

NOTICE TO CONTRACTORS  
OFFICE OF THE STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION  
801 N. BROADWAY AVENUE  
BARTOW, FLORIDA 33830

**November 21, 2024**  
District Procurement Office  
District One

**ADDENDUM NUMBER TWO**

PROJECT DESCRIPTION: I-75 at Sumter Blvd. & I-75 at Toledo Blade Interchange  
Improvements  
FINANCIAL PROJECT NO.: 452356-1-52-01, 452357-1-52-01  
COUNTY: Sarasota County  
CONTRACT NO.: E1X04

The following is a list of the revisions made to the Request for Proposal Package.

Request For Proposal	Page	
	All	The header was updated to reflect the November 21, 2024, date for RFP Addendum No. 2
	4	Attachments Added: <u>A27 – Lighting Design Analysis Report (LDAR)</u> 452356-1-I-75-Sumter LDAR-90% 452357-1-I-75- Toledo LDAR-90%

Attached to Addendum Two is the RFP dated November 21, 2024.

Acknowledge receipt of Addendum Number Two in the space provided on the proposal.

*Charli Bell*  
\_\_\_\_\_  
Contracts Administrator

**PLEASE SIGN BELOW IN RECEIPT OF THIS NOTICE AND  
ADDITIONAL DOCUMENTS ANNOTATED ABOVE.**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Company Name

Contract No. E1X04  
Addendum No. 02

FPID 452356-1-52-01, 452357-1-52-01  
November 21, 2024



*Florida Department of Transportation*  
*District 1*

**LOW BID  
DESIGN-BUILD  
REQUEST FOR PROPOSAL**

**For**

**I-75 (SR 93) at Sumter Blvd. & I-75 (SR 93) at Toledo Blade  
Blvd. Interchange Improvements  
Sarasota County**

**Financial Projects Number(s): 452356-1-52-01, 452357-1-52-01  
Federal Aid Project Number(s): D124-049-B, D124-050-B**

**Contract Number: E1X04**

**ADDENDUM No. ~~12~~**

A17 - PD&E documents

452356-1 Approved Environmental Certification  
452357-1 Approved Environmental Certification  
IOAR-Complete\_with\_DocuSign\_452356-1\_I75\_at\_Sumter  
IOAR-Complete\_with\_DocuSign\_452357-1\_I75\_at\_Toledo

A18 - Environmental permits

452356-1-52-01 NPR I-75  
Contamination.Memorandum.(P2)\_452356-1-52-01  
Contamination.Memorandum.(P2-LBDB)\_452357-1-52-01

A19 - Right of way maps

17075-000\_4130444  
17075-2401(2402,2403)

A20 - Typical section package

452356-1 Typical Section Package 2023-10-09 S+S  
452357-1 Typical Section Package 2023-10-09 S+S

A21 - Concept Plans

452356-1-52-01\_Final RFP Concept Plans\_8-26-24\_reduced  
452357-1-52-01\_Final RFP Concept Plans\_8-26-24\_reduced

A22 - Drainage analysis

452356-1 I-75 Drainage Report\_SUBMITTAL\_010924  
452357-1 I-75 Drainage Report\_SUBMITTAL\_010924

A23 - Utility Information

45235615201\_FPLDistribution\_MarkedPlans  
45235615201\_FPLDistribution\_NoConflict  
45235615201\_FPLTransmission\_NoFacilities  
45235615201\_Frontier\_MarkedPlans  
45235615201\_Frontier\_NoConflictEmail  
45235615201\_MCI\_VerizonBusiness\_NoFacilities  
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45235615201\_NorthPort\_NoConflict  
45235715201\_CrownCastle\_MarkedPlans  
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45235715201\_FPLDistribution\_MarkedPlans  
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45235715201\_FPLTransmission\_NoConflictEmail  
45235715201\_Frontier\_NoFacilities  
45235715201\_MCI\_VerizonBusiness\_NoFacilities  
45235715201\_NorthPort\_MarkedPlans  
45235715201\_NorthPort\_NoConflict  
45235715201\_TECO PeoplesGas\_NoFacilities  
North Port Sumter RFC Plans\_Under Construction  
North Port Toledo RFC Plans

A24 - District One Traffic Operation and Maintaining Agency Special Requirements 080221

A25 - ITSFM Implementation Guidelines and Minimum Requirements for D1 20171129

A26 - Active Construction Plans

2023-05-PW\_90 PERCENT PLANS\_SIGNALIZATION\_TOLEDO\_BLADE  
45055115201-PLANS-04-ITS\_S&S

A27 - Lighting Design Analysis Report (LDAR)

452356-1-I-75-Sumter LDAR-90%  
452357-1-I-75- Toledo LDAR-90%



*Florida Department of Transportation*  
*District 1*

**LOW BID  
DESIGN-BUILD  
REQUEST FOR PROPOSAL**

**For**

**I-75 (SR 93) at Sumter Blvd. & I-75 (SR 93) at Toledo Blade  
Blvd. Interchange Improvements  
Sarasota County**

**Financial Projects Number(s): 452356-1-52-01, 452357-1-52-01  
Federal Aid Project Number(s): D124-049-B, D124-050-B**

**Contract Number: E1X04**

**ADDENDUM No. 2**

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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**

A01 - Project Advertisement

A02 - Design Build Division I Specifications

A03 - Award and Execution of Contract – Public Records

A04 - Legal Requirements and Responsibilities to the Public – E-Verify

A05 - Legal Requirements and Responsibilities to the Public – Scrutinized Companies

A06 - Contaminated Material - Mercury-Containing Devices and Lamps

A07 - Division II and III Special Provisions

A08 - Mobilization

A09 - Contractor Quality Control General Requirements

A10 - Structures Foundations

A11 - Survey & SUE

452356-1 zip

452357-1 zip

A12 – CADD Files.zip

A13 - Geotechnical Report

452356-1 Geotechnical Report for Structures Sumter Blvd – Final

452356-1 RSS Report Sumter Blvd Widening at I-75\_ess 010424

452357-1 Geotechnical Report for Structures Toledo Blade Blvd\_Final

452357-1 RSS Toledo Blvd Widening at I-75\_ess 01.04.24

ROCB-Sumter Mast Arms Light Poles

ROCB-Toledo-Mast Arm Light Poles

A14 - As-Built Plans

170139\_I-75SBatToledoBladeAsBuiltPlansDS

413044-3 FINAL ROADWAY AS BUILT PLAN

429192-1-52-01\_SR 93 I-75 Toledo Blade Blvd

FINAL AS-BUILT ROADWAY PLANS

I-75 RESURFACING FROM CHARLOTTE CO TO DEER PRAIRIE CREEK PLANS

State Proj 17075-3403\_SR 93\_[I\_75] 2012261\_\_M.P. 8.5\_M.P. 11.6

A15 - Pavement design

452356-1 Pavement Design Memo

452357-1 Pavement Design Memo

A16 - Design exceptions and variations

452356-1 Design Variation Memo\_4-24\_S+S\_APPROVED

452357-1 Design Variation Memo\_4-24\_S+S\_APPROVED

452357-1 Design Variation Memo\_Bicycle Lane

A17 - PD&E documents

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A27 - Lighting Design Analysis Report (LDAR)

