

9/14/2020

Krysti L. Brotherton, Purchasing Manager
Martin County Board of County Commissioners
2401 SE Monterey Rd., Stuart, FL 34996

RE: RFQ2020-3236 - CONSTRUCTION ENGINEERING & INSPECTION (CEI) SERVICES FOR MURPHY ROAD BRIDGE REPLACEMENT PROJECT - REV 1

Dear Mrs. Brotherton:

As requested, please see the attached scope of services to provide CEI Services for the Murphy Road Bridge Replacement Project.

Our firm specializes in Quality Control and Verification Testing for asphalt, concrete, and earthwork operations under the FDOT Quality Control guidelines. AE is also FDOT LAP certified provider with the expertise ensure the success of your contract.

Our specific CEI services consist of:

- Construction Inspection Services – Site Inspections
- Daily and Weekly Inspection Reports
- Scheduling / Progress Tracking
- Bid Documents Evaluation
- Quality Control & Quality Assurance
- Project Certifications
- Cost Estimating
- Resident Compliance Specialist Services (Payrolls/EEO)

AE Engineering is excited to provide professional services to the County on this contract and future opportunities. Please feel free to contact me to discuss the details of the proposal at your convenience. Thanks again for this important opportunity.

Sincerely,



Roderick Myrick, P.E., President

ESTIMATE OF WORK EFFORT

LAP GRANT FM Project #	438665-1-58-01
CEI Start Date	11/11/2020
CEI End Date	11/26/2021
Construction Start Date	12/1/2020
Construction End Date	11/26/2021
Construction Duration	360
Total Duration (Days)	420
Calendar Months	14.0



ESTIMATE OF WORK EFFORT

Company	Position	2021												2022		Total Man Months	Average Hours Per Week	Total Man Hours	Projected Rates	TOTAL EXPENDITURE		
		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC						JAN	LAP-closure
AE	Senior Project Engineer	0.05	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	1.45	4	239.25	\$ 190.00	\$ 45,457.50
AE	Project Administrator	0.25	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	7.25	20	1,196.25	\$ 150.00	\$ 179,437.50
AE	Asso. Contract Support Specialist / RCS	0.10	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	5.00	14	825.00	\$ 90.00	\$ 74,250.00
AE	Sr. Bridge Inspector	0.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	13.35	40	2,202.75	\$ 110.00	\$ 242,302.50
AE	Bridge Inspector (as needed)	0.00	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	1.20		198.00	\$ 80.00	\$ 15,840.00
Pacifica	Geotechnical Engineer / VT testing	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.55		90.75	\$ 150.00	\$ 13,612.50
Man Month Subtotal		0.50	2.10	2.10	28.80		4,752.00		570,900.000													

Senior Project Engineer	\$ 190.00
Project Administrator	\$ 150.00
Contract Support Specialist	\$ 90.00
Sr. Bridge Inspector	\$ 110.00
Bridge Inspector	\$ 80.00
Geotechnical Engineer / VT testing	\$ 150.00

LABOR TOTAL \$ 570,900.000

GRAND TOTAL \$ 570,900.000

% of Constructio 13.82%

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Scope of Services

The scope of work for this Local Agency Program (LAP) project includes the removal and replacement of the bridge on SW Murphy Road, located over the SFWMD C-23 Canal (approximately 0.17 miles north of SW Island Way on SW Murphy Road). The work will also include some roadway construction work at each end of the bridge.

Subtask 1: Pre-Construction

Description:

- A.** Setup and manage the pre-construction and EEO pre-work meetings with the contractor, subs, stakeholders, utility companies and government agencies. Ensure that all key stakeholders can attend or provide virtual access.
- B.** Attend the preconstruction meeting, record, create and distribute the meeting minutes and EEO data collections to begin the construction Phase.
- C.** Coordinate public outreach with the contractor. Including and not limited to attendance to coordination meetings with the public, issuance of informational notices and posting of proper signage as needed along the R/W. Ensure proper approach and coordination with the stakeholders and residents impacted by the construction activities along the canal and adjacent communities.

Deliverable:

- Preconstruction meeting minutes, EEO meeting minutes and fulfillment of utility meeting coordination with utility and property owners. Public outreach and project kickoff notices distributed as approved by Owner.

Performance Measure: Deliverables will be reviewed by the Owner to confirm they are complete, accurate, and timely.

