open deck drains) are not permitted to discharge storm water off of the bridge in the permanent condition.
- k. Conduits for lighting or utilities shall not be mounted to exposed faces of bridge elements or MSE walls.
- l. The LRFD Operational Importance Factor shall be 1.0 for all bridges.
- m. For steel superstructures, the fascia girders shall not have intermediate transverse stiffeners on the outside face of the girder.
- n. The Department has performed a contamination impact evaluation on the existing bridges within the limits of the Project. \A compilation of the asbestos and metal-based coating survey reports is provided as a Reference Document for use by the Design-Build Firm.
- o. Lightweight concrete will not be permitted for any structural applications.
- p. Minor widenings shall comply with the minimum bearing support dimensions required by LRFD 4.7.4.4.

- q. Field welding is not allowed with the exception of welding required for steel piles performed in accordance with the FDOT Specifications.
- r. The following minimum clearances apply to all bridges crossing South Cross-Seminole Trail:

Minimum Clearances – Bridges over South Cross-Seminole Trail		
Lateral Offset (Measured From Centerline Trail)	15'-0" LT	15'-0" RT
Vertical Clearance (Measured Over Trail)	12'-0"	

- s. The use of culverts of any type is not permitted for any bridges over the South Cross-Seminole Trail.
- t. To address the Vehicular Collision Force requirements of SDG 2.6, the following minimum requirements apply (see Reference No. 26):
 - i. Bridge No. 775502 (Oviedo Mall Blvd. over SR 417): Pier Protection Barrier meeting the requirements of Standard Plans Index No. 521-002 is required for all existing piers within 30 feet of the edge of traveled way. Strengthening/retrofitting the existing piers is not permitted.
 - ii. Bridge Nos. 770062 & 770063 (SR 417 over Red Bug Lake Rd.): Leave the existing barrier wall in place at the existing intermediate piers; No further action required
 - iii. Bridge Nos. 770067 & 770068 (SR 417 over Winter Springs Blvd.): No action required
- u. At locations where existing bridges to be widened have battered piles at the end bents, the proposed end bent extensions for the bridge widening shall provide a means to resist the lateral loads in a manner similar to the existing system (i.e. "widening in-kind"). Examples of such systems include proposed battered piles, plumb piles with soil reinforcement straps in select fill, or deadman tiebacks. An end bent widening solely with plumb piles and no other means of lateral load restraint is not acceptable.
- v. Several of the existing bridges proposed to be widened have existing piles that were installed as part of the original construction to accommodate future widening. If these piles are incorporated into the final design of the widened structures, the Design-Build Firm shall be responsible for exposing the piles, surveying their location, and verifying the integrity of the piles to confirm that they are suitable for use.
- w. Either squared beam ends (with or without diaphragms) or skewed beam ends with diaphragms may be used at the discretion of the Design-Build

Firm provided the use of diaphragms satisfies all pertinent criteria in the Governing Regulations.

Walls

- x. Anticipated retaining wall locations are provided in the Project Concept Plans, which are provided as a Reference Document with this RFP. The Design-Build Firm shall be responsible for identifying, designing and detailing all retaining walls within the project limits. Calculations and plans shall be signed and sealed by a Professional Engineer licensed in the State of Florida.
- y. 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.
- z. For proposed permanent retaining walls, partial height walls such as perched walls or toe-walls, as defined in the FDOT Structures Manual, shall not be permitted.
- aa. All permanent sheet pile walls, soldier pile walls, and specialty walls shall have a concrete facing, cap and coping. If wales are used they shall be covered with concrete.
- bb. Noise walls shall be designed and constructed so as to satisfy the SR 417 Noise Wall Study provided as an Attachment to this RFP and any additional requirements resulting from changes to the conceptual design initiated by the Design-Build Firm. It should be noted that noise wall lengths listed in the Noise Wall Study for traffic barrier mounted noise walls do not include the length of required end tapers.
- cc. Wrap-around MSE walls shall be used for all new walls at bridge end bent locations (including in the median area between bridges where there is a minimum clear width of 12-ft. between bridges).

Sign Structures

- dd. All sign structures that are removed as part of this Project shall become the property of the Design-Build Firm and be disposed of properly, unless otherwise directed in the RFP.

Signal Structures

- ee. All mast arms shall be designed in accordance with the Seminole County Standard Mast Arm Drawings. Pole Type 4 shall be provided and all mast arms shall be painted black in accordance with the Seminole County Mast Arm Standard Drawings.

Culverts

- ff. All culverts shall meet clear zone requirements where sufficient right of way exists. The Department will not approve the use of permanent roadside barriers to protect culverts within the clear zone where the right of way is sufficient to extend the culvert.
- gg. If abandoned in place, existing Culvert No. 77Q005 shall be completely filled with a lightweight material. Additional settlement at the culvert location shall be limited to satisfy the settlement criteria in Section VI.C under Settlement Prone Locations.

Surface Finish Aesthetic Details

- hh. Concrete Surface Finish requirements are shown in the Project Aesthetics Requirements Attachment.

Existing Bridge Repairs

- ii. Required existing bridge repairs are included in the Existing Bridge Repair List Attachment.
 - i. For all existing strip seal expansion joints to be replaced, the existing joint edge rails shall be removed and replaced with polymer nosings.
- jj. Ensure all bridges and retaining walls are free of garbage/debris, graffiti, and nuisance vegetation at the completion of construction activity.

3. Inventory for Welding Inspection

Prepare a List of Components of all steel structures that need welding inspection to be included in the Inventory for Welding Inspection. For example – steel bridges, cantilever sign structures with span lengths greater than 41 feet, span sign structures, bridge-mounted sign structures, any structures with field welds, etc. A Sample Inventory for Welding Inspection has been included as a Reference Document with this RFP.

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 and Attachment 41 Turnpike Shop Drawing Review Process. 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, but the Department reserves the right to perform a more detailed review, as necessary. 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.
6. For non-cash operating toll facilities follow GTR TTCP requirements.
7. For toll facilities with cash operations, follow GTR TTCP requirements and coordinate TTCP with toll plaza manager.

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 FDM 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. The Department shall be provided the FDEP coverage letter prior to beginning construction activities.

N. Transportation Management Plan:

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

1. Traffic Control Analysis:

The Design-Build Firm shall design a safe and effective Temporary Traffic Control Plan to move vehicular and pedestrian traffic during all phases of construction. Topics to be addressed shall include, but are not limited to, construction phasing, utility relocation, drainage structures, signalization, ditches, front slopes, back slopes, drop offs within clear zone, temporary roadway lighting, traffic monitoring sites, and guide signs. Special consideration shall be given to the drainage system when developing the construction phases. Positive drainage must be maintained at all times.