452356-1-I-75-Sumter LDAR-90%  
452357-1-I-75- Toledo LDAR-90%



## **EXEMPT DOCUMENTS**

### E01 - As-Built Plans

Bridge Plans 170129 I-75 SB Over Sumter Blvd Existing Plans – SPN 17075-3403 – Doc #1055431

Bridge Plans 170129 I-75 SB Over Sumter Blvd Widening - FPID 409210-1-52-01 - Doc #1055449

Bridge Plans 170130 I-75 NB Over Sumter Blvd Existing Plans – SPN 17075-3403 – Doc #1055432

Bridge Plans 170130 I-75 NB Sumter Blvd - FPID 409210-1-52-01 - Doc #1055450

Bridge Plans 170140 I-75 Over Toledo Blade Blvd Bride Widening – FPID 409210-1-52-01 – Doc #1055476

### E02 - Structures – Pier Protection

Mathcad – Pier Protection I-75 over SB

Mathcad - Pier Protection I-75 over TBB

### 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 Scrutiny-DBE (375-030-60 & 275-030-11, 11B)

## **I. Introduction.**

The Florida Department of Transportation (Department) has issued this Request for Proposal (RFP) to solicit competitive Bids and Proposals from Proposers for interchange improvements to include signalization, lighting and widening for increased capacity of the SR 93 (I-75) northbound on-ramp at I-75 and Sumter Blvd. And I-75 and Toledo Blade Blvd. Interchanges in Sarasota County, Florida.

For the purpose of Project Specific Liability Insurance coverage, the Department has determined this project to have low complexity.

### **Description of Work**

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.

#### 452356-1:

The I-75 (SR 93) interchange at Sumter Blvd. within Sarasota County is to be improved via signalization of the north and south intersections, lighting of the intersections and all existing pedestrian crossings, and adding capacity to the northbound I-75 on-ramp from Sumter Blvd. The existing northbound I-75 on-ramp is single lane with a single left turn lane from Sumter Blvd. These improvements would provide lengthened dual left turn lanes from Sumter Blvd. and provide a two lane on-ramp onto northbound I-75.

Sumter Blvd. is an arterial under the jurisdiction of the City of North Port. It is a 4-lane divided arterial with a design speed of 45 MPH. The existing typical section includes two 12-foot travel lanes per direction, a single 12-foot left turn lane, 10-foot paved shoulders and a concrete median. There is also guardrail to the outside of the 10-foot paved shoulder beneath the I-75 bridge.

The proposed Sumter Blvd. typical section will include two 12-foot travel lanes southbound, a single 12-foot travel lane northbound, a 12-foot outside left turn lane and a 11-foot inside left turn lane. The existing 10-foot paved shoulders will remain, however, the existing guardrail will be removed and replaced with pier protection barrier. These typical section improvements to the pavement will be accomplished by reconstructing the existing concrete median and widening into the median to provide the second 11-foot left turn lane. The remaining pavement on Sumter Blvd. within the limits of the interchange will be milled and resurfaced for re-striping purposes.

The northbound I-75 on-ramp is within the limited access R/W and is currently a single lane from northbound Sumter Blvd. and southbound Sumter Blvd. The design speed of the ramp varies. The existing typical section consists of a 15-foot ramp with a 4-foot paved inside shoulder and a 2-foot paved outside shoulder. Beyond the full inside and outside shoulder widths, 6-foot each, there is a tie down to existing ditch. The northbound I-75 off-ramp will also be realigned to ensure proper alignment with the new dual northbound I-75 on-ramp and reconstructed median.

The proposed northbound I-75 on-ramp will include two 12-foot ramps, a 10-foot outside paved shoulder

and a 4-foot inside paved shoulder. Beyond the full inside and outside shoulder widths, 8 feet and 12 feet respectively, there is a 1:4 minimum tie down to the existing regraded ditch. The existing northbound I-75 on-ramp from southbound Sumter Blvd. will remain a single lane but will be realigned to merge into the new dual lane on-ramp from northbound Sumter Blvd. The existing northbound I-75 off-ramp will also remain a single lane but will need to be realigned. These typical section improvements will be accomplished by widening to the inside and outside of the existing northbound I-75 on-ramp. The remaining pavement will be milled and resurfaced for re-stripping purposes.

The new traffic signal at the northbound I-75 ramps and Sumter Boulevard intersection will include mast arm structures, presence detection for all approaches, dilemma zone detection for the Sumter Boulevard approaches, a CCTV camera, and connectivity to the I-75 Freeway Management System (FMS) via 12-count fiber optic drop cable. In addition, the Design-Build firm shall replace any Intelligent Transportation Systems (ITS) infrastructure impacted by the project - including ITS poles, Microwave Vehicle Detection Systems (MVDS), and any associated materials or equipment. All replacements shall be new. All ITS shall be maintained throughout construction.

452357-1:

The I-75 (SR 93) interchange at Toledo Blade Blvd. within Sarasota County is to be improved via signalization of the north and south intersections, lighting of the intersections and all existing pedestrian crossings, and adding capacity to the northbound I-75 on-ramp from Toledo Blade Blvd. The existing northbound I-75 on-ramp is single lane with a single left turn lane from Toledo Blade Blvd. These improvements would provide lengthened dual left turn lanes from Toledo Blade Blvd. while maintaining dual through lanes each way and provide a two lane on-ramp onto northbound I-75.

Toledo Blade Blvd. is an arterial under jurisdiction of the City of North Port. It is a 4-lane divided arterial with a design speed of 45 MPH. The existing typical section includes two 12-foot travel lanes per direction, a single 12-foot left turn lane, 5-foot bicycle lane, 5-foot shoulder and a concrete median. There is also guardrail to the outside of the paved shoulder beneath the I-75 bridge.

