

*Florida Department of Transportation*  
*District One*

**DESIGN-BUILD  
REQUEST FOR PROPOSAL  
For**

**I-75 (SR 93) at Fruitville Road / CR 780  
Interchange Reconstruction and I-75 Auxiliary Lanes  
between Bee Ridge Road (SR 758) and Fruitville Road (CR  
780) in Sarasota County**

**Financial Projects Number(s):  
420613-2-52-01, 420613-2-56-01, and 420613-2-56-02**

**Federal Aid Project Number(s):**

**Contract Number: E1W47**

**ADDENDUM No. 7**

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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.

## ATTACHMENTS

### A001 Project Advertisement

### A002 Design Build Division I Specifications

A002a Award and Execution of Contract – Public Records (SP0030900D1)

A002b Legal Requirements and Responsibilities to the Public – Equal Employment Opportunity Requirements (SP0072700)

A002c Legal Requirements and Responsibilities to the Public – Preference to State Residents (SP0072800)

A002d Legal Requirements and Responsibilities to the Public – E-Verify (SP0072900)

A002e Legal Requirements and Responsibilities to the Public – Scrutinized Companies (SP0073000)

A002f Contaminated Material - Mercury-Containing Devices and Lamps (SP0080409)

A002g Damage Recovery (\$30,000/\$5,000/\$77,000) (SP0081200) (I-75)

A002h Damage Recovery (\$20,000/\$3,000/\$46,000) (SP0081200) (Fruitville)

A002i Damage Recovery (\$2,000/\$350/\$5,200) (SP0081200) (Ramps)

A002j Partnering (\$5,000) (SP0080306)

A002k DRB / 54 Meetings + 2 Hearings (SP0080307DRB)

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

A003a Mobilization (SP1010000DB)

A003b Contractor Quality Control General Requirements (SP1050813DB)

A003c Structures Foundations (SP4550000DB)

### Developmental Specifications identified by the Department to be used on the Project:

A003d RoadWeatherInformation System (dev688)

A003e ConnectedVehicleRoadSideUnit (dev681)

### Documents and Reports

A004\_4206132\_TypicalSectionPackage\_04172024

A004a\_4206132\_TypicalSectionPackage\_04172024-SummaryOfChanges

A004b\_4206132\_TypicalSectionPackage\_04172024-CADD

A005\_4206132\_PavementDesignReport

A006\_2012775\_Typical Section Package

A007\_2012775\_Variation - 2percent full depth cross slope

A008\_2012775\_Superelevation Exception Cover Letter

A008a\_2012775\_Superelevation Exception

A009\_4206132\_BCWE

A010\_4206132\_VE Report  
A011\_4206132\_NESHAP ASBESTOS SURVEY  
A012\_4206132\_RoadwaySoilSurveyReport  
A013\_4206132\_Draft\_Lev\_1\_CSER\_TechMemo  
A014\_4206132\_LevII CSER\_ML&Ponds  
A015\_4206132\_LightingDesignAnalysisReport  
A016\_4206132\_USACE Permit Ap  
A017\_4206132\_Listed Species Tech Memo  
A018\_4260132\_FBB\_Draft Tech Rpt  
A018a\_4260132\_FruitvilleBeeRidge\_Tech Rpt  
A019\_4206132\_WER  
A020\_4206132\_ESBA  
A021\_4206132\_CRAS  
A022\_2012775\_CRAS Memo  
A023\_2012775\_CRAS  
A024\_2012775\_Level II CSER\_ML&Ponds  
A025\_Asb 170079 80 I-75 over Main  
A026\_Asb 170081-170082 I-75 over Palmer  
A027\_2012775\_BCWE  
A028\_2012775\_ESBA\_WTM  
A029\_4206132 Revised Draft NSRA Tech Memo\_5.22.2023  
A030\_2012775\_Final Siting Report Addendum No1  
A031\_4206132\_Drainage\_Doc\_Vol\_I  
A032\_4206132\_Drainage\_Doc\_Vol\_II  
A033\_ERP Permit  
A034\_ICPR Files  
A035\_Project Traffic VISSIM Files  
A036\_Storm Sewer Analysis  
A037\_Phillipi Creek Watershed Models  
A038\_4206132\_Variation\_Lanes one direction\_050824  
A039\_4206132\_Variation\_600V Power System\_050924

**Existing Information**

A040\_4206132\_100%ROWMaps  
A041\_17075-3409\_AsBuilts  
A042\_4206131\_AsBuilts  
A043\_4298311\_AsBuilts  
A044\_17075000 I-75 SLD  
A045\_17040000 Fruitville SLD  
A046\_Fruitville Master Plan  
A047\_Fruitville Sub-Planning Area D  
A048\_4206134\_Radio Tower Plans  
A049\_Temporary Construction Easement Descriptions  
A050\_Geotech Data Report  
A051\_Additional ITS Documentation  
A052\_2012775\_ROW Maps\_Fruitville  
A053\_4206131\_Noisewall\_Geotech  
A054\_4206131\_Borings.dgn

**Utility Information**

A060\_4206132\_Utility Test Hole Summary Report  
A061\_Utility Conflict Matrix  
A062\_Sarasota County UWHCA Design Criteria Package  
A063\_Utility Coordination\_02092024.zip  
A064\_FPLDistr\_RGBs  
A065\_2023-H-194-00043 Utility Permit I75

**Concept Plans**

A070\_Overall Concept Plan\_05212024  
A071\_4206132\_ROADWAY\_Concept Plans  
A072\_4206132\_SPM\_Concept Plans  
A073\_4206132\_SIGNALS\_Concept Plans  
A074\_4206132\_LIGHTING\_Concept Plans  
A075\_4206132\_ITS\_Concept Plans  
A076\_2012775 Roadway Plans  
A076a\_2012775 Roadway Plans Update  
A076b\_2012775 SPM Plans Update  
A077\_42061325601\_Sarasota County UWHCA Concept Plans

**Guidance Documents**

A090\_ITSFM Functional Requirements for the District One District-wide Implementation February 2023  
A091\_D1 Guidelines for the Development of Traffic Signal Timings April 2021  
A092\_2022fdmd217ddi  
A093\_EmergencyShoulderUse\_E-75 NB ESU - MM 101.8 - MM 234.3 - SOP - 6.23.2020

**PD&E Documents - Preliminary**

A100\_2012771\_I-75 FINAL PDSR – 2008 PD&E Study  
A101\_4206132 InterchangeModificationReport  
A102\_4206132 NSRA Tech Memo\_6.15.2023  
A103\_4206132 Construction Reevaluation (Added Attachments 10192023)  
A104\_Final I-75 SIMR Report Laurel Rd to Moccasin Wallow Rd  
A105\_4206132\_Project Commitment Record (PCR)  
A106\_420613-2-32-01 Design Reevaluation  
A107\_420613-2-43-01 ROW Reevaluation  
A108\_201277-3-43-01 ROW Reevaluation

**CADD Files**

A110\_4206132\_Cadd.zip\_05212024  
A111\_2012775\_Cadd.zip  
A112\_I-75 Aux Lane.zip

**Bid Price Proposal Forms**

1. Bid Blank (375-020-17)
2. Design Build Proposal of Proposer (375-020-12)
3. Design Build Bid Proposal Form (700-010-65)
4. Bid or Proposal Bond (375-020-34)
5. Vendor Scrunity-DBE (375-030-60 & 275-030-11, 11B)

**EXEMPT ATTACHMENT DOCUMENTS**

EA01\_Original Bridge Asbuilts I-75 at SR 780  
EA02\_4206132\_STRUCTURES\_Concept Plans  
EA03\_4206132\_Bridge Geotech Report  
EA04\_4206132\_StructuresCalcs  
EA05\_4206132\_BDR  
EA06\_170084 BIR - JAN 2015  
EA07\_170083 BIR - JAN 2015  
EA08\_170083 BIR - OCT 2015  
EA09\_2012775\_Preliminary\_Design\_Calculations  
EA10\_2012775\_Preliminary\_Roadway\_Soil\_Survey  
EA11\_2012775\_BDR  
EA12\_2012275\_I75\_Main A Canal BHR  
EA13\_2012775\_STRUCTURES\_Concept Plans  
EA13a\_2012775\_Structures\_Concept Plans Update  
EA14\_420974-1-58-01 Sarasota ATMS PH 1 As-built Plans  
EA15\_414730-1, 414732-1, 414736-1 Sarasota and Manatee Counties I-75 FMS As-built Plans  
EA16\_2012775\_Bridge Geotech Report  
EA17\_4206132\_Structures\_CADD.zip  
EA18\_2012775\_Structures\_CADD.zip  
EA19\_170154 BIR - JAN 2017  
EA20\_2012275\_I75\_Phillippi Canal BHR

## I. Introduction.

The Florida Department of Transportation (Department) has issued this Request for Proposal (RFP) to solicit competitive bids and proposals from Proposers for the reconstruction of the interchange of I-75 (SR 93) at Fruitville Rd (SR 780) and the construction of I-75 auxiliary lanes between Bee Ridge Road and Fruitville Road in Sarasota County. For the purpose of Project Specific Professional Liability Insurance coverage, the Department has determined this project to have **low** complexity.

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 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 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**

### **FPID 420613-2-52-01**

The intent of this project is to widen/reconstruct I-75 through the limits of the Fruitville Road (SR 780) interchange to provide for six general use lanes (three in each direction) in their ultimate location based on the previously approved PD&E study. The ultimate typical section, as established in the approved PD&E,

is a 10-lane facility with six General Use lanes, four Express lanes (three and two lanes in each direction, respectively) and, additionally, one auxiliary lane in each direction between the I-75 at Bee Ridge Road interchange and the I-75 at Fruitville Road interchange. The project improvements will maintain the existing auxiliary lanes between the Fruitville Road interchange and University Parkway interchange. Additional I-75 improvements include the replacement of the southbound Palmer Blvd bridge to its ultimate location, inside widening of the existing northbound Palmer Blvd bridge to accommodate the auxiliary lane, inside widening of both southbound and northbound Main A Canal bridges to accommodate the auxiliary lanes to and from the Bee Ridge Road interchange, outside widening of the northbound Main A Canal bridge to accommodate the future Bee Ridge Road interchange ramp connection and the construction of median guardrail to replace the existing high-tension cable barrier system. Existing high-tension cable barrier materials (posts, cables, etc.) shall be salvaged, inventoried, and delivered to the FDOT Manatee Operations Center (14000 SR 64, Bradenton, FL 34212) for future maintenance use.

The SB bridge reconstruction over Palmer Blvd shall be a single span structure, intended to accommodate the widening of Palmer Blvd in the future.

The project will also include improvements and changes on Fruitville Road (SR 780) from Honore Ave. to east of Lakewood Ranch Blvd. to enhance safety, mobility, and capacity of the interchange. Project improvements include reconstructing the interchange to a Diverging Diamond Interchange (DDI) while providing necessary capacity through the interchange to accommodate levels of services for the design year established in the Interchange Modification Report (IMR). One additional thru lane will be added at the following locations: Westbound on Fruitville Road from Honore Ave. to Lakewood Ranch Blvd.; Westbound from east of Lakewood Ranch Blvd (approximate Sta. 606+70) to the end of Construction limits on Fruitville Road (Sta. 611+15.05); Eastbound from east of Honore Ave (approximate Sta. 529+50) to Cattlemen Road; and Eastbound from east of the interchange (approximate Sta. 584+66) to Lakewood Ranch Blvd. Additionally, seven-foot buffered bike lanes will be established for the length of improvements along Fruitville Road. The buffered bike lanes through the interchange will include a two-foot raised separator. A barrier wall shall be installed within the median, where traffic has “crossed-over” for the purposes of a visual barrier.

Six-foot sidewalks on both sides of Fruitville Road will be provided through the limits of the project, with the exception of where bike and pedestrian traffic are expected to share the path within the limits of the interchange. In these locations, the sidewalks will be 10-foot wide minimum. Within the median between the DDI crossovers, sidewalk will be 10-foot wide minimum, except when constrained by barrier wall.

Lane and shoulder widths, median widths, slopes, and curb types are defined in the approved typical section package. The inside paved shoulders on Fruitville Rd. as shown in the concept plans are not to be included in the final design. Attachment ‘A004\_4206132\_TypicalSectionPackage\_04032024’ shall be followed.

The Design Speeds are 70 mph for I-75 and 45 mph for Fruitville Rd outside of the interchange proper. Within the interchange, Fruitville Rd has a design speed of 30 mph as defined in the approved typical section and concept plans. Ramp design speeds vary and are defined in the concept plans. The context classification for Fruitville Rd is C3C. The Design Vehicle is a WB-62FL.

Emergency Stopping Sites/Emergency Refuge Areas are to be provided on the SB off ramp (Ramp C) and the NB off ramp (Ramp A) locations.

All proposed stormwater management facilities and conveyance system improvements will be sized to accommodate the ultimate interstate improvements through the Fruitville Road interchange. Replace the existing concrete box culvert under I-75 at approximate Sta. 343+25. Extend the existing concrete box

culverts under Fruitville Rd. at approximate Sta. 541+30 and Sta. 588+30. All cross drains along I-75 north of Palmer Blvd are to be replaced. Establish Pond L-2-4, as shown in the plans for FPID 201277-5 attachment plans and the Overall Concept Plan roll plot, for the purposes of storm water management of the improvements south of Palmer Blvd. Construct the pond such that the widening of the Bee Ridge Road interchange, as depicted in the attached plans, will not require adjustment of the pond shape or outfall locations.

Complete signal replacements along Fruitville Rd at Paramount Dr. and Cattlemen Rd. intersections with strain poles. The signal at Paramount Dr. shall accommodate a future expansion to the north. New signals will be established at the interchange ramps with mast arms. Provide a mast arm with an overhead pedestrian actuated signal at the Ramp B pedestrian crossing. Additional signal heads, and pedestrian signals will be established at the existing intersection of Fruitville Road and Lakewood Ranch Blvd.

The following items are required at the signalized intersections of Paramount Dr, Cattlemen Rd, I-75 SB Ramps, and I-75 NB Ramps:

- Multiple point detection on the Fruitville Rd through movement (EB direction for I-75 SB Ramps and WB direction for I-75 NB Ramps)
- Pole mounted Internally Illuminated Street Name Signs
- Uninterrupted Power Supply Unit CCTV with ethernet capability piggyback mounted to the cabinet
- CCTV IP High definition cameras

Single lane ramps with pedestrian crossings shall be supplemented with Rectangular Rapid Flashing Beacons (RRFB), including the optional advanced pedestrian sign and “ahead” subpanel, per the TEM. Additionally, construct “PED XING” pavement messages 150 feet in advance of crossings approaching the RRFBs. Multilane ramps with pedestrian crossings shall be signalized per the Concept plans.

