



PURCHASING DEPARTMENT

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**BOARD OF COUNTY
COMMISSIONERS**

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COUNTY MANAGER

January 23, 2023

Prospective Respondents

**RE: Addendum #2 23-10 Traffic Signal Mast Arm Hardening Project
HMGP 4399-119-R**

Please accept this as Addendum No. 2 for the above referenced solicitation.

The following questions have been received. The County's answers follow in **bold**.

1. The previous contract advertisement (RFP 22-37) required that a new mast arm was to be located in every quadrant of an intersection, with horizontal members oriented perpendicular to their associated approaches (i.e., no diagonally oriented horizontal mast arm members). Is this a requirement of this contract (ITB 23-10)? **Please see the attached Revised Exhibit 2 Scope of work.**
2. What forms need to be completed by the contractor's DESIGN team members? **The required bid forms are to be completed and submitted by the vendor responding to this Invitation to Bid (ITB) and pricing shall be inclusive of all work described in the attached Revised Exhibit 2 Scope of work.**

REVISED EXHIBIT 2 SCOPE OF WORK

Description of Work

As a Hazard Mitigation Grant Program project, the County proposes to upgrade span wire traffic signals at fourteen (14) locations throughout Bay County, FL 32401, 32408, 32444, 32405, and 32466.

The HMGP project scope of work proposes replacing the existing span wire, pole structures and associated underground infrastructure, which support the traffic signal system, with new mast arm structures. The work includes, but is not limited to, design, construction, installation, and integration of traffic signal mast arm supports and associated work at designated traffic signal locations that are currently existing on spanwire supports and concrete strain poles.

The Vendor shall be responsible for all work necessary to complete the project, including but not limited to, survey, geotechnical investigation, design, preparation of all documentation related to the acquisition of all permits not acquired by the County, preparation of any and all information required to modify permits acquired by the County if necessary, maintenance of traffic, demolition, installation, and integration of traffic signal mast arm supports. While the project is intended to be constructed within the existing right-of-way, the Vendor shall provide all utility coordination activities, including any relocations that may be discovered necessary.

Project Locations:

ID#	Name	Location/Intersection	Coordinates
1	173	CR2301 Bayou George Fire Department Preemption Signal	30.313138, - 85.549415
2	174	Highway 231 & Youngstown Fire Department Preemption Signal	30.360245, - 85.438574
3	130	CR 389 & SR 390	30.233211, - 85.628101
4	88	CR 389 (East Avenue) & Baldwin Road	30.202393, - 85.624863
5	109	Thomas Drive & Patronis Street	30.168327, - 85.757625
6	117	Thomas Drive & Magnolia Street	30.158844, - 85.753182
7	99	Joan Street & North Lagoon Street	30.172193, - 85.789789
8	102	11 th Street & Frankford Street	30.168150, - 85.692144
9	103	11 th Street & Lisenby Street	30.168058, - 85.683798

10	104	11 th Street & Balboa Street	30.167995, 85.675351	-
11	105	11 th Street & Jenks Avenue	30.167860, 85.662532	-
12	107	11 th Street & Bay Avenue	30.167734, 85.641777	-
13	108	11 th Street & Sherman Avenue	30.167680, 85.633406	-
14	84	11 th Street & East Avenue	30.167617, 85.625076	-

The project shall provide protection against 144 MPH winds or the wind speed protection and impact requirements indicated by the effective Florida Building Code or any other applicable code at the time permits are issued. Activities shall be in strict compliance with Federal, State, and Local applicable Rules and Regulations.

A. Vendor Responsibility

This is a grant funded project, HMGP DR-4399-119-R. It will be split into two phases: Phase I will be for the design of the mast arms at the appropriate locations as listed above. The County is required to submit the design to the State of Florida for approval prior to beginning Phase II Construction. Vendor shall provide all design for permitting, construction, installation of mast arms, and approval by the State of Florida Division of Emergency Management (FDEM). Drawings shall be engineered stamped drawings.

Phase 1 Design shall be completed within 100 calendar days and Phase 2 Construction shall be 355 calendar days after FEMA/State approval of Engineer stamped design. A Notice to Proceed for each phase will be issued.