The proposed Toledo Blade Blvd. typical section will repurpose the pavement width to include two 11-foot travel lanes each way, two 11-foot left turn lanes and a 9-foot buffered bicycle lane. The existing guardrail will be removed and replaced with pier protection barrier. These typical section improvements to the pavement will be accomplished by reconstructing the existing concrete median and widening into the median as well as widening from the existing edge of travel to the edge of pavement. The remaining pavement on Toledo Blade Blvd. within the limits of the interchange will be milled and resurfaced for re-stripping purposes.

The northbound I-75 on-ramp is within the limited access R/W and is currently a single lane from northbound Toledo Blade Blvd. and southbound Toledo Blade Blvd. The design speed of the ramp varies. The existing typical section consists of a 15-foot ramp with a 4-foot paved inside shoulder and a 2-foot paved outside shoulder. Beyond the full inside and outside shoulder widths, 6-foot each, there is a tie down to an existing ditch. The northbound I-75 off-ramp will also be realigned to ensure proper alignment with the new dual northbound I-75 on-ramp and reconstructed median.

The proposed northbound I-75 on-ramp will include two 12-foot ramps, a 10-foot outside paved shoulder and a 4-foot inside paved shoulder. Beyond the full inside and outside shoulder widths, 8 feet and 12 feet respectively, there is a 1:4 minimum tie down to the existing regraded ditch. The existing northbound I-75 on-ramp from southbound Toledo Blade Blvd. will remain a single lane but will be realigned to merge into the new dual lane on-ramp from northbound Toledo Blade Blvd. The existing northbound I-75 off-ramp

will also remain a single lane but will need to be realigned. These typical section improvements will be accomplished by widening to the inside and outside of the existing northbound I-75 on-ramp. The remaining pavement will be milled and resurfaced for re-striping purposes.

The new traffic signal at the northbound I-75 ramps and Toledo Blade Boulevard intersection will include mast arm structures, presence detection for all approaches, dilemma zone detection for the Toledo Blade Boulevard approaches, a CCTV camera, and connectivity to the I-75 FMS via 12-count fiber optic drop cable. In addition, the Design-Build firm shall replace any ITS infrastructure impacted by the project. Install new ITS poles and associated materials and equipment for impacted MVDS sites. All ITS shall be maintained throughout construction. Temporary signals will be installed by the City of North Port at I-75 and Toledo Blade Blvd. intersections prior to the begin of this contract. The Design-Build Firm shall maintain the temporary signals and traffic through the temporary signals throughout the duration of the project up until the permanent condition is installed. The Design-Build Firm shall coordinate with the City of North Port's project manager/point of contact throughout the duration of the contract (XX). Upon the completion of the permanent signal, the Design-Build Firm shall remove the temporary signal equipment and coordinate the return of the materials to the City of North Port.

Temporary signals will be installed by the City of North Port at I-75 and Toledo Blade Blvd. intersections prior to the begin of this contract. The Design-Build Firm shall maintain the temporary signals and traffic through the temporary signals throughout the duration of the project up until the permanent condition is operational. The Design-Build Firm shall coordinate with the City of North Port's project manager/point of contact throughout the duration of the contract (2023-05-PW). Upon the installation and activation of the permanent signal, the Design-Build Firm shall remove the temporary signal equipment and coordinate the return of the materials to the City of North Port. (A26 – Active Construction Plans – 2023-05-PW\_90 PERCENT PLANS\_SIGNALIZATION\_TOLEDO\_BLADE)

A Wrong-Way Vehicle Detection Systems (WVVD) is currently being deployed by the District One TSM&O for the off-ramps at Sumter Blvd and Toledo Blade Blvd. interchanges. The construction of these improvements are being performed by the District ITS Maintenance Contractor with construction complete by the end of the FY 24 calendar year. (A26 – Active Construction Plans – 45055115201-PLANS-04-ITS\_S&S)

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

The Design-Build Firm shall be responsible for compliance with Design and Construction Criteria (Section VI) which sets forth requirements regarding survey, design, construction, and maintenance of traffic during

construction, requirements relative to Project management, scheduling, and coordination with other agencies and entities such as state and local government, utilities, and the public.

The Design-Build Firm shall be responsible for reviewing the approved PD&E Study, Technical Documents supporting the PD&E Study, and subsequent re-evaluations included in the 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 shall examine the Contract Documents and the site of the proposed work carefully before submitting a Proposal for the work contemplated and shall investigate the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished and as to the requirements of all Contract Documents. Written notification of differing site conditions discovered during the design or construction phase of the Project will be given to the Department's Project Manager.

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

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

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

## **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, NEPA re-evaluations will be processed by the District Environmental Management Office for approval by the Department's Office of Environmental Management pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016 and executed by the FHWA and the Department.

## **II. Schedule of Events.**

Below is the current schedule of the remaining events that will take place in the selection 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>October 25, 2024</u>	0	Planned Advertisement
<u>November 4, 2024</u>	10	Current Advertisement
<u>November 12, 2024</u>	8	Mandatory Virtual Pre-Proposal meeting at 2: 00 p.m. 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>January 3,2025</u>	52	Deadline for submittal of questions, for which a response is assured, prior to the submission of the Technical and Bid Price Proposals. All questions shall be submitted to the Pre-Bid Q&A website.
<u>January 3, 2025</u>	0	Final deadline for submission of requests for Design Exceptions or Design Variations
<u>January 9, 2025</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 Proposal.
<u>January 10, 2025</u>	1	The Design Build firm must complete <u>Low Bid Design-Build Qualification Validation Form No. 700-011-36</u> , for all qualifying team members, at least 24 hours in advance of the scheduled letting. The Form shall be submitted to the appropriate district (to the Design-Build email account designated for submittals), who will confirm qualification for the prospective Design-Build Firm. The form must be submitted at least 24 hours in advance of the response deadline (Bids Due Date).
<u>January 13, 2025</u>	3	Technical Proposals and Price Proposals due in District Office by 10:00 a.m. local time
<u>January 13, 2025</u>	0	Public announcing of Price Proposals at 11:00 a.m. local time in <b><i>801 N. Broadway Ave., Bartow, FL, 33830</i></b>
<u>January 16, 2025</u>	3	Public Meeting of Technical Review Committee to determine Responsiveness of Technical Proposal(s) at 8:30 a.m. local time in <b><i>801 N. Broadway Ave., Bartow, FL, 33830</i></b>
<u>January 21, 2025</u>	5	Public Meeting of Date Selection Committee to determine intended Award <b><i>801 N. Broadway Ave., Bartow, FL, 33830</i></b>
<u>January 21, 2025</u>	0	Final Selection Posting Date
<u>February 10, 2025</u>	20	FHWA Concurrence to Award
<u>February 17, 2025</u>	7	Anticipated Award Date
<u>March 10, 2025</u>	21	Anticipated Execution Date

### **III. Threshold Requirements.**

#### **A. Qualifications**

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

#### **B. Joint Venture Firm**

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

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://bqa.fdot.gov/home>

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.