Construct preformed pavement marking speed limit (30 MPH) shields (36” X 48”) in each thru lane approaching the DDI signals (approximately Sta. 555+77 and 561+00, eastbound; and approximately Sta. 586+10 and 580+00, westbound). Additionally, W3-5 (30 MPH AHEAD) preformed pavement marking shields (36” x 36”) at stations (540+00 and 593+69) in alignment with the single post signs on each side of the roadway.

The Design-Build firm shall replace any Intelligent Transportation Systems (ITS) infrastructure impacted by the project

ITS infrastructure includes the Freeway Management System (FMS) on I-75 managed by the Department and the Advanced Traffic Management System (ATMS) on Fruitville Road managed by Sarasota County. ITS operability shall be maintained at all times. The Design-Build firm shall develop a Maintenance of Communications (MOC) Plan to address possible downtime of associated communications networks. The Design-Build Firm shall install a new wrong way vehicle detection systems (WWVDS) advanced countermeasures at both off-ramps from I-75 at Fruitville Rd. The existing Highway Radio Advisory (HAR) system shall be removed and de-commissioned.

Install new ITS Poles and associated materials and equipment for new and impacted MVDS and CCTV camera sites. All ITS shall be maintained throughout construction.

Install signage for Emergency Shoulder Use (ESU) as shown in the Emergency Shoulder Use Standard Operating Procedure (See attachments) and Standard Plans Index 700-010, sheet 7 of 11. The Design-Build Firm shall provide inside paved shoulders that are equal to or greater in width of the existing inside paved

shoulders through the project limits included in the Emergency Shoulder Use Standard Operating Procedure for the duration of the project.

Remove high mast lighting and foundations and install conventional lighting on all ramps and interstate mainline limits within the Fruitville Rd. interchange. Remove existing lights along Fruitville Rd from Honore Ave. to Lakewood Ranch Blvd and replace with new poles and fixtures. Relocate existing light poles east of Lakewood Ranch Blvd. to the end limits of the project. Install underdeck lighting at both bridges over Palmer Blvd. All new light fixtures will be LED. Lighting shall be maintained for the duration of construction. The concept lighting plans were developed prior to the adoption of current criteria. The proposed lighting shall meet all current and applicable criteria.

Install a new overhead span sign structure and panels on northbound I-75 providing lane assignments approximately 1-1/4 miles south of the Fruitville Road interchange. Install a new overhead span sign structure and panels on northbound I-75 providing lane assignments approximately 1/2 mile south of Fruitville Road interchange. Install a new overhead span sign structure and panels on northbound I-75 providing lane assignments at the ramp taper of the Fruitville Road interchange.

Install a new overhead span sign structure and sign panels on southbound I-75 providing lane assignments at the future ramp taper of Bee Ridge Rd. interchange (approximate Sta. 2215+77). Install a new overhead span sign structure and sign panels providing lane assignments on southbound I-75, approximately 1/2 mile north of the Bee Ridge Rd. Install a new overhead span sign structure and sign panels providing lane assignments on southbound I-75, approximately 1 mile north of the Bee Ridge Rd.

Remove all existing cantilevered sign structures and foundations that conflict with proposed structures and signage.

Remove and replace existing sign panel on existing cantilever structure at approximate Sta. 129+02.

Install a new overhead span sign structure and sign panels providing lane assignments on Fruitville Rd. in advance of the interchange and at the ramp tapers (approximate Sta. 545+43, Sta. 558+49, Sta. 582+60, and 595+60). Install overhead cantilevered signs in advance of on-ramps providing lane assignments (approximate Sta. 568+00 and Sta. 571+12).

Install new overhead sign structure and sign panels on Ramp A providing lane assignments. Install new overhead sign structure and sign panels on Ramp C providing lane assignments.

This project will require coordination with the Tower Relocation project (FPID 420613-4). The schedule for that project has an anticipated construction completion in Spring 2025. The proposed maintenance of traffic shall accommodate the existing tower location until it is decommissioned, ensure staging areas for their activities remain accessible, and the new cell tower location and access are accommodated. The access point (any interim and the final) to the new cell tower site shall be off Fruitville Rd. The driveway apron shall be provided under this project.

This project has areas of known contamination, as identified in the CSER. These areas shall be identified in the final design plans. Additionally, coordination with the Department's District Contamination Impacts Coordinator (DCIC) and the Department's CAR contractor prior to any work requiring excavation or dewatering within the defined plan area will be required.

Limited Access fencing shall remain in place for the duration of the project. Impacts to existing fencing shall be reestablished along the Limited Access ROW.

A Noise Barrier was determined to be reasonable and cost feasible along the northbound roadway (east side of the corridor) immediately north of the Bee Ridge Rd. on Ramp. The barrier will be established according to the NSRA Tech Memo and as described below (with minor adjustments):

Barrier Segment	Location	Height	Begin Station	End Station
ROW Segment 1	12' inside ROW	22'	1197+56	1201+48
	Varies 12' to 21.5' inside ROW	22'	1201+48	1208+51
	21.5 inside ROW	22'	1208+51	1214+25
ROW Segment 2	28' inside ROW	22'	1213+67	1219+61
ROW Segment 3	12' inside ROW	22'	1223+00	1232+25
Shoulder Segment 1	Outside shoulder	14'	1218+48	1220+38.83
Shoulder Segment 2	Main A Canal Bridge	8'	1220+38.83	1222+80.31
Shoulder Segment 3	Outside Shoulder	14'	1222+80.31	1225+50

The color and texture have not been determined. Texture options are identified in Standard Plans Index 534-200. Colors will be selected from the following options: Grey (Federal Shade No. 36314), Beige (Federal Shade No. 33578), or Tan (Federal Shade No. 33522). Anti-graffiti coating is not required.

All work within the defined Temporary Construction Easements shall be completed prior to the expiration date associated with the parcels as defined in the attachments.

Removal of all existing foundations shall be deep removal, with the exception of bridge foundations in which Standard Specifications shall apply.

Landscape opportunity plans are to be provided within the interchange limits.

#### **FPID 420613-2-56-01 & 420613-2-56-02**

The proposed work includes the Design and Construction of the Utility Work by Highway Contractor (UWHCA) for Sarasota County. The Sarasota County UWHCA Design Criteria Package (included in as an attachment) outlines the requirements to successfully complete the design of the Utility Adjustments are Relocations for Sarasota County utilities and IT facilities located within the Project Limits. The Sarasota County Conceptual Utility Adjustment Plans depict the conceptual utility adjustments and relocations required for this project based on the concept plans. Impacts are anticipated to the existing water and wastewater facilities, as well as Sarasota County ITS fiber and conduit. The anticipated work to be performed under the UWHCA includes, but is not limited to, the following: installation of new water, wastewater and ITS facilities with associated appurtenances using trenching and trenchless construction methods; connection of new water, wastewater and ITS facilities to existing facilities including restraint of existing water and wastewater facilities; placing existing water and wastewater facilities out of service (including grout filling); protection of existing utilities; and backfill and compaction. The final design of the proposed utility adjustments within the rights of way shall be determined by the Design-Builder, based on review and approval by the County during the design review process.

Utility work completed within the subordinated easements, as identified in the concept plans, to be completed under 420613-2-56-02. All other work associated with the UWHCA is to be completed under

FPID 420613-2-56-01. All utility work shall be broken out per utility type within the bid documentation (Water, Sewer, Communications).

The Attachments represent the Department's concept and are considered to be reliable information developed for the project. The requirements of this project are included below in this RFP. Attachments do not constitute or represent a binding requirement of this contract unless specifically stated below and/or in subsequent sections of this RFP.

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](http://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.

#### **A. Design-Build Responsibility**

The Design-Build Firm shall be responsible for survey, completing the 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 professionals 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 Attachments. 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 geotechnical 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 May 26, 2022, 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.

<b>Date</b>	<b>Minimum # of Days</b>	<b>Event</b>
<u>09/29/23</u>	0	Planned Advertisement
<u>10/09/23</u>	10	Current Advertisement
<u>11/28/23</u>	50	Letters of Interest for Phase I of the procurement process due in District Office by 5:00 pm local time
<u>12/20/23</u>	22	Proposal Evaluators submit Letter of Interest Scores to Contracting Unit 9:30 am local time
<u>12/28/23</u>	8	Contracting Unit provides Letter of Interest scores and Proposal Evaluators comments to Selection Committee 9:30 am local time
<u>01/03/24</u>	6	Public Meeting of Selection Committee to review and confirm Letter of Interest scores 9:30 am local time
<u>01/03/24</u>	0	Shortlist Posting Date
<u>01/08/24</u>	5	Final RFP provided to Design-Build Firms continuing to Phase II of the procurement process 5:00 pm local time
<u>01/10/24</u>	2	Mandatory Virtual Pre-Proposal meeting at 8:00 am local time. 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>01/10/24</u>	0	Virtual Utility Pre-Proposal Meeting facilitated by the District Utility Engineer at 9:00 am local time.
<u>01/16/24</u>	8	Deadline for Design-Build Firm to request participation in Risk Register and One-on-One Alternative Technical Concept Discussion Meeting No. 1 5:00 pm local time
<u>01/22/24</u>	6	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 5:00 pm local time
<u>01/29/24</u>	7	Risk Register and One-on-One Alternative Technical Concept Discussion Meeting No. 1. 90 Minutes will be allotted for this Meeting.
<u>01/29/24</u>	0	Deadline for Design-Build Firm to request participation in Risk Register and One-on-One Alternative Technical Concept Discussion Meeting No. 2, 5:00 pm local time
<u>02/05/24</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. 2. 5:00 pm local time
<u>02/26/24</u>	21	Risk Register and One-on-One Alternative Technical Concept Discussion Meeting No. 2. 90 Minutes will be allotted for this Meeting.
<u>03/13/24</u>	16	Deadline for submittal of Risk Register items and Alternative Technical Concept Proposals 5:00 pm local time.



<u>03/27/24</u>	14	Final deadline for submission of requests for Design Exceptions or Design Variations. 5:00 pm local time
<u>03/27/24</u>	0	Deadline for Department Responses to Alternative Technical Concept Proposals
<u>04/08/24</u>	12	Addendum issued for approved Design Exceptions. 5:00 pm local time
<u>04/15/24</u>	7	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 3 5:00 pm local time
<u>04/22/24</u>	7	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 <u>3/27/24</u> 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 <u>2/27/24</u> .
<u>04/30/24</u>	8	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 <u>2/27/24</u> . Deadline is 5:00 pm local time.
<u>05/15/24</u>	15	DDE completes review of ATCs and notifies Design-Build Firms.
<u>05/29/24</u>	14	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.
<u>06/04/24</u>	6	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.
<u>06/06/24</u>	2	Technical Proposals due in District Office by 5:00 pm. local time
<u>06/06/24</u>	0	Deadline for Design-Build Firm to “opt out” of Technical Proposal Page Turn meeting.
<u>06/13/24</u>	7	Technical Proposal Page Turn Meeting. Times will be assigned during the Pre-Proposal Meeting. 30 Minutes will be allotted for this Meeting.
<u>07/09/24</u>	26	Question and Answer Written Responses. Deadline for the Department to provide a list of questions/clarifications for the Design-Build Firm to answer.
<u>07/16/24</u>	7	Deadline for submittal of Question-and-Answer Written Responses to the Department’s questions/clarifications from the Design-Build Firm. 5:00 pm local time
<u>07/23/24</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. 5:00 pm local time
<u>07/30/24</u>	7	Deadline for submittal of Question-and-Answer Written Responses to the Department’s follow up questions. 5:00 pm local time.
<u>07/30/24</u>	0	Deadline for the Department to respond to Risk Register submittals 5:00 pm local time
<u>07/30/24</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>08/05/24</u>	6	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>08/05/24</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>08/07/24</u>	2	Price Proposals due in District Office by 11:00 am local time.
<u>08/07/24</u>	0	Public announcing of Technical Scores and opening of Price Proposals at 11:00 am local time at 801 N. Broadway Ave, Bartow Fl. 33830
<u>08/13/24</u>	6	Public Meeting Date of Selection Committee to determine intended Award
<u>08/13/24</u>	0	Final Selection Posting Date
<u>08/19/24</u>	7	Anticipated Award Date
<u>09/10/24</u>	22	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. This public meeting will be conducted virtually via GoToMeeting, at the dates/times noted in the project Advertisement Schedule under the [All-Advertisements](#) link. If interested in attending public meetings, members of the public shall email the applicable District designated email account at least 24 hours in advance of the subject meeting (Saturdays, Sundays, and state holidays shall be excluded in the computation of the 24-hour time), to obtain the teleconference number and Access Code information to virtually attend. The designated email account for District 1 is [D1.DesignBuild@dot.state.fl.us](mailto:D1.DesignBuild@dot.state.fl.us). 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. FHWA will be invited on Projects of Division Involvement (PoDIs), in order to discuss the Project in detail and to clarify any concerns. 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 accounted for prior to the start of the mandatory pre-proposal meeting. The convener of the meeting will call attendance at the time the meeting was advertised to begin. Once all Proposers have identified themselves with the firm they represent, the meeting will “officially” begin. Any Proposer not signed in at the “official” start of the meeting will be considered late and will not be allowed to propose on the Project.

#### **E. Technical Proposal Page-Turn Meeting**

The Department will meet with each Proposer, formally for thirty (30) minutes, for a page-turn meeting. FHWA will be invited on Projects of Division Involvement (PoDIs). The purpose of the page-turn meeting is for the Design-Build Firm to guide the Technical Review Committee through the Technical Proposal, highlighting sections within the Technical Proposal that the Design-Build Firm wishes to emphasize. The page-turn meeting will occur between the date the Technical Proposal is due and the Question and Answer Written Response occurs, per the Schedule of Events section of this RFP. The Department will terminate the page-turn meeting promptly at the end of the allotted time. The Department will record all of the page-turn meetings. 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.

The Design-Build Firm shall submit to the Department, by the deadline shown in the Schedule of Events in this RFP, 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.