The services performed by the Vendor shall be in compliance with all applicable Manuals and Guidelines including FDOT, 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 Florida Department of Transportation at the date of advertisement of this contract with the exception of the Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications, Manual on Uniform Traffic Control Devices (MUTCD), and FDOT Standard Plans with applicable Interim Revisions. The Vendor shall use the edition of the Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications, FDOT Standard Plans and applicable Interim Revisions in effect at the time the bid price proposals are due to the County. The Vendor shall use the 2009 edition of the MUTCD (as amended in 2012). It shall be the Vendor's responsibility to acquire and utilize the necessary manuals and guidelines that apply to the work required to complete this Project. The services will include preparation of all documents necessary to complete the Project as described in Section I of this document.

1. Florida Department of Transportation Design Manual (FDM)
<http://www.fdot.gov/roadway/FDM/>
2. Florida Department of Transportation Specifications Package Preparation Procedure
<http://www.fdot.gov/programmanagement/PackagePreparation/Handbooks/630-010-005.pdf>
3. Florida Department of Transportation Standard Plans for Road and Bridge Construction
<http://www.fdot.gov/design/standardplans/>
4. Standard Plans Instructions (Refer to Part I, Chapter 115, FDM)
<http://www.fdot.gov/roadway/FDM/>
5. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications
<https://www.fdot.gov/programmanagement/Implemented/SpecBooks/default.shtm>
6. Florida Department of Transportation Surveying Procedure 550-030-101
<http://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/FormsAndProcedures/ViewDocument?topicNum=550-030-101>
7. Florida Department of Transportation EFB User Handbook (Electronic Field Book)
http://www.fdot.gov/geospatial/doc_pubs.shtm
8. Florida Department of Transportation Drainage Manual
<http://www.fdot.gov/roadway/Drainage/ManualsandHandbooks.shtm>
9. Florida Department of Transportation Soils and Foundations Handbook
<http://www.fdot.gov/structures/Manuals/SFH.pdf>
10. Florida Department of Transportation Structures Manual
<http://www.fdot.gov/structures/DocsandPubs.shtm>
11. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Manual
<http://www.fdot.gov/cadd/downloads/publications/CADDManual/default.shtm>
12. AASHTO – A Policy on Geometric Design of Highways and Streets
https://bookstore.transportation.org/collection_detail.aspx?ID=110
13. MUTCD – 2009 (with Revision Numbers 1 and 2 incorporated, dated May 2012)
<http://mutcd.fhwa.dot.gov/>
14. Safe Mobility for Life Program Policy Statement
<http://www.fdot.gov/traffic/TrafficServices/PDFs/000-750-001.pdf>
15. Traffic Engineering and Operations Safe Mobility for Life Program
<http://www.fdot.gov/traffic/TrafficServices/SafetyisGolden.shtm/>
16. Florida Department of Transportation American with Disabilities Act (ADA) Compliance – Facilities Access for Persons with Disabilities Procedure 625-020-015
<https://fdotwp1.dot.state.fl.us/ProceduresInformationManagementSystemInternet/?viewBy=0&procType=pr>

17. Florida Department of Transportation Florida Sampling and Testing Methods
<http://www.fdot.gov/materials/administration/resources/library/publications/fstm/disclaimer.shtm>
18. Florida Department of Transportation Flexible Pavement Coring and Evaluation Procedure
<http://www.fdot.gov/materials/administration/resources/library/publications/materialsmanual/documents/v1-section32-clean.pdf>
19. Florida Department of Transportation Design Bulletins and Update Memos
<http://www.fdot.gov/roadway/Bulletin/Default.shtm>
20. Florida Department of Transportation Utility Accommodation Manual
https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/programmanagement/utilities/docs/uam/uam2017.pdf?sfvrsn=d97fd3dd_0
21. AASHTO LRFD Bridge Design Specifications
https://bookstore.transportation.org/category_item.aspx?id=BR
22. Florida Department of Transportation Flexible Pavement Design Manual
<http://www.fdot.gov/roadway/PM/publicationS.shtm>
23. Florida Department of Transportation Rigid Pavement Design Manual
<http://www.fdot.gov/roadway/PM/publicationS.shtm>
24. Florida Department of Transportation Pavement Type Selection Manual
<http://www.fdot.gov/roadway/PM/publicationS.shtm>
25. Florida Department of Transportation Right of Way Manual
<http://www.fdot.gov/rightofway/Documents.shtm>
26. Florida Department of Transportation Traffic Engineering Manual
<http://www.fdot.gov/traffic/TrafficServices/Studies/TEM/tem.shtm>
27. Florida Department of Transportation Intelligent Transportation System Guide Book
http://www.fdot.gov/traffic/Doc_Library/Doc_Library.shtm
28. Federal Highway Administration Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Plans and Specifications
<http://www.fhwa.dot.gov/engineering/geotech/pubs/reviewguide/checklist.cfm>
29. AASHTO Guide for the Development of Bicycle Facilities
https://bookstore.transportation.org/collection_detail.aspx?ID=116
30. Federal Highway Administration Hydraulic Engineering Circular Number 18 (HEC 18).
http://www.fhwa.dot.gov/engineering/hydraulics/library_arc.cfm?pub_number=17
31. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways
<http://www.fdot.gov/roadway/FloridaGreenbook/FGB.shtm>
32. Florida Department of Transportation Project Development and Environment Manual, Parts 1 and 2
<http://www.fdot.gov/environment/pubs/pdeman/pdeman1.shtm>