During and after the meeting, it is the responsibility of the Project Manager/Contracting Unit to ensure that each Proposer develops their Technical Proposal with the same information. If a Proposer receives information from the Department relating to the Project, the Department will ensure that all Proposers receive the same information in a timely fashion. The Project file will clearly document all communications with any Firm regarding the design and construction criteria by the Contracting Unit or the Project Manager.

#### **E. Question and Answer**

The Design-Build Firm shall submit questions to the Departments Q&A website in accordance with section 2-4 of the Division I Design-Build Specifications.

#### **F. 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 Proposals. 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.

#### **G. 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.

#### **H. 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.
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.

**I. Modification or Withdrawal of Proposal**

Proposers may modify or withdraw previously submitted Proposals at any time prior to the Proposal due date. Requests for modification or withdrawal of a submitted Proposal shall be in writing and shall be signed in the same manner as the Proposal. Upon receipt and acceptance of such a request, the entire 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 Proposal provided the change is submitted prior to the Proposal due date.

**J. 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.

**K. 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 on the bid blank/contract front page under "% DBE Availability Goal". The Department has determined that this DBE percentage can realistically 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 all of our 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 DBE's and Non-DBE's. 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  
<http://www.fdot.gov/programmanagement/default.shtm>
6. Florida Department of Transportation Surveying Procedure 550-030-101  
<https://www.fdot.gov/programmanagement/Implemented/SpecBooks/default.shtm>
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>

**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.

**C. Geotechnical Services:**

**1. General Conditions:**

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

**D. Department Commitments:**

See IOAR and TYPE I CE included in the attachments.

The Design-Build Firm will be responsible for adhering to the project commitments identified below and/or in the Project Commitment Record (see Attachments):

See IOAR and TYPE I CE included in the attachments.

**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 all 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 wetland impacts identified in the following documents (452356-1\_Approved Environmental Certification and 452357-1\_Approved Environmental Certification). If any design modifications 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 application 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 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 and other information.

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

**I. Submittals:**

**1. Component Submittals:**

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

**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.

### **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 design documentation
- 1 copy of Technical Special Provisions
- Google Earth kmz

All QC plans and documentation for each component submittal shall be electronic in .pdf format

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

### **Final Submittal**

- 1 set of signed and sealed 11" X 17" plans (all required documents)
- 1 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 set of final documentation
- 1 signed and sealed copy of Construction Specifications Package or Supplemental Specifications Package
- 1 copy of signed and sealed Construction Specifications Package or Supplemental Specifications Package
- 1 electronic copy of Technical Special Provisions in .pdf format
- Structure Number Assignment Form
- Google Earth kmz

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

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

### **3. Requirements to Begin Construction:**

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

The Design-Build Firm may choose to begin construction prior to completion of the Phase Submittals and the Department stamping the plans and specifications Released for Construction except for bridge construction. No permanent structures work, including fabrication of bridge members, may begin without signed and sealed plans or shop drawings (whichever controls the design and details utilized to construct/erect the specific structural component) that have been Released for construction. To begin construction the Design-Build Firm shall submit signed and sealed plans for the specific activity; submit a signed and sealed Construction Specifications Package or Supplemental Specifications Package; obtain regulatory permits as required for the specific activity; obtain a PD&E Study re-evaluation when required for the specific activity; obtain utility agreements and permits, if applicable; and provide five (5) days notice before starting the specific activity. The plans to begin construction may be in any format including report with details, 8 1/2” X 11” sheets, or 11” X 17” sheets, and only the information needed by the Design-Build Firm to construct the specific activity needs to be shown. Beginning construction prior to the Department stamping the plans and specifications Released for Construction does not reduce or eliminate the Phase Submittal requirements.

### **As-Built Set:**

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

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

condition precedent to the Departments issuance of Final Acceptance.

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

The Department shall accept the As-Built Plans and related documents when in compliance with Design Build Division I Specification 7-2.3, As-Built Drawings and Certified Surveys, and the As-Built Requirements.

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

- 1 set of 11" X 17" signed and sealed As-Built plans, drawings and Certified Surveys
- 1 set of 11 "X 17" copy 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
- 1 set of final documentation (if different from final component submittal)
- 1 set 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.

- <<*List milestone submittals*>> N/A?

**5. Railroad Submittals:**

No railroad submittals are anticipated.

**J. Contract Duration:**

The Department has established a Contract Duration of 700 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) working 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 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:

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
- Design Submittals
- Shop Drawing Submittals
- Other Contractor-Initiated Submittals including Request for Information (RFI)'s, Request for Modification (RFM)'s, Request for Correction (RFC)'s, and Non-Conformance Report (NCR)'s
- Design Survey
- Submittal Reviews by the Department and FHWA
- Design Review / Acceptance Milestones
- Materials Quality Tracking
- Geotechnical Investigation
- Start of Construction
- Clearing and Grubbing
- Construction Mobilization
- Embankment/Excavation
- PD&E Study re-evaluation documentation
- Environmental Permit Submittals
- Environmental Permit Acquisition
- Foundation Design
- Foundation Construction
- Roadway Design
- Roadway Construction
- Signing and Pavement Marking Design
- Signing and Pavement Marking Construction
- Signalization and Intelligent Transportation System Design
- Signalization and Intelligent Transportation System Construction
- Lighting Design
- Lighting Construction
- Maintenance of Traffic Design
- Maintenance of Traffic Set-Up (per duration)
- Operational/Burn-In Testing
- Erosion Control
- Holidays and Special Events (shown as non-work days)
- As-Built Plan Preparation
- Additional Construction Milestones as determined by the Design-Build Firm
- Final Completion Date for All Work

**L. Key Personnel/Staffing:**

The Design-Build Firm's work shall be performed and directed by key personnel identified in the 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 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 Technical Proposal 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 Technical Proposal.