The Temporary Traffic Control Plan shall address how to assist with maintenance of traffic throughout the duration of the contract.

Temporary traffic control requirements pertaining to tolling facilities are provided in the FTE GTR.

The Design-Build Firm shall coordinate all temporary traffic control with any and all adjoining construction projects.

The Temporary Traffic Control Plan shall be prepared by a certified designer who has completed the

Department's Advanced Maintenance of Traffic training course, and in accordance with the latest edition of the Department's Standard Plans and the FDOT Design Manual (FDM).

This Project is considered a Significant Project, which requires a Transportation Management Plan (TMP). The TMP will consist of three components:

- (1) Temporary Traffic Control (TTC) plan component;
- (2) Transportation Operations Plan (TO) component; and
- (3) Public Information Plan (PI) component.

Additional information can be found in Chapter 240 of the 2022 FDM.

2. Hurricane Readiness Plan

Refer to the Florida's Turnpike Enterprise Field Operations Guide (See Attachment No. 15) for requirements of the Design-Build Firm as related to the implementation of Hurricane Operations on the FTE System.

3. Temporary Traffic Control Plans:

a. General

1. The Design-Build Firm shall utilize Index Series 102-600 of the Department's Standard Plans. Should these standards be inadequate, a detailed Temporary Traffic Control Plan shall be developed. The Design-Build Firm shall prepare standard-format (11"x17") and/or large-format (36"x72") plan sheets, notes, and details to include the following: standard-format general notes and construction sequence sheet(s), and large-format traffic control plan sheet(s). Traffic control plan sheet(s) shall include project typical sections, typical details, and critical cross sections.
2. The Design-Build Firm shall prepare additional plan sheets such as detours, profiles, drainage structures, temporary roadway lighting, retaining wall details, and sheet piling as necessary for proper construction and implementation of the Temporary Traffic Control Plan.
3. The Design-Build Firm shall design a safe and effective TCP to ensure that all vehicular traffic can be accommodated through the construction zones with minimum delay and exposure to unsafe conditions during all phases of construction. The work shall include, but not be limited to, overall phase planning, temporary static signs and portable changeable message signs (PCMS), utility relocation, temporary lighting, temporary drainage structures, ditches, front slopes, back slopes, drop offs within clear zone, traffic monitoring sites, and provide an open area for the staging of disabled vehicles.
4. Special consideration shall be given for temporary drainage for each construction phase. Positive drainage must be maintained at all times. Gutter spread calculations at the temporary barrier walls shall be performed. Temporary barrier walls adjacent to an active travel lane shall be placed so that the resulting gutter spread due to the temporary barrier wall does not encroach beyond the

temporary pavement stripe. Bridge deck spread must be evaluated for all bridges including MOT phases. Bridge Development Reports must include preliminary spread calculations for the bridge deck in order to determine whether additional drainage conveyance is required. All temporary drainage items must be shown in the plans and quantified.

5. The Temporary Traffic Control Plan shall include:
 - a. Accommodation for traffic impacts associated with local events,
 - b. Accommodation for traffic impacts due to the Turnpike Holiday Calendar (see RFP Attachment),
 - c. A written plan detailing each activity involved in a lane closure, including back-up plans for activities critical to re-opening the lanes to traffic,
 - d. Locations and details for work zone access.
6. The Design-Build Firm shall maintain a median barrier (permanent or temporary barrier) on the mainline during all phases of construction.
7. No U-turns will be permitted on the SR 417 Mainline in accordance with FTE's U-Turn Policy.
8. Critical sections shall be incorporated into the TTCP Phasing and shall be provided as a deliverable by the Design-Build firm as part of their Technical Proposal and ATC process.
9. The use of crossovers to place opposing SR 417 Mainline traffic on the same side of the roadway is not preferred and shall only be permitted for the purpose of superelevation correction on curves CLSR417-3 & CLSR417-4.
10. A hydroplaning analysis shall be performed on all temporary diversions to determine the need for temporary open graded friction course.
11. Emergency pull off areas shall be incorporated into the TTCP Phasing where a minimum shoulder width of 8' is not attained and shall be provided as a deliverable by the Design-Build firm as part of their Technical Proposal and ATC process. Design of these areas shall be in accordance with the FDM.
12. Minimum lane and shoulder widths used for temporary traffic control shall comply with the requirements of the FDM and Standard Plans Index 102-600 for Interstates.
13. When temporary concrete barrier wall is required on cross streets and on ramp terminals within 100 feet of an intersection, low profile barrier wall shall be used. Low profile barrier wall shall be in accordance with Standard Plans Index 102-120.
14. The Design-Build Firm shall use only paint for temporary pavement markings on asphalt pavement. Low profile reflective pavement markers shall not be allowed.
15. Overlays or milling with overlays will be the only acceptable method(s) to achieve a positive means for the obliteration of existing pavement markings in areas such as long-term crossovers, and diversions that provide a rough riding pavement.
16. High pressure water blasting is the only acceptable method for the removal of conflicting pavement

markings in those areas not mentioned above. When removing pavement messages via water blasting, the entire area within the pavement message, including the interior of the message that is not painted or does not have thermoplastic, shall be water blasted so that the message outline is completely obliterated and drivers are not able to read or see the scar outlining the former message.

17. Throughout the milling operations, the Design-Build Firm shall use a self-contained vacuum type mobile broom for cleanup of milled dust material.
18. The final pavement lift of any temporary paving operation, including any temporary overbuilding of existing shoulders, shall be constructed with a paving machine to insure adequate rideability.
19. The Design-Build Firm shall ensure that street name signs are visible in order to facilitate emergency vehicle traffic.
20. All commercial material for temporary driveway maintenance shall be milled asphalt.
21. The Design-Build Firm shall provide a dedicated crew for the installation, maintenance and removal of the temporary traffic control devices. This crew shall consist of at least three members of the work force whose sole responsibility is the installation, maintenance and removal of the temporary traffic control devices. This crew shall have immediate access to a work vehicle to aid in these activities.
22. The Design-Build Firm shall ensure that all logo signs are displayed to the traveling public at all times during the project. The Design-Build Firm shall coordinate any relocation of the signs with Florida Logo, Inc. at 813-686-5261.
23. The Design-Build Firm shall operate and maintain existing signals for the entire project duration or until the signal is no longer necessary and removed from service. New signals shall be operated and maintained commencing with the need for the new signal and continuing through to the project completion. If temporary signals are utilized for traffic control or if existing signals are modified for traffic control, they shall be fully actuated. Pre-timed signals will not be allowed.
24. The Design-Build Firm shall contact the FTE Turkey Lake TMC at (407) 264-3363 at least 45 days in advance of any necessary ITS removal or relocation within the project limits.
25. The Design-Build Firm shall notify a property owner 96 hours prior to clearing and grubbing any existing privately constructed sprinkler systems, signs or landscaping within the project limits.
26. The Design-Build Firm shall maintain turn lane storage lengths during MOT equivalent to existing conditions.
27. For ramps, existing acceleration and deceleration lengths shall not be reduced during times when lane closures are restricted.
28. Travel lanes comprising a multi-lane section in one direction shall not be split from each other to facilitate maintenance of traffic.
29. The Design-Build Firm shall design and construct temporary pavements based upon the anticipated

traffic expected during the life of the temporary diversion.