Subtask 2: Construction

Description:

- A.** From Pre Construction meeting to substantial Completion Perform Site Visits to observe construction progress resulting in monthly site/progress logs, which report to the owner such data as the time of arrival, observations regarding construction progress and/or contractor or subcontractor performance, photo of progress and /or concerns, and time of departure. Other duties shall include:
 - Daily Work Report and Monthly Updates
 - Shop drawing/Submittal review
 - Review and respond to request for information (RFI) from contractor.
 - Review and negotiate change orders and plan modifications with contractor on behalf of the County and coordinate such change orders with FDOT. Ensure proper procedures and applicability of the contract provisions and claims that should arise during construction.
 - Schedule of values review/comments.
 - Contractor Delivery Schedule review and comment.

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- Pile Driving Test Program coordination with County QC – Pre pile drive meeting
 - Documentation that concrete is produced from National Ready-Mixed Concrete Association (NRCA) or FDOT certified plant per LAP Specifications.
 - Documentation that asphalt is produced from FDOT certified plant, per LAP Specification.
 - Documentation of Straight Edge tests.
 - Weekly VT density logbook for earthwork, backfill, drainage piping, etc.
 - Weekly VT density logbook for Proctors and soil classifications.
 - Collect asphalt tickets with all noted items pursuant to LAP Sheet.
 - Utilities coordination (Water, Sewer, Electric, etc.) - Consultant shall coordinate with the County to conduct a Utility Design Meeting with the involved Utility Agency/ Owners.
 - Verify and collect all results from Contractor field test.
- B.** Ensure the Contractor has access to the Equal Opportunity Compliance (EOC) system.
- C.** Ensure the Local Agency has given access to the GAP/LAPIT or the successor GAP system to the assigned RCS.
- D.** Periodic collection of forms and data from the contractor and review of/ comment on same, ensure all information has been uploaded to GAP/GAP/LAPIT, and/or the EOC as applicable, which may include but not be limited to:
- All forms applicable for the County full compliance with the LAP contract requirements
 - Verify DBE firms in the EOC and ensure they have been entered into the EOC (Equal Opportunity Compliance Program) by the contractor.
 - Collect/review and ensure the Bid Opportunity List has been uploaded to GAP/GAP/LAPIT program by the RCS and have been entered into the EOC program by the contractor. Also ensure all additional subs have been updated on the form and have been uploaded to GAP/GAP/LAPIT and entered the EOC.
 - Collect/review FDOT Form 700-010-36, Certification of Sublet Work, and ensure it has been uploaded to GAP/LAPIT program by the RCS and have been entered into the EOC program by the contractor. Also ensure revisions have been added upon additions of subcontractors (all tiers).
 - Collect/review subcontract agreements/Purchase Order and ensure that FHWA 1273 Required Contract Provisions for Federal Aid Construction is inserted, in its entirety, in all contractor agreements including each subcontract and any lower tier subcontract or purchase order that may in turn be made.
 - Collect /review rental agreements for compliance with FHWA.
 - Collect Jobsite Board inspection (monthly) FDOT Form 275-021-10.
 - Obtain EEO Officer FDOT Form No 275-021-13, for contractor and subs at \$10,000.00 and above, and collect approval/registration letter of EEO Officer from EEO office in Tallahassee.
 - Collect contractors' and subcontractors Annual July Reports, if applicable.
 - Conduct a minimum of 4 hours average per working day – inspector assistance should be coordinated upon establishment/approval of the contractor construction baseline schedule
- E.** Generation of reports, which may include, but not limited to:

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- Verification of NPDES Reports.
 - Building Permits and water management district permit monitoring reports.
 - Maintenance of Traffic Reports.
 - Material Testing reports and documentation.
- F. Conduct/attend meeting relative to project. Which may include, but not limited to:**
- Owner's Monthly- monitoring meeting regarding the contractor's schedule and progress (Frequency can be change/adjusted at the owner's convenience)
 - Construction operations progress meeting. The Inspector will hold a weekly meeting with the contractor field competent person an issue a weekly update.
 - Perform required Employee Interviews Report Labor/EEO complaint FDOT Form No 700-010-63, frequency as per contract amount, as outlines in EEO Compliance Workbook.
 - Conduct site inspections and generate report and photographic log of the work in progress. Inspections
 - Periodic and continuous inspections of the project as the work being performed to ensure contractor's compliance with the project plans, permits and specifications.
 - Review Water Conveyance Package which includes final pressure testing reports, bacteriological testing, as-builts and the Engineer of Record certifications of the new watermains with the Health Department.
 - Inspect the project's site layout survey prior to clearing operation.
 - Inspect the clearing operation, contouring of the trail and its storm water swales.
 - Inspect any utilities associated with the project, whether protecting existing utility lines or installing new.
 - Inspect the preparation of the subbase materials, obtain all test results, direct the contractor to perform additional test as needed, if the area is in question.
 - Inspect installation of the base materials; verify the materials origin (from an FDOT approved source). Obtain all test results; perform additional tests as needed if the areas are in question.
 - Inspect paving operations, verify the material origins (from an FDOT approved source), and obtain all test results.
 - Inspect pile driving operations, verify that PDA driving criteria has been met for all piles installed
 - Ensure the contractor compliance with the Buy America requirements per applicable contract specifications.
 - Inspect paving operation, according to FDOT Standards.
 - Inspections may include but not be limited to the installation of sod, landscaping seed, and mulch, fences, signage, signing and pavement markings as applicable in the contract documents.
 - Attending substantial completion inspection and generating a list of punch list items.
 - Attending Final Walkthroughs with all stakeholders and provide Final acceptance certification.
- G. Collect/review documentation for processing contractors pay applications, which may include but not limited to:**
- Certification Disbursement of Periodic payment to Subcontractors, FDOT from No: 700-010-38.

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- Obtain copies of payrolls to verify Davis Bacon Wages/ Consultant will verify that all job classifications are on the approved bid list of job classification and that all rates meet or exceed those rates.
- Certified payrolls form, FDOT Form No: 700-010-69.
- If there are payroll violations, FDOT Form No: 700-010-59.
- Construction Compliance with specification and plans, FDOT Form No: 700-020-02.
- Compile contractor invoices and review to confirm adequate support is received for quantities paid and ensure that invoice amounts match construction activities to date.
- Provide photographs for each pay request to documents complete work (2 copies).

Deliverable: Monthly report and form package (Include copies of all reports and logs generated, documents received from the contractor forms that may be applicable or the work done during the preceding month, meeting minutes and comments and approvals of any reviewed documents.)

Performance Measure: Deliverables will be reviewed by the Department to confirm they are complete, accurate, and timely.

Subtask 3: Project Close Out

Description:

- A.** Collect forms and data from the contractor relative to the project completion. Forms and data may include, but not limited to:
- Substantial completion inspection/punch list closeout.
 - Document final measure items on the as-built plans.
 - Provide project statement certifying materials on the project upon completion.
 - Assist in completion of Final Inspection Acceptance of Federal Aid Project, FDOT Form No: 525-010-42 (to be completed and signed by the Project Administrator, with a project description, and actual construction cost).
 - Record of Final Plans, FDOT Form No: 700-050-28 and Form No. 525-010-42.
 - Statement of Materials Certifications, with documentation that all deficiencies have been addressed.
 - Explanation of Liquidated Damages (State number of days assessed and damage amount per day with totals).
 - Certify as-built drawings submitted by the contractor.
 - Close-out the associated Health Department permits.
 - Close-out the associated water management district permits with Martin County Environmental.
 - Close-out of project environmental local permit with Martin County Environmental.
- Track total payments to the DBE and non-DBE firms for FDOT Closeout.
- Obtain Substantial completion and final completion forms.
- B.** Collect forms and data from the contractor relative to project completion for project closeout. Forms and data may include, but may not be limited to:
- Signalization & Lighting Items.
 - Locate on as-built plans- track changes on as built.
 - Coordinate inspection and approval by appropriate maintaining agency.
 - Coordinate proper transfer to maintaining agency.
 - Striping/Pavement Marking/Signing.
 - Retro-reflectivity reading certification, FDOT Form No: 700-050-70.
 - Submit signed and sealed set of plans to FDOT District If revisions to plans have been made, submit revised sign, and sealed and dated plans by the Professional Engineer.

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- Provide final estimates of quantities.
- Provide documentation of coordination with FDOT maintenance unit for punch list inspection.
- Obtain copies of all materials certifications and upload to GAP/LAPIT program by the RCS.
- Obtain copies of all pay applications and final estimates and upload to GAP/LAPIT program by the RCS.

Deliverable:

- Final Inspection report and Project Close Out Package. Provide AE certification that the project was completed per the approved plans and specifications.

Performance Measure: Deliverables will be reviewed by the Department to confirm they are complete, accurate, and timely.

Project Schedule:

Activity	Duration (Calendar Days)
Subtask 1:	30 Days
Subtask 2:	360 Days
Subtask 3:	30 Days