**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 2009 edition of the MUTCD (as amended in 2012). It shall be the Design-Build Firm's responsibility to acquire and utilize the necessary manuals and guidelines that apply to the work required to complete this Project. The services will include preparation of all documents necessary to complete the Project as described in Section I of this document.

1. Florida Department of Transportation Design Manual (FDM)  
<http://www.fdot.gov/roadway/FDM/>  
Note: the use of FDM Part 9 requires approval by the District Design Engineer
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](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  
[Soils and Foundation Handbook \(windows.net\)](http://www.fdot.gov/roadway/SoilsandFoundations/SoilsandFoundationHandbook(windows.net))
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](https://bookstore.transportation.org/collection_detail.aspx?ID=110)
  13. MUTCD - 2009  
<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](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](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](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](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](http://www.fhwa.dot.gov/engineering/hydraulics/library_arc.cfm?pub_number=17)
  31. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways  
<http://www.fdot.gov/roadway/FloridaGreenbook/FGB.shtm>
  32. Florida Department of Transportation Project Development and Environment Manual, Parts 1 and 2  
<http://www.fdot.gov/environment/pubs/pdeman/pdeman1.shtm>
  33. Florida Department of Transportation Driveway Information Guide  
<http://www.fdot.gov/planning/systems/programs/sm/accman/pdfs/driveway2008.pdf>
  34. AASHTO Highway Safety Manual  
<http://www.highwaysafetymanual.org/>
  35. Florida Statutes  
<http://www.leg.state.fl.us/Statutes/index.cfm?Mode=View%20Statutes&Submenu=1&Tab=statutes&CFID=14677574&CFTOKEN=80981948>
  36. Florida Department of Transportation Equal Opportunity Construction Contract Compliance Manual  
<http://www.fdot.gov/equalopportunity/contractcomplianceworkbook.shtm>
  37. Florida Department of Transportation Interchange Access Request User Guide  
[fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/systems/systems-management/document-repository/iar/fdot-iaarg\\_september-2022.pdf?sfvrsn=59ccd2bd\\_2](fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/systems/systems-management/document-repository/iar/fdot-iaarg_september-2022.pdf?sfvrsn=59ccd2bd_2)

## **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 Departments 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. An ATC is intended to propose an alternate idea to modify a contract requirement. For example, an ATC of the concept plans is not required if the element of the concept plan proposed to be modified is not a requirement of the contract. ATCs also include items defined in FDM, Part 1, Chapter 121.3.2. The proposed ATC shall provide an approach that is equal to or better than the requirements of the RFP, as determined by the Department. ATC Proposals which reduce scope, quality, performance, or reliability should not be proposed. A proposed concept does not meet the definition of an ATC if the concept is contemplated by the RFP.

The 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).
- Department Commitments (See the Project Commitments Report)
- Approved Pavement Designs (Minimum Requirements)
- Context Classifications
- Changes that preclude the construction of the ultimate typical section for I-75
- Limits of improvements along I-75 and Fruitville Rd.
- Lane Closure Restrictions

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.

- Modifications to the horizontal and/or vertical geometry requiring an ATC submittal as described in Section VI.F of this RFP. ATC's proposing horizontal and/or vertical alignment changes greater than two (2) feet from the concept plans (Attachment A070\_Overall Concept Plan\_07172023) must include geometric information including curve data, superelevation calculations, horizontal stopping sight distance computations and other pertinent data necessary to allow for a comprehensive review by the Department. Changes associated with implementing current DDI criteria in FDM D217 differing from the concept plans, unless expressed by the RFP directly, does not require an ATC. It is the responsibility of the Design Build Firm to ensure the appropriate criteria is applied to the final design of the project.
- 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. FHWA should be invited to ATC meetings for all PoDI projects. Immediately prior to the conclusion of the One-on-One ATC discussion meeting, the Department will advise the Design-Build Firm as to the following related to the ATC proposals which were discussed:

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

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

### 3. Submittal of ATC Proposals

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

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

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 require approval 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 a Risk Register submittal or undertake mitigation efforts as the result of a Risk Register submittal.

## **8. Risk Register Submittals Schedule of Values**

The Department will develop a Schedule of Risk Values (SORV) for each team based on their Risk Register submittals. Firms will submit this SORV with their bid price proposals.

### **C. Geotechnical Services:**

#### **1. General Conditions:**

The Design-Build Firm shall be responsible for identifying and completing the 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 responsible for completing the geotechnical aspects of the Project.

**D. Department Commitments:**

The Design-Build Firm will be responsible for adhering to the project commitments identified in the Project Commitment Record (see Attachments).

Any commitments that may be affected by an ATC shall be identified in the ATC proposal and discussed at the ATC meeting.

**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 acquiring permits and/or 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 if requested) 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 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 previously permitted wetland impacts. 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.

**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.

## **H. Verification of Existing Conditions:**

The Design-Build Firm shall be responsible for verification of existing conditions, including research of all existing Department records, right of way maps, 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.

## **I. Submittals:**

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 11" X 17" plans (all required components)
- 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  
1 copy of Technical Special Provisions  
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  
.KMZ file of the proposed design and alignment files

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

### **Final Submittal**

1 set of signed and sealed 11" X 17" plans (all required documents)  
1 copy of signed and sealed 11" X 17" 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  
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  
.KMZ file of the proposed design and alignment files

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. Any UWHCA work shall require written approval to begin construction from the affected Utility Agent/Owner (UAO). 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) day's 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.

ITS As-Built data shall be collected by personnel having completed the Intelligent Transportation System Facilities Management (ITSFM) training designated for as-built data collection. The ITS As-Built documentation shall be submitted 30 days prior to anticipated 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
- 2 sets of 11 "X 17" copies of the signed and sealed As-Built plans, drawings and Certified Surveys (including as-built channel survey)
- All As-Built plans required to be submitted based on environmental permit conditions
- 2 copies of Landscape Opportunity Plans
- 1 signed and sealed copy of the Bridge Load Rating Summary Form and Calculations based on as-built conditions
- 2 sets of final documentation (if different from final component submittal)
- 2 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.

- Interchange Operational Analysis Report/Interchange Modification Report (if proposed)
- PD&E Study Re-Evaluation (if proposed)

**5. Railroad Submittals: N/A**

**J. Contract Duration:**

The Department has established a Contract Duration of 1600 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 is established by the Department for these reviews, should a category 2 structure be proposed. The Design-Build Firm shall allow at least 30 calendar

days for the 60% phase Category 2 submittal review to allow for the initial development of the IDR. 60 days shall be allowed for the 90% review, non-inclusive of comment resolution duration. Overlapping or concurrent review durations for submittals on the same unit will not be permitted. IDR durations are subject to change based on the Design Build Firm's Technical Proposal submittal dependent on complexity, but the durations stated above are established minimums. 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:

None Identified

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
- Anticipated Pre-Construction Conference
- Start of Construction
- Clearing and Grubbing
- Construction Mobilization
- Embankment/Excavation
- Milling Operations
- Paving Operations
- 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
- Operational/Burn-In Testing
- Lighting Design
- Lighting Construction
- Maintenance of Traffic Design
- Landscape Opportunity Plans
- Maintenance of Traffic Set-Up (per duration)
- Erosion Control
- Holidays and Special Events (shown as non-work days)
- Additional Construction Milestones as determined by the Design-Build Firm
- Final Signed and Sealed As-Built Drawings and Final Documentation Submittal
- 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
- UWHCA Coordination 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/Hybrid/In-Person 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, the public, and other agencies.
  - Providing up-to-date 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.

**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:**

For the items identified by the Department in the Risk Register, provide a schedule of risk values with the Bid Price Proposal. The schedule of risk values will not be used to determine the best value selection. The schedule of risk values shall include quantities and unit prices. Upon award, the DB firm will submit a schedule of values for the rest of the work items. 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, however Microstation and Geopak were used in the development of the concept plans and may be used for the delivery of this project.. 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 \(fdot.gov\)](#). 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 Microstation, OpenRoads Designer (ORD) 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 Microstation, OpenRoads Designer (ORD) 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:

- Roadway features
- Roadway drainage systems,
- Bearings
- Expansion joints
- Approach slabs
- Superstructure
- Substructure
- Structure drainage systems
- Paint systems
- 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:

Tower Relocation project (FPID 420613-4)

This list may not be all inclusive, and it will be the Design-Build Firm's responsibility for determining the complete inventory of adjoining projects (present and planned) and the required coordination.

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 not identified vibration sensitive sites along the Project corridor. The Design-Build Firm shall be responsible for the identification of and coordination with vibration sensitive sites impacted by the Work for the duration of the construction period.

The Design-Build Firm is responsible for evaluating the need for, design of, and the provision of any necessary precautionary features to protect existing structures from damage, including, at a minimum, selecting construction methods and procedures that will prevent damage. The Design-Build Firm shall submit for Department acceptance a Settlement and Vibration Monitoring Plan (SVMP) as part of the 90% plans submittal and update the SVMP throughout the Construction Period, as applicable. 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:**

From approximate Station 284+00 to Station 285+50 and Station 328+00 to Station 331+00, bridges shall be supported using deep foundation tipped no higher than Elevation minus 10 ft (-10 ft) NAVD

#### **Driven Pile Foundations for Bridges and Major Structures**

The Design-Build Firm shall determine whether the resistance factors used for pile design will be based on



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

- Station 220+60 to Station 222+60 (BL of Survey), (minimum two tests)
- Station 284+00 to Station 285+50 (BL of Survey), (minimum two tests)
- Station 328+00 to Station 331+00 (BL of Survey), (minimum two 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. Submitting Production Pile Length and Driving Criteria Letters (for projects that require a driving criteria), including analysis of dynamically load tested piles.
10. Driving piles to the required capacity and minimum penetration depth.
11. 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.
12. Submitting Foundation Certification Packages.
13. Providing safe access, and cooperating with the Department in verification of the piles, both during construction and after submittal of the certification package.

### **Drilled Shaft Foundations for Bridges and Miscellaneous Structures**

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

- Station 220+60 to Station 222+60 (BL of Survey), (minimum two tests)
- Station 284+00 to Station 285+50 (BL of Survey), (minimum two tests)
- Station 328+00 to Station 331+00 (BL of Survey), (minimum two 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 pilot holes prior to establishing the drilled shaft tip elevations and socket requirements.
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.

### **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.

#### **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
3. Reviewing proposed utility permit application packages and providing comments based on the compatibility of the permit as related to the Design-Build Firm's plans.
4. Scheduling and conducting utility meetings, preparing and distributing minutes of all utility meetings, and ensuring expedient follow-up on all unresolved issues.
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 and coordinating the execution and implementation of and submitting to the Department for review, all Utility Work Schedules.
8. Assist in resolving utility conflicts.
9. 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.
10. Providing periodic Project updates to the Department Project Manager and District Utility Office as requested.
11. Coordination with the Department on any issues that arise concerning reimbursement of utility work costs between the Department and the utility.
12. 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

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

<u>UAO</u>	<u>Name Utility Relocation Type</u>	<u>Design-Build Responsibility</u>	<u>Cost Estimate</u>
<b>AT&amp;T Distribution</b> Alan Reynolds Phone: 407-351-8180 <a href="mailto:AR2916@ATT.com">AR2916@ATT.com</a>	Relocation by UAO At UAO expense	Coordination and Schedule	At UAO expense
<b>AT&amp;T TCA Distribution</b> Martin Shaw Phone: 610-328-6465 ext 242	Relocation by UAO At UAO	Coordination and Schedule	At UAO expense

Cell: 610-513-7050 <a href="mailto:Martin@trecgroup.com">Martin@trecgroup.com</a>	expense		
<b>AT&amp;T – Transmission</b> Greg Jacobson 813-342-0512 <a href="mailto:Gtjacobson@att.com">Gtjacobson@att.com</a>	Relocation by UAO At UAO expense	Coordination and Schedule	At UAO expense
<b>CenturyLink Communications LLC</b> Ken Lutz Phone: 863-452-3185 Cell: 863-214-1490 <a href="mailto:ken.lutz@lumen.com">ken.lutz@lumen.com</a>	Relocation by UAO At UAO expense	Coordination and Schedule	At UAO expense
<b>Comcast</b> Kevin Murph 941-356-1489 <a href="mailto:Kevin_murphy4@comcast.com">Kevin_murphy4@comcast.com</a> <a href="mailto:CENFLR_Construction@comcast.com">CENFLR_Construction@comcast.com</a>	Relocation by UAO At UAO Expense	Coordination and Schedule	At UAO Expense
<b>Crown Castle (south)</b> Danny Haskett 786-610-7073 <a href="mailto:SouthFloridaPlansReview@crowncastle.com">SouthFloridaPlansReview@crowncastle.com</a>	Relocation by UAO at UAO Expense	Coordination and Schedule	At UAO expense
<b>FP&amp;L – Distribution</b> Brian Garver (561)723-4442 <a href="mailto:Brian.Garver@fpl.com">Brian.Garver@fpl.com</a>	Relocation by UAO At UAO expense	Coordination and Schedule	At UAO Expense
<b>FP&amp;L – Transmission</b> Craig Ledbetter 561-803-7942 <a href="mailto:Craig.ledbetter@fpl.com">Craig.ledbetter@fpl.com</a>	Relocation by UAO At UAO expense	Coordination and Schedule	At UAO Expense
<b>Frontier Communications</b> Denise Hutton Phone: 941-906-6722 Cell: 941-504-9652 <a href="mailto:denise.hutton@ftr.com">denise.hutton@ftr.com</a>	Relocation by UAO At UAO expense	Coordination and Schedule	At UAO Expense
<b>Level 3 Communications LLC</b> Matt Anthony Cell: 239-822-4986 <a href="mailto:Matthew.P.Anthony@lumen.com">Matthew.P.Anthony@lumen.com</a>	Relocation by UAO At UAO expense	Coordination and Schedule	At UAO Expense
<b>MCI/Verizon Business</b>			

James Barra 813-928-9881 <a href="mailto:James.barra1@verizonwireless.com">James.barra1@verizonwireless.com</a>	Relocation by UAO At UAO expense	Coordination and Schedule	At UAO expense
<b>Myakka Communications Inc.</b> Mark Ackaway Phone: 941-322-9216 <a href="mailto:mark@myakka.com">mark@myakka.com</a>	Relocation by UAO At UAO expense	Coordination and Schedule	At UAO expense
<b>Sarasota County Utilities</b> Demar Machuca Phone: 941-861-0580 Cells: 951-526-1643 / 941-487-0355 <a href="mailto:dmachuca@scgov.net">dmachuca@scgov.net</a>	UWHCA At UAO expense and FDOT Expense	Design, Construction, Coordination, Schedule, and all associated costs	At UAO expense With FDOT Expense \$42,520 (Work within Subordinated easement)
<b>Spectrum Sunshine State</b> Alex Fleming 941-213-0877 <a href="mailto:James.fleming1@charter.com">James.fleming1@charter.com</a>	Relocation by UAO At UAO expense	Coordination and Schedule	At UAO Expense
<b>TECO Peoples Gas</b> Alex McFarlane 813-275-3762 <a href="mailto:AMcFarlane@tecoenergy.com">AMcFarlane@tecoenergy.com</a>	Relocation by UAO At UAO expense	Coordination and Schedule	At UAO Expense
<b>Uniti Fiber</b> Terry Young 251-422-3872 <a href="mailto:Terry.young@uniti.com">Terry.young@uniti.com</a>	Relocation by UAO At UAO expense	Coordination and Schedule	At UAO Expense

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

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

The Design-Build Firm shall be responsible for determining the locations of UAO facilities within the project by SUE during the design phase, as necessary to resolve utility conflicts. The Design-Build Firm shall coordinate with each UAO prior to all work impacting utilities.