30. The Design-Build Firm shall maintain existing pedestrian access on all sidewalks and at all intersections. Pedestrian sidewalks and paths shall be maintained and continue to conform to ADA requirements. When the Design-Build Firm allows work areas to encroach upon a sidewalk or crosswalk area, and a minimum clear width of 4-ft. cannot be maintained for pedestrian use, an alternative accessible pedestrian route shall be provided.

31. The Design-Build Firm shall coordinate with LYNX to maintain bus service throughout all phases of construction.

32. Temporary Lighting Notes and Criteria

- a. The Design-Build Firm shall maintain lighting throughout all phases of construction either by maintaining the existing lighting system, providing temporary lighting, or activating the proposed lighting system.
- b. The design of temporary lighting must meet the criteria shown in FDM 231.2. Temporary lighting design may require Department review for the purposes of opening a project specific pay item. Photometrics, details, quantities, and layout in the roadway temporary traffic control plan for specific construction phases will be required. See FDOT Basis of Estimates for additional information regarding temporary lighting requirements.
- c. Provide a temporary lighting system on existing illuminated sections of the Project at all times. The Design-Build Firm shall provide a temporary lighting design signed and sealed by a professional engineer registered in the state of Florida. The Design-Build Firm shall provide voltage drop calculations, conductor and conduit sizes, load center drawings and wiring diagrams for temporary power service.
- d. All structure calculations and drawings must be signed and sealed by a professional engineer registered in the state of Florida.
- e. Furnish, install, maintain and remove the temporary lighting system in accordance with the National Electric Code and National Electric Safety Code requirements.
- f. Provide overhead wiring wherever possible, however, the use of underground conduit and conductors shall be provided where overhead wiring would interfere with construction.
- g. Provide all maintenance of temporary lighting equipment, including existing load centers, once they are connected to the temporary lighting system.
- h. Coordinate all temporary lighting work with the Traffic Control Plans for the appropriate sequence of construction.
- i. The overhead electrical supply conductors shall be a minimum of 15 feet above the highest construction grade level during all phases of construction.

- j. The nominal height of the temporary light poles shall not exceed the nominal height of the existing light poles.
- k. Wherever possible, the Design-Build Firm shall utilize existing circuits from the existing service points to power the temporary lighting system.
- l. Install temporary or proposed lighting fixtures and modifications to existing systems during daylight hours. Those poles replaced or installed by the Design-Build Firm shall be operational at night. The Design-Build Contractor may elect to remove/install poles at night, but shall provide sufficient lighting per the Temporary Lighting Criteria (provided above) to compensate for the down poles.
- m. All components of the temporary lighting systems that are not part of the proposed lighting system shall be removed when no longer needed and disposed of by the Design-Build Firm.
- n. Prior to any equipment order, submit for approval equipment specification or design data for all material proposed for the temporary lighting design. These must specifically include:
 - Luminaire photometrics, including electronic IES photometric files
 - Pole strength calculations
 - Pole frangibility test
 - Temporary service points
 - Calculations and drawings for temporary barrier wall light poles and mountings
 - Load center electrical equipment, including wiring schematics
 - Design calculations, including voltage drops and load analysis

1. Traffic Control Restrictions:

The Design-Build Firm shall maintain the existing number of lanes on all roadways at all times, except for during permissible lane closures and detours. A lane may only be closed during active work periods. All lane closures, including ramp closures, must be reported to the local emergency agencies, the media and the District PIO. 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. Refer to FTE's Lane Closure Policy documents and the FDM for more information.

- **SR 417**
 - NO LANE CLOSURES ALLOWED from 7:00 a.m. to 10:30 p.m.
 - NO LANE CLOSURES ALLOWED from 7:00 a.m. Friday to 10:30 p.m. Sunday
- **SR 426 (Aloma Avenue)**
 - NO LANE CLOSURES ALLOWED from 6:30 a.m. to 9:30 p.m.
 - NO LANE CLOSURES ALLOWED from 6:30 a.m. Friday to 9:30 p.m. Sunday

- NO DETOURS ALLOWED from 5:00 a.m. to 11:30 p.m.
- NO DETOURS ALLOWED from 5:00 a.m. Friday to 11:30 p.m. Sunday
- **Slavia Road**
 - NO DETOURS ALLOWED from 5:00 a.m. to 11:30 p.m.
 - NO DETOURS ALLOWED from 5:00 a.m. Friday to 11:30 p.m. Sunday
- **Red Bug Lake Road**
 - NO SINGLE LANE CLOSURES ALLOWED from 8:00 a.m. to 8:00 p.m.
 - NO SINGLE LANE CLOSURES ALLOWED from 8:00 a.m. Friday to 8:00 p.m. Sunday
 - NO DOUBLE LANE CLOSURES ALLOWED from 7:00 a.m. to 9:30 p.m.
 - NO DOUBLE LANE CLOSURES ALLOWED from 7:00 a.m. Friday to 9:30 p.m. Sunday
 - NO DETOURS ALLOWED from 5:00 a.m. to 10:30 p.m.
 - NO DETOURS ALLOWED from 5:00 a.m. Friday to 10:30 p.m. Sunday
- **Winter Springs Boulevard**
 - NO LANE CLOSURES ALLOWED from 6:00 a.m. to 10:00 p.m.
 - NO LANE CLOSURES ALLOWED from 6:00 a.m. Friday to 10:00 p.m. Sunday
 - NO DETOURS ALLOWED from 5:00 a.m. to 11:30 p.m.
 - NO DETOURS ALLOWED from 5:00 a.m. Friday to 11:30 p.m. Sunday
- **SR 434**
 - NO LANE CLOSURES ALLOWED 7:00 a.m. to 8:00 p.m.
 - NO LANE CLOSURES ALLOWED from 7:00 a.m. Friday to 8:00 p.m. Sunday
 - NO DETOURS ALLOWED from 5:00 a.m. to 11:30 p.m.
 - NO DETOURS ALLOWED from 5:00 a.m. Friday to 11:30 p.m.
- **RAMP DETOURS**
 - NO DETOURS ALLOWED from 5:00 a.m. to 11:30 p.m.
 - NO DETOURS ALLOWED from 5:00 a.m. Friday to 11:30 p.m. Sunday