**N. Meetings and Progress Reporting:**

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

- Department technical issue resolution
- Local government agency coordination
- Maintenance of Traffic Workshop
- Pavement Design Meeting
- Permit agency coordination
- PD&E Study re-evaluation meeting
- Scoping Meetings
- System Integration Meetings

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

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

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

The Design-Build Firm shall provide all documentation required to support system integration meetings, including detailed functional narrative text, system and subsystem drawings and schematics. Also included shall be the documentation to demonstrate all elements of the proposed design which includes, but is not limited to: technical, functional, and operational requirements; ITS/communications; equipment; termination/patch panels; performance criteria; and details relating to interfaces to other ITS subsystems.

System Integration Meetings will be held on mutually agreeable dates.

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

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

**O. 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.

**1. 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.

**P. 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.

**Q. Engineers Field Office:**

N/A.

**R. Schedule of Values:**

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

Upon receipt of the estimates 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.

**S. Computer Automation:**

The Project shall be developed utilizing computer automation systems in order to facilitate the development of the contract plans. Various software and operating systems were developed to aid in assuring quality and conformance with Department policies and procedures. The Department supports Bentley's OpenRoads Designer ORD and/or Autodesk's AutoCAD Civil 3D as an alternate platform. Seed Files, Cell Libraries, User Commands, MDL Applications and related programs developed for roadway design and drafting are available in the FDOT CADD Software [Current Supported Versions \(fdot.gov\)](https://www.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 OpenRoads Designer ORD and/or Autodesk's AutoCAD Civil 3D design files format.

As part of the As-Built Set deliverables, field conditions shall be incorporated into Bentley's OpenRoads Designer ORD and/or Autodesk's AutoCAD Civil 3D design files. Use the cloud revision utility as well as an "AB" revision triangle to denote field conditions on plan sheets.

**T. 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.

**U. 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.

**V. Value Added:**

N/A.

**W. 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:.

1. North Port Sumter RFC Plans Under Construction.

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.

**X. 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 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 existing bridges and underground utilities are considered vibration sensitive.

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

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

- Identify any existing structures that will be monitored for vibrations during the construction period.  
  
Establish the maximum vibration levels for the existing structures that 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:**

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

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 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.
3. Preparing and submitting a Drilled Shaft Installation Plan for the Department's acceptance.
4. Constructing the method shaft (test hole) and load test shafts successfully and conducting thermal integrity tests on these shafts.
5. Determining the production shaft lengths.
6. Documenting and providing a report that includes all load test shaft data, analysis, and recommendations to the Department.
7. Constructing all drilled shafts to the required tip elevation and socket requirement in accordance with the specifications.
8. Inspecting and documenting the construction of all drilled shafts in accordance with the specifications.
9. Performing Non-Destructive Drilled Shaft Integrity Testing in accordance with 455-17.6.
10. Repairing all detected defects and conducting post repair integrity testing using 3D tomographic imaging and gamma-gamma density logging.
11. Submitting Foundation Certification Packages in accordance with the specifications.
12. 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**

N/A.

### **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 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 (UCM). 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.

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.

UA/O	Utility Relocation Type	Design-Build Firm Responsibility	Cost Estimate
<b>452356-1: I-75 at Sumter Blvd. Interchange Improvement</b>			
City of North Port Michael Acosta. (941) 240-8013 <a href="mailto:macosta@cityofnorthport.onmicrosoft.com">macosta@cityofnorthport.onmicrosoft.com</a>	N/A	N/A	N/A
Florida Power & Light - Distribution Chris McJunkin (941) 267-7476 <a href="mailto:Chris.Mcjunkin@fpl.com">Chris.Mcjunkin@fpl.com</a>	N/A	N/A	N/A
Frontier Communications Denise Hutton (941) 906-6722 <a href="mailto:denise.hutton@ftr.com">denise.hutton@ftr.com</a>	N/A	N/A	N/A
<b>452357-1: I-75 at Toledo Blade Blvd. Interchange Improvement</b>			
City of North Port Michael Acosta. (941) 240-8013 <a href="mailto:macosta@cityofnorthport.onmicrosoft.com">macosta@cityofnorthport.onmicrosoft.com</a>	N/A	N/A	N/A
Crown Castle Fiber Danny Haskett (786)-610-7073 <a href="mailto:crowncastlefloridareviews@crowncastle.com">crowncastlefloridareviews@crowncastle.com</a>	N/A	N/A	N/A
Florida Power & Light - Distribution Chris McJunkin (941) 267-7476 <a href="mailto:Chris.Mcjunkin@fpl.com">Chris.Mcjunkin@fpl.com</a>	N/A	N/A	N/A
Florida Power & Light – Transmission Craig Ledbetter (561) 803-7942 <a href="mailto:Craig.Ledbetter@fpl.com">Craig.Ledbetter@fpl.com</a>	N/A	N/A	N/A

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.

**DEVIATION FROM THE CONCEPTUAL UTILITY RELOCATION PLAN:** If the Design-Build Firm chooses to deviate from the conceptual plans and the scope of the impact to a utility depicted in Appendix XX, 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 Appendix XX. 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 Appendix XX. 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 Appendix XX. The Design-Build Firm shall also provide a draft utility permit application acceptable to the Department for the placement of the utility owner's facilities based on the final design. The Department shall not compensate or reimburse the Design-Build Firm for any cost created by a change in scope of the impact to a utility from that depicted in Appendix XX, or be liable for any time delays caused by a change in scope of the impact to a utility from that depicted in Appendix XX.

The relocation agreements, plans, and permit application are to be forwarded by the Design-Build 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 the 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 (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 develop and submit a signed and sealed Typical Section Package, 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. If a Design-Build Firm requests a Design Variation or Design Exception, it must be discussed prior to the submission of the Proposal. All such Design Variations and Design Exceptions must be approved or disapproved prior to the submission of the Proposal. Design Exceptions will be disclosed to all the Design-Build Firms via an Addendum.

These packages shall include the following:

**F. Roadway Design:**

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

1. **Typical Section Package:**

- A typical section package is included in the attachments.

2. **Pavement Design Package:**

Pavement Design Memorandums are included in the attachments.

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

- The Design-Build Firm shall design the sidewalk to ensure positive drainage is provided for the sidewalk and pedestrian pads.
- The drainage design must meet applicable Water Management District permitting requirements.

