Florida Department of Transportation
District 5

DESIGN-BUILD
REQUEST FOR PROPOSAL
for
Interstate 75 (SR-93) Improvements
From south of CR 470 to south of Florida's Turnpike
Sumter County, Florida

Financial Projects Number(s): 242626-3-52-01
Federal Aid Project Number(s): 0751-185-I
Contract Number: E-5W11

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ATTACHMENTS

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

- Project Advertisement
- Division I Design-Build Specifications
- Design-Build Utility Agreement (Form number 710-010-19)
- SWFWMD Permit no. 43033330.001
- SWFWMD Permit No. 43033330.001 Plans
- USACE Permit (will be attached once received)
- Right-of-Way Maps
- Right-of-Way Control Survey
- Right-of-Way Commitments
- Type 2 Categorical Exclusion (PD&E – April 2007)
- Pond Siting Report Update (October 2007)
- Memorandum of Understanding – FDOT and Sumter County
- Geotechnical Services Requirements/Specifications
  - Contractor Quality Control General Requirements (SP1050813DB)
  - Structures Foundations (SP4550000DB)
- Value Added Specifications
  - Section 475, Value Added Bridge Component
  - Section 725, Value Added Highway Lighting System

REFERENCE DOCUMENTS

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

Reference Documents Include:

- Conceptual Design Plans - Roadway (Including Drainage Plans and Drainage Maps)
- Conceptual Signing Layout – Roll Plots
- Conceptual Design Plans CADD Files in MicroStation
- Typical Section Package
- Pavement Design
- Utility Conflict Analysis
- Utility Mark-Ups
- Structures Technical Memorandum
- Bridge/Culvert Inspection Reports
- Design Survey CADD Files
- Drainage Design Calculations

Roadway Design Calculations
Report of Roadway Soil Survey – 100% (February 2011)
Addendum to Report of Roadway Soil Survey (September 2013)
Right-of-Way Acquisition Schedule
CR 470 and I-75 Interchange Traffic Study – Final Technical Memorandum
CR 470 and I-75 Lighting Justification Report
CR 470 and I-75 Single Point Urban Interchange Preliminary Engineering Analysis
CR 470 and I-75 Signal Warrants (pending)
Project Information Meeting Summary – SR 93 (I-75) Widening Design Project
Final Preliminary Engineering Report (PD&E – March 2007)
Final Wetland Evaluation Report (PD&E – March 2006)_
Final Endangered Species Biological Assessment (PD&E – March 2006)
Pond Sites NLP2, LP1, LP2 Wetland and Wildlife Assessment (Updated October 2013)
Final Cultural Resource Assessment Survey Report (PD&E – March 2006)
Final Contamination Screening Evaluation (PD&E – March 2006)
Ponds NLP2, LP1, LP2 Contamination Screening (Updated September 2013)
Final Noise Report (PD&E – March 2006)
Noise Barrier Analysis I-75 @ CR 470 (September 2011)
Final Pond Siting Report (PD&E – March 2006)
Determination of Sovereignty – Lake Panasoffkee
Design Variation - Border Width Reductions
Design Variation - Vertical Clearance Reduction I-75 under Existing CR 514 Bridge
Design Variation - Vary Median Shoulder Cross Slope

I. Introduction.

The Florida Department of Transportation (Department) has issued this Request for Proposal (RFP) to solicit competitive bids and proposals from Proposers for the design and construction of Interstate 75 (SR-93) six lane improvements in Sumter County, Florida from south of CR 470 to south of the Florida's Turnpike interchange. The Project includes the widening of I-75 from four to six lanes for the project limits and a complete interchange reconstruction at CR 470, including improvements on CR 470 from CR 490 to CR 527, and improvements to CR 475 from south of the I-75 off-ramp to CR 470. Improvements include roadway, drainage, bridges, walls, miscellaneous structure, signing and pavement marking, signalization, intelligent transportation systems, lighting, geotechnical, utilities, subsurface utility engineering, public involvement and environmental permitting

Description of Work

Overview of the roadway construction to be completed:

This Project involves the design and construction of the Interstate 75 (SR-93) six-lane improvements from south of CR 470 to south of the Florida's Turnpike interchange. The southern project limit shall provide six lanes at approximately MP 13.219 and tie to the on-going project to the south (FIN 242646-2-52-01). The northern project limit shall provide six lanes at approximately MP 20.814 and interface to the future widening project to the north (FPN 406110-1-52-01).

The Project work includes new pavement, drainage system, bridge construction, box culvert extensions, median barrier, signing and pavement markings, traffic signals and lighting at the CR 470 interchange, an at-grade railroad crossing, sidewalk and driveways, and milling and resurfacing with required cross slope correction.

Construction activities include widening I-75 from the existing four-lane section to a six-lane facility. The project includes complete reconstruction of the existing interchange at CR 470. The CR 470 interchange shall include the northbound I-75 ramp to CR 475, reconstruction of CR 475 from south of the ramp terminal to CR 470, and ramps at CR 470. The bridge in the interchange shall accommodate a four-lane facility on CR 470, including dual left-turn lanes to southbound I-75 and the single left-turn lane to northbound I-75 with full clear zones. The existing CSX Railroad grade crossing (DOT/AAR Crossing no. 625284 K) shall be reconstructed to accommodate the four-lane section on CR 470 including a single left-turn lane to CR 475 and a 24 feet wide access road to Shady Brook Greenway County Park.

The Design-Build Firm shall construct the full typical section of I-75 as described above. In the event the other adjacent projects are not substantially complete the Design-Build Firm shall provide interim roadway transitions to existing I-75 north and/or south of the project with temporary pavement markings as directed by the Department.

The Department, under a separate contract, has produced concept plans. The concept plans are included in Reference Documents of this RFP and are supplied to the Design-Build Firm for information purposes.

Any changes to requirements of the RFP by a Design-Build Firm must be approved by the Department through the Alternative Technical Concept (ATC) Proposal process, as described herein, prior to the information cut-off date. For this Project, the Department considers the following to be requirements of the Project that are not to be changed by the Design-Build Firms:

- Prohibition of the use of Mechanistic-Empirical Pavement Design Guide for pavement design,

The Department is in the process of acquiring right of way for the Project. Information regarding the location of the parcels to be acquired and the acquisition schedule can be found in the Right of Way Acquisition Schedule (see Reference Documents). The parcels to be acquired in the Right of Way Acquisition Schedule shall not be used for any construction activity or any other purpose until the Department has issued an applicable parcel clear letter or a Right of Way Certification for Construction.

It is the Department's intent that all Project construction activities be conducted within the existing right of way and within the right of way that the Department is in the process of acquiring per the Right of Way Acquisition Schedule. The Design-Build Firm may submit a Technical Proposal that requires the acquisition of additional right of way that is not included in the Right of Way Acquisition Schedule. Any Technical Proposal that requires the acquisition of additional right of way shall not extend the contract duration as set forth in the RFP under any circumstances. The Department will have sole authority to determine whether the acquisition of additional right of way on the Project is in the Department's best interest, and the Department reserves the right to reject the acquisition of additional right of way.

If a Design-Build Firm intends to submit a Technical Proposal that requires the acquisition of additional right of way, the Design-Build Firm shall present such a proposal as part of the Alternative Technical Concept process. If a Design-Build Firm submits a Technical Proposal that requires the acquisition of additional right of way and the Design-Build Firm fails to present such a proposal as part of the Alternative Technical Concept process, then the Department will not consider such aspects of the Proposal during the Evaluation process. If the Design-Build Firm's Technical Proposal requires additional right of way, the additional right of way will be required to be directly acquired by the Department. The Design-Build Firm shall submit, along with the Technical Proposal, certified sketches and legal descriptions including area in square feet of any proposed additional right of way parcels. On a State-funded project, the additional right of way will be acquired by the Department in accordance with all applicable state laws. On a Federally-funded project, the additional right of way will be acquired by the Department in accordance with all applicable federal laws, specifically including, but not limited to, the Uniform Relocation Assistance and Real Property Acquisition Policies for Federal and Federally Assisted Programs (42 USC Chapter 61) and its implementing regulations. All costs concerning the acquisition of additional right of way shall be borne solely by the Design-Build Firm. The Department will have sole discretion with respect to the entire acquisition process of the additional right of way.

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

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

Build Firm.

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

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

The Design-Build Firm shall design and construct one (1) contra-flow emergency crossover (aka Reverse Lanes) on I-75 south of the turnpike interchange for hurricane evacuations. The contra-flow crossover shall be placed in the median and accommodate two lanes. The direction of the contra-flow median crossover will allow traffic travelling north on southbound I-75 during an emergency evacuation to cross the median and return to northbound I-75.

Drainage and Environmental

Drainage work includes all work required to comply with the permit requirements for water quality and quantity. Permit modifications will be required by the Design-Build Firm to accommodate the following:

- Ponds LP-7 and LP-8 as shown in the Concept plans included as a Reference Document to this RFP.
- Ponds NLP-2, LP-1, and LP-2 as shown in the Concept plans included as a Reference Document to this RFP

Any other permit modifications required to accommodate the drainage system shall be the responsibility of the Design-Build Firm

Structures

Structures work includes the design and construction of a new crossing of Interstate 75 and CR 470. The bridge(s) shall accommodate widening of CR 470 to four lanes including dual left-turn lanes to southbound I-75 and a single left-turn lane to northbound I-75.

Signing and Pavement Markings

The Design-Build Firm shall be responsible for complete signing and pavement marking plans. All existing signs and sign structures within the project limits are to be replaced. The signing plan shall include all signs necessary to provide appropriate regulatory and guide signing. A Concept Signing Layout was developed during the development of the Concept Roadway Plans. The Concept Signing Layout is included as a Reference Document to this RFP.

Signals

The Design-Build Firm shall be responsible for complete signalization plans. The intersection of CR 475, northbound I-75 ramp terminal, and CR 470 shall be signalized. The intersection of southbound I-75 ramp terminals and CR 470 shall be signalized.

ITS
The Design-Build Firm shalll be responsible for the design and construction of all new ITS systems throughout the project limits in accordance with the requirements outlined in this RFP.

Lighting
The Design-Build Firm shall be responsible for the design and construction of high-mast roadway lighting for the CR 470 interchange The lighting coverage limits shall be from the furthest taper south of the interchange to the furthest taper north of the interchange and to the limits of the L/A right-of-way on the side street.

Traffic Monitoring Site:
The Telemetered Traffic Monitoring Site (TTMS) 189920 located at approximately MP 17.5859 on I-75 will be impacted and will need to be considered as a part of the proposed roadway improvements.
The Design-Build Firm is required to remove and replace the existing Telemetry Traffic Monitoring Site (TTMS) # 189920 to accommodate the six-lane section on I-75 and include all ancillary items. . The contact person for this site is Walton 'Kip' Jones from Transportation Statistics Office, Central Office at (850) 414-4726.
This site requires complete replacement of TMS Inductive Loops (2 loops per each lane), TMS Vehicle Sensors (one sensor per each lane), Conduit, Pull Boxes, Directional Bore, TMS Speed/Classification Unit, TMS Solar Power Unit, Type IV TMS pole mounted cabinet. Coordinate location for loops and axle sensors and cabinet with the Department prior to installation. Reference to be made to the FDOT Design Standards Index 17900 (latest edition) for TMS installation. Placement of the cabinet is to be outside of the clear zones with rear of the cabinet facing towards road.
Design-Build Firm is to contact James Whitley of the Transportation Statistics Office at (850) 921-7300 or (800) 399-5523 ten (10) days prior to roadwork performed in the vicinity of the Traffic Monitoring Site and ten (10) days prior to installation of new site. Refer to FDOT Standard Specifications, FDOT Design Standards and FHWA Traffic Monitoring Guide for work, equipment and material requirements."

Additional Items
The Design-Build Firm shall be responsible to restrict livestock from entering Department Right-of-Way.

The Design-Build Firm shall be responsible to design and construct graded maintenance access secured with fences and gates allowing access from I-75 to pond sites.

A. Design-Build Responsibility

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

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

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

A Type 2 Categorical Exclusion was approved by the Federal Highway Administration (FHWA) on April 16, 2007 under FPN 242626-1, which defined the Project Development and Environment (PD&E) Study commitments for I-75 (SR 93) from 1.5 Miles North of Hernando County Line to 0.2 Miles North of Florida's Turnpike in Sumter County. The Design-Build Firm shall comply with all of the commitments included in the Type 2 Categorical Exclusion (see Attachments) and provide documentation acceptable to the Department to prove adherence to and/or completion of the commitments.

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

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

The Design-Build Firm shall be responsible for immediately notifying the District Five Environmental Administrator if the Design-Build Firm intends to propose a change that is inconsistent, or potentially inconsistent, with the I-75 PD&E Study or the Concept Plans. The Department shall have sole discretion in determining 1) if the proposed changes require additional review and 2) the process by which the proposed changes will be reviewed and processed. The Design-Build Firm shall be responsible for providing all necessary data to the Department to enable the Department to conduct the necessary analyses and documentation, public involvement activities, and any other activities necessary to satisfy the requirements to obtain approval of the Department, the FHWA, and other agencies. Proposed changes may require a Reevaluation of the Type 2 Categorical Exclusion. The Design-Build Firm should allow a minimum of 9 months in the schedule for the Department to perform the analysis, public involvement, and coordination with FHWA and other agencies. Until and unless approval is obtained from the Department and all applicable agencies, the Design-Build Firm shall not conduct construction activities associated with the proposed changes. The Design-Build Firm shall be responsible for any additional construction or delay costs that may result from the above activities and approval processes. No additional compensation or contract time will be provided by the Department.

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 he 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.

B. Department Responsibility

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

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

The Department will determine the environmental impacts and coordinate with the appropriate agencies during the preparation of NEPA or SEIR Reevaluations. For federal projects, the Department will coordinate and process Reevaluations with FHWA.