The following additional traffic control restrictions apply:

1. A reduction in the posted speed limits in work zones shall not be allowed.
2. There shall be no detours except as contemplated by this RFP.
3. All lane closures proposed during construction of this project shall require onsite Traffic Control Officer(s) from Florida Highway Patrol (FHP) Troop K personnel.
4. For all roadways, at least one lane of traffic in each direction shall remain open at all times except during allowable detour timeframes.
5. Lane closures will not be permitted on multi-lane ramps.
6. Long-term ramp closures (defined as duration longer than nightly) are subject to Department approval during the ATC process and are otherwise prohibited.

7. Closures for South Cross Seminole Trail and North Cross Seminole Trail shall only be allowed to accommodate overhead work such as beam setting activities, stay-in-place form installation, deck overhang falsework installation, and deck pours. No closures shall be allowed from 4:30 a.m. to 9:00 p.m.
8. Pile driving (including sheet pile) and guardrail post driving shall not be allowed between 8:00 p.m. and 6:00 a.m.
9. Detours for SR 426 (Aloma Avenue), Slavia Road, Red Bug Lake Road, Winter Springs Boulevard, and SR 434 will only be allowed to accommodate overhead work such as beam setting activities, stay-in-place form installation, deck overhang falsework installation, and deck pours.
10. Detours for all SR 417 Ramps will only be allowed to accommodate temporary pavement construction and milling and resurfacing operations within the influence area of the ramp toll plazas
11. Approved detour routes are provided in the Lane Closure Analysis included as a Reference Document. The Design-Build Firm shall obtain approval for any alternate or additional detour routes from FTE and the maintaining agency of all roads in the detour. The request shall include the closure date(s) and duration(s) along with backup information specifying the type of construction work to be done during the closure period. The primary point of contact for each maintaining agency is provided below:
 - i. Seminole County – Charlie Wetzel, Traffic Engineer, (407)-656-5677 and Mike Blinn, Traffic Engineer, (407) 665-5699
 - ii. City of Oviedo – Ben Williams, Engineering Specialist/Inspector, (407) 971-5643
 - iii. City of Winter Springs – Christopher Schmidt, Community Development Director, (407) 327-7597
 - iv. FDOT, District 5 – Jim Wood, District Traffic Operations Engineer, (386)-943-5309
 - v. Orange County – Follow the procedure outlined on the Orange County website using the following hyperlink [Maintenance of Traffic \(MOT\) \(ocfl.net\)](https://www.ocfl.net/PermitsLicenses/Permits/MaintenanceofTraffic(MOT).aspx#.Y9gIaXbMKUk) for any detours utilizing Orange County roads. [https://www.ocfl.net/PermitsLicenses/Permits/MaintenanceofTraffic\(MOT\).aspx#.Y9gIaXbMKUk](https://www.ocfl.net/PermitsLicenses/Permits/MaintenanceofTraffic(MOT).aspx#.Y9gIaXbMKUk)
12. The Design-Build Firm shall perform any additional analysis and justification as needed for minimizing traffic disruption.
13. Only approved TTCP General Notes included in provided as an attachment to this RFP shall be incorporated into the TTCP.
14. The Design-Build Firm shall notify Seminole County Traffic Engineering (Charlie Wetzel) and Seminole County Engineering (Mike Blinn) at least two weeks in advance of any lane closure or detour on Seminole County maintained roadways or trails. The Design-Build Firm shall also coordinate with Seminole County Traffic Engineering to request signal timing adjustments for

nighttime detours.

15. The Design-Build Firm shall coordinate with the Central Florida Expressway Authority (CFX) and obtain approval for lane closures and detours needed on the SR 417 Mainline in Orange County.
16. All weekday traffic shifts and temporary detours shall require a minimum of fourteen (14) days of advance PCMS notifications to the users. The use of alternate routes via PCMS shall be required. The exact locations and messages of the PCMS shall be shown on the TTCP and shall be coordinated with the Department's Construction Project Manager.

NO LANE CLOSURES are allowed on the Project during the times shown below so as to minimize potential impacts to the following events:

1. The Design-Build Firm shall allow for 10 working days (24 hours periods) per year for Special Events, annually, that will be determined during the construction phase of the Project.
2. Working day before Martin Luther King, Jr. Day
3. Working day before President's Day
4. Day before and day after Independence Day (July 3 & July 5)
5. Friday before Easter
6. Friday before Memorial Day
7. Additional times as indicated on the Turnpike Holiday Calendar

The current Turnpike Holiday Calendar for years 2022 through 2024 is provided as an attachment to this RFP.

The Turnpike Holiday Calendar for subsequent years will be provided to the Design-Build Firm by Turnpike Traffic Operations at a later date during the construction period.

Refer to the Reference Documents for the detailed Lane Closure analysis for the Seminole Expressway.

O. Environmental Services/Permits/Mitigation:

The Design-Build Firm will be responsible for preparing designs and proposing construction methods that are permissible. 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 Permit Office.

If the Department has determined that suitable gopher tortoise habitat exists in the project area, then 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 or District Environmental Permit Office, as appropriate. 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.

In addition to the requirements in Section V.E.2., the following Project specific Environmental Services/Permits have been identified as specific requirements for this project:

1. Wetlands and Mitigation
2. Wildlife and Habitat
3. Contaminated Materials

Bald Eagle Nests

Eagle Nest SE004: The project area occurs within the 660-foot buffer of Nest SE004. The Design-Build Firm must locate the nest and reestablish the protective buffers for the nest. The Design-Build Firm must limit all construction activities within the 660-foot buffer to outside of the breeding season (October 1 to

May 15) to avoid disturbance to the nest. Or the Design-Build Firm may be allowed to perform construction activities within the protective buffer during the breeding season with monitoring of the nest in accordance with the USFWS Bald Eagle Monitoring Guidelines (September 2007). The Design-Build Firm shall be responsible for performing all monitoring activities and documenting any abnormal behavior displayed by the adult eagles or eaglets because of project activities in an effort to minimize disturbance during construction. Construction activities within the protective buffer must cease immediately upon documentation of abnormal behavior.