33. Florida Department of Transportation Driveway Information Guide
<http://www.fdot.gov/planning/systems/programs/sm/accman/pdfs/driveway2008.pdf>
34. AASHTO Highway Safety Manual
<http://www.highwaysafetymanual.org/>
35. Florida Statutes
<http://www.leg.state.fl.us/Statutes/index.cfm?Mode=View%20Statutes&SubMenu=1&Tab=statutes&CFID=14677574&CFTOKEN=80981948>
36. Florida Department of Transportation Equal Opportunity Construction Contract Compliance Manual
<http://www.fdot.gov/equalopportunity/contractcomplianceworkbook.shtm>

B. Geotechnical Services:

1. General Conditions:

The Vendor 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 FDOT and Bay County guidelines, procedures and specifications. All geotechnical work necessary shall be performed in accordance with the Governing Regulations. The Vendor shall be solely responsible for all geotechnical aspects of the Project.

C. 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 Vendor shall be responsible for acquiring or modifying permits as necessary to accurately depict the final design. The Vendor shall be responsible for any necessary permit time extensions or re-permitting in order to keep any environmental permits valid throughout the construction period. The Vendor shall provide the County 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 County prior to submittal to the agencies.

All applicable data shall be prepared in accordance with Chapter 373 and 403, Florida Statutes, Chapters 40 and 62, F.A.C.; Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, 23 CFR 771, 23 CFR 636, and parts 114 and 115, Title 33, Code of Federal Regulations. In addition to these Federal and State permitting requirements, any dredge and fill permitting required by local agencies shall be prepared in accordance with

their specific regulations. Preparation of all documentation related to the acquisition of all applicable permits will be the responsibility of the Vendor. Preparation of complete permit packages will be the responsibility of the Vendor. The Vendor is responsible for the accuracy of all information included in permit application packages.

As the permittee, the County 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 County has approved the permit application, the Vendor is responsible for submitting the permit application to the environmental permitting agency. A copy (electronic and hard copy) of any and all correspondence with any of the environmental permitting agencies shall be sent to the District Environmental Permits Office. If any agency rejects or denies the permit application, it is the Vendor's responsibility to make whatever changes necessary to ensure the permit application is approved. The Vendor shall be responsible for any necessary permit extensions or re-permitting in order to keep the environmental permits valid throughout the construction period. The Vendor shall provide the County 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 County prior to submittal to the agencies.

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

Prior to submitting a permit modification to a regulatory agency, the Vendor shall provide the County a draft of all supporting information. The County will have up to 15 calendar days (excluding weekends and County observed holidays) to review and comment on the draft permit application package. The Vendor will address all comments by the County and obtain County approval, prior to submittal of the draft permit application package. The Vendor shall be solely responsible for all time and costs associated with providing the required information to the County, as well as the time required by the County to perform its review of the permit application package, prior to submittal of the permit application(s) by the Vendor to the regulatory agency(ies).

D. Railroad Coordination

The County will conduct the required contract negotiations and plans review coordination. All required Railroad Reimbursement Agreements will be between Bayline Railroad (a subsidiary of Genesee & Wyoming Railroad) and the County. Copies of the approved Agreements will be made available to the Vendor. The Vendor must comply with the terms of these agreements. The Vendor must make the necessary arrangements with Bayline Railroad prior to encroachments into the railroad rights-of-way.

The Vendor will provide at its expense the cost of any liability insurance and permitting fees that may be required by the railroad company, as well as the cost for prescribed protective services (i.e. watchman or flagging services).

E. Survey

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

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

The Vendor shall provide final Right of Way survey and mapping services unless the County determines it is not needed for the Project. The scope of work shall include performing appropriate Right of Way survey for the proposed Project, including mainline alignment, side streets as needed, as well as all Right of Way interests.