Design and Construction of Sarasota County facilities:

The Department has entered in a Utility Work By Highway Contractor Agreement (UWHCA) with Sarasota County for their water & sewer facilities work. The Design-Build Firm shall be responsible for performance of all Sarasota County's utility work including the design, new construction, removals, adjustments, and

relocation work. Obtain all utility permits required for the performance of utility work as specified in this RFP in accordance with the Department and the Sarasota County Utilities engineering standards.

The Design-Build Firm shall perform all final design, all necessary relocations, adjustments and removals for the utility work as per Sarasota County utilities design standards.

The Design-Build Firm shall coordinate with the Department and Sarasota County Utilities for all design, approvals. The Design-Build Firm shall act as the engineer of record (EOR) for the UWHCA plans package, obtain all required utility permits and also responsible for signing and sealing the utility construction As-Built plans in accordance with Sarasota County's Utilities standards.

The Design-Build Firm shall be responsible for utility locates (Sunshine 811) of new and relocated UWHCA utilities for the entire duration of the project.

The Design-Build firm may request Sarasota County Water & Sewer facilities to relocate to accommodate changes from the conceptual UWHCA plans; however, these relocations require the Department's approval, and the Department will not pay for the UAOs or the Design-Build Firm for the utility relocation work regardless of the UAO's eligibility for reimbursement.

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

If the Design-Build Firm chooses to deviate from the conceptual plans and the scope of the impact to a utility depicted in the concept plans, and thereby causes a greater impact to a utility, the Design-Build Firm shall be solely responsible for all increased costs incurred by the utility owner associated with the increase in the scope of the impact to a utility from that depicted in the concept plans. The Design-Build Firm shall obtain an agreement from the utility owner being impacted which outlines the changes to the scope of the impact to a utility from that depicted in the concept plans. The agreement shall also address the Design-Build Firm's obligation to compensate the utility owner for the additional costs above the costs which would have been incurred without the Design Build Firm's increase in the scope of the impact to a utility from that depicted in the concept plans. The Department shall not compensate or reimburse the Design-Build Firm for any cost created by a change in scope of the impact to a utility from that depicted in the concept plans, or be liable for any time delays caused by a change in scope of the impact to a utility from that depicted in the concept plans.

The relocation agreements, plans, work schedules and permit application are to be forwarded by the Design Firm's Utility Coordination Manager 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.

**E. Roadway Plans:**

**General:**

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

### **Design Analysis:**

The Design-Build Firm shall either utilize the signed and sealed Approved Typical Section Package (see Attachments) and comply with the same, or via the ATC process, develop and submit a different signed and sealed Typical Section Package for review and concurrence by the Department. The Design-Build Firm shall develop and submit a signed and sealed Pavement Design Package and Drainage Analysis Report for review and concurrence by the Department and FHWA on Projects of Division Involvement (PoDIs).

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

These packages shall include the following:

#### **F. Roadway Design:**

See FDM Part 9; Chapter 901 or 2022 FDM Part 3; Chapter 301 for Roadway Design sheets, elements and completion level required for each submittal.

##### **1. Typical Section Package:**

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

##### **2. Pavement Design Package:**

- 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. Identify if ARMI layer is required
  11. Minimum milling depth

The following document, inclusive of its appendices, is an Attachment provided by the Department and shall be used by the Design-Build Firm in the development of the pavement design. The pavement



thicknesses provided in this report are established minimums for the project.

- A005\_4206132\_PavementDesignReport

Use of the Mechanistic-Empirical Pavement Design Guide (MEPDG) for pavement design is not permitted.

### 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, underdrains, edge drains, roadway ditches, outfall ditches, storm sewers, 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 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 objective is to obtain an approved stormwater treatment/attenuation design.

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

Trench drains are prohibited for the final condition unless shown in the concept plans.

Manholes shall not be placed within the pavement along I-75 mainline or ramps.

The use of concrete collars and concrete jackets shall not be used without written approval from FDOT, unless otherwise shown in the concept plans.

Inverted siphons are not permitted for use on the project.

V-Ditches are not permitted unless shown in the concept plans and approved by the District Drainage Engineer.

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

Prior to proceeding with the Drainage Design, the Design-Build Firm shall meet with the District Drainage Engineer. 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 an electronic copy (pdf) of a signed and sealed Drainage Design Report. It shall include the Final Design of all drainage computations, both hydrologic and hydraulic. The engineer shall include all necessary support data,

including any variations approved by the District Drainage Design Engineer.

#### **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.

Emergency Stopping Sites/Emergency Refuge Areas shall be provided along the I-75 exit ramps. Deceleration length from mainline gore to begin point of the Emergency Stopping Site is to be based desirably on 70 mph to 0 mph, but no less than 70 mph to 20 mph. The Emergency Stopping Site shall be 12 feet wide by 170 feet long. Tapers of 5:1 or less into and out of the site are to be used. The site shall be offset 8 feet from the travel lane creating a paved flush island on either the left or right side of the ramp. The width (12-foot typical) can vary, depending upon location, from a minimum of 12 feet to a maximum of 36 feet. The area of storage for vehicles should be desirably 3,000 square feet, but no less than 1,000 square feet. The 8-foot-wide flush island shall be striped (18 inches wide/45°/10' C-C). Place tubular markers at 10-foot centers along the centerline of the flush island. The pavement design for the Emergency Stopping Sites and Refuge Areas, including the flush island, is to be the same as new I-75 ramp shoulder construction. Mainline and ramp signing is required to identify the Emergency Stopping Sites. The site is also required to have signing identifying it as an Emergency Stopping Site.

#### **H. Design Documentation, Calculations, and Computations:**

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

The design notes and computation sheets shall be fully titled, numbered, dated, indexed, and signed by the designer and the checker. Computer output forms and other oversized sheets shall be folded to a standard size 8½" x 11". 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. Sight distance
4. Guardrail length of advancement
5. Vertical geometry calculations
6. 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. The Design-Build Firm shall evaluate scour on all bridges over water using the procedures described in HEC 18.
- e. Any erection, demolition, and any proposed sheeting and/or shoring plans that may potentially impact the railroad must be submitted to and approved by the railroad. This applies to areas adjacent to, within and over railroad rights of ways.
- f. 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.
- g. 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.

2. **Criteria**

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

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

Regulations of Section V. A.

- b. Bridge Widening: In general, match the existing as per the Department Structures Manual.
- c. 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.
- d. For bridges over navigable waterways, establish the required pier strengths using the MathCad program furnished by the Department if no specific pier strength is listed in the Design and Criteria Package. The MathCad program furnished by the Department allows for the proposed bridge geometry to be input by the Engineer. Other parameters such as water traffic, waterway characteristics, etc. may not be changed. This assures that all Design-Build Firms are designing on the same assumptions other than the specific bridge layout that each is proposing.
- e. Classifications for all bridges and walls should be as follows:
  - i. Superstructure (Concrete)– Slightly aggressive
  - ii. Substructure (Concrete)– Slightly aggressive
  - iii. Substructure (Steel)– Moderately aggressive
- f. Concrete Stain shall be applied to portions of the structures where Class V coatings are identified in the concept plans
- g. Partial height walls are not permitted, unless otherwise shown in the concept plans.

**J. Specifications:**

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

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

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

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

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

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

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

#### **K. Shop Drawings:**

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

#### **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 Restrictions:**

There will be NO LANE CLOSURES allowed between the following hours:

**I-75 Northbound and Southbound**

**Single Lane Closures – 6:00 AM to 8:00 PM**

**Multilane (2-lanes) Closures – 4:00 AM to 11:30 PM**

**I-75 Ramps**

**Single or Multilane (2-lanes) Closures – 6:00 AM to 8:00 PM**

**Fruitville Road**

**Single Lane Closures – 6:00 AM to 8:00 PM**

**Multilane (2-lanes) Closures – 5:00 AM to 9:00 PM**

A lane may only be closed during active work periods.

No traffic pacing is anticipated for the project. If the Design Build Firm requests Pacing Operations, a Signed and Sealed Traffic Pacing Report shall be submitted for review and approval by the Department.

There will be no DETOURS allowed between the hours of 5:30 AM and 9:30 PM. Detours will be limited to overhead work, DDI switchover, or when approved by the Department. Detours shall use adjacent interchanges.

All lane closures, including ramp closures, must be reported to the projects Community Outreach Manager who will notify emergency services, the media and 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.

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

None Identified

**2. Temporary ITS Communications and ITS Devices:**

The Design-Build Firm shall prepare and submit to the Department for approval a Maintenance of Communications (MOC) Plan. The MOC Plan shall detail and document existing ITS equipment and report which devices will be removed, relocated, or impacted by Project work. Authorized removal of existing devices will be verified operational by the Department or its designee and Sarasota County or its designee before the Design-Build Firm is allowed to remove or relocate the device.

There are existing fiber optic, power cables and an underground conduit system currently running within the Project limits. The Design-Build Firm shall design, furnish, install, and integrate temporary communications system if the Department's ITS fiber optic cable and/or devices are deemed by the Department or its designee to be in conflict with any design or construction activity, or work done on this Project that requires them to be relocated. The Design-Build Firm's temporary communication system shall provide enough bandwidth for all of the ITS devices within the Project limits to operate as currently configured and must be approved by the District ITS Project Manager or their designee. The Design-Build Firm shall be responsible for designing, constructing and maintaining (see ITS Maintenance herein) any temporary communications that may be necessary to provide continual communications to all of the ITS field devices and communications hubs.

The Design-Build Firm shall be responsible for designing, constructing, and maintaining (see ITS Maintenance herein) any temporary communications that may be necessary to provide continual communications to all of the ITS field devices and communications hubs. Existing CCTVs cameras shall maintain 100% roadway coverage and may need to be relocated and/or adjusted if 100% roadway coverage cannot be maintained due to any visual obstruction during construction. Existing WWVDS operations shall be maintained for the I-75 off-ramps for the duration of the project.

If relocation of existing ITS is required as per the MOC Plan, the Design-Build Firm shall be responsible for the re-installation and recalibration of the ITS fiber optic cable, ITS field devices, and infrastructure in accordance with this RFP. Existing underground infrastructures (i.e., conduits, pull boxes, splice boxes, fiber optic cable, and locating system) shall not be used in the final ITS configurations upon the Final Acceptance of the Project.

The Design-Build Firm shall maintain the integrity of the temporarily relocated ITS devices and ensure the ITS devices and ancillary equipment such as any cabinet, UPS, switch, etc., operate as originally installed and configured by the Department.

**O. Environmental Services/Permits/Mitigation:**

The Department has conducted an investigation of the Project site and determined that potential gopher tortoise habitats could be impacted by the Project. All coordination by the Design-Build Firm with the Department regarding gopher tortoises will be completed through the District Environmental Management Office. 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 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, 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. Cultural Resources
2. Section 4(f) (federal projects only)
3. Wetlands and Mitigation
4. Wildlife and Habitat
5. Contaminated Materials

**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 identifying sign locations and messages within the Project limits. No structural analysis was performed for the Conceptual Signing Plan.

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

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. All existing single and multi-post sign assemblies shall be entirely replaced and upgraded to meet current standards unless otherwise shown in the concept plans

**Q. Lighting Plans:**



The Design-Build Firm shall provide a lighting design and a lighting analysis, and prepare lighting plans in accordance with Department criteria.

The Design-Build Firm shall not consider a lighting system approach that utilizes lighting fixtures attached to any existing utility poles. The installation of lighting fixtures on utility poles is not allowed.

Maintain lighting of the project limits during construction.

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

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

1. Provide a new load center per current codes and all applicable 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.

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 are proposed in the concept plans and the Design Build Firm shall coordinate with the local power company to determine final electrical service locations and shall be responsible for any Contributions In the Aid of Construction (CIAC) costs associated with the new service location. . 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 (ITS) Plans:**

### **1. General**

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

The Design-Build Firm shall prepare basic signal timings, prepare emergency vehicle preemption details, and install dilemma zone detection on Fruitville Road in accordance with the FDOT District 1 Traffic Operations Guidelines for the Development of Traffic Signal Timings – April 2021 (Attachment A08\_D1.Guidelines.April-2021.pdf). Vehicle detection shall utilize microwave/radar technologies. Each detection zone shall be on its own detection channel to facilitate lane-by-lane detection.

The Design-Build Firm shall submit a Traffic Signal Operations Analysis Report that justifies the signal operations for the signalized intersections being modified by this project. The Traffic Signal Operations Analysis Report shall also include the proposed DDI signal operations. The Traffic Signal Operations Analysis Report shall be submitted prior to the 90% Phase Submittal. A meeting with District TSM&O shall be held two weeks after the submittal of the Traffic Signal Operations Analysis Report to discuss the results and the proposed DDI signal operations. The Design-Build Firm shall be responsible for collecting all traffic data needed to perform the analysis.

Left-turn lane storage lengths shall meet or exceed the lengths provided in the concept plans.

Provide passing test results for all ITS devices, fiber optic cabling and infrastructure, and communications network equipment signed by the Department's CEI and the Contractor.