Eagle Nest SE095: The project area occurs within the 330-foot buffer of Nest SE095. An Incidental Take Permit is being obtained by the Department which will eliminate any unwarranted consequences to the nest that may arise as a result of disturbance from the project's construction. The Design-Build Firm shall be responsible for complying with all permit conditions.

Unless specifically identified otherwise, the design and construction of any alternate design approach identified within this RFP is not a requirement of this RFP. The Design-Build Firm is not responsible for any permitting or commenting agency coordination or other impacts to the permit processes that would be associated with any alternate design approach, unless the Design-Build Firm chooses to include the alternate design approach in its Proposal.

P. Signing and Pavement Marking Plans:

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

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

Pavement Markings:

The Design-Build Firm shall provide Thermoplastic Pavement markings on all asphalt surface for the limits of the project. Profiled Thermoplastic edge lines (audible edge lines) shall be provided for the ramps. All remaining existing pavement markings not impacted by construction within the project limit for the side streets shall be restriped by using Refurbishment Thermoplastic if approved by the district maintenance engineer for final condition. Complete removal of the existing pavement markings and pavement messages before placing new stripes and markings will be required if Refurbishment Thermoplastic cannot be applied without exceeding the maximum thickness of 0.150 inch.

The Design-Build Firm shall provide Green-Colored pavement markings on the bike lanes crossing vehicular turn lanes in the interchange areas upon approval of the District Design Engineer through Project Suite's Design Approval request process.

Special emphasis crosswalks shall be provided at all signalized intersections. Crosswalks shall be 10-feet wide and strips shall be positioned so they are parallel to the wheel path.

Signing:

All interchange guide signs (1 mile, ½ mile, and exit signs) on SR 417 shall be mounted overhead.

The Design-Build Firm shall reference the Conceptual Signing Plan and use it as a guide as to where signs are to be placed and as a guide as to messages to be placed on each sign panels. All guide signs shall be reviewed and approved by the Department.

All existing signs within the Project limits shall be removed unless identified in the conceptual Signing Plan. All existing signs within the Project limits that are to remain must be shown as such in the plans.

The DBF shall provide all signs and pavement markings for Wrong Way Vehicle Detection System in accordance with FDOT FDM 230.4.

The Design-Build Firm shall select any applicable method approved by the Department to mount single post signs on the proposed noise walls where applicable.

All sign installations on side streets shall be coordinated with the appropriate maintaining agencies. These other maintaining agencies include FDOT District 5 and Seminole County.

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. Mounting types for various signs shall not be changed by the Design-Build Firm (i.e. if the proposed or existing sign is shown as overhead it shall be overhead and not changed to ground mount) unless approved by the Department. Any existing sign structure to be removed shall not be relocated and reused, unless approved by the Department.

If overhead sign truss depths greater than 8-ft. (96") are required to meet design criteria, accommodations shall be provided to facilitate future climbing inspections for these structures.

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. Existing single and multi-post sign assemblies impacted by construction shall be entirely replaced and upgraded to meet current standards. Existing sign assemblies not impacted by construction can remain.

Q. **Lighting Plans:**

The Design-Build Firm shall provide a conventional lighting design and a Lighting Design Analysis Report (LDAR), and prepare lighting plans in accordance with Department criteria and criteria contained in the FDM latest version for the project limits. No high mast lighting will be allowed.. The analysis shall include daytime analysis study to determine if daytime lighting is required. Temporary lighting will also be required at the interchanges. The lighting design software files, AGI32, Visual or other lighting software, are to be included with all submittals.

The Design-Build Firm shall develop and submit for approval, a Load Center/Circuit/Pole Number

identification plan that is compatible with the Pole Identification Tag Detail contained in the FTE Lighting Guide Drawings existing lighting systems maintenance identification scheme. This plan shall be submitted to the maintaining agency for approval.

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 criteria.
2. Identify an existing load center capable of feeding the existing and proposed lighting while meeting all current codes and all applicable 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 Maintaining Agency as to whether these features will become the property of Design-Build Firm or salvaged, transported, and delivered to the Maintaining Agency for future use. Existing conduits are not to be abandoned except by approval of the engineer.

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: conductors, conduit, grounding, enclosures, voltages, mounting heights, pullboxes, etc. This review also includes circuits outside the limits of lighting construction that originate 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.

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 have been coordinated with and provided by Duke Energy Distribution. The preliminary electrical service locations are shown in the Lighting Concept Plans. Each service point shall be separately metered.

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.

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 provide ITS devices that meet the requirements of the National Transportation Communications for ITS Protocol (NTCIP) versions supported by the Florida Turnpike SunGuide software currently in use or as directed by the Department.

Ensure that all proposed signal and ITS devices are on the FDOT's Approved Product List (APL) or Innovative Products List (IPL) and are compatible with all Florida Turnpike SunGuide software and the Florida Turnpike Enterprise Traffic Management Centers (FTE TMC) located at the Turkey Lake Service Plaza and the Pompano Beach Operations Center. All signal devices are compatible with FDOT District 5 RTMC and Seminole County Traffic Management Center Signal Software.

Provide grounding, lightning protection, surge suppression, and commercial power as required for all signal and ITS devices and cabinets in accordance with FDOT Standard Specifications, FDOT Standard Plans, FDM, National Electrical Code (NEC) and National Electrical Safety Code (NESC) guidelines.

Provide test results for all ITS devices, communications cabling and infrastructure, and communications network equipment signed by Design-Build Firm EOR.

Determine the locations of the ITS devices to meet the requirements of this RFP. The Concept Plans show the locations of ITS devices, including WWVDS.

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. The 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, MVDS attachment, MVDS operation/layout
 - WWVDS structure, WWVDS attachment, WWVDS operation/layout
 - Fiber optic splice and conduit diagrams
 - Power Service Distribution
 - Power Design Analysis Report (PDAR). PDAR is to be submitted with each phase submittal. Refer to project MTR for information to be provided in the PDAR.
 - Wiring and connection details
 - Conduit, pull box, and vault installation
 - Roadway Cross sections for ITS cabinets and ITS Poles
 - Grounding System location and installation details
 - Communication Hub and Field Cabinets
 - System-level block diagrams
 - Device-level block diagrams
 - 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.
- ITS field cabinet details
- Maintenance of Communications (MOC) Plan

The Design-Build firm is responsible for ensuring project compliance with the Regional ITS Architecture and FDOT ITS Topic 750-040-003-c, Systems Engineering and ITS Architecture Procedure as applicable. This includes, but is not limited to, the development or update of a concept of operations and the development or update of a system engineering master plan (SEMP) as well as coordination of document review.