The Vendor shall provide final Right of Way maps unless the County determines it is not needed. These maps and any associated sketches, legal descriptions and all associated necessary documentation, field data collection and any other supporting documentation shall be included as part of the Construction Set of plans submitted by the Vendor.

F. Verification of Existing Conditions:

The Vendor shall be responsible for verification of existing conditions, including research of all existing FDOT or County records and other information.

By execution of the contract, the Vendor specifically acknowledges and agrees that the Vendor is contracting and being compensated for performing adequate investigations of existing site conditions sufficient to support the project developed by the Vendor and that any information is being provided merely to assist the Vendor 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.

G. Submittals:

- **Component Submittals:**

The Vendor may submit components of the contract plans set instead of submitting the entire contract plan set; however, sufficient information from other components must be provided to allow for a complete review. In accordance with the FDOT Design Manual, components of the contract plans set are roadway, signing and pavement marking, signalization, ITS, lighting, landscape, architectural, structural, and toll facilities. The County will designate in the review comments if the next submittal will be a resubmittal of

the 90% phase submittal or if the plans and supporting calculations are significantly developed to proceed to the Final Submittal.

- **Phase Submittals:**

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

All comments shall be resolved to the County's satisfaction prior to making the next phase submittal. The County will designate in the review comments if the next submittal will be a resubmittal of the 90% phase submittal or if the plans and supporting calculations are significantly developed to proceed to the Final Submittal.

The Vendor shall provide the documents for 90% phase submittal listed below to the County's Project Manager

90% Phase Submittal

- 1 copy of 11" X 17" plans (all required components)
- 1 copy of signed and sealed geotechnical report
- 1 copy of Technical Special Provisions

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

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

Final Submittal

- 1 set of signed and sealed 11" X 17" plans (all required documents)
- 1 signed and sealed Construction Specifications Package or Supplemental Specifications Package
- 1 of electronic copy of Technical Special Provisions in .pdf format
- 1 copy of all review comments and the EOR's response to those comments

All of the information above shall be submitted electronically in .pdf format.

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

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

Phase II Construction:

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

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

The Vendor's Professional Engineer in responsible charge of the project shall professionally endorse (sign, seal, and certify) the As-Built Plans, the special provisions

and all reference and support documents. The professional endorsement shall be performed in accordance with the FDOT Design Manual.

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

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

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

The Vendor shall furnish to the County, upon Project completion, the following:

- 1 set of 11" X 17" signed and sealed As-Built plans, drawings and Certified Surveys
 - 2 sets of 11 "X 17" copies of the signed and sealed As-Built plans, drawings and Certified Surveys
 - 2 sets of final documentation (if different from final component submittal)
 - 2 sets of survey information, including electronic files and field books
 - Deliver the final CADD.zip in accordance with the FDOT CADD Manual
 - 1 Final Project submittal containing the information above shall be electronic in .pdf format
- **Milestones:**

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

- The Vendor shall submit a proposed component submittal and milestone list within thirty (30) calendar days following issuance of the written Notice to Proceed. The list shall be maintained in an up-to-date manner throughout the course of the project.

Railroad Submittals:

Three sets of the plan sheets listed below are required for review by the railroad company, as applicable. The sets are to be mailed to the County Project Manager or to the FDOT

District Three Rail Administrator, as applicable. 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

H. Project Schedule:

The Vendor shall submit a schedule that allows for up to fifteen (15) calendar days (excluding weekends and County observed Holidays) review time for the County's review of all submittals. Review time will not begin until submittals are deemed complete by the County.

The County will perform the review of Foundation Construction submittals in accordance with Section 455. The minimum number of activities included in the Schedule shall be those listed in the Schedule of Values, and those listed below:

- Anticipated Award Date
- Kickoff meeting with the County
- Submittals
- Component Submittals (if applicable)
- Shop Drawing Submittals
- Other Contractor-Initiated Submittals
- Survey
- Submittal Reviews by the County (and/or FDOT, as applicable)
- Design Review / Acceptance Milestones
- Materials Quality Tracking
- Geotechnical Investigation
- Start of Construction
- Clearing and Grubbing
- Construction Mobilization
- Permit Submittals and Acquisition
- Foundation Design
- Foundation Construction
- Procurement of Materials
- Signalization and Intelligent Transportation System Design
- Signalization and Intelligent Transportation System Construction
- Signalization and Intelligent Transportation System Integration
- Signalization and Intelligent Transportation System Acceptance Testing
- Maintenance of Traffic Design
- Lane Closure Analysis (if applicable)
- Erosion Control