The Design-Build Firm shall prepare design plans and provide necessary documentation for the procurement and installation of the Signalization and ITS 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:

- Key Sheet
- Project Layout / Overview sheets outlying the locations of field elements
- Detail sheets on:
  - Dynamic Message Sign (DMS) Structure, DMS attachment, DMS display/layout
  - CCTV camera structure, CCTV camera attachment, CCTV camera operation/layout
  - MVDS structure, MDVS attachment, MDVS operation/layout
  - RWIS structure, RWIS attachment, RWIS operation/layout
  - RSU structure, RSU attachment, RSU operation/layout
  - Wrong way vehicle detection system (WWVDS) structure, WWVDS attachment, WWVDS operation/layout
  - Cross sections for all ITS device locations
  - Fiber optic splice and conduit
  - Power Service Distribution
  - Wiring and connection details
  - Conduit, pull box, and vault installation
  - Communication Hub and Field Cabinets
  - System-level block diagrams
  - Device-level block diagrams
  - ITS field cabinet

- Field hub/router cabinet configuration details
- Fiber optic Splicing Diagrams
- System configuration/Wiring diagram/Equipment Interface for field equipment at individual locations and communications hubs.
- Maintenance of Communications (MOC) Plan

Anticipated DMS features and details: DMS NB & SB likely need to be replaced with new Aux lanes between SR 758 (Bee Ridge Road) and SR 780 (Fruitville Road).

DMS Feature	Approximate Location	Direction	Notes
20 mm Full-Color Walk-In DMS	MM 208.6	Northbound	
20 mm Full-Color Walk-In DMS	MM 209.0	Southbound	

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.

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

The primary signalization and ITS elements of this project include:

- Replacement of the traffic signals along SR 780 (Fruitville Rd) at the intersections of:
  - Paramount Drive
  - Cattlemen Road
  - I-75 SB Ramps
  - I-75 NB Ramps
- Modifications will also be required to the existing traffic signals at the SR 780 intersections with:
  - Honore Avenue
  - Lakewood Ranch Blvd/ Coburn Road

Mast arms are required at the I-75 SB and NB ramp DDI crossover intersections and span wire assemblies in box configurations are acceptable at Paramount Drive and Cattlemen Road. Provide new ATC controllers at all project signalized intersections. Stop bar detection is required for all lanes and all approaches and advanced detection is required for SR 780 approaches, Microwave/radar detection is required for both stop bar and advance detection. Detectors shall be placed and configured to provide Automated Traffic Signals Performance Measures (ATSPM) data. This includes but is not limited to advance detection zones, stop bar detection zones, and Intersection Movement Counts (IMC) detection zones.

## 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.

### a. I-75 Freeway Management System (FMS)

Ensure that all ITS devices are on the FDOT's Approved Project List (APL). At a minimum, the ITS work in this project consists of the procurement, installation, and testing of the following major components as defined herein:

- ITS Communications Subsystem – Includes fiber optic cables, network switches, and components to complete a fully functional end-to-end communication system. Wireless communications shall not be permitted.
- DMS Subsystem – Includes cantilever sign support structure, walk-in DMS, ITS field cabinet, and all other items required or needed provide a complete and fully operational and functional motorist information system. Each DMS shall have a dedicated verification CCTV camera.
- CCTV Camera Subsystem – Includes CCTV camera concrete poles, camera lowering devices (CLDs), mountings, ITS field cabinets, communications devices, and all other items required or needed to provide a complete CCTV camera subsystem – including incident management CCTV cameras and DMS verification CCTV cameras.
- MVDS Subsystem – Includes concrete poles and mountings to detect all general purpose lanes and off-ramps within the I-75 corridor, and detector calibration.
- WWVDS Subsystem – Includes all support structures, mountings, highlighted signs, and detectors for detecting and notifying wrong way drivers.
- Roadside Unit (RSU) Subsystem – Includes all mountings needed for placement at all proposed locations.
- Road Weather Information System (RWIS) Subsystem - RWIS structure, RWIS attachment, RWIS operation/layout.
- Power Subsystem – Includes all electrical infrastructure required for providing power to ITS devices.
- Removal and replacement of any ITS 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 and to a condition equal to or better than that existing at the time such impact occurs.
- Testing of fiber optic backbone and fiber optic lateral drops furnished and installed or modified by the Design-Build Firm.
- Testing of the ITS.

i. ITS Communications Subsystem

1. Fiber Optic Cable

The Design-Build Firm shall meet the following fiber optic cable general requirements:

- Furnish and install a 144-strand single mode fiber optic backbone cable along northbound I-75 for the following limits:
  - Fiber optic connection at southern project limits:
    - Splice the entire new 144-strand single mode fiber optic backbone cable to the existing 96-strand single mode fiber optic backbone cable in the existing splice vault (FSV-I75-207.9-NB-A) at MVDS north of Bee Ridge Rd. (208N\_75\_N/O\_BEE\_RIDGE\_RD\_M208).
  - Fiber optic connection at northern project limits:

- Splice the entire new 144-strand single mode fiber optic backbone cable to the existing 96-strand single mode fiber optic backbone cable in the existing splice vault (FSV-I75-211.4-NB-A) at MVDS (2112N\_75\_N/O\_SR\_780\_M211).
- Install a 12-strand single mode fiber optic lateral cable to new device sites.
- Install a 12-strand single mode fiber optic lateral cable to existing device sites that are to remain.
- Provide 12-strand single mode fiber optic lateral cables of the same type as the fiber optic backbone cable.
- Utilize a Fiber Optic Locator as called for in the FDOT Standard Specifications for Road and Bridge Construction.
- Coordinate with the Department for designated fiber optic fiber assignments in the 144-strand single mode fiber optic branch cable.

## 2. Fiber Optic Patch Panels (FOPP)

The Design-Build Firm shall meet the following FOPP general requirements:

- Provide a complete assembly including housing, front/rear lockable doors, pigtailed cassettes loaded with connector panels and factory terminated pigtailed, heat shrinks, protective tubing, routing clips and guides, grommets, cable ties for strain relief, blank panels (as required), mounting hardware, and all other materials and components as needed to provide a complete FOPP installation. The connector type shall be confirmed with the Department.
- Provide 12-port FOPPs in all ITS field cabinets.
- Terminate and connect all lateral cable fibers in the FOPP.
- Install the FOPP so it is accessible to field maintenance personnel from the front and rear.

## 3. Managed Field Ethernet Switch (MFES)

The Design-Build Firm shall furnish and install new MFES in all new ITS field cabinets. The MFESs shall meet the following requirements:

- Minimum of two optical 1 Gbps Ethernet SFP/GBIC ports. Each optical port shall consist of a pair of fibers.
- Provide sufficient Ethernet ports to support the number of devices to be installed on each switch plus an additional Ethernet port on each switch for maintenance purposes.
- Coordinate with District TSMO staff for IP addressing and network configuration details.

## ii. DMS Subsystem

### 1. General Requirements

The Design-Build Firm shall meet the following DMS general requirements:

- Design, procure, install, integrate, and test a DMS subsystem that includes: DMS enclosures, cantilever sign support structures and foundations, mounting brackets, network-managed sign controllers, remote power management (RPMU) units, a network-managed uninterruptible power supply (UPS) subsystem, communications devices, ITS field cabinets, all cabling and connectors, conduits, electrical services, lightning protection systems which include air terminals, down

conductors, surge protection devices and grounding array and all other items required or needed and specified herein to provide a complete and fully operational and functional motorist information system.

- Design with the DMS positioned over the outside travel lane.
- Provide a design that provides no negative visual impacts due to existing or proposed lighting
- Each DMS shall have its own sign controller.
- Provide a separate base mounted ITS field cabinet a minimum of 100 feet in advance of each DMS location to house the sign controller and required communications systems equipment.
  - The ITS field cabinet with the sign controller must be located to allow maintenance personnel to visually verify the DMS messages from the cabinet.
  - House the UPS batteries in the DMS' ITS field cabinet - not in the sign enclosure .
  - Provide a multimode fiber optic cable connection between the sign controller in the ITS field cabinet and the DMS' communications / interface electronics.
  - Terminate all fiber strands in a fiber patch panel with connectors and jumpers inside the ITS field cabinet. Within the sign enclosure, all fiber strands are to have connectors and be secured including slack loops.
- Prior to installation, perform a water leakage test to ensure that the sign assembly was not damaged during transport. The water leakage test procedure and results are to be approved by the Department.
- Insert a diagram of all components illustrating all connectors and connections used to interconnect the components, wiring diagrams and schematic drawings of all circuits in a re-sealable weather-resistant pocket that is permanently mounted on the inside of an accessible door in the ITS field cabinet and in the sign enclosure.
- Label all sign devices, components, cables, and wires with permanently attached labels designed for use in the intended environment.

## 2. DMS Requirements

The Design-Build Firm shall provide signs that, at a minimum, meet the following requirements:

- 
- A high resolution 20 mm pixel pitch display.
- Full-color capability.
- Display 18-inch characters.
- Display area containing a pixel matrix of 400 columns with a pixel pitch of 20 mm, capable of displaying three lines, using an 18-inch font that meets the height to width ratio and character spacing in the MUTCD, Section 2L.04 paragraphs 05, 06, and 08.
- Equipped with a 20A/120VAC duplex receptacle outlet for maintenance purposes within each sign enclosure.
- DMS shall be a walk-in type.

### iii. CCTV Camera Subsystem

#### 1. General Requirements

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

- Design, procure, install, integrate, and test a CCTV camera subsystem that includes CCTV camera assemblies, mounting hardware, poles and foundations, CLDs, ITS field cabinets, communications devices, remote power management units, a network-managed UPS , all cabling,

conduit, lightning protection systems which include air terminals, down conductors, surge protection devices and grounding array, electrical service, and all other items required or needed to provide a complete CCTV camera subsystem.

- Demonstrate and verify CCTV camera coverage requirements as specified herein. The Design-Build Firm is to conduct a 360-degree field of view video survey at the proposed camera height within a few feet from the actual location of each proposed CCTV camera site utilizing the same camera as the Design-Build Firm's proposed CCTV camera. Clearly label the location of the CCTV camera where the video survey is being conducted from.
  - At least 4 weeks prior to performing the video survey, the Design-Build Firm shall submit the CCTV camera survey procedures to the Department for approval. The procedures shall document how the video survey will be performed and what materials will be used to perform the video survey.
  - The Design-Build Firm shall submit the video survey to the Department for review and approval as part of the 90% ITS Design Plans submittal. Rejected CCTV camera locations may require additional surveys to be conducted by the original survey method, or bucket truck with the Design-Build Firm's proposed CCTV camera, at the Department's discretion, to refine the selection of the optimum site at no additional expense to the Department. The pole location and camera height for each CCTV camera are subject to approval by the Department.
  - Provide a DVD clearly displaying the CCTV camera coverage from each proposed location and height.
- Integrate all CCTV cameras into the existing District One SunGuide Software with all new CCTV cameras added to the existing I-75 tours.
- Ensure that the CCTV camera subsystem design creates multicast video streams that can be shared with other Transportation Management Centers (TMC) in accordance with current industry standards.

## 2. CCTV Camera Locations and Coverage Requirements

The Design-Build Firm shall meet the following CCTV camera locations and coverage requirements:

- Provide and submit the final locations, heights, and number of the CCTV cameras to be provided on this Project to the Department as part of all phase submittals.
- Provide a CCTV camera subsystem which provides the following coverage:
  - Incident Management:
    - Provide a minimum of two CCTV cameras with one located on the northbound side of the interchange and the other located on the southbound side of the interchange.
    - 100% coverage of the I-75 lanes from shoulder-to-shoulder including access roads.
    - 100% coverage of the arterial at the interchange from shoulder-to-shoulder. Arterial coverage is required at the interchanges for a half mile in both directions on the arterial measured from the centerline of the I-75 mainline.
    - Coverage of I-75 and arterials shall be unobstructed from overpasses; existing and proposed signs; existing and proposed sign structures; rigid barriers; existing

and proposed landscaping; existing and proposed lighting; existing and proposed utility poles; and changes in roadway geometry.

- Orient the CCTV camera on the pole to maximize visibility of I-75 and the interchange ramps.
- Minimum mounting height of 50 feet above of I-75 mainline adjacent to site.
- DMS Verification
  - Provide dedicated DMS verification CCTV camera at locations that are upstream from all Project DMS locations, to be inside of the cone of vision for each location, and close enough such that all pixels of the DMS and any co-located static signs text characters are readable and legible via the CCTV camera without using zoom.
    - Minimum distance from DMS shall be 100 feet.
    - Co-located with DMS ITS field cabinet.
  - DMS verification CCTV cameras shall not be considered for the 100% coverage requirements.
  - Maximum height of three vertical feet above the top of the DMS.

### 3. Camera Assembly and Components

The Design-Build Firm shall meet the following CCTV camera assembly and components requirements:

- Provide a CCTV camera that provides Pan-Tilt-Zoom (PTZ) capabilities for incident management.
- Provide a fixed or PTZ CCTV camera for dedicated DMS verification.
- Provide a CCTV camera that is full High-Definition (HD) 1080P with minimum resolution of 1920x1080.
- Utilize Digital Signal Processor (DSP) technology and provide a camera zoom lens with an image stabilizer to compensate for slight movements in the camera image.

### 4. CCTV Camera Poles and Mounting

The Design-Build Firm shall meet the following CCTV camera pole and mounting requirements:

- Provide a design where each CCTV camera site is accessible by maintenance vehicles and equipment without lane closure.
- Provide a level concrete pad area for maintenance personnel around all CCTV camera poles. The concrete pad must provide sufficient surface area for one maintenance person to stand with the ITS cabinet door open and a three-foot clear space. The concrete pad area must have a minimum thickness of six inches.
- Power and communication pull boxes must be placed within the concrete pad area and flush to the top of the concrete surface.

### 5. Camera Lower Devices (CLD)

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



- Provide a CLD on CCTV camera poles for all CCTV camera locations above 40 feet or more above the elevation of the mainline at the location of the CCTV camera pole.
- External-mounted CLDs are not allowed.
- Ensure the CCTV camera pole is designed and installed such that the CLD hand holes are oriented 180 degrees from the CCTV camera. The Design-Build Firm shall submit the details of the placement of CLD and CCTV camera assemblies as part of the 90% phase submittal for the Department's review and approval.
- Provide two portable lowering tools with both a manual hand crank and a portable electric drill motor with custom clutch adapter from the CLD manufacturer.
- No other devices on the CCTV camera pole shall interfere with the raising/lowering of any CCTV camera on the same pole.

iv. MVDS Subsystem

1. General Requirements

The Design-Build Firm shall meet the following MVDS subsystem requirements:

- Design, procure, install, integrate, and test a MVDS subsystem that includes: MVDSs, poles and foundations, mounting hardware, ITS field cabinets, communications devices, RPM units, network-managed UPS, all cabling, lightning protection systems which include air terminals, down conductors, surge protection devices and grounding array, conduit, electrical service, and all other items required or needed and specified herein to provide a complete and functional MVDS subsystem.