The Design-Build Firm shall detail existing Signalization and Intelligent Transportation System equipment and report which devices will be removed, replaced, or impacted by project work. Existing conduits are not to be abandoned except by approval of the engineer.

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 ITS system components shall be new unless otherwise identified for relocation. The design of the new system shall integrate with the existing devices. 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 sub-systems that remain or are re-deployed as the final project.

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

- a) 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.
 - b) Fiber Optic Communications sub-system – The project includes replacement of the existing FOC with a 144 SM FOC and all required underground infrastructure for an operational communications system. The Department will not approve other forms of communications such as wireless communications technology. The Concept Plans show where existing and proposed fiber is located. The design requirements are contained in Attachment No. 33 Minimum Technical Requirements, FDOT Standards and FTE Minimum Technical Requirements. The DBF shall coordinate design and connections as Master Hub at southern project limits with CFX since CFX network traffic uses FTE backbone.
- (1) Conduit - The Design-Build firm shall furnish and install conduit, locate wire, warning tape, fiber route markers, pull boxes and splice vaults. The ITS/Signalization components are to be connected with a lateral from the backbone with a twenty-four (24) count single mode fiber optic cable. The Design-Build Firm shall determine the appropriate means and methods to install conduit, noting some locations will require directional bore to mitigate any potential wetland or other surface water impacts as noted in Reference documents R07 and R09.
 - (2) Pullboxes and Splice Vaults - The Design-Build Firm shall design, furnish and install pull

boxes as part of this project. Place communications pull boxes and splice boxes in elevated dry locations away from any area prone from flooding, water collection or water drainage. Provide locking and security systems on all electrical ITS pull boxes to prevent theft of copper cable. The security system shall include, as a minimum, a system for securing the lid that includes hardened metal bars or other cover and locks/bolts with unique keys that are compatible with the existing locking and security system. Ten keys shall be provided to the Department. The keys shall be delivered to the Department upon Final Acceptance.

- (3) Fiber Optic Buffer Tube Allocations- The Design Build Firm shall coordinate with the FTE Department for Fiber buffer tube allocations. The Design-Build Firm shall submit a Fiber Splicing Diagram that depicts the fiber buffers used and all fiber that will be spliced as part of this project.
- c) Signal and ITS Cabinets - The Design-Build firm shall design, furnish and install traffic and ITS cabinets as part of this project. The Design-Build Firm shall install ground mounted or pole mounted cabinets at locations similar to what is shown in the concept plans.
- d) CCTV- The Design-Build Firm shall design, furnish and install CCTV cameras to provide 100% CCTV coverage of the project corridor. During all phases of this project, existing CCTV cameras along the project corridors shall remain operational and be connected and functioning at the FTE TMC. The Design-Build Firm shall be responsible for conducting a CCTV Camera Site Survey. The Design-Build Firm may use a bucket truck or a drone survey.
- e) MVDS- The Design-Build Firm shall design, furnish, install, calibrate, integrate and validate a non-intrusive vehicle detection system utilizing above-ground, side-fire microwave vehicle detector stations (MVDS). The MVDS should be installed at CCTV camera locations, and where conflicts between the MVDS and CCTV lowering device can be avoided. The use of roadway lighting poles or sign structures for the installation of CCTV cameras and MVDS sites is not allowed.
- f) Wrong Way Driving subsystem- The Design-Build firm shall design, furnish, install, integrate and test a commercial powered and fiber optic communications WWVDS as shown in the concept plans. The Design-Build Firm shall use current FDOT standards and specifications for all poles, foundations, and special mounting/connection details. Any special mounting details or connections outside of standard specifications shall include a structural analysis to verify the structure and connection details have adequate structural capacity to accommodate the WWVDS and all components. The Design-Build Firm is responsible for all connections and incidental wiring/connection details and connect equipment according to manufacturer specifications or requirements. The Design-Build Firm shall avoid placing any WWVDS equipment in and around the toll facility as required by GTR Section 230.
- g) Dynamic Message Sign (DMS) - The DB Firm shall maintain, relocate, reconnect and integrate the existing DMS system consisting of Freeway Dynamic Message Signs for this Project. The Design-Build Firm shall design, furnish, install, test and integrate new Arterial DMS (ADMS) as shown in the Concept Plans. The Design-Build Firm is responsible for all reconnections and incidental wiring/connection details and connect equipment according to manufacturer specifications or requirements.
- h) Roadside Units (RSU) - The Design-Build Firm shall design, furnish, install and integrate RSU assemblies within the project limits in approximate locations shown in the concept plans, at every interchange and within 1 mile separation. All RSUs shall be collocated with proposed ITS poles along the project corridors and may share communication conduit to connect to ITS cabinet if available. The Design-Build Firm shall determine the suitability of existing conduit to connect the

RSU to the ITS cabinet. The Design-Build Firm shall design the system and all supporting ancillary systems for Connected Vehicle applications.

- i) The DBF shall install RSU equipment manufacturer/vendor provided software instances that will be installed to control each RSU from FTE TMC.
 - ii) RSU's are currently not on the FDOT Approved Products List (APL). Statewide specifications are under development. The selected vendor shall ensure all proposed products, including RSU radios are listed on either the APL or Innovative Products List (IPL). All CV RSUs or other ITS devices not listed on the APL or IPL prior to standalone testing, the vendor shall follow the permit process outlined here: <https://www.fdot.gov/traffic/Traf-Sys/TERLPCH.shtm>.
 - iii) The Design-Build Firm shall provide 3 on-board units (OBU's) compatible with the RSU's for system acceptance and testing and Department use for future maintenance to verify the RSU messages.
- i) Travel Time Subsystem - The Design-Build Firm shall design, furnish, install and integrate VDS-AVI assemblies within the project limits in locations as shown in the concept plans. All VDS-AVI shall be collocated with proposed ITS poles along the project corridors.
 - j) Network Communications- This project is to provide traveler information systems on multiple corridors that will require network communications between multiple agencies. These agencies are FTE, FDOT D5, CFX, and Seminole County at a minimum as shown in the Concept Plans. The Design-Build Firm is responsible to design, coordinate, construct, integrate and test the system in its entirety, to ensure a fully operational system over existing and proposed network infrastructure. The Design-Build Firm shall furnish and install Ethernet switches as part of the project. There will be a combination of existing layer 2 and layer 3 communications infrastructure and proposed layer 2 communications infrastructure. Existing locations are the responsibility of Design-Build Firm to determine that the existing switches can accommodate the required number of fiber and copper Ethernet ports to support the project communications requirements plus 1 open copper Ethernet port for maintenance purposes.
 - k) Integration of all system components- The Design-Build Firm shall integrate all the required components to ensure an integrated and operable system. The DBF is responsible to ensure all technical requirements can be met and shall provide an integrated and operable system.
 - Center to Center Connectivity - The FTE has built fiber to fiber connections between FDOT D5, CFX, and Seminole County. The DBF shall identify any communications and network gaps and develop solutions to close these gaps and make the networks operational. The FTE will provide existing fiber and network drawings upon award.
 - Device to TMC/Operations Center Connectivity - This project has multiple ITS field devices that communicate to the FTE CO, FDOT D5 TMC and Seminole County. The DBF shall coordinate with each agency to connect the proposed devices to the respective TMC/agency network using fiber optic communications.
 - Maintenance of Communications (MOC) – An MOC shall be developed and submitted for review and approval by the FTE. The MOC will maintain backbone communications and communications with local hubs and devices throughout construction, until the new fiber optic backbone and new ITS devices are installed and fully integrated with the FTE network

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.

