

**EXHIBIT "A"**

**CONSTRUCTION ENGINEERING AND INSPECTION**

**SCOPE OF SERVICES**

**FOR**

**CEI FOR TRAFFIC OPERATIONS PUSH BUTTON PROJECTS - CONTINUING**

**Financial Project ID: TBD**

**Federal Project No.: TBD**

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**SCOPE OF SERVICES**  
**CONSTRUCTION ENGINEERING AND INSPECTION**

**1.0 PURPOSE:**

This scope of services describes and defines the Construction Engineering and Inspection (CEI) services which are required on various construction projects in District Seven listed below. The services to be provided under this agreement will be provided on an as needed basis using Task Work Order issued by the Department. The Task Work Order will define the project on which the services will be provided and the date the services are authorized to begin.

**2.0 SCOPE:**

Provide services as defined in this Scope of Services, the referenced Department manuals, and procedures.

The projects for which the services are required are:

Financial Project ID: TBD

Descriptions: Construction Engineering and Inspection for Traffic Operations  
Push Button Projects (Signalization, Intersection Lighting and  
Improvements, Median Modifications, and Minor Intermodal  
Improvements) - Continuing

County: Citrus, Hernando, Hillsborough, Pasco, Pinellas

Other projects may be added to this contract.

Services provided by the Consultant shall comply with Department manuals, procedures, and memorandums. Such Department manuals, procedures, and memorandums are found at the State Construction Office's website.

On a single Construction Contract, it is a conflict of interest for a professional firm to receive compensation from both the Department and the Contractor either directly or indirectly.

Consultant staff will be required to travel and shall have and maintain a valid U.S. Driver's License. The license for each consultant staff member must be submitted to the Department prior to beginning any of the services under this agreement. The license will be reviewed by the Department on an annual basis.

Consultant staff will be required to travel to construction work sites, as well as other locations to perform the duties and responsibilities under this agreement. Other projects developing within the geographical area of Citrus, Hernando, Hillsborough, Pasco, and Pinellas Counties may be added at the Department's discretion. Ensure performance of the staff assigned to the contract. Remove or discipline staff as requested by the Department to ensure a satisfactory and professionally run program.

### **3.0 LENGTH OF SERVICE:**

The services for each Construction Contract shall begin upon issuance of a Task Work Order and written notification to proceed by the Department.

While no personnel shall be assigned until written notification by the Department has been issued, the Consultant shall be ready to assign personnel within 14 calendar days of notification.

### **4.0 DEFINITIONS:**

- A. Agreement: The Professional Services Agreement between the Department and the Consultant setting forth the obligations of the parties thereto, including but not limited to the performance of the work, furnishing of services, and the basis of payment.
- B. Contractor: The individual, firm, or company contracting with the Department for performance of work or furnishing of materials.
- C. Construction Contract: The written agreement between the Department and the Contractor setting forth the obligations of the parties thereto, including but not limited to the performance of the work, furnishing of labor and materials, and the basis of payment.
- D. Construction Project Manager: The Department employee assigned to manage the Construction Engineering and Inspection Contract and represent the Department during the performance of the services covered under this Agreement.
- E. Construction Training/Qualification Program (CTQP): The Department program for training and qualifying technicians in Aggregates, Asphalt, Concrete, Earthwork, and Final Estimates Administration. Program information is available at CTQP website.
- F. Consultant: The Consulting firm under contract to the Department for administration of CEI services.
- G. CEI Consultant Engineer: The employee assigned by the Consultant (if applicable) to be in charge of providing Construction Inspection Contract administration services for the Consultant Inspection Contract.
- H. CEI Resident Compliance Specialist: The employee assigned by the Consultant to oversee project specific compliance functions.
- I. District Construction Engineer: The administrative head of the District's Construction Offices.
- J. District Contract Compliance Manager: The administrative head of the District Contract Compliance Office.

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- K. District Consultant CEI Manager: The Department employee assigned to administer the Consultant Construction Engineering and Inspection (CCEI) Program in the District.
- L. District Director of Transportation Operations: The Director of Construction, Maintenance, Traffic Operations, Materials, and Safety.
- M. District Final Estimates Manager: The administrative head of the District Final Estimates Office.
- N. District Procurement Services Manager: The administrative head of the District Professional Services Office.
- O. District Secretary: The Chief Executive Officer in each of the Department's eight (8) Districts.
- P. Districtwide Contract Compliance Specialist Consultant: The Consultant hired under a separate agreement with the Department to ensure contractors comply with the requirements of the Federal Highway Administration and USDOL.
- Q. Engineer of Record: The Engineer noted on the Construction plans as the responsible person for the design and preparation of the plans.
- R. Operations Engineer: The Engineer assigned to a particular County or area to administer Construction and Maintenance Contracts for the Department.
- S. Project Engineer/Project Administrator: Department employee(s) assigned to construction projects that utilize the services provided through this Construction Inspection Contract. The Construction Project Manager may also fill the role as a Project Engineer/Project Administrator for assigned projects.
- T. Public Information Office: The Department's office assigned to manage the Public Information Program.
- U. Resident Engineer: The Engineer assigned to a particular County or area to administer Construction Contracts for the Department.
- V. Complex Category Two (CC2) Bridge Structures: Bridge structures that are complex and require advanced designs and construction engineering and inspection. A full definition is provided in the FDOT Design Manual.