2. MVDS Locations and Coverage Requirements

The Design-Build Firm shall meet the following MVDS locations and coverage requirements:

- Provide MVDSs on both sides of I-75 at half-mile maximum spacing for travel lanes.
  - MVDS shall cover all lanes and shoulders along I-75.
- Provide MVDS at top of exit ramps for spillback detection.
  - MVDS used for exit ramp detection shall be separate devices from mainline detection.
- If occlusion is an issue, then the Design-Build Firm shall provide MVDSs as necessary to meet spacing and performance parameters. The Design-Build Firm is responsible to design and determine the final number of MVDS sites for this Project.
- Design MVDS poles so that the weatherhead is no more than 24 inches from the MVDS device.
- Provide a design where each MVDS site is accessible by maintenance vehicles and equipment without lane closure.
- At all non-impacted MVDS sites within the project limits, replace existing MVDS detectors with new MVDS detectors.

3. MVDS Poles and Mounting

The Design-Build Firm shall meet the following MVDS pole and mounting requirements:

- Mount on dedicated poles or co-locate on CCTV camera poles.

- Devices on dedicated poles shall have a dedicated ITS field cabinet.
- Devices shall not be mounted on static sign structures, DMS structures, or luminaire poles.
- If installed on CCTV camera poles, the MVDS shall not interfere or block the use of the CLD.
- All proposed concepts shall be designed to not adversely impact the accuracy performance level of the MVDS.

v. Wrong Way Vehicle Detection System (WWVDS) Subsystem

1. General Requirements

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

- Design, procure, install, integrate, and test a WWVDS subsystem that includes: WWVDSs, poles and foundations, highlighted signs, mounting hardware, ITS field cabinets, communications devices, RPM units, network-managed UPS, all cabling, lightning protection systems which include surge protection devices and grounding array, conduit, electrical service, and all other items required or needed and specified herein to provide a complete and functional WWVDS subsystem.
- Capable of remote configuration, calibration, monitoring, and diagnostic of real-time traffic activities from the District One RTMC using the SunGuide® software and software provided by the detection system vendor.

2. WWVDS Locations and Coverage Requirements

The Design-Build Firm shall meet the following WWVDS locations and coverage requirements:

- Provide WWVDS on each exit ramp of I-75 at Fruitville Rd.
  - At minimum, two sets of static wrong way signs and two sets of highlighted wrong way signs shall be provided on each exit ramp.
- Detect on all lanes and shoulders along the exit ramp for a minimum of 600 feet beginning at the stop bar for the intersecting arterial.

3. WWVDS Assembly and Components

The Design-Build Firm shall meet the following WWVDS assembly and components requirements:

- Provide an automated alert to the District One RTMC if a motorist is detected traveling in the opposite direction of traffic.
- Collect and process data locally prior to sending a notification to the District One RTMC.
- WWVDS shall be hardwired for power and communications to the FMS.
- Highlighted signs shall be hardwired for power and communications from the WWVDS' main cabinet.

vi. Roadside Unit (RSU)

The Design-Build Firm shall meet the following Connected Vehicle (CV) RSU requirements:

The Design-Build Firm shall design, construct, integrate and test RSU assemblies within the project limits at all existing and proposed CCTV cameras and MVDS locations along I-75. All RSUs shall be mounted on new poles, existing signal poles or DMS structures located along the project corridors and may use existing conduit to connect to ITS cabinets if available.

The Design-Build Firm shall determine the suitability of existing conduit to connect the RSU to the cabinet. If the existing conduit is not suitable, then the Design-Build Firm shall install new conduit. Ensure communication cabling and power conductors do not share the same conduit. The Design-Build Firm shall design the system and all supporting ancillary systems for Connected Vehicle applications. The RSU shall contain the following applications at a minimum; MaP, Signal Phasing and Timing (SPaT), Data Collection, Transit Signal Priority (TSP), Traffic Information Message (TIM), End of Ramp Deceleration Warning (ERDW), Signal Status Message (SSM) and Over-the-Air-Update.

RSUs shall meet the following requirements:

- latest version of Joint AASHTO, ITE, NEMA, and SAE Roadside Unit Standard (<https://www.ite.org/technicalresources/standards/rsu-standardization/>; currently CTI 4001 v 01.01 RSU standard, adopted September 16, 2022) and evaluate the optional requirements for design and implementation;
- be browser-based for interface provisioning and control,
- possess diagnosis and remote software update capability, data security protection with V2X private keys and signature generation at a minimum,
- NEMA 6P compliant enclosures and connectors,
- Power Over Ethernet (POE) capable,
- contain GPS location capability with 2-meter accuracy and WAAS correction support,
- be Wi-Fi hotspot capable, be updated with latest FCC V2X & C-V2X (firmware, hardware and software) and possess a security credential using the Security Credentials Management System (SCMS) for RSU devices.

The Design-Build Firm shall install RSU equipment manufacturer/vendor provided software instances to control each RSU from FDOT RTMC.

The selected vendor shall ensure all proposed products, including RSU devices are listed on either the Department's APL or Innovative Products List (IPL) or are certified by the OmniAir Consortium <https://omniair.org/certified-products/>.

The Design-Build Firm shall provide 3 on-board units (OBUs) compatible with their proposed RSUs for system acceptance, testing, and future Department use.

## vii. Road Weather Information System (RWIS) Subsystems

### 1. General Requirements

The Design-Build Firm shall meet the following RWIS general requirements:

- Design, procure, install, integrate, and test a RWIS subsystem that includes: RWIS environmental sensors, pole/towers, mounting hardware, ITS cabinets, communications devices, RPM Unit, network-managed UPS, lightning protection systems which include air terminals, down conductors, surge protection devices and grounding arrays, conduit, electrical service, and all other items required or needed and specified herein to provide a complete RWIS subsystem that

meets and/or exceeds the most current Standard or Developmental FDOT Standard Specifications, along with the revised and/or additional requirements as specified herein.

- Furnish all new material with the most recently developed and approved product versions that meet or exceed FDOT Developmental Specification Section 688, and are listed in the FDOT's Innovative Product List (IPL).
- Install RWIS equipment/sensors at levels and with connections as specified by the manufacturer(s).
- Use only fiber-based Ethernet communications for the RWIS site.
- Utilize a cabinet for the sole purpose of the RWIS that is not co-located with any other devices on this Project. The following additional requirements need to be met: provide communications devices, (i.e. network switch, fiber optic termination units) RPM Units, and a network-managed UPS

## 2. RWIS Location and Coverage Requirements

The Design-Build Firm shall determine the appropriate location for the RWIS within the project limits. The Design-Build Firm shall not install the RWIS near tree lines. Final site locations must be approved by the Department.

## 3. RWIS Poles and Mounting

The Design-Build Firm shall meet the following RWIS poles and mounting requirements:

- Mount on a Type P-III pre-stressed concrete pole of a height required for the proper operation of the equipment as defined by the vendor.
- Provide a level concrete pad area for the RWIS station. The pad area must provide sufficient surface area for one maintenance person to stand with the ITS cabinet door open and a three-foot clear space. The concrete pad area must have a minimum thickness of six inches. Power and communication pull boxes must be placed within the concrete pad area and flush to the top of the concrete surface.

### viii. Power Subsystem

#### vii. General Requirements

The Design-Build Firm shall meet the following power subsystem general requirements:

- Design, construct, install, integrate, and test a power subsystem within the FDOT Right of Way consisting of underground power conduits and conductors, transformers, UPSs, RPM units, and all associated equipment and wiring.
- Utilize the existing FMS power subsystem to the extent possible.
  - New power service points are not permitted.
- Evaluate existing power services and determine the necessary modifications required to accommodate all ITS devices and infrastructure.
  - The Design-Build Firm shall be responsible to upgrade any existing electrical components used to supply the Intelligent Transportation System.
  - All NEC and NESC requirements shall be satisfied.
  - At a minimum, all affected existing ITS field cabinets shall be calculated for 120% over electrical draw.

- Analyze the existing emergency permanent generator to ensure it is adequately sized for the proposed load plus 120% over electrical draw. If the existing emergency permanent generator is not adequately sized a new one shall be provided at no additional cost.
- Submit a signed and sealed Power Design Analysis Report that documents the power load, voltage drop, generator backup calculations, battery backup calculations, and a short circuit and protection coordination study for the project. Calculate loads per National Electric Code (NEC) requirements. All electrical equipment (including lights, fans, UPS battery charging) shall be considered continuous loads. UPS battery charging load shall be included in the calculated load. Maximum allowable voltage drop from the utility power service point to the ITS field cabinet and DMS housing outlets shall be less than 5%. In addition to the electrical load of the ITS site, an additional 200W of power for future use must be provided for each new or existing ITS field cabinet. For project electrical requirement calculations within the power report, the Design-Build Firm can assume that only one of the maintenance receptacles in a cabinet will be in use at one time. This assumption shall use the worst-case scenario of one nine-amperes load at the farthest point on each circuit being used and shall be clearly identified within the Power Design Analysis Report.

#### viii. Power Subsystem Design Requirements

The Design-Build Firm shall meet the following power subsystem design requirements:

- Do not locate electrical circuits 60 volts or under in same conduit or pull box with circuits over 60 volts.
- Do not locate AC electrical circuits in same conduit or pull box with DC circuits.
- Include copper wound step-up or step-down transformers as needed for each location.
- Provide a design that contains readily accessible, manually resettable, or replaceable circuit protection devices (such as circuit breakers or fuses) for equipment and power source protection.
- It is the Design-Build Firm's responsibility to complete any and all necessary coordination with the utility companies.
- Provide a design that does not utilize solar power as a power solution for any ITS device and/or subsystem for this Project.
- Provide a design that is capable of supplying nine amperes total to the maintenance receptacles while not exceeding the supply voltage tolerance of 5% drop from the nominal 120 VAC within the cabinet or any other point in the power circuit.
- Provide a design that does not include any exposed wiring.
- Provide all protection devices as required to minimize interruption of electrical service to any subsystem.
- Provide outdoor-rated connections that are protected from moisture and water intrusion.
- Label power cables with one tag indicating direction or exit from underground facilities (i.e., pull boxes, transformers, etc.) and label with the next point of connection (i.e., transformer 1 to transformer 2).

#### ix. Transformer Requirements

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

- Design, construct, install, and integrate a dry-type transformer (ITS device transformer) at each of the ITS cabinets, as required, to step-down from the voltage supplied from the underground distribution wire to the 120/240VAC power requirement for that location. Aluminum wound transformers are not acceptable.
- Equip with two 2.5% taps above and two 2.5% taps below normal voltage. All taps must be full capacity taps. However, the Design-Build Firm shall not include the plus or minus tap in the voltage drop calculations during the design of the power distribution subsystem.

x. UPS Requirements

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

- Supply all electronic components housed in and associated with the ITS field cabinets with resettable UPSs in the event of power loss. Maintenance outlets are not required to be backed up by the UPS.
- Provide a manual / maintenance bypass switch. The switch must not cause a power outage to the power source when it is put in bypass mode and/or UPS mode.
- Ensure that the UPS is generator compatible to ensure power to protected equipment is free from voltage spikes, drops, ripples, or noise when under generator power using functions such as power inverters.
- Furnish, configure, and integrate any software as required to monitor the UPSs from the District One RTMC.

xi. RPM Unit Requirements

The Design-Build Firm shall meet the following RPM unit requirements:

- Provide in all ITS field cabinets.
- Provides the ability to remotely turn on and off power individually to any of the ITS and communication/network equipment installed inside ITS field cabinets.
- An internal web server interface for remote access and login.
- Webpages display power status.
- Ability to enable Auto-Ping feature to reboot devices automatically even during network outages.
- Front panel switches to allow immediate control for manual override, lockout, emergency-off and reset.
- Digital voltage and current meters monitor current and wattage on each bus individually.
- Multi-user logins and SYSLOG reports.
- Internal audio alarm with programmable warning alerts.
- Outlets & Receptacles - 12 x outlets NEMA 5-15R, 15A, or more as required based on the number of devices.
- Two additional outlets feed un-switched power to “always-on” devices.
- Two separate power cords on A/B circuits provide a total of 30 amps of power.

- Surge Suppression - Dual Metal Oxide Varistor (MOV), 3600J rating.
- Ethernet Interface - 10/100 autosensing, Static IP, port selectable, RJ-45.
- Internal/External Script.
- Web Controlled.
- Operating Temperature -30° to 170°F (-34° to 76°C).

ix. ITS Field Cabinets

xii. General Requirements

Design, procure, install, and test ITS field cabinets for DMS, CCTV camera, MVDS, RWIS, and WWVDS locations. ITS field cabinets shall be sized, as required, to house all ITS equipment, network switches, fiber patch panels, power components, surge protection, RPM unit, and UPS with batteries. The Design-Build Firm shall meet the following ITS field cabinet requirements:

- Provide ITS field cabinets, as a minimum, consisting of the following type and size:
  - Pole Mounted Type 336S cabinet with sunshields with all mounting hardware.
  - Pole Mounted RWIS cabinet per Developmental Specifications Section 688-2.4 with all mounting hardware.
  - If more space is required, the Design-Build Firm may propose a larger cabinet or a matching cabinet to house the associated equipment / components. No “piggyback” style or “add-on” cabinets will be accepted.
- Meet the following minimum ITS cabinet location and orientation requirements:
  - When the doors are fully opened, must allow maintenance personnel adequate space to perform work within the FDOT Right of Way.
  - DMSs shall utilize Base Mounted Type 334 cabinets.
  - RWIS shall have its own cabinet that is not shared with other ITS devices.
  - Orient such that the ITS field cabinet and doors avoid any conflicts with the lowering of cameras.
  - Provide railing at cabinets locations with drop off hazards.
- Provide all ITS cabinets with a minimum of two switched interior mounted NEMA 5-15R type, 120-volt, 60 Hz outdoor rated ground fault circuit interrupter (GFCI) electrical receptacles to supply power for devices and/or maintenance equipment (including shop-vac and laptops) while in the field. The GFCI electrical receptacles must be connected to a dedicated circuit breaker with a minimum rating of 20 Amps.
- For base mounted cabinets, provide a minimum of seven 2-inch conduits into the cabinets. The conduits are to be routed as follows:
  - Two 2-inch conduits to the splice vault/fiber optic pull box.
  - Two 2-inch conduits to the electrical pull box/junction box
  - Three 2-inch conduits to the composite / low voltage communications pull boxes
- Configure and organize ITS field cabinets containing the same/similar type equipment as follows:

- Components must be mounted by the same means and in the same location from one similar cabinet to the next.
- Devices must be plugged into the same ports on the MFES. (such as device servers would be plugged into port seven at all cabinets).
- Fiber optic patch cables must be connected in the same way (such as the fiber heading north is always on port one, etc.).