II. Schedule of Events.

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

Date	Event
1/27/14	Advertisement
2/17/14	Expanded Letters of Interest for Phase I of the procurement process due in District Office by 5:00 pm local time
3/17/14	Proposal Evaluators submit Expanded Letter of Interest Scores to Contracting Unit 5:00 pm local time
3/20/14	Contracting Unit provides Expanded Letter of Interest scores and Proposal Evaluators comments to Selection Committee 8:15 am local time
3/24/14	Public Meeting of Selection Committee to review and confirm Expanded Letter of Interest scores 8:15 am local time
3/24/14	Notification to Responsive Design-Build Firms of the Expanded Letter of Interest scores12:00 pm local time
3/26/14	Deadline for all responsive Design-Build Firms to affirmatively declare intent to continue to Phase II of the procurement process12:00 pm local time
3/26/14	Shortlist Posting 5:00 pm local time
3/31/14	Final RFP provided to Design-Build Firms providing Affirmative Declaration of Intent to continue to Phase II of the procurement process

4/7/14	Pre-proposal meeting at 9:00 am local time in District Office 719 S. Woodland Blvd. Deland, FL 32720. **All impacted Utility Agency/Owners are to be to the mandatory Pre-Proposal meeting.**
4/7/14	Utility Pre-Proposal Meeting facilitated by the District Utility Engineer at 9:00 am local time in District Office 719 S. Woodland Blvd. Deland, FL 32720.
4/14/14	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 1 5:00 pm local time
4/21/14	Deadline for Design-Build Firm to submit preliminary list of Alternative Technical Concepts prior to One-on-One Alternative Technical Concept Discussion Meeting No. 1 5:00 pm local time
4/28/14	One-on-One Alternative Technical Concept Discussion Meeting No. 1. 90 Minutes will be allotted for this Meeting.
4/28/14	Deadline for Design-Build Firm to request participation in One-on-One Alternative Technical Concept Discussion Meeting No. 2 5:00 pm local time
5/5/12	Deadline for Design-Build Firm to submit preliminary list of Alternative Technical Concepts prior to One-on-One Alternative Technical Concept Discussion Meeting No. 2 5:00 pm local time
5/12/14	One-on-One Alternative Technical Concept Discussion Meeting No. 2. 90 Minutes will be allotted for this Meeting.
5/27/14	Deadline for submittal of Alternative Technical Concept Proposals 5:00 pm local time.
5/27/14	Final deadline for submission of requests for Design Exceptions or Design Variations 5:00 pm local time
6/10/14	District Design Engineer completes review of Alternative Technical Concepts and notifies Design-Build Firms
6/24/14	Deadline for submittal of questions, for which a response is assured, prior to the submission of the Technical Proposal. All questions shall be submitted to the Pre-Bid Q&A website.
6/30/14	Deadline for the Department to post responses to the Pre-Bid Q&A website for questions submitted by the Design-Build Firms prior to the submittal of the Technical Proposal 5:00 pm local time.
7/2/14	Technical Proposals due in District Office by 2:30 p.m. local time
7/2/14	Deadline for Design-Build for to "opt out" of Technical Proposal Page Turn meeting 5:00 pm local time.
7/9/14	Technical Proposal Page Turn Meeting. Times will be assigned during the Pre-Proposal Meeting. 30 Minutes will be allotted for this Meeting.
8/5/14	Deadline for Department to provide a preliminary list of questions in advance of the Question & Answer Session
8/6/14	Question and Answer Session. Times will be assigned during the pre-proposal meeting. One hour will be allotted for questions and responses.
8/13/14	Deadline for submittal of Written Clarification letter following Question and Answer Session 5:00 pm local time
8/13/14	Deadline for submittal of questions, for which a response is assured, prior to the submission of the Price Proposal. All questions shall be submitted to the Pre-Bid Q&A website.
8/18/14	Deadline for the Department to post responses to the Pre-Bid Q&A website for questions submitted by the Design-Build Firms prior to the

	submittal of the Price Proposal 5:00 pm local time.
8/20/14	Price Proposals due in District Office by 2:30 pm local time.
8/20/14	Public announcing of Technical Scores and opening of Price Proposals at 2:30 pm local time in District Office, 719 S. Woodland Blvd. Deland, FL 32720
8/27/14	Public Meeting of Selection Committee to determine intended Award at 8:15 am in Lake County Conference Room
8/27/14	Posting of the Department's intended decision to Award
9/16/14	Anticipated Award Date
10/1/14	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, Florida Administrative Code. Parties to a Joint Venture must submit a Declaration of Joint Venture and Power of Attorney Form No. 375-020-18, prior to the deadline for receipt of Letters of Interest.

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

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 affirmatively declared proposer failing to attend will be deemed non-responsive and automatically disqualified from further consideration. The purpose of this meeting is to provide a forum for the Department to discuss with all concerned parties the

proposed Project, the design and construction criteria, Critical Path Method (CPM) schedule, and method of compensation, instructions for submitting proposals, design exceptions/variations, and other relevant issues. In the event that any discussions at the pre-proposal meeting require, in the Department's opinion, 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 oversight Projects, 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://www3.dot.state.fl.us/BidQuestionsAndAnswers/Proposal.aspx/SearchProposal

E. Technical Proposal Page-Turn Meeting

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

F. Question and Answer Session

The Department may meet with each Proposer, formally, for a Question and Answer session**.** FHWA shall be invited on FA Oversight Projects. The purpose of the Q & A session is for the Technical Review Committee to seek clarification and ask questions, as it relates to the Technical Proposal, of the Proposer. The Department may terminate the Q & A session promptly at the end of the allotted time. The Department shall audiotape record or videotape all or part of the Q & A session. All audiotape recordings or videotape recordings will become part of the Contract Documents. The Q & A session will not constitute “discussions” or negotiations. Proposers will not be permitted to ask questions of the Department except to ask the meaning of a clarification question posed by the Department. No supplemental materials, handouts, etc. will be allowed to be presented in the Q & A session. No additional time will be allowed to research answers.

Within one (1) week of the Q & A session, the Design-Build Firm shall submit to the Department a written clarification letter summarizing the answers provided during the Q & A session. The Design-Build Firm shall not include information in the clarification letter which was not discussed during the Q&A session. In the event the Design-Build Firm includes additional information in the clarification letter which was not

discussed during the Q&A session and is not otherwise included in the Technical Proposal, such additional information will not be considered by the Department during the evaluation of the Technical Proposal.

The Department will provide some (not necessarily all) proposed questions to each Design-Build Firm as it relates to their technical proposal approximately 24 hours before the scheduled Q & A session.

G. Protest Rights

Any person who is adversely affected by the specifications contained in this Request for Proposal must file a notice of intent to protest in writing within seventy-two hours of the posting of this Request for Proposals. Pursuant to Sections 120.57(3) and 337.11, Florida Statutes, and Rule Chapter 28-110, Florida Administrative Code, 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 ten days after the filing of the notice of protest. The formal written protest shall be filed within ten days after the date of the notice of protest if filed. The person filing the Protest must send the notice of intent and the formal written protest to:

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

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

H. Non-Responsive Proposals

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

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

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.

I. Waiver of Irregularities

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

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

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

3. In no event will any such elections by the Department be deemed to be a waiving of the Design and Construction Criteria.

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

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

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

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

J. Modification or Withdrawal of Technical Proposal

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

K. Department’s Responsibilities

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

The Department does not guarantee the details pertaining to borings, as shown on any documents supplied by the Department, to be more than a general indication of the materials likely to be found adjacent to holes bored at the site of the work, approximately at the locations indicated.

L. Design-Build Contract

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

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

IV. Disadvantaged Business Enterprise (DBE) Program.

A. DBE Availability Goal Percentage:

The Department of Transportation has an overall eight and six tenths percent (8.6%) race-neutral DBE goal. This means that the State's goal is to spend at least 8.6% 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 8.6% overall goal can be achieved through the normal competitive procurement process. The Department has reviewed this Project and assigned a DBE availability goal shown on the bid blank/contract front page under "% DBE Availability Goal". Although not a contract requirement, the Department believes 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 8.6% 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. This information is being collected through the Anticipated DBE Participation Statement.

B. DBE Supportive Services Providers:

The Department has contracted with a consultant, referred to as DBE Supportive Services Provider, to provide managerial and technical assistance to DBE's. This consultant is also required to work with prime Design-Build Firms, who have been awarded contracts, to assist in identifying DBE's that are available to participate on the Project. The successful Design-Build Firm should meet with the DBE Supportive Services Provider to discuss the DBE's that are available to work on this Project. The current Provider for the State of Florida is serviced by Blackmon Roberts Group and can be reached at (863) 802-1280 in Lakeland or (305) 777-0231 in Coral Gables.

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.

A Bid Opportunity List should be submitted through the Equal Opportunity Compliance system which is available at the Equal Opportunity Office Website. This information should be returned to the Equal Opportunity Office within three days of submission.

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), Design Standards and Revised Index Drawings. 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, Design Standards and Revised Index Drawings 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 Roadway Plans Preparation Manuals (PPM)
   http://www.dot.state.fl.us/rddesign/PPMManual/PPM.shtm

2. Florida Department of Transportation Design Standards
   http://www.dot.state.fl.us/rddesign/DesignStandards/Standards.shtm

3. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications
   http://www.dot.state.fl.us/specificationsoffice/Default.shtm

4. Florida Department of Transportation Surveying Procedure
   http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/550030101.pdf

5. Florida Department of Transportation EFB User Handbook (Electronic Field Book)
   http://www.dot.state.fl.us/surveyingandmapping/doc_pubs.shtm

6. Florida Department of Transportation Drainage Manual
   http://www.dot.state.fl.us/rddesign/Hydraulics/ManualsandHandbooks.shtm

7. Florida Department of Transportation Soils and Foundations Handbook
   http://www.dot.state.fl.us/structures/Manuals/SFH.pdf

8. Florida Department of Transportation Structures Manual
   http://www.dot.state.fl.us/structures/DocsandPubs.shtm

9. Florida Department of Transportation Current Structures Design Bulletins
   http://www.dot.state.fl.us/structures/Memos/currentbulletins.shtm

10. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Manual
http://www.dot.state.fl.us/ecso/downloads/publications/Manual/default.shtm

11. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Production Criteria Handbook
http://www.dot.state.fl.us/ecso/downloads/publications/CriteriaHandBook/

12. Florida Department of Transportation Production Criteria Handbook CADD Structures Standards
http://www.dot.state.fl.us/ecso/downloads/publications/CriteriaHandBook/

13. Instructions for Design Standards
http://www.dot.state.fl.us/structures/IDS/IDSportal.pdf

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

15. MUTCD - 2009
http://mutcd.fhwa.dot.gov/

16. Safe Mobility For Life Program Policy Statement
http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/000750001.pdf

17. Traffic Engineering and Operations Safe Mobility for Life Program
http://www.dot.state.fl.us/trafficoperations/Operations/SafetyisGolden.shtm

18. Florida Department of Transportation American with Disabilities Act (ADA) Compliance – Facilities Access for Persons with Disabilities Procedure
http://www2.dot.state.fl.us/proceduraldocuments/procedures/bin/625020015.pdf

19. Florida Department of Transportation Florida Sampling and Testing Methods
http://www.dot.state.fl.us/statematerialsoffice/administration/resources/library/publications/fstm/disclaimer.shtm

20. Florida Department of Transportation Flexible Pavement Coring and Evaluation Procedure
http://www.dot.state.fl.us/statematerialsoffice/administration/resources/library/publications/materialsmanual/documents/v1-section32-clean.pdf

21. Florida Department of Transportation Design Bulletins and Update Memos
http://www.dot.state.fl.us/rddesign/Bulletin/Default.shtm

22. Florida Department of Transportation Utility Accommodation Manual
http://www.dot.state.fl.us/specificationsoffice/utilities/UAM.shtm

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

24. Florida Department of Transportation Flexible Pavement Design Manual
http://www.dot.state.fl.us/rddesign/PM/publicationS.shtm

25. Florida Department of Transportation Rigid Pavement Design Manual
http://www.dot.state.fl.us/rddesign/PM/publicationS.shtm

26. Florida Department of Transportation Pavement Type Selection Manual
http://www.dot.state.fl.us/rddesign/PM/publicationS.shtm

27. Florida Department of Transportation Right of Way Manual
http://www.dot.state.fl.us/rightofway/Documents.shtm

28. Florida Department of Transportation Traffic Engineering Manual
http://www.dot.state.fl.us/TrafficOperations//Operations/Studies/TEM/TEM.shtm

29. Florida Department of Transportation Intelligent Transportation System Guide Book
http://www.dot.state.fl.us/TrafficOperations/Doc_Library/Doc_Library.shtm

30. 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

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

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

33. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways
http://www.dot.state.fl.us/rddesign/FloridaGreenbook/FGB.shtm

34. Florida Department of Transportation Project Development and Environment Manual, Parts 1 and 2
http://www.dot.state.fl.us/emo/pubs/pdeman/pdeman1.shtm

35. Florida Department of Transportation Driveway Information Guide
http://www.dot.state.fl.us/planning/systems/sm/accman/pdfs/driveway2008.pdf

36. AASHTO Highway Safety Manual
http://www.highwaysafetymanual.org/Pages/default.aspx

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

B. Innovative Aspects:

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

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

1. Alternative Technical Concept (ATC) Proposals

The ATC process allows innovation, flexibility, time and cost savings on the design and construction of Design-Build Projects while providing the best value for the public. Any deviation from the RFP that the Design-Build Firms seeks to obtain approval prior to Technical Proposal submission is, by definition, an ATC. The proposed ATC shall provide an approach that is equal to or better than the requirements of the RFP, as determined by the Department. ATC Proposals which reduce scope, quality, performance, or reliability should not be proposed. A proposed concept does not meet the definition of an ATC if the

concept is contemplated by the RFP.

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

- Type 2 Categorical Exclusion commitments
- Approved Typical Section Package elements for I-75 (lane widths, shoulder widths, median width, mainline design speeds)
- Approved Typical Section Package elements for CR 470 (lane widths, median width, design speed)
- Approved Typical Section Package elements for CR 475 (lane widths, shoulder widths, design speed)
- Ramp design speeds, Ramp lane widths and Ramp shoulder widths
- Pavement Design Package parameters for I-75 (Design life duration, % Reliability, 18kip ESAL analysis projections, Design LBR)
- Pavement Design Package parameters for CR 470 and CR 475 (Design life duration, % Reliability, 18kip ESAL analysis projections, Design LBR)

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

- Items not specifically listed in the list above.

2. One-on-One ATC Proposal Discussion Meetings

One-on-One ATC discussion meetings may be held in order for the Design-Build Firm to describe proposed changes to supplied basic configurations, Project scope, design criteria, and/or construction criteria. Each Design-Build Firm with proposed changes may request a One-on-One ATC discussion meeting to describe the proposed changes. The Design-Build Firm shall provide, by the deadline shown in the Schedule of Events of this RFP, a preliminary list of ATC proposals to be reviewed and discussed during the One-on-One ATC discussion meetings. This list may not be inclusive of all ATC's to be discussed but it should be sufficiently comprehensive to allow the Department to identify appropriate personnel to participate in the One-on-One ATC discussion meetings. The purpose of the One-on-One ATC discussion meeting is to discuss the ATC proposals, answer questions that the Department may have related to the ATC proposal, review other relevant information and when possible establish whether the proposal meets the definition of an ATC thereby requiring the submittal of a formal ATC submittal. The meeting should be between representatives of the Design-Build Firm and/or the Design-Build Engineer of Record and District/Central Office staff as needed to provide feedback on the ATC proposal. Immediately prior to the conclusion of the One-on-One ATC discussion meeting, the Department will advise the Design-Build Firm as to the following related to the ATC proposals which were discussed:

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

3. Submittal of ATC Proposals

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

All ATC submittals are required to be on roll plots or plan sheets and shall be sequentially numbered and include the following information and discussions:

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

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

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

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

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

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

g) Quality: A description of how the ATC is equal or better in quality and performance than the requirements of the RFP;

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

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

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

4. Review and Approval of ATC Submittals

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

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

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

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

The Department Project file will clearly document all communications with any Design-Build Firm.

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

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

Note to developer of the RFP: ***The following shall only be included if Stipends are being paid as part of this Project.***

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

C. Geotechnical Services:

1. **General Conditions**:

The Design-Build Firm shall be responsible for identifying and performing any geotechnical investigation, analysis and design of foundations, foundation construction, foundation load and integrity

testing, and inspection dictated by the Project needs in accordance with Department guidelines, procedures and specifications. All geotechnical work necessary shall be performed in accordance with the Governing Regulations. The Design-Build Firm shall be solely responsible for all geotechnical aspects of the Project.