At a minimum, the Signalization work in this project shall consist of the proposed signal component features shown in Reference Document 4. Conceptual Signalization Plans at the following intersections:

1. SR 426 at SR 417 Southbound Ramps intersection
2. SR 426 at SR 417 Northbound Ramps intersection
3. Red Bug Lake Road at SR 417 Southbound Ramps intersection
4. Red Bug Lake Road at SR 417 Northbound Ramps intersection
5. SR 434 at SR 417 Southbound Ramps intersection
6. SR 434 at SR 417 Northbound Ramps intersection

The Design Build Firm shall design the new signal detection and traffic signal controller to be smart signal compatible with the districtwide ATSPM database and future compatibility for connected vehicle (CV) including enhanced detection. The smart signal design shall include:

- Stop bar detection for all lanes of the intersection which will provide 1-min batch Intersection Movement Counts (IMC).
- Advance detection for all lanes of the intersection (including turn lanes).
- ATC controller that are compatible with the maintaining agencies ATMS software, capable of high-resolution data logging and are forward compatible with CV and integrated corridor management (ICM) initiatives. Seminole County currently uses the ATC NEMA controllers manufactured by Trafficware, Commander™ series.

The Design-Build Firm shall be responsible for inventorying and relocating current smart signal, CV, incident management, intersection movement counts (IMC), enforcement, video vehicle detection and AVI detection equipment installed at each signalized intersection such as:

- Closed Circuit Television (CCTV) cameras for incident management
- IMC Gridsmart System (inclusive of cameras and processor) or other system in place
- CV roadside units (RSUs)
- Bluetooth Reader(s) (cabinet and aboveground equipment)
- Red Light Indicator Lights (RLILs)

Any equipment damaged during removal or relocation shall be replaced with new equal equipment. The Design-Build Firm shall be responsible for coordinating with Seminole County Traffic Signals Operations and FDOT District 5 for equipment compatibility. The Design-Build Firm shall contact Seminole County Traffic Engineering at least 48 hours prior to beginning any work in the intersections maintained by Seminole County.

Pre-emption system (Opticom) shall be furnished and installed at all traffic signals with the Opticom GPS antenna installed on the nearest pole to the traffic signal cabinet. Existing Opticom shall remain operational during construction. All Opticom detectors on mast arms shall be mounted in an upright position. Existing

Opticom equipment to be removed shall be delivered to Seminole County. The proposed Opticom system shall include an auxiliary interface panel (AIP) and GPS antenna radio. The 764 Opticom multi-mode phase selector system shall be a plug-in four channel, dual priority, multimode encoded signal designed for use with both Opticom infrared emitters and detectors and Opticom GPS radios/intersection units.

Traffic Controller Assembly:

Existing controller cabinets shall be returned to Seminole County Traffic Engineering. All cabinets shown as proposed traffic controller assembly in the Conceptual Signalization Plans shall be upgraded to Trafficware ATC Commander™ Series and shall be compatible with Seminole County's Advance Traffic Management System. All cabinet assemblies shall be 70006-TS2/FL (68 inch Size 6, rear door, with two fans) with 16 load bay positions that are capable of handling signal, ped or overlap phasing, Traffic ware TS2 MMU, Model, 516L-E with Ethernet, four(4) Trafficware BIU Model 130, 16 NEMA load switches, 1 NEMA flasher, 8 Transformer Relays, Spare Interface Panel wired to power panel, Trafficware TS2 Cabinet Power Supply, 64 Channel Detector Rack, 4 Channel Opticom Rack & Field Panel with Suppression, 32 Loop Detector Panel with 32 SRA-6:C Surge Arrestors, Ped Isolator Card, All Loop Detectors Shall Be Trafficware Menu Driven LCD Detectors, One (1) set of load resistors for back panel (FDOT Specification compliant), One (1) ball bearing rolling drawer.

Fiber Optic Cable Interconnect:

Seminole County Traffic fiber optic cable (FOC) backbone specification is 96-count single mode (SM) or 72-count SM fiber for new fiber installations (Corning Cable, All-Dielectric, Loose-Tube, Dry-Block or Approved Equivalent). Contact Seminole County Traffic Engineering for exact fiber counts and splice details for locations where existing fiber is being replaced. No-located/unmarked FDOT ITS facilities a, including fiber optic communications and traffic control signal loops/devices may exist within the project limits. The Design-Build Firm shall be responsible to make temporary repairs to any damaged facility within four (4) hours of occurrence notification.

Traffic Signal Lateral Connection: Include a 24"x36" pull box in front of each proposed traffic controller cabinet with 100 feet of fiber optic cable slack. Connection to the cabinet shall be 12-count SM FOC with ST connectors and a mid entry splice into the backbone. All twelve fibers shall be terminated in the traffic controller cabinet and spliced into the backbone as approved by Seminole County. Existing fiber optic communications shall be maintained operational at all times. Cut over to new fiber shall be done during off-peak hours and coordinated with Seminole County Traffic Engineering (407-665-5677).

Backup Power:

An uninterruptible power supply (UPS), line interactive with cabinet on a concrete pad shall furnished and installed at locations shown in the Conceptual Signalization Plans sized to provide backup power for a minimum of 8 hours. UPS cabinets attached to the proposed or existing traffic controller cabinet shall not be allowed.

The Design-Build Firm shall be responsible for development of proprietary certification letters and documentation required for any proposed signal elements such as traffic controller Commander™ series, Layer 2 Managed Field Ethernet Switch (MFES) ITS Express (ITS-8012-24+), Gridsmart System video detection, RSUs and Bluetooth readers.

Equipment and Materials:

All equipment and materials shall be submitted for review and approval by Seminole County Traffic Engineering.