- Holidays and Special Events (non-work days)
- Additional Construction Milestones as determined by the Vendor
- Final Completion Date for All Work

The Vendor shall anticipate and remain available for periodic meetings with County and other agency personnel as required for resolution of project issues. These meetings may include:

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

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

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

The Vendor shall meet with the County's Project Manager at least thirty (30) calendar days before beginning system integration activities. The purpose of these meetings shall be to verify the Vendor'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 Vendor shall identify any concerns regarding the integration tasks and provide detailed information on how such concerns will be addressed and resolved.

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

System Integration Meetings will be held on mutually agreeable dates. Action items resulting from the System Integration Meeting shall be documented and satisfactorily addressed by the Vendor, and reviewed and approved by the County.

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

I. Quality Management Plan (QMP):

1. Phase 1 Design:

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

The Vendor 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 Vendor 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 Vendor, as part of their normal operation or it may be one specifically designed for this Project. The Vendor 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 Vendor shall, without additional compensation, correct all errors or deficiencies in the surveys, designs, drawings, specifications and/or other services.

2. Construction:

The Vendor 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.

J. Schedule of Values:

The Vendor is responsible for submitting estimates requesting payment. Estimates requesting payment will be based on the completion or percentage of completion of tasks as defined in the Schedule of Values. The Vendor shall submit a Schedule of Values to the County for approval. The Schedule of Values shall include line items for project closeout activities and documentation such as Integration, Inspection and Acceptance Testing, As-Built Plans, and other documentation required by the Contract Documents. No estimates requesting payment shall be submitted prior to County approval of the Schedule of Values.

Upon receipt of the estimate requesting payment, the County'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. Final payment will be made upon final acceptance by the County of the Project.

K. 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 FDOT policies and procedures recognized by the County. Furnish As-Built documents for all components of the Project in CADD. It is the responsibility of the Vendor to obtain and utilize current releases of all CADD applications.

The Vendor will be required to furnish the Project's CADD files after the plans have been Released for Construction. The Vendor will be required to submit final documents and files which shall include complete CADD files and coordinate geometry files in MicroStation and/or AutoCAD files format, as specified by the County.

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

L. Construction Engineering and Inspection:

The County is responsible for providing Construction Engineering and Inspection (CEI) and Quality Assurance Engineering services through use of inhouse or contracted personnel.

M. Testing:

At its option, the County 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.

N. Adjoining Construction Projects:

The Vendor shall be responsible for coordinating all design, permitting, and construction activities with other construction projects that are impacted by or impact the Project. This includes projects under the jurisdiction of local governments, FDOT, other regional and state agencies, or private entities.

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

I. Construction Criteria.

A. General:

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

B. Utility Coordination:

The Vendor shall utilize a single dedicated person responsible for managing all utility coordination. This person shall be contractually referred to as the Utility Coordination Manager (UCM). The Vendor shall notify the County 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 FDOT and various local agency standards, policies, and procedures.
2. Knowledge of FDOT and various local agency plans production process and utility coordination practices,
3. Knowledge of FDOT and various local agency agreements, standards, policies, and procedures.

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

1. Ensuring that all utility coordination and activities are conducted in accordance with the requirements of the Contract Documents.
2. Identifying all existing utilities and coordinating any new installations
3. Reviewing proposed utility permit application packages and providing comments based on the compatibility of the permit as related to the Vendor's plans.
4. Scheduling and conducting utility meetings, preparing and distributing minutes of all utility meetings, and ensuring expedient follow-up on all unresolved issues.
5. Distributing all plans, conflict matrices and changes to affected Utility Agency/Owners and making sure this information is properly coordinated.
6. Identifying, preparing, reviewing and facilitating any agreement required for any utility work needed through final approval and execution. The UCM shall also be responsible for monitoring and reporting the performance of all involved parties under said agreement.
7. Preparing, reviewing, approving, signing, and coordinating the implementation of and submitting to the County for review, all Utility Work Schedules.
8. Resolving utility conflicts.
9. Obtaining and maintaining all appropriate "Sunshine 811" tickets as they apply to utility relocation work.
10. Performing Constructability Reviews of plans prior to construction activities with regard to the installation, removal, temporary removal, de-energizing, deactivation, relocation, or adjustment of utilities.
11. Providing periodic Project updates to the County Project Manager and FDOT Utility Office as applicable.