D. Department Commitments:

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

The following environmental commitments are included:

- Mitigation to offset permanent impacts to wetland systems associated with the construction of the project as shown in the conceptual plans is provided, pursuant to Section 373.4137 F.S., to satisfy all mitigation requirements of Part IV Chapter 373 F.S. and 33 U.S.C. Section 1344. Any additional wetland impacts which occur as part of permit modifications will be the responsibility of the Design-Build Firm. The Design-Build Firm will need to secure acceptable wetland mitigation outside of F.S. 373.4137 for any additional wetland impacts above the acreage of wetland impacts under the original permits.
- The Noise Study Report identified reasonable and feasible noise abatement in one noise study area. A detailed noise analysis was completed based on the conceptual plans and is included as a Reference Document to this RFP. The Design-Build Firm shall be responsible to determine whether the final design process warrant a new detailed noise analysis. The implementation of reasonable and feasible noise abetment is contingent upon the following conditions:
    - Detailed noise analyses during the final design process support the need for abatement
    - Reasonable cost analyses indicate that the economic cost of the barriers will not exceed the guidelines;
    - Community input regarding noise barriers has been solicited by the Florida Department of Transportation
    - Preferences regarding compatibility with adjacent land uses; particularly as addressed by officials having jurisdiction over such land uses, has been noted,
    - Safety and engineering aspects as related to the roadway user and adjacent property owner have been reviewed; and
    - Any mitigating circumstances found in Part 2, Chapter 17-4.6.1 of the PD&E Manual have been analyzed
- If at a later date it is determined that the project will potentially affect the habitat of the Florida scrub-jay, a re-assessment survey will be performed and an analysis of the effects of scrub removal on scrub-jay survival and dispersal will be completed
- If wood stork foraging habitat is impacted by the project, it will be replaced with an equal amount of in-kind, on-site wetland habitat having functions and value equal to those of the affected habitat. If on-site habitat is not available, the Design-Build Firm shall be responsible for providing suitable off-site mitigation, and ensuring the Department has proper documentation to demonstrate that it is acceptable to the Service.

Additionally, the Design-Build Firm shall be responsible for the following project commitments.

- Provide a 24 foot wide access road into Shady Brook Greenway County Park with access to CR 527. This access road shall cross the CSX Railroad and utilize the same CSX railroad grade crossing (DOT/AAR Crossing No. 625284 K) as CR 470.
- All Right-of-Way commitments included as an attachment to the RFP

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 Department has obtained Southwest Florida Water Management District (SWFWMD) ERP Permit No 43033330.001 and United States Army Corps of Engineers (USACE) Permit (pending). They are included as an attachment to this RFP. The permit obtained by the Department reflects the design as shown in the Conceptual Design Plans under "Reference Documents" except for the current configuration of Ponds NLP1, LP1, LP2, LP7 and LP8. At a minimum permit modifications will be required for the ultimate configuration of Ponds NLP1, LP1, LP2, LP7 and LP8.

The Design-Build Firm shall be responsible for modifying the issued permits as necessary to accurately depict the final design. The Design-Build Firm shall be responsible for any necessary permit time extensions or re-permitting in order to keep the environmental permits valid throughout the construction period. The Design-Build Firm shall provide the Department with draft copies of any and all permit applications, including responses to agency Requests for Additional Information, requests to modify the permits and/or requests for permit time extensions, for review and approval by the Department prior to submittal to the agencies.

All applicable data shall be prepared in accordance with Chapter 373 and 403, Florida Statutes, Chapters 40 and 62, Florida Administrative Code; 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 permitee, 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 of any and all correspondence with any of the environmental permitting agencies shall be sent to the District Environmental Permits Office. If any agency rejects or denies the permit application, it is the Design-Build Firm's responsibility to make whatever changes necessary to ensure the permit application is approved. The Design-Build Firm shall be responsible for any necessary permit extensions or re-permitting in order to keep the environmental permits valid throughout the construction period. The Design-Build Firm shall provide the Department with draft copies of any and all permit applications, including responses to agency Requests for Additional Information, requests to modify the permits and/or requests for permit extensions, for review and approval by the Department prior to submittal to the agencies.

The Design-Build Firm will be required to pay all permit fees and mitigation not already provided by the Department for the conceptual design. Any fines levied by permitting agencies shall be the responsibility of the Design-Build Firm. A copy of any and all correspondence with any of the environmental permitting

agencies shall be sent to the District Environmental Permits Office. The Design-Build Firm shall be responsible for complying with all permit conditions.

Wetland mitigation is required in the issued permits, which are based on the Conceptual Design Plans, and will be the responsibility of the Department. If any permit applications completed by the Design-Build Firm propose to increase the amount of wetland impact that requires mitigation, the Design-Build Firm shall be responsible for providing to the Department an update on the amount and type of wetland impacts as soon as the impacts are anticipated (including temporary impacts and/or any anticipated impacts due to construction staging or construction methods).

The Design-Build Firm shall be solely responsible for all costs associated with these 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:

The Department will conduct the required contract negotiations and plans review coordination. All required Railroad Reimbursement Agreements will be between ___CSX_____ and the Department. Copies of the approved Agreements will be made available to the Design-Build Firm. The Design-Build Firm must comply with the terms of these agreements. The Design-Build Firm must make the necessary arrangements with _Jim Ganey, District Rail Administrator prior to encroachments into the railroad rights-of-way.

The Design-Build Firm shall be responsible for contacting the Department District Rail Administrator by email to jim.ganey@dot.state.fl.us, a **MINIMUM of 45 DAYS** prior to railroad right-of-way encroachments , to request railroad watchman/flagging services and to complete ***CSX FLAGGING REQUEST*** form.

The Design-Build Firm shall not enter CSX right-of-way without first obtaining the required railroad watchman/flagging services.

The Design-Build Firm shall be solely responsible for any "DELAY OF TRAIN" penalties imposed by the railroad.

Invoices for such penalties, received by the Department, will be forwarded to the Design-Build Firm for payment.

If the Design-Build Firm fails to pay such penalties, the Department may deduct said amount from

payments made to the contractor.

All labor, services, materials, and equipment furnished by the railroad in executing the work to be performed, shall be billed directly to the Department of Transportation, by the railroad.

The Design-Build Firm shall comply with ***CSX CONSTRUCTION SUBMISSION CRITERIA*** while working within or near the CSX right-of-way.

G. Survey:

The Design-Build Firm shall perform all surveying and mapping services necessary to complete the Project. Survey services must also comply with all pertinent Florida Statutes and applicable rules in the Florida Administrative Code. 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 Procedure, Topic Nos. 550-030-101; Right-of-Way Mapping Procedure, Topic No. 550-030-015; Aerial Surveying Standards for Transportation Projects Procedure, Topic No. 550-020-002. This work must comply with the Minimum Technical Standards for Professional Surveyors and Mappers, Chapter 5J-17, F.A.C., pursuant to Section 472.027, F.S. This survey also must comply with Chapter 177, F.S

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. Plans:

Plans must meet the minimum contents of a particular phase submittal prior to submission for review. The particular phase of each submittal shall be clearly indicated on the cover sheet. Component submittals must be accompanied by sufficient information for adjoining components or areas of work to allow for proper evaluation of the component under review.

Submittals for Category I and II bridges are limited to the following component submittals: foundation, substructure, and superstructure. Bridge component submittals must be accompanied by all supplemental information required for a complete review. Submittals for individual component elements (i.e. Pier 2, Abutment 1, Span 4, etc.) and incomplete submittals will not be accepted.

Category I and II bridge component submittals shall contain the following:

- Plan sheets for the component under review developed to the specified level of detail (i.e. 90% plans, Final plans, etc.),

- A complete set of the most developed plan sheets for all other major elements of the bridge. These sheets shall be marked "For Information Only" on the index sheet. In no case shall a plan sheet be less than 30% complete.
- Design documentation including a complete set of calculations, geotechnical reports, pertinent correspondence, etc. in support of the 90% and final component submittals.
- For Category II bridges component submittals shall also include independent peer review documentation.

The Design-Build Firm shall provide copies of required review documents as listed below.

90% Component Plans

16 sets of 11" X 17" roadway plans
9 sets of 11" X 17" structure plans
8 sets of 11" X 17" each component set
5 copies of Final Geotechnical Report
2 sets of documentation – roadway/drainage
2 set of documentation - structures
2 copy of Specification Package
2 sets of 11"x17" roadway, structures and component plans in Adobe Acrobat (*..pdf) on CD
2 Bridge Load Rating Reports, with 2 Load Rating Summary Forms (Excel format) and 2 Load Rating Detail Tables (CADD)
2 sets of Independent Peer reviewer's comments and comment responses

Final Component Plans

16 sets of 11" X 17" roadway plans
9 sets of 11" X 17" structure plans
8 sets of 11" X 17" each component set
2 sets of final documentation
2 sets of 11"x17" roadway and component plans in Adobe Acrobat format (*.pdf) on CD
1 signed and sealed copy of Specifications Package
2 sets of electronic copies of Technical Special Provisions on CD
Independent Peer Reviewer's signed and sealed cover letter that all comments have been addressed and resolved.

Construction Set:

1 set of 11"X 17" copies of the signed and sealed plans for the Department to stamp "Released for construction**"**

1 "Release for Construction" Bridge Load Rating Summary Form (Excel format), and 1 Detail Table (CADD), both signed and sealed. Provide full report if rating revisions occur subsequent to the 90% Component Submittal

Final signed and sealed plans will be delivered to the Department's Project Manager prior to construction of any component. The Department's Project Manager will send a copy of final signed and sealed plans to the appropriate office for review and comment. Once all

comments have been satisfactorily resolved as determined by the Department, the Department's Project Manager will initial, date and stamp each submittal as "Released for Construction". Only signed and sealed plans which are stamped "Released for Construction" by the Department's Project Manager are valid and all work that the Design-Build Firm performs in advance of the Department's release of Plans will be at the Design-Build Firm's risk. To work at risk, the Design-Build Firm must submit signed and sealed plans and can begin working prior to the Department's Project Manager providing stamped "Release for Construction" plans. The Design-Build Firm shall notify the Department five (5) days prior to starting work at risk. All work that the Design-Build Firm performs in advance of the Department's release of Plans will be at the Design-Build Firm's risk.

Record Set:

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

- 1 set of 11" X 17" signed and sealed plans
- 2 sets of 11 "X 17" copies of the signed and sealed plans
- 1 signed and sealed copy of the Bridge Load Rating based on as-built conditions
- 2 sets of final documentation (if different from final component submittal)
- 2 (two) Final Project CD's
- 2 sets of 11" x 17" as-built roadway, structure and component plans in Adobe Acrobat format(.pdf) on CD

The Design-Build Firm's Professional Engineer in responsible charge of the Project's design shall professionally endorse (signed and sealed and certified) the record prints, the special provisions and all reference and support documents. The professional endorsement shall be performed in accordance with the Department Plans Preparation Manual.

The Design-Build Firm shall complete the record set as the Project is being constructed. The record set becomes the as-builts at the end of the Project. All changes shall be signed/sealed by the EOR. The record set shall reflect all changes initiated by the Design-Build Firm or the Department in the form of revisions. The record set shall be submitted on a Final Project CD upon Project completion.

The CEI shall do a review of the record set prior to final acceptance in order to complete the record set.

The CEI shall certify the final plans as per Section 4.5.7 of Chapter 4 of the Preparation and Documentation Manual (TOPIC No. 700-050-010).

2. Railroad Coordination:

Three sets of certain plan sheets are required for review by the railroad. The sets are to be mailed to the District Rail Administrator. The required sheets are:

- Key Sheet
- Typical Section(s)
- Plan & Profile Sheet(s)
- Rail-highway grade crossing detail sheet
- Signing and Pavement Marking Sheet(s)
- Cross Section Sheets

J. Contract Duration:

The Design-Build Firm shall establish the Contract Duration for the subject Project. In no event shall the Contract Duration exceed __1000___ calendar days. The Proposed Contract Duration shall be submitted with the Bid Price Proposal.

K. Project Schedule:

The Design-Build Firm shall submit a Schedule, in accordance with Subarticle 8-3.2 (Design-Build Division I Specifications). The Design-Build Firm's Schedule shall allow for up to fifteen (15) calendar days (excluding weekends and Department observed Holidays) review time for the Department's review of all submittals with the exception of Category II structures submittals. The review of Category II structures submittals requires Central Office involvement and the Schedule shall allow for up to twenty (20) calendar days (excluding weekends and Department observed Holidays) for these reviews.

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:

- University of Florida Home Football Games
- Sumter County Fair
- Bushnell Fall Festival

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
- 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
- Environmental Permit Acquisition
- Foundation Design
- Foundation Construction
- Substructure Design
- Substructure Construction
- Superstructure Design
- Superstructure Construction
- Walls Design

- Walls Construction
- Roadway Design
- Roadway Construction
- Signing and Pavement Marking Design
- Signing and Pavement Marking Construction
- Signalization and Intelligent Transportation System Design
- Signalization and Intelligent Transportation System Construction
- Lighting Design
- Lighting Construction
- Maintenance of Traffic Design
- Permit Submittals
- Maintenance of Traffic Set-Up (per duration)
- Erosion Control
- Holidays and Special Events (shown as non-work days)
- Additional Construction Milestones as determined by the Design-Build Firm
- Final 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 expanded letter of interest and/or technical proposal by the Design-Build Firm. Any changes in the indicated personnel shall be subject to review and approval by the Department's Project Manager. The Design-Build Firm shall have available a professional staff that meets the minimum training and experience set forth in Florida Statute Chapter 455.

M. 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
- Permit agency coordination
- Local government agency coordination
- Scoping Meetings
- System Integration Meetings

During design, the Design-Build Firm shall meet with the Department's Project Manager on a monthly basis 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 in 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.

N. Public Involvement:

1. General:

Public involvement is an important aspect of the Project. Public involvement includes communicating to all interested persons, groups, and government organizations information regarding the development of the Project. A Public Involvement Consultant (PIC) has been hired by the Department to carry out an exhaustive Public Involvement Campaign and a marketing effort. The Design-Build Firm will continue to be part of the Public Involvement effort but on a limited basis as described below.

2. Community Awareness:

The Design-Build Firm will review and comment on a Community Awareness Program provided by the PIC for the Project.

3. Public Meetings:

The Design-Build Firm shall provide all support necessary for the PIC to hold various public meetings, which may include:

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

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

For any of the above type meetings the Design-Build Firm shall provide all technical assistance, data and information necessary for the PIC to produce display boards, printed material, video graphics,

computerized graphics, etc., and information necessary for the day-to-day exchange of information with the public, all agencies and elected officials in order to keep them informed as to the progress and impacts that the proposed Project will create. This includes workshops, information meetings, and public hearings.

The Design-Build Firm shall, on an as-needed basis, attend the meetings with an appropriate number of personnel to assist the Department's Project Representative/PIC. The Design-Build Firm shall forward all requests for group meetings to the PIC. The Design-Build Firm shall inform the PIC of any meetings with individuals that occur without prior notice.

4. **Public Workshops, Information Meetings:**

The Design-Build Firm shall provide all the support services listed in No. 3 above.
All legal/display ads announcing workshops, information meetings, and public meetings will be prepared and paid for by the PIC.

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

5. **Public Involvement Data:**

The Design-Build Firm is responsible for the following:

- Coordinating with the Public Involvement Consultant.
- Identifying possible permit and review agencies and providing names and contact information for these agencies to the PIC.
- Providing required expertise (staff members) to assist the PIC on an as-needed basis.
- Preparing color graphic renderings and/or computer generated graphics to depict the proposed improvements for coordination with the Department, local governments, the Urban Design Guidelines Committee, and other agencies.

The collection of public input occurs throughout the life of the Project and requires maintaining files, newspaper clippings, letters, and especially direct contacts before, during and after any of the public meetings. Articles such as those mentioned shall be provided to the PIC for their use and records.