- Signal heads shall be die cast aluminum with tunnel visors.
- Terminal blocks shall include a 6-millimeter minimum wire insertion orifice to connect signal cable the signal pole hand hole with a maximum of three (3) 14-gauge conductors per lug and a minimum of six (6) feet of slack cable for troubleshooting.
- All signal cables shall have three (3) spare conductors.
- All signal heads and pedestrian signals shall be LED.
- Internally Illuminated Street Signs (IISS) shall be powered from a separate breaker in the breaker box, not in the traffic signal cabinet. All photocells shall be mounted on the breaker box with minimum capacity of 15 amperes.
- All IISS shall be mounted perpendicular to the roadway.

3. Construction and Integration Services:

The Design-Build Firm shall be responsible for all Signalization and ITS construction and integration services relating to the Project. The Design-Build Firm shall be responsible for requesting security access and provide the required signalized intersection inventory using District 5's Signalized Intersection Inventory Application (SIIA).

The DBF shall coordinate any interruptions to backbone FOC with both the Department and CFX since CFX network traffic runs over the FTE backbone fiber. The DBF shall meet FDOT requirements for downtime except as directed by the Engineer or CFX.

- 1) Spares- The Design-Build Firm (DBF) shall provide the following spare equipment as part of the project to the FTE and delivered to FTE Operations Center or other designated facility prior to final acceptance:

ITS DEVICE / ANCILLARY COMPONENT	
Communications Subsystem	Spares
Splice Vaults	10%
Pull Boxes	10%
CAT6 Patch Cords	10%
Terminal Servers	10%
Data Surge Suppression Boards	10%
Power Surge Suppression Boards	10%
Power Subsystem	
Pull Boxes—electrical	10%
Transformer	1 for each type
UPS including comm modules, Generator comm modules	10%
PDU	10%
Wrong Way Device System (WWDS)	

Traffic controller assembly with cabinets	1
Highlighted Sign	1 pair
Complete Detection Pole for 2 or more ramps	2
<i>CCTV Camera Subsystem</i>	
CCTV Cameras	2
Camera Lowering Devices	2
Cabinets for CCTV Sites	2
<i>VDS</i>	
MVDS Aboveground Equipment	2
Bluetooth Aboveground Equipment	1
<i>Connected Vehicle</i>	
Road Side Units	1
On-Board Unit (OBU)	3
Surge Protection Device for 120V Power	10%
Surge Protection Device for 480V to 120/240V Power	10%

- 2) Warranty Requirements - All device and product warranties shall be a minimum of 3 years from Final Project Acceptance.

All equipment shall be warranted and guaranteed against defects and/or failure in design, materials and workmanship. A failure shall be defined as a subsystem, ITS device or ancillary component becoming unable to comply with the Project requirements and all applicable standards. The contractor warranty shall conform to the requirements in the FDOT Standard Specifications at a minimum.

The DB Firm shall submit the warranty terms as part of the Proposal.

For the new, replacement and upgraded ITS devices and infrastructures, the warranty period shall not begin until the date that the Engineer issues written notice of the final acceptance of new ITS devices and infrastructures regardless of the manufacturer warranty period which usually begins at the time of receipt or install.

The acceptance of the tests, components or any repair defects or repair methods does not in any way alleviate the responsibility of the DB Firm from the warranty obligations set forth elsewhere in the contract.

Prior to final acceptance of the project, the DB Firm shall provide a warranty letter from each manufacturer that shows the Department as the owner of the warranty and the term of the warranty.

- 3) Training - The Design-Build firm shall provide training at a location approved by the Department for a minimum of 10 people. Operational training for all field devices shall occur at a location approved by the Department. The Design-Build firm shall provide operational training during the testing period. Training sessions shall occur at the beginning of the subsystem testing period before Operational System Acceptance Test (OSAT). Field device maintenance training shall occur at locations approved by the Department. The Design-Build Firm shall provide all training materials. All training shall be video recorded to use for future or additional training by the Department or those who are unable to attend in-person.
- 4) Documentation - The Design-Build Firm shall provide all software and hardware documentation

including installation manuals, configuration manual, troubleshooting videos, and all warranty information to the Department prior to final acceptance.

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 FDOT Project Manager. The Design-Build Firm shall conduct all tests in the presence of the FDOT Project Manager or designated representative. The Design-Build Firm shall perform all Testing and Acceptance according to Attachment No. 33 - FTE Minimum Technical Requirements for ITS.

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, community commitments and other Project needs in identifying future landscape planting areas. Landscape opportunity areas should be preserved in accordance with the Department's "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.

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-foot 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 District EMO office, District Drainage Engineer and the District Landscape Architect. Trees may not be planted within 5 feet of storm drain 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 must 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: _____

The minimum information to be included:

Section 1: Project Approach

- Paper size: 8½" x 11". The maximum number of pages shall be (15), 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.
- Describe how the proposed design solutions and construction means and methods meet the project needs described in this Request for Proposal. 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 Request for Proposal. Bar or Gantt charts are prohibited.
- Provide a summary documenting the proposed Category 2 elements for each bridge as defined in FDM 121.3.

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 8'. 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.
- 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.

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	35
2. Construction	35
3. Innovation	5
4. Value Added	5
Maximum Score	80

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

1. Design (35 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
- Design coordination plan minimizing design changes
- Geotechnical investigation plan
- Geotechnical load test program
- PD&E Study re-evaluation and minimizing impacts through design to:
 - Environment (social, cultural, natural, and physical)
 - Public
 - Adjacent Properties
 - Structures
- Transportation Management Plan
- Incident Management Plan
- Aesthetics
- Utility Coordination and Design

- 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 (35 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 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 commitments in the Project Commitment Record 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 (5 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
- Materials
- Optimize design to reduce the overall maintenance needs on the project throughout its life.
- Enhance Design and Construction aspects related to future expansion of the transportation facility
- For utility relocations required, provide a design that meets all applicable criteria, standards, specifications, etc., while relocating any utilities in conflict in locations/alignments that will not adversely impact system operation or maintenance in the future

4. Value Added (5 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 Concrete Pavement	5 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. 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 \$572,206 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. One (1) hard copy of the Bid Price Proposal shall be hand delivered in a separate sealed package to the following:

Mr. Richard Nethercote

Professional Services/Design Build Contract Manager

Florida's Turnpike Enterprise

Turkey Lake Service Plaza

Building 5315, Mile Post 263

Florida's Turnpike

Ocoee, FL 32761

Phone: (407) 264-3885

tp.designbuild@dot.state.fl.us

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.