12. Coordination with the County on any issues that arise concerning reimbursement of utility work costs between the County and the utility.

The Vendor's Utility Coordination Manager (UCM) shall consult with the County and FDOT as applicable to identify all Utility Agency/Owners (UAO's) having facilities within the Project limits for which the Vendor contemplates an adjustment, protection, or relocation is possible.

The Vendor may request the utility to be relocated to accommodate changes identified in the design plans; however, these relocations require the County's approval and the County will not pay the Utility Agency Owner (UAO) or the Vendor for the utility relocation work regardless of the UAO's eligibility for reimbursement.

The relocation agreements, plans, work schedules and permit application are to be forwarded to the County and FDOT as applicable for review by the County's Project Manager and FDOT District Three Utility Office (DUO), again as applicable.

C. Design Documentation, Calculations, and Computations:

The Vendor shall submit to the County 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 County. At Project completion, a final set of notes and computations, signed by the Vendor, shall be submitted with the As-Built Plans and tracings.

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

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

D. Specifications:

FDOT Specifications may not be modified or revised. Technical Special Provisions shall be written only for items not addressed by FDOT and County Specifications, and shall not be used as a means of changing FDOT and County Specifications. The Vendor 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 bids were due, along with any approved Developmental Specifications and Technical Special Provisions, that are not part of this ITB. Any subsequent modifications to the Construction

Specifications Package shall be prepared, signed and sealed as a Supplemental Specifications Package. The Specifications Package(s) shall be prepared, signed and sealed by the Vendor's Engineer of Record. Upon review and approval by the County, the Construction Specifications Package will be stamped "Released for Construction" and initialed and dated by the County.

E. Shop Drawings:

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

F. Transportation Management Plan:

The Vendor must develop and implement a Transportation Management Plan for review and approval by the County. The Vendor shall conduct a Lane Closure Analysis in accordance with FDOT requirements should any lane closures be proposed outside the hours of 6:00 AM to 9:00 AM, and 4:30 PM to 6:30 PM. The Lane Closure Analysis documentation shall be submitted to the County for review and approval. In addition, the Vendor shall consult with the County and FDOT to develop a list of special events for review and approval by the County during which no lane closures shall be allowed.

G. Signalization and Intelligent Transportation System Plans:

1. General

The Vendor shall prepare Signalization and Intelligent Transportation Plans in accordance with FDOT and County criteria.

The Vendor shall prepare plans and specifications, and provide additional necessary documentation for the procurement and installation of the Signalization and Intelligent Transportation System devices, as well as overall system construction and integration.

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

- Project Layout / Overview sheets depicting the locations of field elements
- Detail sheets on (as applicable):
 - CCTV structure, CCTV attachment, CCTV operation/layout
 - Fiber optic splice and conduit
 - Power Service Distribution
 - Wiring and connection details
 - Conduit, pull box, and vault installation
 - Communication Hub and Field Cabinets
 - System-level block diagrams
 - Device-level block diagrams
 - Field hub/router cabinet configuration details
 - Fiber optic Splicing Diagrams
 - System configuration/Wiring diagram/Equipment Interface for field equipment at individual locations and communications hubs.
 - Maintenance of Communications (MOC) Plan

The Vendor shall clearly detail existing Signalization and Intelligent Transportation System equipment and reflect which devices will be removed, replaced, or impacted by project work.

2. Engineering Services:

The Vendor shall be responsible for all Signalization and ITS design and engineering services relating to the Project. All Signalization and ITS system components shall be new unless otherwise identified for relocation, subject to approval by the County.

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

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

- Construction of mast arm supports at designated locations previously constructed with spanwire and concrete strain pole supports. New mast arms are to be located in each quadrant of an intersection, with horizontal members oriented perpendicular to their associated approaches (i.e.: no diagonally oriented horizontal mast arm members)
- Replacement of any ITS System components that are impacted by the Vendor's scope of work as approved by the County. All equipment shall be new unless otherwise specified.

- CCTV – Include strategically-placed fully-integrated CCTV at each intersection where new mast arms are being installed.
- Removal of any ITS System components that are impacted by the Vendor’s scope of work as approved by the County.
- Testing of fiber optic backbone and lateral drops furnished and installed or modified by the Vendor.
- Testing of the Intelligent Transportation System.

3. Construction and Integration Services:

The Vendor shall be responsible for all Signalization and ITS construction and integration services relating to the Project.

4. Testing and Acceptance:

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