In addition to collecting public input data, the Design-Build Firm may be asked by the PIC to prepare responses to any public inquiries as a result of the public involvement process. The Department shall review all responses prior to mailing.

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.

No fabrication, casting, or construction will occur until all related design review and shop drawing review comments are resolved.

2. **Construction:**

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

The sampling, testing and reporting of all materials used shall be in compliance with the Sampling, Testing and Reporting Guide (STRG) provided by the Department. The Design-Build Firm will use the Department's database(s) to allow audits of materials used to assure compliance with the STRG. The Department has listed the most commonly used materials and details in the Department's database. When materials being used are not in the Department's database list, the Design-Build Firm shall use appropriate material details from the STRG to report sampling and testing. Refer to the "Access Instruction for LIMS" for more information on how to gain access to the Department's databases: http://www.dot.state.fl.us/statematerialsoffice/quality/programs/qualitycontrol/contractor.shtm

Prepare and submit to the Engineer a Job Guide Schedule (JGS) using the Laboratory Information Management System (LIMS) in accordance with Section 105 of Standard Specifications.

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

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:

The Design-Build Firm will provide an Engineers Field Office in accordance with Special Provision 109.

The Design-Build Firm shall provide, furnish and maintain a minimum 1,200 square foot on-site Engineer's Field Office for exclusive use by the Department in accordance with Section 109 of the Specifications. If the Design-Build Firm sets an on-site field office, the Engineer's Field office shall be

located in the same fenced/enclosed area as the Design-Build Firm's field office.

R. Schedule of Values:

The Design-Build Firm will be responsible for invoicing the Department based on current invoicing policy and procedure. Invoicing will be based on the completion or percentage of completion of major, well-defined 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 CPAM. The Design-Build Firm must submit the schedule of values to the Department for approval. No invoices shall be submitted prior to Department approval of the schedule of values.

Upon receipt of the invoice, 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 of Transportation policies and procedures. Seed Files, Cell Libraries, User Commands, MDL Applications and related programs developed for roadway design and drafting are available for the MicroStation V8 format in the FDOT CADD Software Suite. However, it is the responsibility of the Design-Build Firm to obtain and utilize current Department releases of all CADD applications.

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 Intergraph / Micro station format, as described in the above referenced document.

The archived submittal shall also include either a TIMS database file, CADD Index file (generated from RDMENU) or documentation that shall contain the Project history, file descriptions of all (and only) Project files, reference file cross references, and plotting criteria a (e.g. batch, level symbology, view attributes, and display requirements). A printed directory of the archived submittal shall be included.

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.

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V. Value Added:

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

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

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

W. Adjoining Construction Projects:

The Design-Build Firm shall be responsible for coordinating 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, or other regional and state agencies. Coordination with adjacent projects shall include, but not be limited to, the widening of I-75 from Hernando County line to south of CR 470 (FPN 242626-2-52-01) and the Interchange improvements at I-75 and Florida's Turnpike (FPN 406110-1-52-01).

X. Design Issue Escalation:

The Department has established the issue escalation process for design questions and conflict resolution that the Design-Build Firm shall follow unless revised by the Partnering agreement. All issues are to be directed to the Department Project Manager. If the issue cannot be resolved at this level the Department Project Manager shall forward the issue to the next level in the process. The escalation process begins with the District Design Engineer, followed by the Director of Transportation Operations, and finally to the District Secretary. Each level shall have a maximum of three (3) calendar days (excluding weekends and Department observed holidays), to answer, resolve or address the issue. The three (3) calendar day (excluding weekends and Department observed holidays) period is a response time and does not infer resolution. Questions may be expressed verbally and followed up in writing. The Department Project Manager will respond in a timely manner but not to exceed three (3) calendar days (excluding weekends and Department observed holidays). The Design-Build Firm shall provide any available supporting documentation.

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

The District Secretary will have the final authority on design decisions.

Y. Construction Clarification, Conflict Resolution, and Issue Escalation:

In the event that construction problems occur, the resolution of those problems will be processed in one of the following two ways unless revised by a Partnering agreement:

- If the resolution does not change the original intent of the technical proposal/RFP, then the Design-Build Firm Engineer of Record (EOR) will be responsible for developing the design solution to the construction problem and the Resident Engineer will be responsible for review and response within ten (10) calendar days (excluding weekends and Department observed holidays). The Resident Engineer will either concur with the proposed solution or, if the Resident Engineer has concerns, the issue will be escalated as described in the process below**.**

- If the resolution does alter the original intent of the technical proposal/RFP then the EOR will develop the proposed solution, copy in the Resident Engineer, and send it to the District Construction Office for review and response through the Department Project Manager. The District Construction Office will respond to the proposed solution within ten (10) calendar days (excluding weekends and Department observed holidays). The District Construction Office will either concur with the proposed solution or, if the Resident Engineer has concerns, the issue will be escalated as described in the process below. Changes to the original intent of the technical proposal/RFP will require a contract change order and FHWA approval.

- The Department has established the issue escalation process for construction questions and conflict resolution that the Design-Build Firm shall follow unless revised by the Partnering agreement. All issues are to be directed to the Department Project Manager. If the issue cannot be resolved at this level the Department Project Manager shall forward the issue to the next level in the process. The escalation process begins with the District Construction Engineer, followed by the Director of Transportation Operations, and finally to the District Secretary. Each level shall have a maximum of three (3) calendar days (excluding weekends and Department observed holidays) to answer, resolve or address the issue. The three (3) calendar day (excluding weekends and Department observed holidays) period is a response time and does not infer resolution. Questions may be expressed verbally and followed up in writing. The Department Project Manager will respond in a timely manner but not to exceed three (3) calendar days (excluding weekends and Department observed holidays). The Design-Build Firm shall provide any available supporting documentation.

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:

The Design-Build Firm shall be responsible for: detailed plan checking as outlined in the Plans Preparation Manual (PPM); as described in the RFP; and the Design and Construction criteria package. This includes a checklist of the items listed in the PPM for each completed phase submittal. Bridge submittals may be broken into foundation, substructure, superstructure, approach spans and main channel spans. Roadway submittals may be broken down into grading, drainage, walls, ITS, signing & pavement marking, signalization, lighting and final geometry components. The component design must be in conformity with the Design and Construction Criteria requirements, approved preliminary layout and concept as provided in the Technical Proposal.

Before construction activities can begin for a specific component, signed and sealed design plans and calculations supporting the design for that component must be reviewed by the Department. Component submittals shall be complete submittals along with all the supporting information necessary for review. The work must represent logical work activities and must show impacts on subsequent work on this Project. Any modification to the component construction due to subsequent design changes as the result of design development is solely the Design-Build Firm's risk. Upon review by the Department, the plans will be stamped "Released for Construction" and initialed and dated by the reviewer. Any construction initiated by the Design-Build Firm prior to receiving signed and sealed plans stamped "Released for Construction" shall be at the sole risk of the Design-Build Firm.

Prior to submittal to the Department, all Category II bridge plans shall have a peer review analysis in accordance with PPM Volume 1 Chapter 26.

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

B. Geotechnical Services:

Driven Pile Foundations for Bridges and Major Structures

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

- CR 470 Interchange, (minimum _2__tests)

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

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

Drilled Shaft Foundations for Bridges and Miscellaneous Structures

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

- CR 470 Interchange, (minimum _2__tests)

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

1. Evaluating geotechnical conditions to determine the drilled shaft diameter and length and construction methods to be used.
2. Performing the subsurface investigation and drilling pilot holes prior to establishing the drilled shaft tip elevations and socket requirements. For redundant drilled shaft bridge foundations, perform at least one test boring in accordance with the Soils and Foundations Handbook at each bent/pier.
3. Determining the locations of the load test shafts and the types of tests that will be performed.
4. Performing pilot borings for test holes (also known as test shafts or method shafts) and load test shafts and providing the results to the Department at least one (1) working day before beginning construction of these shafts.
5. Preparing and submitting a Drilled Shaft Installation Plan for the Department's acceptance.
6. Constructing the method shaft (test hole) and load test shafts successfully and conducting integrity tests on these shafts.
7. Providing all personnel and equipment to perform a load test program on the load test shafts.
8. Determining the production shaft lengths.

9. Documenting and providing a report that includes all load test shaft data, analysis, and recommendations to the Department.
10. Constructing all drilled shafts to the required tip elevation and socket requirement in accordance with the specifications.
11. Inspecting and documenting the construction of all drilled shafts in accordance with the specifications.
12. Performing Cross-Hole Sonic Logging (CSL) or Thermal Integrity tests on all nonredundant drilled shafts supporting bridges. For redundant drilled shaft bridge foundations and drilled shafts for miscellaneous structures, perform CSL or Thermal Integrity testing on any shaft suspected of containing defects.
13. Repairing all detected defects and conducting post repair integrity testing using 3D tomographic imaging and gamma-gamma density logging.
14. Submitting Foundation Certification Packages in accordance with the specifications.
15. Providing safe access, and cooperating with the Department in verification of the drilled shafts, both during construction and after submittal of the certification package.

Spread Footings Foundations

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

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

Auger Cast Piles for Sound Barrier Walls

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

1. Evaluating geotechnical conditions and designing the foundations, including diameter and lengths.
2. Constructing all auger cast piles to the required tip elevation and socket requirements, in accordance with the specifications.
3. Preparing and submitting a Auger Cast Pile Installation Plan for the Department's acceptance.
4. Inspecting and documenting the auger cast pile installation.
5. Submitting Foundation Certification Packages in accordance with the specifications.
6. Providing safe access, and cooperating with the Department in verification of the auger cast piles, both during construction and after submittal of the certification package.

C. 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. 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. Locating any Department utilities and/or utilities servicing Department facilities and property. Reviewing proposed utility permit application packages and recommending approval/disapproval of each permit application based on the compatibility of the permit as related to the Design-Build Firm's plans.
3. Scheduling utility meetings, preparing and distributing minutes of all utility meetings, and ensuring expedient follow-up on all unresolved issues.
4. Distributing all plans, conflict matrices and changes to affected Utility Agency/Owners and making sure this information is properly coordinated.
5. Identifying and coordinating the execution and performance under any agreement that is required for any utility work needed in with the Design-Build Project.
6. Preparing, reviewing, approving, signing, coordinating the implementation of and submitting to the Department for review and acceptance, all Utility Work Schedules.
7. Resolving utility conflicts.
8. Obtaining and maintaining all appropriate Sunshine State One Call Tickets.
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.

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The following Utility Agency/Owners (UA/O's) have been identified by the Department as having facilities within the Project corridor which may be impacted by the Project. Also provided below is a determination made by the Department as to the eligibility of reimbursement for each potentially impacted UA/O identified herein.

UA/O	Eligible for Reimbursement (Y/N)
CenturyLink	Y
Sumter Electric Cooperative - Transmission	Y
Sumter Electric Cooperative – Distribution	Y
Brighthouse	Y

Progress Energy – Transmission	Y
City of Wildwood Water & Sewer	Y
Level 3	Y
Transcore	Y

The Department has conducted limited advanced utility coordination with the UA/O's listed above.

"Buy America" Material Certification Requirements: The UA/O will only use steel and iron produced in the United States, in accordance with the Buy America provisions of 23 CFR 635.410, as amended. The UA/O will ensure that all manufacturing processes for this material occur in the United States. As used in this provision, a manufacturing process is any process that modifies the chemical content, physical shape or size, or final finish of a product, beginning with the initial melding and mixing and continuing through the bending and coating stages. A manufactured steel or iron product is complete only when all grinding, drilling, welding, finishing and coating have been completed. If a domestic product is taken outside the United States for any process, it becomes foreign source material. These requirements are applicable to all steel and iron materials incorporated into the finished work, but are not applicable to steel and iron items that are not incorporated into the finished work. The UA/O will provide a certification from the producer of steel or iron, or any product containing steel or iron as a component, stating that all steel or iron furnished or incorporated into the furnished product was manufactured in the United States in accordance with the requirements of this specification and the Buy America provisions of 23 CFR 635.410, as amended. Such certification shall also include a statement that the product was produced entirely within the United States. The UA/O will furnish each such certification to the Florida Department of Transportation prior to incorporating the material into the project.

D. 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, 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 Federal Aid Oversights Projects.

Any deviation from the Department's design criteria will require a design variation and any deviation from AASHTO will require a design exception. All such design variations and exceptions must be approved.

These packages shall include the following:

1. **Roadway Design:**

See PPM Volume 2; Chapter 2 for Roadway Design sheets, elements and completion level required for each submittal.

2. **Typical Section Package:**

The Department has developed an approved Typical Section Package for this Project (a Reference Document to this RFP), which includes the following minimum requirements for the elements shown below. Any deviation from or revision to these approved Typical Section Package elements is at the risk of the Design-Build Firm and will require approval from the Department as indicated in the ATC Section of this RFP.

I-75 Typical Section Elements:

6 mainline lanes (3 lanes in each direction)
12’ wide travel and auxiliary lanes
12’ full width and 10’ paved width outside and inside (median) shoulder widths
10’ outside and inside bridge shoulder widths
70 MPH Design Speed
40’ Median width
Median barrier

CR 470 Typical Section Elements:

4 through lanes (2 lanes in each direction)
12’ wide travel and turn lanes
Minimum 5’ sidewalk on both sides
Bike Lanes
40 MPH Design Speed

CR 475 Typical Section Elements:

3 through lanes (2 lanes northbound and 1 lane southbound)
12’ wide travel and turn lanes
10’ full width and 5’ paved width outside shoulder widths
40 MPH Design Speed

3. **Pavement Design Package:**

In addition to the Flexible Pavement Design Manual requirements, the following minimum pavement design requirements shall be provided:

- The minimum %R for all designs shall be 90%.
- For all new construction and reconstruction areas the minimum LBR shall be 25.
- All friction courses shall have PG76-22 (PMA) binder.

- All PG76-22 binder required in the structural lift(s) shall be Polymer Modified Asphalt binder (PMA).
- The mill and resurface of all flexible pavement areas shall include one lift of Structural course and one lift of friction course unless noted otherwise below. On I-75 mainline shoulders the friction course only needs to extend 8 inches onto the paved shoulder.
- For all milling and resurfacing areas the Mr shall be 24,000 psi.
- The minimum thicknesses in Table 5.5 of the Flexible Pavement Design Manual shall be met.

I-75 Mainline and Shoulders, Interchange Ramps and ramp shoulders:

- The mainline ESAL's used for the design shall be 39,000,000.
- The ramp ESAL's used for the design shall be 5,030,000.
- The thickness of the Superpave Structural Course for the mainline reconstruction/new construction shall be a minimum 5 inches.
- The thickness of the Superpave Structural Course for the shoulder reconstruction/new construction shall be a minimum 2 inches.
- The thickness of the Superpave Structural Course for the ramp reconstruction/new construction shall be a minimum 3 inches.
- The friction course provided for the mainline and ramps shall be FC-5, PG 76-22, PMA.
- The mill and resurface of the proposed L3 & R3 mainline lanes shall be 3.25 inches.
- The mill and resurface of all ramp lanes shall be 2.25 inches.
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CR 470 and CR 475:

- The ESAL's used for the design shall be 8,500,000.
- The thickness of the Superpave Structural Course for the mainline reconstruction/new construction shall be a minimum 3.5 inches.
- The thickness of the Superpave Structural Course for the shoulder reconstruction/new construction shall be a minimum 1.5 inches.