No loose cabling or equipment within the ITS field cabinet will be permitted. All internal components must be permanently mounted, and cables must be of proper length with adequate slack for movement within the ITS field cabinet. No cable is to be routed across the face of the ITS field cabinet. Cables must be carefully and neatly routed within the ITS field cabinet and loosely tied to not crimp or deform the cables.

x. ITS Conduit, Pull Boxes, Junction Boxes, and Splice Vaults

xiii. General Requirements

The Design-Build Firm shall meet the following ITS conduit, pull boxes, junction boxes, and splice vaults general requirements:

- Coordinate placement of communications pull boxes and splice vaults with existing and proposed drainage features to prevent flooding. Any changes to this requirement must be approved by the Department.
- Provide a pull tape or rope with a tensile strength of at least 1,250 pounds in each empty or spare conduit. Terminate the ends of the pull tape or rope to prevent them from inadvertently being pulled into the conduit.
- Connect all pole-mounted or above-grade enclosures or ITS field cabinets with rigid aluminum conduit.
- Install conduit(s) perpendicular to the roadway when crossing an interchange ramp, crossroad or other roadway.
- Communications Conduit:
  - Provide, as a minimum, three 1¼-inch standard inside dimension ratio (SIDR) conduits. One 1¼-inch conduit shall be used for fiber optic cable, one 1¼-inch conduit shall be a spare, and one 1¼-inch conduit shall be used for the locate wire. Conduit color shall match the Department guidelines
  - When boring under the roadway, provide an additional 1¼-inch conduit as a spare.
- Electrical Conduit:
  - Provide, as a minimum, one 2-inch conduit for ITS electrical power conductors. Design-Build Firm will determine the number of electrical conduits depending on the number of devices that are serviced. Electrical conduit must be separate from ITS communications conduit.
  - When boring under the roadway, provide an additional 2-inch conduit as a spare.
- Provide, as a minimum, two 2-inch conduit for composite / low voltage communications cables.
- Existing conduit shall not be utilized without prior approval from the Department.



- Existing trenched conduit shall be removed.
- Existing directional bored conduit may remain in place.

**b. Sarasota County Advanced Traffic Management System (ATMS)**

The Sarasota County ATMS is managed by Sarasota County. The Design-Build Firm shall ensure that the proposed ITS devices are on the FDOT’s APL and are fully compatible with the Sarasota County ATMS software and hardware.

At a minimum, the ITS work in this project consists of the procurement, installation, and testing of the following major components as defined herein: ITS Communications Subsystem – Procurement, installation, termination, and testing of fiber optic cables and components to complete a fully function end-to-end communication system.

- CCTV Camera Subsystem – Includes CCTV camera concrete poles, and mountings for incident management CCTV cameras.
- Roadside Unit (RSU) Subsystem – Includes all poles and mountings needed for placement at all signalized locations.
- Removal and replacement of any ITS 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.
- Testing of fiber optic backbone and fiber optic lateral drops furnished and installed or modified by the Design-Build Firm.
- Testing of the ITS.

i. ITS Communications Subsystem

1. Fiber Optic Cable, Components, and Splicing

The Design-Build Firm shall meet the following fiber optic cable, components, and splicing requirements:

- Furnish and install a 96-strand single mode fiber optic backbone cable along Fruitville Road and splice to the existing fiber optic backbone cable as shown in the concept plans.
- Install a 12-strand single mode fiber optic lateral cable to new traffic signal cabinets.
- Install a 12-strand single mode fiber optic lateral cable to existing traffic signal cabinets that are to remain.
- Provide 12-strand single mode fiber optic lateral cables of the same type as the fiber optic backbone cable.
- Coordinate with Sarasota County and the Department for designated fiber optic fiber assignments in the 96-strand single mode fiber optic branch cable.
- Provide 12-port FOPPs in new and existing traffic signal controller cabinets. Terminate and connect all lateral cable fibers in the fiber optic patch panel.
- Install the FOPPs so they are readily accessible to field maintenance personnel.
- Install two 2-inch orange HDPE conduits for the 96-strand single mode fiber optic backbone cable.
  - One conduit will contain the backbone cable
  - One conduit will be designated spare

- Install two 2-inch orange conduits for the 12-strand single mode fiber optic lateral cable.
  - One conduit will contain the lateral cable
  - One conduit will be designated a spare.
- When boring, provide an additional 1¼-inch conduit to contain the locate wire.
- Existing conduit shall not be utilized without prior approval from the Department.

## 2. Managed Field Ethernet Switches (MFES)

The Design-Build Firm shall furnish and install new MFESs in the Project's new and existing traffic signal controller cabinets.

Provide a MFES that has the following features and capabilities:

- Minimum of two optical 1 Gbps Ethernet SFP/GBIC ports. Each optical port shall consist of a pair of fibers.
- Minimum of four spare 10/100 Base-T/TX full duplex copper local ports in addition to the local ports needed per design of each cabinet.
- Fully compatible and interoperable with the existing Sarasota County ATMS network.

### ii. CCTV Camera Subsystem

The Design-Build Firm shall meet the following CCTV camera subsystem requirements:

- Design, procure, install, integrate, and test a CCTV camera subsystem that includes CCTV camera assemblies, mounting hardware, poles and foundations, all cabling, conduit, surge protection devices, electrical service, and all other items required or needed to provide a complete CCTV camera subsystem.
- At a minimum, one CCTV camera shall be provided at each of the following signalized intersections:
  - Fruitville Road and Paramount Road
  - Fruitville Road and Cattlemen Road
  - Fruitville Road and Southbound I-75 Ramp
  - Fruitville Road and Northbound I-75 Ramp
- Locate the CCTV cameras such that 100% CCTV camera coverage of the project signal is provided.
  - 100% CCTV camera coverage shall be defined as the clear and unobstructed view for a minimum of 1000 feet on the eastbound Fruitville Road approach, 1000 feet the westbound Fruitville Road approach, 500 feet on the northbound minor street approach, and 500 feet on the southbound minor street approach.
- CCTV cameras mounted to concrete poles shall be a minimum of 35 feet above grade and a maximum of 40 feet above grade.
  - CCTV cameras may be mounted to a new signal structures provided the proposed location meets the CCTV camera coverage requirements.

- Final CCTV camera locations shall be approved by the Department prior to plans being released for construction.
- Integrate all new CCTV cameras into the existing Sarasota County ATMS video system.
- All proposed CCTV cameras shall be fully compatible and interoperable with the existing Sarasota County ATMS network.
- Shall connect to the Sarasota County ATMS network via MFES in the new traffic signal controller cabinet.

CCTV camera communications cables may not share conduits with cables or pull boxes with power cables carrying voltage greater than 24 VDC/VAC or current in excess of 1.5 amps.

iii. Roadside Unit (RSU)

The Design-Build Firm shall meet the following Connected Vehicle (CV) RSU requirements:

The Design-Build Firm shall design, construct, integrate and test RSU assemblies within the project limits at all existing and proposed CCTV camera and MVDS locations along Fruitville Road. All RSUs shall be mounted on new poles, existing signal poles located along the project corridors and may use existing conduit to connect to ITS cabinets if available.

The Design-Build Firm shall determine the suitability of existing conduit to connect the RSU to the cabinet. If the existing conduit is not suitable, then the Design-Build Firm shall install new conduit. Ensure communication cabling and power conductors do not share the same conduit. The Design-Build Firm shall design the system and all supporting ancillary systems for Connected Vehicle applications. The RSU shall contain the following applications at a minimum; MaP, Signal Phasing and Timing (SPaT), Data Collection, Transit Signal Priority (TSP), Traffic Information Message (TIM), End of Ramp Deceleration Warning (ERDW), Signal Status Message (SSM) and Over-the-Air-Update.

RSUs shall meet the following requirements:

- latest version of Joint AASHTO, ITE, NEMA, and SAE Roadside Unit Standard (<https://www.ite.org/technicalresources/standards/rsu-standardization/>; currently CTI 4001 v 01.01 RSU standard, adopted September 16, 2022) and evaluate the optional requirements for design and implementation;
- be browser-based for interface provisioning and control,
- possess diagnosis and remote software update capability, data security protection with V2X private keys and signature generation at a minimum,
- NEMA 6P compliant enclosures and connectors,
- Power Over Ethernet (POE) capable,
- contain GPS location capability with 2-meter accuracy and WAAS correction support,
- be Wi-Fi hotspot capable,
- be updated with latest FCC V2X & C-V2X (firmware, hardware and software) and possess a security
- credential using the Security Credentials Management System (SCMS) for RSU devices.

The Design-Build Firm shall install RSU equipment manufacturer/vendor provided software instances to control each RSU from FDOT RTMC.

The selected vendor shall ensure all proposed products, including RSU devices are listed on either the Department's APL or Innovative Products List (IPL) or are certified by the OmniAir Consortium <https://omniair.org/certified-products/>.

The Design-Build Firm shall provide 3 on-board units (OBUs) compatible with their proposed RSUs for system acceptance, testing, and future Department use.

Perform internal coordination to avoid conflicts with landscape plans within the Department Right-of-Way.

### **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 not remove or take offline any existing ITS device without the expressed written permission of the District ITS Project Manager and the Sarasota County ITS Manager (where applicable) unless specified by the Department.

All ITS elements removed from the existing ITS system shall be the property of the owning agency, unless otherwise directed by the Department. Due care shall be taken in the removal and disassembly of all parts so as to not damage those re-usable components. The Design-Build Firm shall conduct a field walk-through with the District ITS Project Manager or its designee and the Sarasota County ITS Manager or its designee prior to construction to determine the condition of the existing equipment and to identify the items to be delivered to the owning agency. Once the equipment list is approved, and the Department/Owner has provided written authorization to remove said devices, the Design-Build Firm shall deliver the removed devices to the owning agency's identified facility within 50 miles of the Project limits.

### **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 a designated representative.

All testing and verification will be performed by the Design-Build Firm with Department oversight, under the Design-Build contract.

#### **i. General Requirements**

The Design-Build Firm shall develop and submit test plans for this Project and a corresponding testing schedule to the Department for review and approval at least 60 calendar days in advance of the Design-Build Firm's scheduled testing dates. Standard Specification Section 611 includes standardized field acceptance test procedures for some ITS devices. The Department has created standardized field acceptance test procedures for the following ITS devices: MFES 750-040-07; CCTV 750-040-08; MVDS 750-040-09; CLD 750-040-10. These are available on the Department's Procedural Document Library: <https://pdl.fdot.gov/> and may be used on this project. Submit a field acceptance test plan to test the standalone functions of devices not covered by 611-4.2. If the Department rejects or requests modifications

to the test plan, the Design-Build Firm shall update and resubmit a revised test plan to the Department for review and approval. The Design-Build Firm shall allow 15 working days for the Department's review and approval of the test plan. No testing will commence until the Department has reviewed and approved the test plan.

Request in writing to the Department for approval to start each testing activity a minimum of 15 calendar days (excluding weekends and Department-observed holidays) prior to the requested start date. The Department reserves the right to reschedule the start date if needed. The start date for each testing activity cannot be prior to the successful completion of all previous testing activities unless otherwise approved by the Department. Provide test plans that are based on and include the following:

- A step-by-step outline of the test procedures and sequence to be followed demonstrating compliance with the project requirements
- A test set-up/configuration diagram showing what is being tested
- A description of expected operation, output, and test results (pass/fail criteria)
- An estimate of the test duration and proposed testing schedule
- A data form to be used to record all data and quantitative results obtained during the tests
- A description of any special equipment, setup, test software, manpower, and/or conditions required for each respective test
- The number of test cases must reflect the complexity of each device or subsystem and the content of test cases must cover all functionalities and requirements

All provided test plans shall have the signed approval of the EOR. Conduct the following tests on devices and subsystems where applicable:

- Pre-Installation Tests (PIT)
- Installed Site Test \ Stand Alone Tests (SATs)
- Fiber Optic Cable End-to-End Tests
- 30-Day Operational System Acceptance Test (OSAT)
- ITS Close-Out and Final ITS Acceptance

Provide Maintenance of Traffic (MOT) during all testing activities as required. Provide and maintain all test equipment and software, made ready for use by the Design-Build Firm and/or the Department. Provide up-to-date calibration certification with dates and test parameters for all test equipment utilized in accordance with the manufacturer's recommended procedures.

Conduct all tests in the presence of the Department, unless otherwise approved in writing by the Department. The Department reserves the right to waive the right to witness certain tests. Neither witnessing of the tests by the Department nor the waiving of the right to do so shall relieve the Design-Build Firm of the responsibility to comply with the Project requirements.

Document and submit all test results to the Department 15 calendar days (excluding weekends and Department-observed holidays) after the completion of the tests for review and approval by the Department. Test results must include documentation of:

- Test results with pass/fail criteria and test objectives
- Date of test
- Start/end times of test
- Location of test
- Names and signatures of testers and witnesses of the test

- Sketch of test location and set-up (if applicable)
- Conditions during the test (e.g., weather conditions, etc.)
- Any and all field notes taken by the tester
- Any discrepancies found during testing
- Equipment serial numbers
- Equipment IP addresses (if applicable)
- Equipment MAC addresses (if applicable)

Fiber Optic Cable End-to-End Tests must include Optical Time Domain Reflectometer (OTDR) results. Replace, repair, and retest all devices that fail testing. Provide a report of corrective actions taken when submitting the passing test results.

#### **ii. Pre-Installation Test (PIT)**

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

- Document and submit the factory and reel fiber testing results for all fiber strands to the Department for review and approval 15 calendar days (excluding weekends and Department-observed holidays) prior to any fiber installation.
- Inspect all devices and materials delivered to the designated Design-Build Firm's project field site for any damage as a result of shipping.
- Provide written documentation stating that all devices and materials showed no signs of damage or compromise as a result of shipping.