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

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

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

The Design-Build Firm shall provide the Department's District Drainage Engineer a signed and sealed Drainage Design Report. It shall be a record set of all drainage computations, both hydrologic and hydraulic.

The engineer shall include all necessary support data.

**G. Geometric Design:**

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

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

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

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

The design notes and computation sheets shall be fully titled, numbered, dated, indexed, and signed by the designer and the checker. Computer output forms and other oversized sheets shall be folded to a standard size 8½" x 11". 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 record set of plans and tracings.

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

1. Standards Plans and criteria used for the Project
2. Geometric design calculations for horizontal alignments
3. Vertical geometry calculations
4. Documentation of decisions reached resulting from meetings, telephone conversations or site visits

**I. Structure Plans:**

1. **Bridge Design Analysis:**

N/A, There are no new bridges or bridge widening included in this project.

2. **Criteria**

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

- a. All plans and designs are to be prepared in accordance with the Governing Regulations of Section V. A.
- b. **Critical Temporary Retaining Walls:** Whenever the construction of a structural component (such as a wall, footing, or other such 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.

**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. 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 Departments 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 Departments 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 and approval of the Shop Drawing, the



Department will initial, date, and stamp the drawing “Released for Construction” or “Released for Construction as Noted”.

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.

**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 in accordance with the Department’s FDOT Design Manual. The TTC plan shown in the RFP concept plans should not be used as part of the final design.

**1. Traffic Control Restrictions:**

The following lane closures will be permitted:

- SR 93 (I-75) Full Ramp Closure – 11:00 PM to 5:00 AM
- SR 93 (I-75) Ramp Lane Closure – 10:00 PM to 4:30 AM
- SR 93 (I-75) Northbound Off-Ramp Detour – 12:00 AM to 4:00 AM

Sumter Blvd. and Toledo Blade Blvd.:

Single Lane Closure greater than 600 ft. from a signalized intersection – 9:00 AM to 4:00 PM, 7:00 PM to 7:00 AM

Single Lane Closure within 600 ft. of signalized intersection – 8:00 PM to 6:00 AM

Double Lane Closure greater than 600 ft. from signalized intersection – 8:00 PM to 6:00 AM

Double Lane Closure within 600 ft. of signalized intersection – 10:30 PM to 5:30 AM

A lane may only be closed during active work periods. There will be NO PACING OPERATIONS restrictions. All lane closures, including ramp closures, must be reported to the local emergency agencies, the media and the District public information officer. 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.

LANE CLOSURES are allowed on the Project during the times shown below so as to minimize potential impacts to the following events:

**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 before the Design-Build Firm is allowed to remove or relocate the device.

There are existing fiber optic cables, 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 District Transportation Systems Management and Operations (TSM&O) 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. Existing CCTV 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, uninterruptible power supply (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, District Environmental Permit Office. If the Department has determined that suitable gopher tortoise habitat exists in the project area, then the Design-Build Firm shall be responsible for conducting

the gopher tortoise burrow survey for the purpose of identifying potential gopher tortoise habitats that could be impacted by the Project including any areas to be used for construction staging. The habitat will be systematically surveyed according to the current Gopher Tortoise Permitting guidelines published by the Florida Fish and Wildlife Conservation Commission (FWC). The Department must verify the completeness and accuracy of the assessment prior to commencement of any permitting or construction activities. Any areas where the Design-Build Firm proposes to protect burrows to remain on-site with “exclusionary fencing” shall be reviewed 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 Environmental Management Office or District Environmental Permit Office, as appropriate. If FWC rejects or denies the permit application, it is the Design-Build Firm’s responsibility to make whatever changes necessary to ensure the permit application is approved. Once the permit is obtained, the Design-Build Firm shall notify the Department at least one week prior to the relocation of gopher tortoises. If gopher tortoise relocations are phased throughout the construction, the Design-Build Firm shall notify the Department at least one week prior to each relocation phase. The Department will provide oversight of the relocations and ensure permit compliance. The Design-Build Firm shall be responsible for any necessary permit extensions or re-permitting in order to keep the relocation permit valid throughout the construction period. The Design-Build Firm shall provide the Department with draft copies of requests to modify the permits and/or requests for permit extensions, for review and approval by the Department prior to submittal to the Agencies. The Design-Build Firm shall provide the appropriate reports as required by the permit conditions, including closing out the permit. The Design-Build Firm shall note that permits for gopher tortoise relocation for areas outside of the Department owned Right of Way (i.e. utility easements; license agreements) cannot be obtained with the Department as the “permittee”, per FWC requirements. Should permits in areas outside of the Right of Way be required, the Department will still perform the oversight of the process as described above. The Design-Build Firm will be required to pay all permit fees including any and all fees associated with the relocation of gopher tortoises. Any fines levied by permitting agencies shall be the responsibility of the Design-Build Firm.

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

1. Cultural Resources
2. Section 4(f) (federal projects only)
3. Wetlands and Mitigation
4. Wildlife and Habitat
5. Contaminated Materials

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

**P. Signing and Pavement Marking Plans:**

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

A Conceptual Signing Plan has been provided by the Department (Attachment 10 - Concept Plans) 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. Existing single and multi-post sign assemblies impacted by construction shall be entirely replaced and upgraded to meet current standards. Existing sign assemblies not impacted by construction can remain.

**Q. Lighting Plans:**

The Design-Build Firm shall prepare lighting plans in accordance with Department criteria using the concept plans and lighting analysis report for reference.

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. The Design-Build firm must match the existing lighting aesthetics and fixtures. Pedestrian luminaires shall not be placed on the mast arm structures.

Where new electrical services are required, the Design-Build Firm shall coordinate the final locations of distribution transformer and service pole to minimize service and branch circuit conductors and conduit lengths. The Design-Build Firm shall coordinate with the local power company to determine new electrical service locations and shall be responsible for any Contributions in Aid of Construction (CIAC) cost associated with the new service location. Each service point shall be separately metered." The Design-Build Firm is responsible for coordinating with the District Maintenance Engineer and the District Utilities Engineer to obtain a new or updated Memorandum of Understanding (MOU) agreement(s). FDOT will maintain the lighting. The Design-Build Firm is responsible for maintaining the existing high mast lighting throughout construction.

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. 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 pole to minimize service and branch circuit conductors and conduit lengths. Preliminary electrical service locations have been coordinated with and provided by Florida Power & Light-Distribution. The preliminary electrical service locations are shown in/on reference lighting plans. Each service point shall be separately metered.