4. **Drainage Analysis:**

The Design-Build Firm shall be responsible for designing the drainage and stormwater management systems. All design work shall be in compliance with the Department's Drainage Manual; Florida Administrative Code, chapter 14-86; Federal Aid Policy Guide 23 CFR 650A; and the requirements of the regulatory agencies. This work will include the engineering analysis necessary to design any or all of the following: cross drains, French drains, 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 should 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 Design-Build Firm is responsible for any permit modifications associated with the stormwater management system.

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

Design of the conveyance system, treatment system and attenuation system shall comply with all applicable regulations.

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

The Design-Build Firm shall verify that all existing cross drains and storm sewers that are to remain have adequate hydraulic capacity and design life. Flood flow requirements will be determined in accordance with the Department's procedures. If any of these existing cross drains or storm sewers are found to be hydraulically inadequate or found to have insufficient design life, they must be replaced or supplemented in accordance with the drainage requirements of this RFP. If any existing cross drains or storm sewers require repairs but otherwise would have sufficient remaining design life, repairs shall be made in accordance with the requirements of this RFP.

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

The Design-Build Firm will adhere to the following additional design criteria:

i. No storm sewer pipe exiting a drainage structure shall be constructed with a flow line higher than any storm sewer pipe entering the same structure.
ii. All constructed inlets and manholes must have an outlet storm drain pipe.
iii. The most downstream pipe of each storm drain system must be constructed with its flow line at the bottom of slope of any pond or ditch.
iv. No component of a permanent stormwater system shall be controlled by a pump or any other mechanical means.

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 and an electronic copy in .pdf format. It shall be a record set of all drainage computations, both hydrologic and hydraulic. The engineer shall include all necessary support data. The electronic copy shall include all software files used in the analyses

E. Geometric:

The Design-Build Firm shall prepare the geometric design for the Project using the Design Standards 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.

F. 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. Design Standards 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

G. Structure Plans:

The Project involves new bridge(s) as follows:

- Interstate 75 (SR 93) at CR 470 bridge(s)

The bridge(s) at the interchange of I-75 with CR 470 shall accommodate a four-lane facility on CR 470, including dual left-turn lanes to southbound I-75 and the single left-turn lane to northbound I-75 with full clear zones.

1. **Bridge Design Analysis:**

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

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

c. The Design-Build Firm shall "Load Rate" all bridges in accordance with

the Department Procedure 850-010-035 and the Structures Manual. The bridge load rating shall be submitted to the Department for review with the 90% superstructure submittal. The as-bid load rating (based on the 90% design plans) shall be provided to the Department before any traffic is placed on the bridge. The as-bid load rating shall be signed and sealed by a Professional Engineer licensed in the State of Florida. A final, signed and sealed copy of the Bridge Load Rating, updated for the as-built conditions shall be submitted to the Department's Project Representative and the District Structures Maintenance Engineer with the as-built bridge plans.

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

e. Any erection, demolition, and any proposed sheeting and/or shoring plans that may potentially impact the railroad must be submitted to and approved by the railroad. This applies to areas adjacent to, within and over railroad rights of ways.

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

2. **Criteria**

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

a. All plans and designs are to be prepared in accordance with AASHTO LRFD Bridge Design Specifications, Department Standard Specifications, Structures Manual, Plans Preparation Manual, Department Standard Drawings, Supplemental Specifications, Special Provisions, and directions from the State Structures Design Engineer, Temporary Design Bulletins, Structures Design Office and / or District Structures Design Engineer.

b. Bridge Widening: In general, match the existing as per the Department Structures Manual..

c. 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 detailing the

wall in the set of contract plans. These plans must be signed and sealed by the Structural Engineer in responsible charge of the wall design.

d. For bridges over navigable waterways, establish the required pier strengths using the MathCadd program furnished by the Department if no specific pier strength is listed in the Design and Criteria Package. The MathCadd program furnished by the Department allows for the proposed bridge geometry to be input by the Engineer. Other parameters such as water traffic, waterway characteristics, etc. may not be changed. This assures that all Design-Build Firms are designing on the same assumptions other than the specific bridge layout that each is proposing.

H. Specifications:

Department Specifications may not be modified or revised. The Design-Build Firm shall also include all Technical Special Provisions, which will apply to the work in the proposal. 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.

Before construction activities can begin, 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. The Specifications Package 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/SpecificationsEstimates/PackagePreparation/TrainingConsultants.aspx

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

https://www2.dot.state.fl.us/SpecificationsPackage/Utilities/Membership/login.aspx?ReturnUrl=%2fspecificationspackage%2fDefault.aspx.

The signed and sealed Specifications Package shall also include individually signed and sealed Technical Special Provisions for any and all work not addressed by Department Specifications. Any Technical Special Provisions included in the signed and sealed Construction Specifications Package which had not been included in the proposal phase, may require a contract cost modification as a condition of approval.

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

Any subsequent modifications to the Construction Specifications Package shall be prepared, signed and sealed as a Supplemental Specifications Package, subject to the same process for submittal, review, and, release for construction, as described above, for the original Construction Specifications Package. Construction work affected by Supplemental Specifications Packages shall not begin until stamped "Released for Construction" Supplemental Specification Package is obtained.

To work at risk, the Design-Build Firm must submit signed and sealed specifications and can begin

working prior to the Department's Project Manager providing stamped "Release for Construction" specifications. The Design-Build Firm shall notify the Department five (5) week prior to starting work at risk. All work that the Design-Build Firm performs in advance of the Department's release of Specifications will be at the Design-Build Firm's risk.

I. Shop Drawings:

The Design-Build Firm shall be responsible for the preparation and approval of all Shop Drawings. Shop Drawings shall be in conformance with the Departments Plans Preparation Manual when submitted to the Department and shall bear the stamp and signature of the Design-Build Firm's Engineer of Record (EOR), and Specialty Engineer, as appropriate. 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. Upon review of the shop drawing, the Department will stamp "Released for Construction" or "Released for Construction as noted" and initialed and dated by the reviewer.

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.

J. 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 Traffic Control Plan (TCP) 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. Proper coordination with adjacent construction Projects and maintaining agencies.

K. Stormwater Pollution Prevention Plans (SWPPP):

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

L. Temporary Traffic Control Plan:

1. **Traffic Control Analysis:**

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

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

The Temporary Traffic Control Plan shall be prepared by a certified designer who has completed the Department's training course, and in accordance with the Department's Design Standards and the Roadway Plans Preparation Manual.

Transportation Management Plans (TMPs) are required for significant Projects which are defined as:

1. A Project that, alone or in combination with other concurrent Projects nearby, is anticipated to cause sustained work zone impacts**.**

2. All Interstate system Projects within the boundaries of a designated Transportation Management Area (TMA) that occupy a location for more than three days with either intermittent or continuous lane closures shall be considered as significant Projects.

For significant Projects a TMP will consist of three components:

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

Additional information can be found in chapter 10 of the PPM.

2. Temporary Traffic Control Plans:

The Design-Build Firm shall utilize Index Series 600 of the Department's Design Standards where applicable. Should these standards be inadequate, a detailed Temporary Traffic Control Plan shall be developed. The Design-Build Firm shall prepare plan sheets, notes, and details to include the following: typical section sheet(s), general notes and construction sequence sheet(s), typical detail sheet(s), traffic control plan sheet(s).

The Design-Build Firm shall prepare additional plan sheets such as cross sections, profiles, drainage structures, retaining wall details, and sheet piling as necessary for proper construction and implementation of the Temporary Traffic Control Plan.

3. Traffic Control Restrictions:

There will be NO DUAL LANE CLOSURES ALLOWED on the three lane section between the hours of **7:00** AM to **8:00** PM and NO LANE CLOSURES ALLOWED on the two lane section between the hours of **7:00** AM to **8:00** PM**.** A lane may only be closed during active work periods. Pacing Operations will be allowed during the approved lane closure hours. All lane closures, including ramp closures, must be reported to the local emergency agencies, the media and the District Five Public Information Officer

(Steve Olson 386-943-5479). 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.

All lane closures must be coordinated with the adjacent construction projects so conflict do not occur.

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

- University of Florida Home Football Games
- Sumter County Fair
- Bushnell Fall Festival

M. Environmental Services/Permits/Mitigation:

The Design-Build Firm will be responsible for preparing designs and proposing construction methods that are permitable. The Design-Build Firm will be responsible for any required permit fees. All permits required for a particular construction activity will be acquired prior to commencing the particular construction activity. Delays due to incomplete or erroneous permit application packages, agency rejection, agency denials, agency processing time, or any permit violations, except as provided herein, will be the responsibility of the Design-Build Firm, and will not be considered sufficient reason for a time extension or additional compensation. As the permitee, Department is responsible for reviewing, approving, signing, and submitting the permit application package including all permit modifications, or subsequent permit applications.

The Department has conducted an investigation of the Project site and determined that potential gopher tortoise habitats could be impacted by the Project. All coordination by the Design-Build Firm with the Department regarding gopher tortoises will be completed through the District Environmental Permit Office. If the Department has determined that suitable gopher tortoise habitat exists in the project area, then the Design-Build Firm shall be responsible for the potential gopher tortoise burrow survey that could be impacted by the Project including any areas to be used for construction staging. The Design-Build Firm shall be responsible for conducting the gopher tortoise burrow survey for the purpose of identifying potential gopher tortoise habitats that could be impacted by the Project including any areas to be used for construction staging. The habitat will be systematically surveyed according to the current Gopher Tortoise Permitting guidelines published by the Florida Fish and Wildlife Conservation Commission (FWC). The Department must verify the completeness and accuracy of the assessment prior to commencement of any permitting or construction activities. Any areas where the Design-Build Firm proposes to protect burrows to remain on-site with “exclusionary fencing” shall be reviewed and approved by the Department. The Design-Build Firm shall submit an “exclusionary fencing” plan for review prior to any “exclusionary fencing” installation. If there are unavoidable impacts to gopher tortoise burrows, the Design-Build Firm shall be responsible for preparing required documentation for the Department to obtain a FWC permit for the relocation of gopher tortoises and commensals from burrows which cannot be avoided. Preparation of complete permit packages will be the responsibility of the Design-Build Firm. As the “permitee”, the Department is responsible for reviewing and approving the permit application package including all permit modifications, or subsequent permit applications. This applies whether the project is Federal or state funded. Once the Department has approved the permit application, the Design-Build Firm is responsible for submitting the permit application to FWC. A copy of the permit and any subsequent reports to FWC must be provided to the District Environmental Management Office or District Environmental Permit Office, as appropriate. If FWC rejects or denies the permit application, it is the Design-Build Firm’s responsibility to make whatever changes necessary to ensure the permit application is approved. Once the permit is obtained, the Design-Build Firm shall notify the Department at least one

week prior to the relocation of gopher tortoises. If gopher tortoise relocations are phased throughout the construction, the Design-Build Firm shall notify the Department at least one week prior to each relocation phase. The Department will provide oversight of the relocations and ensure permit compliance. The Design-Build Firm shall be responsible for any necessary permit extensions or re-permitting in order to keep the relocation permit valid throughout the construction period. The Design-Build Firm shall provide the Department with draft copies of requests to modify the permits and/or requests for permit extensions, for review and approval by the Department prior to submittal to the Agencies. The Design-Build Firm shall provide the appropriate reports as required by the permit conditions, including closing out the permit. The Design-Build Firm shall note that permits for gopher tortoise relocation for areas outside of the Department owned right of way (i.e. utility easements; license agreements) cannot be obtained with the Department as the "permitee", 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.

If the Design-Build Firm proposes alternative interchange or roadway configurations that result in environmental impacts that are different from those documented in the approved NEPA documents and approved and attached permits, the Design-Build Firm shall be responsible for obtaining the required permits or permit modifications from the appropriate regulatory agencies.

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.

N. Signing and Pavement Marking Plans:

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

The Design-Build Firm shall be responsible for verifying the vertical clearance to existing overhead signing above the improved roadway. If existing overhead signing will not meet minimum clearance standards, the Design-Build Firm shall be responsible for modifications to provide required clearances. All existing overhead guide signs shall be maintained overhead in appropriate positions until new signage is installed, unless specifically approved by the Department's Engineer.

All signs within the Project limits shall be replaced.

Speed Limit signs shall be 48-inch by 60-inch panels.

Existing logo signs (gas, food, lodging, camping and attraction blue ground mounted sign structures), shall be maintained and visible to motorists on I-75 during the entire construction period. The logo signs are to be relocated as required. If a logo sign will not be visible for any period of time, the Design-Build Firm shall notify:

Florida Logos, Inc.
Andy Hennosy, General Manager
3764 New Tampa Hwy

Lakeland, FL 33815
(863) 686-5261 office
1-888-608-0833 toll free
(863) 284-2622 fax

The Design-Build Firm shall be responsible for the repair or replacement of any logo signs that are damaged during the construction period. All logo structures remain the property of the Department.

For all overhead signs (cantilever or truss mounted) the Design-Build Firm shall use super-high efficiency reflective sheeting.

O. Lighting Plans:

The Design-Build Firm shall prepare lighting plans in accordance with Department criteria. . The Design-Build Firm shall submit a Lighting Design Analysis report including a point by point analysis of the lighting design demonstrating that the selected fixture meets the Department's criteria for "interstate" lighting levels for all interstate pavement areas (shoulder to shoulder) and for "major arterial" for the side streets.

The Design-Build Firm shall design the lighting for the complete interchange with CR470. All bridges shall include underdeck lighting.

P. Signalization Plans:

The Design-Build Firm shall prepare signalization plans in accordance with Department criteria. The following intersections shall be signalized:

- CR 470 at CR 475 and I-75 northbound entrance ramp
- CR 470 at I-75 southbound entrance and exit ramps

Provide one Telemetered Traffic Monitoring Site (TTMS) to replace the existing TTMS No. 189920 located on I-75 at approximately MP 17.58

Q. Intelligent Transportation System Plans

1. Project Specific Requirements

a) Communication Network

The communication equipment for the I-75 shall consist of fiber optic cable, 1 Gig Ethernet Switches, Layer 2 Switches, Terminal Servers, Controllers, Encoders and Decoders as well as other required and necessary equipment (jumpers fiber/UTP, rack, parts or devices) to provide a full operational system. This Design-Build Project includes any parts or devices, parts, connectors, jumpers needed at the RTMC or other control center to provide full functional communication within the ITS network, including, but not limited to all Field Devices, 1 Gig Ethernet Switches, Terminal Servers, Central Servers, and other devices.

The conceptual communication scheme is to provide a 1 Gig-Ethernet connection between the RTMC and the I-75 ITS network. The Field Devices shall be connected to the copper ports on the Layer 2 switch which shall connect to the 1 Gig Ethernet Switch via a 1 Gig-Ethernet link from one of the 100/1000 optical ports. The Layer 2 Switches shall be “daisy-chained” from the 1 Gig Ethernet Switches to the

furthest Layer 2 Switch. The collapsed ring shall be completed via two fibers that run back to the master hub. The local devices' communication shall be concentrated at the Layer 2 Switches and transported to the 1 Gig Ethernet Switch. The 1 Gig Ethernet Switches along with the existing Ethernet Switches and supplied 10 Gig Blades shall form the communication backbone, forwarding information to the RTMC or other control center. A protocol shall be run on the Layer 2 switches allowing the data to automatically reverse (redundancy) its communication to a secondary 10 Gig Ethernet Switch should a failure occur on the link to the primary 1 Gig Ethernet Switch. All 1 Gig Ethernet Switches shall operate with Layer 2 forwarding only, unless otherwise directed by the Department Project Manager. The green buffer shall be use for the 1 Gig Ethernet Switch-to-1 Gig Ethernet Switch connection and the brown buffer fibers shall be used for the distribution of 1 Gig Ethernet Switch to Layer 2 Switch and Layer 2 Switch to 1 Gig Ethernet Switch. Each link shall require two fibers. The contractor shall terminate District 5 fiber in a splice enclosure. The contractor shall coordinate with District 5 as to with fiber to jumper through prior to placing any connection between the District 5 and FL Turnpike. See Appendix A for a suggested splicing diagram.

b) Fiber Optic Cable

The new fiber on the interstate shall be a minimum of 72 single mode fibers optic cable. The Design-Build Firm shall be required to investigate, identify and include their fiber needs for this project in connecting all the required devices. No dark fibers shall be allowed unless approved by Department.