#### **iii. Stand Alone Tests (SAT)**

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

Field inspect and verify the following items:

- All devices and equipment, once installed at each field site, are undamaged and correctly installed, with correct cabling and wiring terminations, port settings, cable interconnections, good workmanship.
- All devices are functional, operational and can be controlled locally prior to connecting to the communication network.
- All local cabinet components and subsystems, including Ethernet switches, power supply voltages and outputs, are fully functional and operational.
- All devices are properly connected to their power source, and the lightning protection system which includes air terminal, down conductors, surge protection devices and grounding array has been installed.
- Site grounding meets and/or exceeds the FDOT Standard Specifications and is compliant with this RFP.

During the SAT, replace any device with the same make and model that fails its SAT more than twice. The entire SAT must be repeated for the replaced or repaired device until proven successful.

Perform SAT on every device, including the following:

- DMS
- CCTV cameras and components
- CLDs

- MVDS and components
- WWVDS
- RSUs
- ITS Field Cabinets
- RWIS and components
- Device servers
- Layer 2 MFESs
- All fiber optic cables, including splices, patch cables and connectors
  - Perform OTDR bi-directional testing using a launch cable and a receive cable
- RPM units and UPSs

Document and submit all test results to the Department 15 calendar days (excluding weekends and Department-observed holidays) after the completion of the tests for review and approval by the Department. Test results must include documentation of any discrepancies found during testing, successful test completion dates, and equipment serial numbers.

#### **iv. Subsystem Tests**

The Design-Build Firm shall meet the following subsystem tests requirements:

- Perform subsystem tests to demonstrate that each subsystem meets the relevant sections of FDOT Standard Specifications and this RFP. No partial subsystem testing will be permitted.
- Begin subsystem tests only when the Design-Build Firm has satisfied the Department requirements that all SATs along with all fiber optic facilities have been successfully completed and approved by the Department and that all work on the subsystem to be tested has been completed.

Provide qualified personnel to support the diagnosis and repair of system equipment during the subsystem tests as required.

- Perform subsystem tests for the following subsystems:
  - ITS Communications subsystem
  - DMS subsystem
  - CCTV camera subsystem
  - MVDS subsystem
  - WWVDS subsystem
  - RSU subsystem
  - RWIS subsystem
  - Power subsystem

Perform subsystem tests as required to satisfy the requirements. The subsystem test shall include, but not be limited to, the following:

- Verify Layer 2 communications between cabinet MFESs. Layer 2 redundancy along the corridor shall be tested.
- Demonstrate full control and functionality of all devices associated with the subsystem from the respective Operations Center (District One RTMC and Sarasota County TMC) utilizing the respective Central Control Software (FDOT's SunGuide® and the Sarasota County's ATMS.now);
  - Display of each CCTV camera image on workstations, video wall, and other CCTV camera software applications designated in the respective Operations Center.
  - Verify all CCTV camera remote control functions and full PTZ functionality using the respective Central Control Software. Verify that video produced by the CCTV camera is

true, accurate, distortion free, vibration free, and free from transfer smear, oversaturation, and any other image defects under all lighting conditions (dusk, dawn, and night hours) in both color and monochrome modes.

- Verify the proper operation of the auto iris feature. Demonstrate that the functionalities of the local/remote trouble shooting/diagnostics perform as specified in the specific subsystem functional requirements.
- Verify MVDS data is accurately collected and presented in District One SunGuide® software.
- Verify full integration of all other ITS devices installed on this Project to the respective Operations Center, including the verification of all control and monitoring capabilities with the respective Central Control Software.
- Verify remote monitoring and control of all field devices, including network switches, UPSs, and RPM Units.
- Verify WWVDS detection data is accurately collected and presented in District One SunGuide® software.

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

#### **v. Operational System Acceptance Test (OSAT)**

Conduct the OSAT covering all subsystems, integrated together and fully operable as a single system with the respective Central Control Software from the respective Operations Center for a period of 30 consecutive calendar days without failure of any ITS device or subsystem. The OSAT will demonstrate that all subsystems operate together and meet the relevant sections of FDOT Standard Specifications and this RFP. Along with the As-Built Plans, a copy of the completed ITSFM data shall be submitted for review prior to beginning the OSAT. The Design-Build Firm shall submit, via a schedule, the start of the OSAT to be approved by the Department.

Perform tests with the Department personnel managing, monitoring, and controlling the devices in real-time to assure conformance to the Project requirements. Maintain a daily log for all operations after the start of the OSAT. Report in an OSAT daily log all activities associated with OSAT.

OSAT failure criteria shall be per Standard Specification Section 611-5. In the event of an OSAT failure provide qualified personnel to support the diagnosis and repair of system equipment during the OSAT as required.

Diagnose and correct all deficiencies causing the OSAT shutdown. After the deficiency or deficiencies causing the OSAT shutdown have been corrected, the Design-Build Firm shall re-perform all applicable tests as directed by the Department.

Restart tests at day zero for a new 30 consecutive calendar day test period as directed and approved by the Department unless corrections are made within the requirements of Table A: Maximum Allowable Outage Times Prior to Suspension of OSAT. If the allowable outage times have been met, then the OSAT shutdown will be reclassified as an OSAT suspension and the test will recommence at the point it was stopped upon approval by the Department.

**Table A: Maximum Allowable Outage Times Prior to Suspension of OSAT**

Item	Maximum Allowable Outage Times*
ITS Communications	2 hours



DMS	8 hours
CCTV Camera	8 hours
RSU	8 Hours
MVDS	8 hours
RWIS	48 hours
WWVDS	2 hours
PowerService	8 hours

\*Outage time clock starts upon notification to Design-Build Firm.

Provide the following when the total number of OSAT shutdowns equals three for the same subsystem and/or device:

- Remove and replace the subsystem or device with a new unit.
- Perform again all applicable tests, as deemed necessary by the Department.
- Submit diagnostic reports to demonstrate that errors were detected and corrected
- Upon written approval from the Department's CEI, restart the OSAT for a new 30 consecutive calendar day period.

Repeat the OSAT as necessary to satisfy the Project requirements. Submit to the Department the required documentation to verify that all subsystems and ITS devices have been successfully integrated and configured.

If the same ITS device or ancillary component fails more than three times, the Design-Build Firm shall:

- Remove and replace the ITS device or ancillary component with a new and unused unit as per the requirements of this RFP;
- Perform all applicable Stand-alone, Subsystem, and OSATs, as deemed necessary by the Department.

The Design-Build Firm shall provide technical personnel familiar with the Project that shall be available on-site within 24 hours of notification.

#### **vi. ITS Close Out and Final ITS Acceptance**

The Project shall not be eligible for Final ITS Acceptance until the successful completion OSAT. The Design-Build Firm shall meet the following Final ITS Acceptance requirements:

- ITS Close-Out
  - Conduct final inspection once the 60-Consecutive Calendar-Day has demonstrated that the entire ITS is operating successfully and meets all Project requirements. The final inspection must include:
    - Conduct field visit(s) to ensure that all ITS devices are in their correct final configuration.
    - Verify that all Project submittals including test reports and ITSFM documentation have been approved by the Department.
    - Verify that all punch list items have been completed and field conditions restored to their original condition.
    - Ensure that final As-Built Plans and all Project documentation is provided as specified.
    - Ensure that all training services have been successfully completed as specified.

- Ensure that all warranties are in place and transferred to the Department as specified herein.
- Request in writing the Department's approval to start the final inspection a minimum of 15 calendar days prior to the requested start date. The Department reserves the right to reschedule the start date if needed.
- Repeat final inspection upon an unsuccessful or incomplete final inspection after the Design-Build Firm has made the necessary corrections. The Department must be allowed 15 calendar days to conduct a final inspection. The Department reserves the right to require, at no additional expense to the Department, the attendance of a qualified technical representative of the equipment and/or software manufacturers to attend the final inspection.

As-Built Plans shall include Global Positioning System (GPS) data utilizing the criteria set forth in the Intelligent Transportation System Facilities Management (ITSFM) Functional Requirements for the District One District-wide Implementation dated February 2023, included as an attachment to this RFP.

Update the ITSFM data at the conclusion of the OSAT if any device is replaced or reported device attribute information is changed. It is the Design-Build Firm's responsibility to obtain all training and certifications necessary to collect and submit the ITSFM data. Documentation showing the necessary training and certifications have been obtained and/or scheduled shall be submitted within one month of NTP. Contact [d1-itsfm@dot.state.fl.us](mailto:d1-itsfm@dot.state.fl.us) for ITSFM information.

The Design-Build Firm shall gather and provide all data as necessary for populating ITSFM. This will include, but not be limited to, all new and existing conduit runs, fiber infrastructure, pull boxes, ITS devices, and cabinets. The ITSFM Implementation Guidelines and Minimum Requirements for District One describes the procedures and amount of detail required to efficiently and accurately complete this task.

The final inspections of the entire Project shall be performed by the Department in the presence of a representative of the Design-Build Firm.

Upon the Design-Build Firm's successful completion of the OSAT and once all required submittals, testing, training, as-built documentation, and warranty documentation have been successfully delivered to and approved by the Department as specified in this RFP, and the requirements of the FDOT Standard Specifications and all applicable standards have been met, the ITS portion of the project shall be considered accepted for the purposes of overall project Final Acceptance.

In the event of a lag between the completion of the ITS portion of the project and the overall project Final Acceptance, the Design-Build Firm shall maintain all subsystems, devices, or ancillary components until project final acceptance. Corrective action by the Design-Build Firm for a failure shall be a part of the Design-Build Firm's Final Acceptance documentation process and be provided to the Department prior to Final Acceptance and upon request.. The Design-Build Firm shall submit to the Department the required documentation to prove that all units have been successfully reconfigured or updated.

## **5. Existing Conditions**

This section is intended to provide a general overview of the existing conditions of the Department's ITS System and its components such as the fiber optic network (FON) communications infrastructure within the project limits. This section is for informational purposes only. Refer to A075\_4206132\_ITS\_Concept Plans for existing ITS equipment locations.

## 6. ITS Repair Plan

The Design-Build Firm shall prepare and submit an ITS Repair Plan. The ITS Repair Plan shall outline the procedures, resources, points of contact, and a timeline for any ITS repair and replacement activities.

The ITS Repair Plan must be approved by the Department and Sarasota County before any work within the Project limits commences. The Design-Build Firm's ITS Repair Plan shall maintain or exceed the same level of service for the ITS communications and ITS devices as prior to relocation or repair.

If any ITS device or infrastructure is damaged by the Design-Build Firm, it shall be the responsibility of the Design-Build Firm to replace the ITS device or infrastructure as necessary to restore system continuity. Any damage to the communications equipment (i.e., fiber optic cable, conduit, pull boxes, splice cabinets, hubs, etc.) shall be replaced within four (4) hours. Damaged fiber optic cable may be temporarily fusion spliced within the four-hour period to temporarily restore communications; however, any damaged fiber optic cable shall be replaced from termination point to termination point with same count fiber optic cable within 90 calendar days. All other ITS devices and ancillary equipment shall be replaced unless otherwise approved or directed by the Department.

Whenever actions of a third party cause any ITS or ancillary component to fail or cause a disruption of normal operation, as determined by the Department or its designee, the Department shall select to either have the Design-Build Firm restore the ITS and related components to their previous condition and normal operation; or to have the Design-Build Firm provide access and coordinate with the Department's ITS Maintenance Contractor for repair. The Department will, with the exception of any damage resulting from vandalism, compensate the Design-Build Firm for restoring the ITS and ancillary components due to actions caused by a third party. Damage repair resulting from vandalism will be compensated according to the FDOT Standard Specifications for Road and Bridge Construction. Lack of resources -such as workforce or parts- and time of notification are not be considered items beyond the Design-Build Firm's control.

The Design-Build Firm shall notify the District One RTMC a minimum of seven (7) calendar days in advance and wait for approval prior to disconnecting any ITS sub-system or components including the fiber optic backbone. At a minimum provide the following to the RTMC when notifying of scheduled downtime:

- a. Project FPID number and requestor contract information
- b. Outage request contact name and contact information
- c. Planned outage begin date and start time, outage end date and time
- d. Reason for outage
- e. Facility, splice vault, and mile marker information
- f. Prime general contractor, ITS sub-contractor, splice sub-contractor and point of contact information

Immediately prior to the commencement of work, contact the District One RTMC to ensure no major incidents are occurring in the area. After the planned work is completed, contact the RTMC to verify connectivity at the affected area is restored.

## 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 sewer pipes and utilities.

## VII. Technical Proposal Requirements:

### A. General:

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

### B. Submittal Requirements:

The Technical Proposal 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 three (3) flash drives containing the Technical Proposal (entirely, including roll-plots) in PDF format to:

Mr. Don Naylor  
Attn.: Christina Browne  
801 North Broadway Avenue  
Bartow, FL 33830  
863-519-2581  
[D1.DesignBuild@dot.state.fl.us](mailto:D1.DesignBuild@dot.state.fl.us)

The minimum information to be included:

#### Section 1: Project Approach

- Paper size: 8½" x 11". The maximum number of pages shall be Fifteen (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 a listing and description of the approved ATCs included in the Technical Proposal.
- 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.

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.
- 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:

<b>Item</b>	<b>Value</b>
1. Design	30
2. Construction	30
3. Innovation	10
4. Value Added	10
<b>Maximum Score</b>	<b>80</b>

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

1. **Design (30 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
- 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 (30 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 (social, cultural, natural, and physical)
  - Public
  - Adjacent Properties
  - Structures
- Implementation of the and Erosion/Sediment Control Plan
- Implementation of the Maintenance of Traffic Plan
  - Implementation of Diverging Diamond Configuration
- 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 (10 points)**

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

- Minimize or eliminate Utility relocations
- Materials
- Workmanship
- Enhance Design and Construction aspects related to future expansion of the transportation facility

**4. Value Added (10 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 \$389,059 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. A Schedule of Risk Values shall be submitted with the Bid Price Proposal. The Department will accept Bid Price Proposals by electronic mail at [D1.DesignBuild@dot.state.fl.us](mailto:D1.DesignBuild@dot.state.fl.us).

Mr. Don Naylor

Attn: Christina Browne

801 N. Broadway Ave.

Bartow, FL 33830

(863) 519-2581

[D1.DesignBuild@dot.state.fl.us](mailto:D1.DesignBuild@dot.state.fl.us)

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