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

## **R. Signalization and Intelligent Transportation System (ITS) Plans**

### **1. General**

The Design-Build Firm shall prepare Signalization and ITS Plans in accordance with Department criteria. The following attachments are included:

24 - District One Traffic Operation and Maintaining Agency Special Requirements

25 - ITSFM Implementation Guidelines and Minimum Requirements for D1

The City of North Port will be the maintaining agency for the traffic signals.

Presence detection shall be provided for all approach lanes. Dilemma zone detection shall be provided on the Sumter Boulevard and Toledo Blade Boulevard approaches. Vehicle detection shall utilize microwave/radar technologies. Each detection zone shall be on its own detection channel to facilitate lane-by-lane detection. The dilemma zone detection shall be designed per District 1 Traffic Operations Guidelines for the Development of Signal Timings included in the Reference Documents. Traffic signal timing shall be developed using District 1 Traffic Operations Guidelines for the Development of Signal Timings included in the Reference Documents.

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

Traffic signals shall be operated on a separate electrical meter(s) to facilitate the future maintenance transfer to Sarasota County.

Test results documenting the passing of all ITS devices, fiber optic cabling and infrastructure, and communications network equipment required testing is to be signed by the Department's CEI and the Contractor and provided to the Department.

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:
  - MVDS structure, MDVS attachment, MDVS operation/layout
  - CCTV camera structure, CCTV camera attachment, CCTV camera 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 ITS field cabinets
  - System-level block diagrams
  - Device-level block diagrams
  - Field hub/router cabinet configuration details
  - Fiber optic spicing diagrams
  - System configuration/Wiring diagram/Equipment Interface for field equipment at individual locations and communications hubs.
  - Maintenance of Communications (MOC) Plan

The Design-Build firm is responsible for ensuring project compliance with the Regional ITS Architecture and FDOT ITS Topic 750-040-003-c, Systems Engineering and ITS Architecture Procedure as applicable.

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 include:

- Installation of the traffic signals at the intersections of:
  - Northbound I-75 ramps at Toledo Blade Boulevard
  - Southbound I-75 ramps at Toledo Blade Boulevard
  - Northbound I-75 ramps at Sumter Boulevard
  - Southbound I-75 ramps at Sumter Boulevard

Mast arms and ATC controllers are required for both signalized intersections. Both intersections (Northbound I-75 ramps and Southbound I-75 ramps) at each interchange shall be operated from a single traffic signal controller cabinet assembly. Provide a minimum of twelve 2-inch conduits into the traffic signal controller cabinets.

## 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 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.

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

- 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. CCTV Camera Subsystem – Includes CCTV cameras, ITS cabinets, ancillary components such as cabling and suppression, concrete poles, and mountings for incident management CCTV cameras.
- MVDS Subsystem – Includes sensors, ITS cabinets, ancillary components such as cabling and suppression, concrete poles and mountings to detect all general-purpose lanes and off-ramps within the I-75 corridor, and detector calibration.
- RSU Subsystem – Includes all RSU devices, ancillaries, poles, and mountings needed for operation at all signalized locations.
- Power Subsystem – Includes all electrical infrastructure required for providing power to ITS and signalized intersection 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 lateral drops furnished, installed, or modified by the Design-Build Firm.
- Integration and Testing of the ITS including all necessary documentation.
- Coordinate with the Design-Build Firm to avoid conflicts with landscape plans within the Department Right of Way. While procedures are being revised to facilitate this increased collaboration and cooperation, the Design-Build Firm is required to ensure that the design and construction of each ITS project and each landscape project is entirely coordinated with existing and proposed ITS facilities and landscapes. Both programs have been determined to be important components of the state transportation system.

a. ITS Communications Subsystem

i. Fiber Optic Cable

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

- 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 new signalized intersections.
- Provide 12-strand single mode fiber optic lateral cables of the same type as the fiber optic backbone cable.

- Utilize a Fiber Optic Cable 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 existing fiber optic backbone cable.

ii. Fiber Optic Patch Panels (FOPP)

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

- Provide a complete assembly including housing, pigtailed cassettes loaded with connector panels and factory terminated pigtails, 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 and signalized intersections.
- Terminate and connect all lateral cable fibers in the FOPP.
- For ITS field cabinets, install the FOPP so it is accessible to field maintenance personnel from the front and rear.
- For signalized intersections, install the FOPPs so they are readily accessible to field maintenance personnel.

iii. 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.
- Fully compatible and interoperable with the existing Sarasota County ATMS network.

b. 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:
  - Northbound I-75 Ramps at Toledo Blade Boulevard
  - Southbound I-75 Ramps at Toledo Blade Boulevard
  - Northbound I-75 Ramps at Sumter Boulevard
  - Southbound I-75 Ramps at Sumter Boulevard
- 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 Toledo Blade Boulevard and Sumter Boulevard approaches and 500 feet northbound I-75 ramp approaches.



- 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 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 communication cables may not share conduit or pull boxes with power cables carrying voltage greater than 24 VDC/VAC or current in excess of 1.5 Amps.

c. 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 and at all proposed signalized intersections within the project. The RSUs shall connect to the Sarasota County ATMS network via the MFES in the new traffic signal controller cabinet. All RSUs shall be mounted on new poles or existing signal poles within the project. Final RSU locations shall be approved by the Department prior to plans being released for construction.

Ensure communication cabling and power conductors do not share the same conduit or pullbox. 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; Intersection Map (MaP), Signal Phasing and Timing (SPaT), Data Collection, Transit Signal Priority (TSP), Traveler Information Message (TIM), End of Ramp Deceleration Warning (ERDW), Signal Status Message (SSM) and Over-the-Air-Update.

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

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

d. Power Subsystem

i. 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, remote power management (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.

ii. Power Subsystem Design Requirements

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

- Do not locate electrical circuits 60 volts VDC/VAC or under in same conduit or pull box with circuits over 60 volts VDC/VAC.
- Do not locate AC electrical circuits in same conduit or pull box with DC circuits.
- Do not locate power cables in the same conduit or pull box as communication cables.
- 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).

iii. Transformer Requirements

The Design-Build Firm shall meet the following transformer 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 shall not be used.
- 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.

iv. UPS Requirements

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

- Supply all electronic components housed in, or associated with, the ITS field cabinets and traffic signal controller cabinets with resettable UPSs. 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. Ensure generator power to UPS connected equipment is free from voltage spikes, drops, ripples, or noise when under generator power and when using functions such as power inverters.
- Furnish, configure, and integrate any software as required to monitor the UPSs from the District One RTMC.

v. 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.
- 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.
- 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).

e. ITS Field Cabinets

i. General Requirements

Design, procure, install, and test ITS field cabinets for MVDS 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.
  - 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.
  - 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.
- 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.