No bridge mount conduit shall be allowed unless the Department Project Manager concurs. If the Department manager does not concur conduit shall be directional bored at no additional cost. The installation of the fiber optic cable shall be located within existing conduit or between 10 and 20 feet of the right of way line outside of the Interchange Ramp Areas, this includes clearing and grubbing if required, unless otherwise approved by the DOT PM. Interchange Ramp Area is defined as starting 500 prior to the painted gore for the deceleration lane of the interchange and ending 500 after the painted gore for the acceleration lane of the interchange for a given interchange in a given direction of travel. Within Interchange Ramp Areas the fiber optic cable should be located to minimize future impacts.

Splice loss for Single Mode Fiber fusion splice shall not exceed a maximum bidirectional average of .10 decibel for any splice. The core diameter for Single Mode Fiber shall be 8.3 µm. In the design phase, the Design-Build Firm shall measure the link loss and summarize losses in a table. The table shall have splice loss for each direction on each fiber. The table shall be certified as matching the OTDR readings. Both the OTDR and table shall be submitted to the Department. The ODTR can be submitted in paper or electronic format. The table shall be submitted in electronic format only. It shall be compatible with Microsoft Excel.

i. **Splice enclosures**

Water penetration within the compartment containing the splices constitutes a failure and replacement of the enclosure shall be at the Design-Build Firm's expense.

ii. New Conduit

The new conduit installed along the Interstate to hold the fiber run shall be a minimum of 4 – 1 1/4 inch conduit, or inner ducts of equivalent size. The separate conduits shall be colored white, orange, red and yellow. The 72 strand fiber run shall be placed in the orange conduit. The conduit/inner ducts shall be HDPE SR 11 along Interstate roadways. The new conduits shall be individually proofed by the use of a

mandrel of ¼" inch smaller in diameter than the conduit. Any obstruction or other defect preventing the passage of the mandrel shall constitute a failure. Once the mandrel test has been passed the new conduit shall also pass a pressurization test. Conduit shall be plugged and pressurized to 100 psi. The conduit shall maintain this pressure for 10 minutes. If the pressure falls by more than 2 psi shall constitute a failure. Conduit not meeting this standard shall be fixed and the test shall be repeated starting with the mandrel test until the conduit passes the mandrel and pressurization tests. Fiber and tone wire may not be placed inside the conduit until the conduit passes both tests. Conduit shall be run straight through pull boxes at a depth of 30 inches. There shall be a minimum of 6 inches between the conduit and the bottom of the pull box.

The Design-Build Firm shall be allowed to connect conduit/inner duct (Interstate) from plow portions or underground conduit to bore portions if the connection method is concurred with by the the Department Project Manager. The connection conduit method and material shall be submitted for concurrence to the the Department Project Manager.

iii. Splice Boxes

New splice boxes are not to be placed in a swale or drainage area. All pull boxes shall have concrete around them, have a wire grounding unit and shall meet all the requirements of Standard Index 17500 for Reinforcement spacing and slab dimensions. All splices boxes must be located above the water table when possible.

iv. Pull Boxes

Pull boxes are not to be placed in a swale or drainage area. All pull boxes shall have concrete around them, have a wire grounding unit and shall meet all the requirements of Standard Index 17500 for Reinforcement layout and slab dimensions. All pull boxes must be located above the water table when possible.

v. Tone Wire

A tone wire shall be continuous from pull box to pull box following the path parallel to the fiber with a maximum of 2 foot offset inside conduit. Any splices to this wire shall only be done at a pull box, no in-conduit splicing shall be allowed. Splices at the pull box for the tone wire shall meet NEC requirements for continuity and in pull box splices. Tone wire and fiber optic cable shall always be placed in separate conduit. Tone wire can act as a pull string if placed within one of the 4 1 1/4" conduits.

vi. Connectors

Use only Type SC connectors for patch panel connections unless legacy equipment requires otherwise.

vii. Jumpers

Provide jumpers for all connections and cross connections according to the plans. Furnish jumpers that are pre-connectorized by the factory with SC - compatible connectors at a length of four (4) feet or more. Each jumper will contain two fibers with a SC - compatible connector at each fiber end unless legacy equipment requires otherwise.

viii. Splice Trays

Loop the individual fibers one full turn within the splice tray to avoid micro bending. Maintain a minimum bend radius of 20 times the cable diameter during installation and 10 times the cable diameter after final assembly in the optical fiber splice tray. Place buffer tubes and bare optical fibers such that there is no discernible tensile force placed upon them. There shall be only one buffer tube per splice tray. All splice trays shall be capable of closing without the use of tape or other adhesive devices. No fiber optic strands may enter more than one splice tray.

ix. Cross Connect Fields

All local hubs shall have a minimum of 6 fibers in each direction if located physically in the middle of a fiber run, or all fibers if located at the physical end of a drop terminated in a patch panel unless otherwise accepted by the DOT Project Manager. Master hubs shall have all fiber strands terminated in a patch panel in accordance with Section II.A.3.b. All pigtails shall match the color of the fiber strand that they are spliced to. Pigtails shall be used for all fiber terminations.

c) Local Hubs Communication Equipment

The Design-Build Firm may choose to use the existing equipment within the limits but will not guarantee that all equipment meets current state specifications. It will be the responsibility of the Design-Build Firm to provide proper documentation showing all equipment meets state standards. The following are minimum requirements for the components excluding field components, which are covered in section VI.M.1.d:

i. Digital Video Encoder

The encoded streams and SAP broadcast shall need to be decoded and recognize existing decoders including the existing video wall and have H264 capability, which the Department will have in operation. The encoder must have a COM port that is capable of camera PTZ once configured with existing Sunguide Software.

ii. Layer 2 Switch

The Layer 2 Switch shall contain a minimum of two 1000 Base FX fiber up-link ports with SC connectors and 10 copper ports. All Layer 2 Switches shall comply with ITS Statewide Specifications for Managed Field Ethernet Switch, 784-1 and be on Florida's Approved Product List.

iii. 1 Gig Ethernet Switches

The Design-Build Firm shall provide a 1 Gig Ethernet link from the RTMC the tie-in point with the I-75 network. A link currently exists through Fl. Turnpike's fiber to just west of SR 44. From this enclosure there is underground fiber running north to SR 44 Wildwood's Tower Site. The Design-Build shall supply 1 gig blades and optics for the switch chassis. The Department shall configure the switch. 1 new 1 Gig Ethernet Switch to be furnished, installed, and integrated by the Design-Build Firm in this project. The switch shall be composed of, at a minimum, a dual power supply, 4 1 Gig ports and 48 10/100 ports. All 1 Gig Ethernet Switches shall comply with ITS Statewide Specifications for Managed Field Ethernet Switch, 784-1. The 1 Gig Ethernet Switch shall be configured to run Layer 2 or Layer 3 protocols as determined at the integration meeting. The 1 Gig Switch shall be located in Central Office's Tower Site at Wildwood, SR 44. The switch shall be capable of handling a minimum of 1200 multicast streams.

iv. Patch Panel

All fibers strands shall be terminated in the patch panel of a Master Hub. Only one buffer tube shall connect to each connector panel and the color of the buffer tube that connects to the connector panel is shown in the following table. The connector panels shall be increment from left to right, 1 to 12. All strands of one fiber shall terminate on the patch before another fiber's strands are terminated. Color coded buffer tube fan out kits are accepted.

Connector Panel	Buffer Tube	
1	Blue (Bl)	North
2	Orange (O)	
3	Green (G)	
4	Brown (Br)	
5	Slate (S)	
6	White (W)	
7	Blue (Bl)	South
8	Orange (O)	
9	Green (G)	
10	Brown (Br)	
11	Slate (S)	
12	White (W)	

The fibers shall connect to the connector panel as shown in the table below as viewed from the jumper side of the patch panel. All pigtails shall match the color of the fiber strand that they are spliced to. Pigtails shall be used for all fiber terminations.

	SC Fiber Slot	
Slot 1	Blue (Bl)	Orange (O)
Slot 2	Green (G)	Brown (Br)
Slot 3	Slate (S)	White (W)
Slot 4	Red (R)	Black (B)
Slot 5	Yellow (Y)	Violet (V)
Slot 6	Rose (RO)	Aqua (A)

d) Field Devices

The field devices shall consist of CCTV, VDS, and DMS.

i. Cameras (CCTV)

All new CCTV camera shall be compatible and equal or better technology then the presently deployed type of camera. The camera shall feature built-in Electronic Image Stabilization. Whenever possible, use existing camera poles. The CCTV cameras shall be NTCIP compliant. The CCTV cameras shall be wired for and have all necessary firmware to support NTCIP communication as implemented in the SunGuide Software.

ii. Microwave Vehicle Detection System (MVDS)

All new MVDS shall be a non-intrusive device equivalent to the Wavetronix SmartSensor which are currently in use. These units shall be fully functional when interfaced to the SunGuide Software. The MVSD shall automatically configure a minimum of 10 lanes of traffic by automatically determining lane boundaries, lane centers, detection thresholds and have the capability to detect speeds lower than 10 mph. The RVSD shall provide multiple connectivity options for integration into legacy systems, and it shall support multiple data protocols. The RVSD systems deployed relatively close to camera locations shall be mounted on the existing camera poles whenever possible. The MVDS systems shall interface with the local hub via a terminal server.

e) Local Hub Cabinet

All new cabinets shall provide the following requirements for the installation. Local Hub Cabinets are referred to as ITS Field Cabinet in the statewide specifications. All locations shall be pole mounted cabinets unless otherwise approved by the Department Project Manger. Pole mounted cabinets shall be a type 336S or equivalent. Ground mounted cabinets shall be type 334 or equivalent. Ground mounted Local Hub cabinets shall be designed for mounting onto a concrete base in accordance with Index No. 17841 of the Department's Roadway and Traffic Design Standards, for Base Mounted Cabinets. The only deviation from this detail shall be for additional conduits as required, directed and concurred by the Department. The concrete pads shall not be placed in a swale or drainage area. Galvanized or stainless steel anchor bolts shall be imbedded into the concrete pad in a pattern that exactly matches the mounting holes on the interior bottom flange of the Local Hub cabinet.

All cabinet sides shall be caulked at the bottom, both inside and outside, with a clear non-hardening, UV-stabilized, exterior grade caulk. Ground-mounted cabinets shall have an open bottom and be designed for mounting onto a concrete base as specified herein. All equipment shall be mounted in the equipment rack of the cabinet in an upright position. Stacking equipment on top of other equipment is prohibited. A minimum clearance of six (6) inches shall be provided between the top of the cabinet and the top of the equipment mounted as the top piece of equipment in the equipment rack of the cabinet. A minimum clearance of two (2) inches shall be provided between each side of the cabinet and the equipment mounted in the equipment rack.

The hinges for the door shall be located on the right side (viewed from the front). The cabinet shall be furnished with a doorstop, which retains the door open in a 90 degree and 120 degree positions.

All cabinets shall have dual thermostatically controlled exhaust fan with screened guard located at the top of the cabinet. The exhaust fan shall be sized to maintain a temperature within the cabinet that is no greater than 30 degrees F above the outside ambient air temperature.

The Local Hub cabinet shall be provided with a fluorescent lamp, which is mounted on the inside, front top of the cabinet and equipped with a clear shatterproof shield assembly. The lamp shall automatically turn ON when the cabinet door is opened and turn OFF when the door is closed.

The equipment and terminals shall be so arranged within the cabinet that they shall not interfere with the entrance, tracing and connection of conductors. All incoming and outgoing conductors shall have each of its wire connected to terminal post-positions. All wiring panels (terminal blocks) shall be neatly finished and clearly and permanently marked with identifications applied by silk screening. All conductors and communication cable shall be neatly arranged in the cabinet and bundled in groups with cable ties, as

appropriate.

The pullout shelf/drawer shall have a hinged cover strong enough to support at least 20 pounds. The top of the pullout shelf/drawer shall be located on the rack between approximately 3 and 4 feet from the pedestrian floor or ground level. The placement of equipment rack(s), equipment, wiring, and the pullout shelf/drawer shall be such that there is no interference or conflict between any devices, rack(s), pullout shelf, and/or wiring and in the use, removal, and installation of any equipment or wiring, or the use of rack(s) or pullout shelf/drawer. A laptop at least 20" in height, but no taller, shall be assumed to be placed on the shelf. Pole mounted cabinet shall not need a pull out shelf.

All wiring shall be neatly bundled and labeled no farther than four inches from the end. All power conductors shall be bundled separately from signal and logic conductors. In addition, all signal wiring shall be bundled in such a fashion as to minimize cross talk.

Four copies of the field cabinet-wiring diagram shall be provided with each cabinet. A heavy duty, resealable, waterproof, plastic, opaque pouch shall be mounted on the backside of the cabinet door for containing prints, cabinet layout of all components with references and parts list, block diagrams showing all components and the wiring harness between components, and other documentation that may be subject to damage by sunlight and moisture.

The Local Hub cabinet manufacturer's serial number shall be prominently and permanently displayed on cabinet interior.

i. Cabinet Locks

Locks and keys that are compatible with the DOT's existing Cyber Locks programming equipment and cabinet keys shall be provided to the DOT thirty days prior to the installation of any cabinets. The DOT shall have twenty days from the time that all keys and locks are provided to program the keys and locks. At least one lock per cabinet on the job is to be provided. Three keys for CEI staff plus a sufficient number to provide access to the Design-Build Firm shall be provided. All keys and locks shall become the property of the DOT at the end of the construction job. All keys shall be turned in to the DOT Project Manager prior to the job before final acceptance.

ii. UPS and Power and Control Monitoring Strip

Each cabinet shall have a Power and Control Monitoring Strip and an UPS of sufficient size to handle the maximum loading of all proposed local equipment in this document. The Power and Control Monitoring Strip shall be IP based allowing monitoring of alarms, sending of traps, configuring of the strip, rebooting of strip, and turning on and off each of its minimum of 8 individual outlets remotely. In addition the Power and Control Monitoring Strip shall have status/monitoring capabilities. It shall have SNMP support and provide a response to a command as to when this command is completed. The UPS shall communicate via the Layer 2 Switch or 10 Gig Ethernet switch in the hub. The UPS and Power Outlet Strip shall be horizontally mounted on a 19 inch rack within the cabinet. Lastly in the event of a power outage the Power and Control Monitoring Strip shall retain the most current operational for each outlet and restore those settings when power is returned using non-volatile memory.

g. Power

Power shall be the responsibility of the Design-Build Firm. The Design-Build Firm shall be responsible for all design, permits, fees and requirements, including but not limited to power hook up fees and

monthly bills as stated by the local power company, to provide electrical power service for this system. Department shall assume the monthly service fee after final acceptance of the project. Solar Power may not be allowed.

A separate grounded branch circuit from the main service disconnect panel shall be terminated on a Local Hub cabinet power distribution panel providing all power required for the CCTV camera assembly as well as cabinet lights, GFCI duplex receptacle, and cabinet ventilation. The main circuit breaker shall turn off all power to the hub cabinet, CCTV assembly and DMS assembly, as required. Another branch circuit with a circuit breaker mounted to the power board / panel shall provide all power required for the DMS as shown on the Plans, including its associated DMS controller, communications interface equipment, display modules, power supplies, fans, maintenance lighting, and GFCI duplex outlets.

The Design-Build Firm shall determine the maximum and typical load of the ITS equipment furnished for this project to support the power distribution system design. All calculations and drawings shall be signed and sealed by a State of Florida PE. The Design-Build Firm shall provide all electrical calculations and the determined loads to the Department.

A three-wire, 120 VAC, GFCI duplex receptacle shall be mounted to the power distribution panel. The current rating of the main circuit breaker shall be between 1.5 to 2 times the accumulated maximum power requirements for all equipment in the cabinet, CCTV assembly and the DMS assembly or as specified in the ITS Statewide Standards, whichever is greater. All circuit breakers shall be listed by UL and shall have the trip and frame size plainly marked on the breaker. The trip ampere rating shall be visible from the front of the breaker. All wiring coming in or out of the DMS controller cabinet, the CCTV and cabinet except for the 120/240 VAC power lines and short coaxial cable runs shall be non-metallic fiber optic cable.

i. Conductor Terminations

All conductors used in cabinet wiring shall terminate with properly sized non-insulated (if used, for DC Logic Only) or clear insulated spring-spade type terminals except when soldered to a through-panel solder lug on the rear side of the terminal block or as specified otherwise. All crimp-style connectors shall be applied with a power tool, which prevents opening of the handles until the crimp is completed.

ii. Service Conductors

Conductors between the service terminal AC- and Equipment Ground and their associated bus, the equipment ground bus conductor to Power Distribution Assembly and cage rail, AC- Bus to Power Distribution Assembly shall be No. 8 or larger.

iii. Conductor Requirements

All conductors unless otherwise specified shall be No. 22, or larger, with a minimum of 19 copper strands. Conductors shall conform to Military Specification: MIL-W-16878D, Type B, or better. The insulation shall have a minimum thickness of 10 mils and shall be nylon jacketed polyvinyl chloride except that Conductors No. 14 and larger may have Type THHN insulation (without Nylon Jacket), and shall be stranded with a minimum of 7 copper strands.

iv. Conductor Labels

All conductors, except those which can be readily traced, shall be labeled. Labels attached to each end of

the conductor shall identify the destination of the other end of the conductor.

v. Color Coding

All conductors shall conform to the following color-code requirements:

Conductor	Color
Grounds	continuous white or gray color
Equipment Grounds	solid green color or by a continuous green color with one or more yellow stripes
Logic Ground	solid white color with a red stripe
AC+ Conductors	solid black or black with colored stripe
Logic Ungrounded Conductors	any color not specified above

vi. Wiring Workmanship

All wiring harnesses shall be neat, firm and routed to minimize crosstalk and electrical interference. Printed circuit motherboards are to be used where possible to eliminate or reduce cabinet wiring.

AC Routing - Wiring containing AC shall be routed and bundled separately or shielded separately from all logic voltage control circuits.

General Routing Requirements

Cabling shall be routed to prevent conductors from being in contact with metal edges. Cabling shall be arranged so that any removable assembly may be removed without disturbing conductors not associated with that assembly. Within the cabinet, the DC logic ground and equipment ground shall be electrically isolated from the AC grounded conductor and each other by 500 mega-ohms when tested at 250 VDC, with the power line surge protector disconnected. AC Terminal Bus - The AC- copper terminal bus shall not be grounded to the cabinet or connected to logic ground. Nylon screw with a minimum diameter of 0.25 inch shall be used for securing the bus to the service panel. Cabinet Power Supply - The cabinet power supply DC Ground shall be connected to the DC logic ground bus using a No. 14 or larger stranded copper wire.
Detector Lead-in

Each detector lead-in pair, from the field terminals in the cabinet to the sensor unit rack connector, shall be a cable of UL Type 2092 or better. The stranded tinned copper drain wire shall be connected to a terminal on the input file terminal block. This input terminal shall be connected to the equipment grounding bus through a single conductor. Each detector lead in cable shall be labeled for the corresponding lane that it is connected to.

vii. Barrier Type Terminal Blocks

The terminal blocks shall be barrier type rated at 20 amperes, 600 volts RMS minimum. The terminal screws shall be 0.3125 inch minimum length nickel plated brass binder head type with screw inserts of same material. Screw size is called out under associated cabinet assembly, file or side panel.

viii. AC Terminals

The terminals of the power line service terminal block shall be labeled "L1" and "AC-", and shall be covered with a clear insulating material to prevent inadvertent contact. Terminating lugs large enough to accommodate No. 2 conductors shall be furnished for the service terminal block. The terminal block shall be rated for 50 amperes at 600 volts peak, minimum. The block shall be either a double row, 3 position screw/insert with shorting bar (screws, inserts and shorting bars shall be nickel plated brass) or a Marathon #1423552 (or approved equal). If the Marathon block is used, the surge protectors shall be terminated under a screw head (not common with AC+, AC- or Equipment Ground). The AC+, AC- and Equipment Ground conductors connecting to the service terminals and appropriate busses shall not be spade lugged.

h. Foundations

No #57 rock shall be used as foundations for any structures within the project limits, including but not limited to CCTV poles and MVDS poles.

i. Existing Survey Markers

Disruption of existing survey markers shall be avoided in the installation of the conduit(s). No conduit shall be installed within 5 feet from existing survey markers. Damage and/disruption to these markers shall be reported immediately to the CEI personnel. The Design-Build Firm shall be responsible to re-install or repairs to survey markers to the satisfaction of the Department District 5 Survey section.

j. Route Markers, Cabinet Labeling and Fiber Documenting

Mark the location of the conduit system with rigid signposts known as route markers. Route markers shall be a Standard Route Marker (SRM) type. The SRM is a rigid, tubular, driven post used for location and notification purposes only.

The Design-Build Firm shall be responsible for furnishing and installing the District 5's ITS sign labeling standard to be mounted on every cabinet. The sign shall include, but not be limited to:

- Color: Green/white
- Grade: HIP
- Border: No
- Hole: ¼" Diam. ½" in – Centered on L&R side.
- Corner: Square
- Material: Alum
- Gauge: 0.80
- Number of sides: 1
- Confirmed sign with proof

Upon installation of the ITS equipment, the Department requires all installed components, to include fiber, to be documented in a form for inventory control. It is the Design-Build Firms responsibility to provide the following information:

- Record the manufacturer, model and serial number of all equipment within the cabinet.
- Record all fiber buffers and fiber strands used.
- The sequential footages from the cable sheaths where fiber enters and exits the vault/pull boxes.

- Record each cable footage at the splice enclosure, to include where each cable enters and/or exits the vault.
- Record cable stealth footage entering the cabinet.
- Record all fibers that are terminated and landed on the patch panel.
- Record type of termination within the cable.
- Record a splice diagram or a spreadsheet of each splice location.
- Record patches between all equipment and patch panels.
- Record the GPS parameters associated with all pull boxes, splice vaults and cabinets within 1 meter of their location.

k. **Integration**

The Design-Build Firm shall provide a Logical Topology to the Department for concurrence in accordance with Section VI.M.14. The logical topology for integration is to include all Layer II and 10 Gig Ethernet Switches within the project limits. The Design-Build Firm shall then setup an Integration Meeting with District 5 ITS, allowing minimally 2 weeks of notice and review time of the logical topology. At the Integration Meeting the Department will provide an IP Scheme, Standard Port Utilization for all Layer II Devices (including which ports are to be disabled), VLAN Tagging Scheme for all subnets, and information on all Layer III and higher protocols to be run on the switches.

It is then the Design-Build Firms responsibility to setup all tagging, disable all applicable ports, setup all IP addresses, physically connect all devices per plan (except where loops would be formed), and to verify Layer I and Layer II connectivity. The Design-Build Firm shall not place any Layer III or higher protocols on the switches at this time. The Design-Build Firm shall then contact the Department for configuring the management software (currently Sunguide) to control the devices. The Design-Build Firm shall supply the Department with IP addresses and all other needed information for the configuration. The Design-Build Firm shall allow 2 weeks for the Department to enter the information into the management software. The Design-Build Firm shall troubleshoot with the Department's assistance any issues that arise from configuring the central software.

Once the local devices have been entered into the central software the Department shall inspect the network for issues from a remote location. The Design-Build Firm shall provide any assistance necessary to provide the Department with IP addresses, port status (tag, if any device is plug into the port, if so what device), and auto negotiation speeds for all switches that cannot be acquired from the remote location.
Inability of the Department to access the information remote will constitute failing the inspection. If the inspection is failed the Design-Build Firm shall reconfigure the devices and again work with the Department to get the devices into the central management software. After this is complete the switches shall again be inspected. Failure will result in a repeating the earlier step until the integration inspection is successfully completed.

Once the test is completed the Design-Build Firm shall start placing all protocols on the switch, but only while under the supervision of District 5 ITS. Under no circumstance shall the Design-Build place anything greater than a Layer 2 protocol on the switch without District 5 ITS supervision. Once all protocols are in place the Design-Build Firm shall verify their functionality under District 5 ITS supervision.

l. **Testing**

The Design-Build Firm shall develop an Integration and Test Plan that describes the performance and control of all aspects and levels of integration and testing. The Integration and Test Plan shall be

submitted to the FDOT PM within 90 days of the submission of Final Component Plans or 30 days prior to the testing of any subcomponent which every is earlier. By working with the development teams, the Design-Build Firm defines the optimum integration sequence for the various hardware and software functions and develops schedules and procedures for testing those products as they are integrated. All tests that are to be performed remotely shall be conducted through the Department's central software (Sunguide). The following documents are input to the test planning process:

- Contract Requirements (SEMP, SERF, RFP, SOS, ITS Statewide Specifications, TSP, etc.)
- Requirements Traceability and Verification Matrix
- Project Schedule

The Integration and Test Plan that shall include, but may not be limited to plans for the following tests:

- Post-installation Testing/Field Testing of individual devices or subsystems
- Camera Observation Period
- FOC Installation Testing
- System Integration Testing (SATP)
- Turn-On Testing
- System Test
- Burn-In Period

i. ITS Statewide Specifications

The Design-Build Firm shall perform all testing requirements specified in the ITS Statewide Specifications specified in Section VI, ITS Statewide Specifications, of this document unless otherwise stated in this document. The testing includes, but is not limited to Pre-installation Testing, FOC Installation Testing, and Camera Observation Testing. In the event of a conflict between this document and the ITS Statewide Specifications documents referenced herein the contents of this document will be considered the superseding requirement.

ii. Post-installation Testing

The DESIGN-BUILD FIRM shall perform post-installation testing on each ITS component. The purpose of the post-installation testing is to verify that each ITS component has been properly installed, that all wires, cables and connectors have been attached correctly, and that the ITS component has not been damaged during installation.

Post-installation testing shall commence only after all of the following requirements have been met:

- The ITS component has been properly installed and all wires, cables, and connectors have been properly attached,
- The Post-installation Test Plan has been reviewed and approved by the Department,
- The testing schedule has been reviewed and approved by the Department.

iii. System Integration Testing

The Design-Build Firm shall perform system integration testing on the entire ITS. The purpose of the system integration testing is to ensure that the ITS, as a whole, including communications, the VDSs, CCTVs, and switches, function as an integrated system in accordance with this RFP and the ITS

Statewide Specifications.

System integration testing shall commence only after all of the following requirements have been met:

- The System Acceptance Test Plan (SATP) as outlined in Appendix B has been created by the System Test Team, reviewed by the Department, and concurred with by the Department
- The testing schedule has been reviewed and concurred with by the Department.

The Design-Build Firm shall request system integration testing in writing a minimum of 10 working days in advance of the proposed test session.

System integration testing shall follow the SATP and be completed within five consecutive working days unless otherwise approved by the Department.

If during a system integration testing session, any ITS component fails to meet this RFP, or the ITS Statewide Specifications requirements, the Design-Build Firm shall correct the problem. If the problem is identified to be with the CCTVs, system integration testing shall start from the beginning once the problem is corrected. If a problem arises that will delay system integration testing by more than 24 hours, then system integration testing shall be terminated and rescheduled to start anew at a future date. In the event that more than one system integration testing session is necessary, the Design-Build Firm shall be responsible for all costs associated with the extra test session(s).

iv. Turn-On Inspection

After all system integration testing has been successfully completed, all documentation, including but not limited to the system test documentation (Special Provision 781-1.8.5), has been submitted, and approved, and all utility work has passed final inspection by the local permitting authorities, the Design-Build Firm shall contact the Department and local permitting authorities to schedule a Turn-On Inspection. Department shall conduct a Turn-On Inspection within 10 days of notification. Accurate as-built plans of the system shall be provided at Turn-On Inspection. If during the inspection the Department finds that all work has been satisfactorily completed, then the Design-Build Firm shall begin the 30-Day System Test. If any or all of the work is found to be unsatisfactory, Department shall detail the remedial work required to satisfactory complete the Turn-On Inspection. The Design-Build Firm shall immediately perform such remedial work. Subsequent inspections shall be made on the remedial work until the Department accepts all work.

v. System Test

The System Test shall replace 90 observation period (782-2.5.2) from the ITS Statewide specifications. The 30-Day System Test shall begin upon satisfactory completion of the Turn-On Inspection. During the system test the Design-Build Firm shall provide all software required for malfunction diagnosis of hardware and software to the Department for approval. A copy shall be supplied to the Department with documentation. If during the System Test, any ITS component fails to meet the RFP requirements, the Design-Build Firm shall correct the problem. The Design-Build Firm shall correct any failures in the hardware or software supplied by the Design-Build Firm at no additional cost to the Department. If the problem is not corrected within five days, System Testing shall start from the beginning once the problem is corrected. If the problem is corrected within five days, System Testing shall continue for 10 days or the remainder of the 30 day test, whichever is of greater length.

vi. Conditional Acceptance

Conditional Acceptance shall be predicated upon the successful completion of the 30-Day System Test. A 30-day burn-in period shall be required for all equipment furnished and installed as part of this contract. Under no circumstances shall the 30-Day System Test and the 30-day burn-in period run concurrent. The burn-in shall consist of field operation of the system in a manner, which is in full accord with the requirements of the Plans and Specifications.

Final Acceptance of the system installation shall be made after satisfactory completion of the required burn-in of 30 days, successful completion of all specified tests and on the basis of a comprehensive final field inspection.

m. **Maintaining**

The DESIGN-BUILD FIRM shall be responsible for repairing and replacing all components/software used on the project that have become defective from the completion of the Turn-On Inspection until the completion of the thirty (30) day burn-in period. Repairs made shall conform to the Plans, this RFP, the ITS Statewide Specifications and the Department Standards.

Maintenance and repair is defined as all activities that shall be performed for the system to remain in, or return to, operation as specified in the Plans and Technical ITS Statewide Specifications. The work shall also include preventative/routine maintenance. The work shall not include repairs or replacements made necessary by defects resulting from vandalism, traffic accidents, or acts of God. In the event, that such repair or replacement is necessary, the Department's Project Representative reserves the right to negotiate with the Design-Build Firm for such repair or replacement. Maintenance shall include repair and replacement of system components, as well as replacement/ modification of system software. The Design-Build Firm shall maintain a maintenance staff of adequate size to respond to any and all maintenance requirements of the project at all times during the Burn-in period. If the Design-Build Firm damages fiber optic cable, the fiber shall be replaced from hub to hub, as approved by the Department. Replacement shall be at Design-Build Firm’s expense.