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

i. 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:
  - 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.
- 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, 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.

**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 District TSM&O Staff unless specified by the Department.

All ITS elements removed from the existing ITS 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 District TSM&O 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 prepared

by the Design-Build Firm is approved by the Department/Owner and the Department/Owner has provided written authorization to remove said devices, the Design-Build Firm shall deliver the removed devices in an operable and undamaged condition to the owning agency's identified facility. The equipment list is to be approved prior to the removal of any existing equipment.

#### **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, ITS Field/Stand-Alone Acceptance Tests, and system acceptance tests. The times and dates of tests must be accepted in writing by the FDOT Project Manager. The Design-Build Firm shall conduct all tests in the presence of the FDOT Project Manager or designated representative.

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, personnel, 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 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 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)
- Testing device calibration date (speed detection device, OTDR, etc.)

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 Design-Build Firm 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, network 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 and power supplies 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:

- MVDS and components
- CCTV Cameras and Lowering Devices
- RSUs
- ITS Field Cabinets
- Device servers
- 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 within 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**

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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 subsystem:
  - RSU subsystem

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

- 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 RSU equipment manufacturer/vendor provided 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 ITSM 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.

The Department may restart tests at day zero for a new 30 consecutive calendar day test period if corrections are not made within the requirements of **Table A**. 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 Time*
ITS Communications	4 hours
RSU	8 Hours
MVDS	8 hours



CCTV Camera	8 hours
Power	8 hours

\*Outage time clock starts upon notification to Design-Build Firm. If the Design-Build Firm feels an outage is out of their control they may request an exemption from the EOR. The exemption request must be made during the allowable outage time. Lack of parts or other resources – including time and personnel – are not considered factors outside of the Design-Build Firm’s control. Granting of the exemption shall be at the sole discretion of the EOR or the Department.

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 for that subsystem or unit, 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 subsystem component fails more than two times, the Design-Build Firm shall:

- Remove and replace the ITS device or 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.

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

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

- ITS Close-Out
  - Conduct final inspection once 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.
  - 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, 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. Refer to the concept plan for existing ITS equipment locations. This section is for information purposes only. Refer to the Concept Plans attached to this RFP for existing ITS equipment locations. In addition, the Design-Build Firm shall refer to the ITS As-Built Plans provided with this RFP as Attachments for additional information and shall be responsible for field verifying all existing site conditions within the project limits.

## **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 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- at time of notification are not 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:**

N/A.

**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 for the Project.

**B. Submittal Requirements:**

The Technical Proposal shall be submitted using Form 700-010-21 Low Bid Design-Build Technical Proposal.

The Technical Proposal shall be submitted electronically and attached to a single email. The Department has a 10MB limit on email. Emails that exceed this 10MB email server limit may be rejected by the Department's email server. It is solely the Design Build Firm's responsibility to ensure that the Technical Proposal is received by the Department's server by the due date and time. 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.

The maximum number of pages shall be 2, single-sided, typed pages including text, graphics, tables, charts, and photographs. Double-sided 8½" x 11" sheets will be counted as 2 pages. Larger sheets are prohibited.

Submit the Technical Proposal to: [D1.DesignBuild@dot.state.fl.us](mailto:D1.DesignBuild@dot.state.fl.us)

The minimum information to be included:

Section 1: Written Technical Proposal

• **Approach and Understanding of the Project:**

Present a plan for completing the specified work. The plan should address all significant design and construction issues and constraints and should demonstrate efficient use of manpower, materials, equipment, construction schemes, and techniques for completing the project. Coordination with the Department on public involvement, railroad encroachments, and affected utilities shall also be discussed in this section.

• **Staffing:**

- Contractor Name & Applicable Prequalification Work Classes:
- Construction Project Manager:
- Construction Superintendent:
- Consulting Engineer Name and Applicable Prequalified Work Types:
- Subconsultant Name(s) and Applicable Prequalified Work Types:
- Design Project Manager:
- Design Engineer of Record:
- MOT Certified Designer:
- Specification Package Technician
- Utility Coordination Manager

• **Responsible Office:**

Design-Build Firms being considered for this Project may have more than one office location. The office assigned responsibility for the work shall be identified in the Technical Proposal. If different elements of the work will be done at different locations, those locations shall be listed.

**C. Evaluation Criteria:**

The Department shall open all Bids received at a public Bid opening on the date found in Section II of this RFP. The Technical Review Committee will review the Technical Proposal of the Lowest Bidder. The Technical Review Committee will then establish if the Technical Proposal of the Lowest Bidder is responsive or non-responsive based on the criteria described in this RFP. If the Proposal is responsive, that Design-Build Firm will be awarded the Project. If the Proposal is found to be non-responsive, the Technical Review Committee will review the Technical Proposal of the next Lowest Bidder and establish if the Technical Proposal is responsive or non-responsive based on the criteria described in this RFP, and so on.

**D. Final Selection Process:**

The Project shall be awarded to the responsive Bidder with the lowest Price Proposal.

**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. The price proposal shall be emailed to [D1.DesignBuild@dot.state.fl.us](mailto:D1.DesignBuild@dot.state.fl.us) and must be received prior to the proposal deadline in the RFP.

In addition, an original Proposal Bond (375-020-34) must be delivered to Don Naylor, District Contracts Administrator, 801 N. Broadway Ave, Florida, 33830, prior to the proposal deadline. Proposals without a corresponding proposal bond will not be opened. Please be mindful that courier services may not guarantee overnight delivery to the District One Office. Electronic proposal bonds will not be accepted. The package shall indicate clearly that it is the Bid Price Proposal and shall clearly identify the Proposer's name, contract number, project number, and Project description. The Bid Price Proposal shall be secured and unopened until the date specified for opening of Bid Price Proposals. Forms to be included with the Price Proposal are included in the RFP.

Submit Bid Price Proposal and other related documents to:

Mr. Don Naylor  
Attn: Charli Bell  
Florida Department of Transportation District One  
801 N. Broadway Avenue  
Bartow, FL 33830  
[D1.Designbuild@dot.state.fl.us](mailto:D1.Designbuild@dot.state.fl.us)