The need for maintenance shall be detected by a number of sources including but not limited to operator observation, Design-Build Firm personnel, Department maintenance personnel, Florida Highway Patrol, citizen reports, etc. When maintenance activities are being performed by the Design-Build Firm, the Design-Build Firm shall notify the Department's Project Representative as soon as possible of the location and the work activity being performed, and shall provide the Department's Project Representative with an anticipated schedule for completion of the work.

The Department shall make the final determination of whether a defective component/software shall be repaired or replaced. If repair is permitted, the Department's Project Representative shall determine if the repair shall be made in the field, or if the component/software shall be removed (and replaced with a replacement component/software) and repaired elsewhere. The costs of removal, shipping, and related activities are to be borne by the Design-Build Firm and are considered incidental to the burn-in period.

Given software or hardware system or subsystem shall be considered defective if either of the following conditions occurs within the burn-in period:

Above the normal frequency of maintenance: For all components furnished within the project the Design-Build Firm shall furnish the Department with manufacturer supplied and certified test results indicating the mean time between failure (MTBF) for that component on or before the date of construction Final Acceptance. If a component fails prior to its MTBF, the Design-Build Firm shall either repair or replace

the component at the Department's discretion at the Design-Build Firm's expense. If the same component fails again prior to its MTBF, it shall be replaced by the Design-Build Firm at the Design-Build Firm's expense.

Failure of system or subsystem components/software to perform: Components/software that fails to operate in the manner described in the Plans, this RFP and the ITS Statewide Specifications, shall be replaced by the Design-Build Firm at Design-Build Firm's expense with components/software that meet the requirements of the Plans, this scope of services, and the Technical ITS Statewide Specifications. The Department's Project Representative shall make the sole determination of whether or not a given system/subsystem has failed to perform.

The Design-Build Firm shall maintain a log of all response maintenance and repair activities performed during the Burn-in period by the Design-Build Firm. The log shall be kept in a database management system utilizing Department-approved database software, and include, as a minimum, the following information:

Date and time defect reported
Entity reporting the defect
Description of the reported defect
Arrival time at the site of the reported defect
Technician performing defect repair or replacement
Corrective actions taken
Model and serial number of any component repaired or replaced
Date and time defect rectified.

The Design-Build Firm shall maintain records to show the itemized material, equipment, and labor cost incurred to provide maintenance during the burn-in period. These records shall be provided to the Department within 10 working days after the 30-day burn-in period. The purpose of this requirement is to provide the Department with information to estimate the maintenance budget needed for the system after the burn-in period. These records shall not be used as a basis of payments to the Design-Build Firm. The Design-Build Firm shall assure that these cost records are complete and accurate. The Department may perform an audit to verify the accuracy of the cost records.

When performing maintenance activities, the Design-Build Firm shall use appropriate traffic control measures. The traffic control procedures implemented shall be based on and conform to the traffic control plan contained in the project Plans and the current Department Roadway and Traffic Design Standards. All lane closures required to perform work shall be consistent with current Department maintenance of traffic requirements. Approval for lane closures shall be obtained from the Department's Project Representative prior to the implementation of any lane closure. The costs of any and all activities relating to maintenance of traffic are to be borne by the Design-Build Firm and are considered incidental to the work. No lane closures shall be allowed from 6:00AM to 9:00PM.

If the Design-Build Firm fails to perform any maintenance within the time frame for component-related defects or central system defects, the Department shall either perform the corrective work itself or contract with a third party to perform the necessary corrective work. Corrective work necessary due to non-performance by the Design-Build Firm shall be deducted from any payments due the Design-Build Firm. Consistent non-performance on the part of the Design-Build Firm shall result in attachment of the supplemental performance bond.

The Department's or its representative's performance of corrective work under this provision shall have

no effect on the Design-Build Firm's warranty obligations.

The Design-Build Firm shall be responsible for all locates throughout the duration of the project from the Notice to Proceed to Final Acceptance. The Design-Build Firm shall be provided with locates at the beginning of the project by the Department. After initial locates are provided to the Design-Build Firm by the Department they shall add their name to Sunshine One Call and be responsible for all locates at no cost to the Department.

n. Training

The Design-Build Firm shall meet all training requirements set forth in the "ITS Equipment and Network Device Subsystem Training" documentation for all applicable subsystems prior to final acceptance.

o. ITS Statewide Specifications

All plans and designs are to be prepared in accordance ITS Statewide Specifications including but not limited to:

Section 780 Intelligent Transportation Systems General Requirements
Section 781 Intelligent Transportation Systems Motorist Information Systems
Section 782 Intelligent Transportation Systems Video Equipment
Section 783 Intelligent Transportation Systems Fiber Optic Cable And Interconnect
Section 784 Intelligent Transportation Systems Network Devices
Section 785 Intelligent Transportation Systems Infrastructure
Section 786 Vehicle Detection and Data Collection

p. Spare Parts

The following spare parts shall be provided:

- One (1) CCTV Camera
- One (1) Encoder
- One (1) Switch

q. Documentation of Device Configuration and Topology of Network

Thirty days prior to the installation of any communication devices or field devices the Design-Build Firm shall provide to the Department Project Manager a configuration manual. Concurrence by the Department Project Manager is required on all items included in the configuration manual before installation of any communication device or field device. The configuration manual shall be an electronic document. Four copies of the configuration manual shall be submitted. Each shall be on its own CD. The configuration manual shall consist of the following:

- A configuration schematic showing all communication equipment (model number, brand name, device type), its port/connector connection number, and physical location of device (roadway, station, and offset) for the complete system, include a wiring schematic showing physical location of fiber connection (roadway and side), cable owner, buffer color, strand number, indication if the strand is transmit or receive, speed (Fast, 10 Gig, or 10 Gig), media type (copper or fiber), and all non-color-to-color (both buffer and strand) splices for each fiber. (11x17 page size, Visio or Visio compatible drawing)
- A splicing sheet shall be provided for each splice point showing each fiber and buffer indicating

their terminations. (One 8 1/2 x 11 for each splice point, shall be a Microsoft Word document or Microsoft Word compatible.)

- A Devices, connections and/or physical parts cannot be changed without the written authorization from the District Traffic Operation Engineer. Configurations cannot be changed without the written authorization from the Department Project Manager.

r. **As-Built Information**

As-built information shall be submitted to the Department Project Manager within 5 days of the completion of construction. Time will not stop on the job until the As-built information has been submitted and concurred with by the Department Project Manager. The Department Project Manager shall have 5 days from the submission of the As-built information to review and determine concurrence for each submittal. As-built information consists of an electronic submittal.

VII. Technical Proposal Requirements:

A. General:

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

B. Submittal Requirements:

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

A copy of the written Technical Proposal must also be submitted in .pdf format including bookmarks for each section on a CD. No macros will be allowed. Minimum font size of ten (10) shall be used. Times New Roman shall be the required font type.

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

Submit 1 Original, _7___(#) CD's, and _7___(#) hard copies of the Technical Proposal to:

Ms. Michelle Sloan, Professional Services, MS 4-524
Florida Department of Transportation
719 South Woodland Blvd
Deland, Florida 32720

The minimum information to be included:

Section 1: Project Approach

- Paper size: 8½" x 11". The maximum number of pages shall be _***15***___(#), single-sided, typed pages including text, graphics, tables, charts, and photographs. Double-sided 8½" x 11" sheets will be counted as 2 pages. 11"X17" sheets are prohibited.
- Describe how the proposed design solutions and construction means and methods meet the project needs described in this Request for Proposal. Provide sufficient information to convey a thorough knowledge and understanding of the project and to provide confidence the design and construction can be completed as proposed.
- Provide the term, measureable standards, and remedial work plan for any proposed Value Added features that are not Value Added features included in this RFP, or for extending the Value Added period of a feature that is included in this RFP. Describe any material requirements that are exceeded.
- Provide a Written Schedule Narrative that describes the Design and Construction phases and illustrates how each phase will be scheduled to meet the project needs required of this Request for Proposal. Bar or Gantt charts are prohibited. Do not reveal or describe the Proposed Contract Time. Proposed Contract Time will be evaluated when Bid Price Proposals are received.

Section 2: Plans and Technical Special Provisions

- Paper size: 11" x 17". Plan and Profile views of the proposed improvements may be submitted in roll-plot format. The maximum width of the roll-plots shall be 36". The maximum length of the roll-plot shall be 8'. Inclusion of additional information on the roll-plot, other than depictions of the Plan and Profile views, is prohibited and will not be considered by the Proposal Evaluators, if included. The Department may determine that such additional information is excessive and may require the Design-Build Firm to revise and resubmit the roll-plots. If this occurs, the Design-Build Firm will have 2 business days to revise and resubmit the roll-plots upon notification by the Department.
- Provide Technical Proposal Plans in accordance with the requirements of the Plans Preparation Manual.
- The Plans shall complement the Project Approach.
- Provide any Technical Special Provisions which apply to the proposed work. Paper Size: 8½" x 11".

C. Evaluation Criteria:

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

Item	Value
1. Design	30
2. Construction	35
3. Innovation	5
4. Value Added	10
Maximum Score	**80**

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

1. **Design (Maximum 30 points)**

Credit will be given for the quality and suitability of the following elements:

- Structures design
- Roadway design / and safety
- Drainage design
- Environmental Design
- Design coordination plan minimizing design changes
- Geotechnical investigation plan
- Geotechnical load test program
- Minimizing impacts to adjacent properties and structures through design
- Traffic Control Plan design
- Incident Management Plan
- Aesthetics
- Utility Coordination and Design

Credit will be given for aesthetics features of the design including but not limited to the following: considerations in the geometry, suitability and consistency of structure type, structure finishes, shapes, proportions and form throughout the limits of the project.

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

Credit will be given for design and utility coordination efforts that minimize the potential for adverse impacts and project delays due to utility involvement.

Credit will be given for development of design approaches which minimize periodic and routine maintenance. The following elements should be considered: access to provide adequate inspections and maintenance, access to structure's lighting system, and impacts to long term maintenance costs.

2. **Construction (Maximum 35 points)**

Credit will be given for the quality and suitability of the following elements:

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

Credit will be given for developing and deploying construction techniques that minimize disruptions to roadway traffic, the traveling public, business/property owners, enhance project durability, reduce long term and routine maintenance, and those techniques which enhance public and worker safety. This shall include, but not be limited to, minimization of lane and driveway closures, lane widths, visual obstructions, construction sequencing, and drastic reductions in speed limits.

Credit will be given for minimizing impacts to the environment during all phases of construction and insuring all environmental commitments are honored.

Credit will be given for construction and utility coordination efforts that minimize the potential for adverse impacts and project delays due to utility conflicts.

3. **Innovation (Maximum 5 points)**

Credit will be given for introducing and implementing innovative design approaches and construction techniques which address the following elements:

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

4. **Value Added (Maximum 10 points)**

Credit will be given for the following Value Added features:

- Broadening the extent of the Value Added features of this RFP while maintaining existing threshold requirements
- Exceeding minimum material requirements to enhance durability of project components

- Providing additional Value Added project features proposed by the Design-Build Firm

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

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

D. Final Selection Formula:

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

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

BPP = Bid Price Proposal

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

Points will be added to the Technical Score, at the time of Bid Price Proposal opening, according to the Proposed Contract Time based on the following table. The number of days shown on the bid proposal form shall be the official Proposed Contract Time.

Proposed Contract Time (Days)	**Points Awarded**
1000 - 931	0
930 - 861	1
860 - 791	2
790 - 721	3
720 - 651	4
650 or less	5

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

The Department reserves the right to consider any proposal as non-responsive if any part of the Technical Proposal does not meet established codes and criteria. If the Proposed Contract Time is greater than Maximum Contract Time of (1000) calendar days the Bid Price Proposal will be considered non-responsive.

E. Final Selection Process:

After the sealed bids are received, the Department will have a public meeting for the announcement of the Technical Scores and opening of sealed Bid Price Proposals. This meeting will be recorded. At this meeting, the Department will announce the score for each member of the Technical Review Committee, by category, for each Proposer and each Proposer's average Technical Score. Following announcement of the technical scores, the sealed Bid Price Proposals will be opened and the adjusted scores calculated. The Selection Committee should meet a minimum of two (2) calendar days (excluding weekends and Department observed holidays) after the public opening of the Technical Scores and Bid Price Proposals. The Department's Selection Committee will review the evaluation of the Technical Review Committee and the Bid Price Proposal of each Proposer as to the apparent lowest adjusted score and make a final determination of the lowest adjusted score. The Selection Committee has the right to correct any errors in the evaluation and selection process that may have been made. The Department is not obligated to award the contract and the Selection Committee may decide to reject all proposals. If the Selection Committee decides not to reject all proposals, the contract will be awarded to the Proposer determined by the Selection Committee to have the lowest adjusted score.

F. Stipend Awards:

The Department has elected to pay a stipend to a limited number of non-selected Short-Listed Design-Build Firms to offset some of the costs of preparing the Proposals. The non-selected Short-Listed Design-Build Firms meeting the stipend eligibility requirements of the Project Advertisement and complying with the requirements contained in this section will ultimately be compensated. The stipend will only be payable under the terms and conditions of the Design-Build Stipend Agreement and Project Advertisement, copies of which are included with this Request for Proposal. This Request for Proposal does not commit the Department or any other public agency to pay any costs incurred by an individual firm, partnership, or corporation in the submission of Proposals except as set forth in the Design-Build Stipend Agreement. The amount of the stipend will be $__62,000.00_____ per non-selected Short-Listed Design-Build Firm that meets the stipend eligibility requirements contained in the Project Advertisement. The stipend is not intended to compensate any non-selected Short-Listed Design-Build Firm for the total cost of preparing the Technical and Price Proposals. The Department reserves the right, upon payment of stipend, to use any of the concepts or ideas within the Technical Proposals, as the Department deems appropriate.

In order for a Short-Listed Design-Build Firm to remain eligible for a stipend, the Short-Listed Design-Build Firm must execute with original signatures and have delivered to the Department no later than one (1) week after the Short-List has been posted, four (4) originals of the Design-Build Stipend Agreement, Form No. 700-011-14. The Short-Listed Design-Build Firm shall reproduce the necessary copies. Terms of said agreement are non-negotiable. A fully executed copy of the Design-Build Stipend Agreement will be returned to the Short-Listed Design-Build Firm.

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

VIII. Bid Proposal Requirements.

A. Bid Price Proposal:

Bid Price Proposals shall be submitted on the Bid Blank form attached hereto and shall include one lump sum price for the Project and the number of calendar days within which the Proposer will complete the Project. The lump sum price shall include all costs for all design, geotechnical surveys, architectural

services, engineering services, Design-Build Firms quality plan, construction of the Project, and all other work necessary to fully and timely complete that portion of the Project in accordance with the Contract Documents, as well as all job site and home office overhead, and profit, it being understood that payment of that amount for that portion of the Project will be full, complete, and final compensation for the work required to complete that portion of the Project. One (1) hard copy Bid Price Proposal shall be hand delivered in a separate sealed package to the following:

Ms. Michelle Sloan
Professional Services Administrator
Florida Department of Transportation
District 5
719 South Woodland Boulevard
DeLand, Florida 32720

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