## **5.0 ITEMS TO BE FURNISHED BY THE DEPARTMENT TO THE CONSULTANT:**

- A. The Department, on an as needed basis, will furnish the following Construction Contract documents for each project. These documents may be provided in either paper or electronic format.
  - 1. Construction Plans,

2. Specifications Package,
  3. Computer Aided Drafting and Design (CADD) Files
  4. Copy of the Executed Construction Contract
  5. Utility Agency's Approved Material List (if applicable).
- B. The Department will allow connection to the FDOT Network by the Consultant through either dialup communications, authorized Virtual Private Network (VPN) or approved leased lines. Appropriate approvals must be received from the Department prior to their use.
- C. The Department will furnish and support the software packages for AASHTOWare Project Construction (PrC) or any subsequent system.

## **6.0 ITEMS FURNISHED BY THE CONSULTANT:**

### **6.1 Department Documents:**

All applicable Department documents referenced herein shall be a condition of this Agreement. All Department documents, directives, procedures, and standard forms are available through the Department's Website or through the District.

### **6.2 Office Automation:**

Provide all software and hardware necessary to efficiently and effectively carry out the responsibilities under this Agreement.

Provide each inspection staff with a laptop computer (or tablet) running PrC or any subsequent application through Citrix connection using a mobile broadband connection at the jobsite.

All computer coding shall be input by Consultant personnel using equipment furnished by them.

All informational, contractual and other business required for this project will be through a system of paperless electronic means. When the specifications require a written submission of documentation, such documents must be submitted electronically.

All documents requiring a signature must be executed electronically by both parties in accordance with Chapter 668, Florida Statutes, and have the same force and effect as a written signature. The Department will provide a web-based collaboration site to facilitate the electronic document exchange. All persons requiring access to the collaboration site shall be identified during the preconstruction conference. All persons that normally sign paper documents, and will be using the site, must acquire digital signature certificates.

Ownership and possession of computer equipment and related software, provided by the Consultant shall remain with the Consultant at all times. The Consultant shall retain responsibility for risk of loss or damage to said equipment during performance of this Agreement. Field office equipment shall be maintained and operational at all times.

**6.3 Vehicles:**

Equip vehicles with appropriate safety equipment to effectively carry out the requirements of this Agreement. Vehicles shall have the Consultant's name and phone number visibly displayed on both sides of the vehicle.

**6.4 Field Equipment:**

Supply survey, inspection, and testing equipment essential to perform services under this Agreement; such equipment includes non-consumable and non-expendable items.

Hard hats and safety vests shall have the Consultant's name visibly displayed.

Equipment described herein and expendable materials under this Agreement will remain the property of the Consultant and shall be removed at completion of the work.

Handling of nuclear density gauges shall be in compliance with license requirements.

Retain responsibility for risk of loss or damage to said equipment during performance of this Agreement. Maintain field office equipment at all times.

**6.5 Licensing for Equipment Operations:**

Obtain proper licenses for equipment and personnel operating equipment when licenses are required. The license and supporting documents shall be available for verification by the Department, upon request.

Radioactive Materials License for use of Surface Moisture Density Gauges shall be obtained through the State of Florida Department of Health.

**7.0 LIAISON RESPONSIBILITY OF THE CONSULTANT STAFF:**

The Department's Construction Project Manager or Project Engineer/Project Administrator assigned to an individual project will be in Responsible Charge and will receive inspection reports and other correspondence for that project from assigned consultant inspection staff related to its responsibilities under this Agreement.

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Inform the designated Department project personnel of any design defects, reported by the Contractor or observed by the Consultant.

Submit all administrative items relating to Invoice Approval, Personnel Approval, User IDs, Time Extensions, and Supplemental Amendments to the Construction Project Manager for review and approval.

## **8.0 PERFORMANCE OF THE CONSULTANT:**

During the term of this Agreement, the Department will review the Consultant operations to determine compliance with this Agreement. Cooperate and assist Department representatives in conducting the reviews. If deficiencies are indicated, immediately implement remedial action. Document the Department's recommendations and Consultant's responses/actions. No additional compensation shall be allowed for remedial action taken by the Consultant to correct deficiencies. Remedial actions and required response times may include but are not limited to the following:

- A. Further subdivide assigned inspection responsibilities, reassign inspection personnel, or assign additional inspection personnel, within seven (7) calendar days of notification.
- B. Immediately replace personnel whose performance has been determined by the Consultant and/or the Department to be inadequate.
- C. Immediately increase the frequency of monitoring and inspection activities in phases of work that are the Consultant's responsibility.
- D. Increase the scope and frequency of training of the Consultant personnel.

## **9.0 REQUIREMENTS OF THE CONSULTANT:**

### **9.1 General:**

Administer, monitor and inspect the Construction Contract such that the project is constructed in conformance with the plans, specifications, and special provisions for the Construction Contract.

Observe the Contractor's work to determine the progress and quality of work. Identify discrepancies, report significant discrepancies to the Department, and direct the Contractor to correct such observed discrepancies.



Inform the designated Department project personnel of any significant omissions, substitutions, defects, and deficiencies noted in the Contractor's work and the corrective action that has been directed to be performed by the Contractor.

**9.2 Independent Engineering Judgment:**

Exercise independent engineering judgment in pursuit of the project. Personnel are expected to gather information from project inspection personnel and make informed, technically sound decisions to promote timely, successful completion of the project without sacrificing quality. For technical issues which require coordination with the Department, all levels of CEI Project Engineer shall be expected to present options for consideration along with a preferred option. Engineering experience and expertise are considerations for the selection of Consultant staff. It is the Department's expectation that this experience and expertise will be employed by Consultant staff to make sound engineering judgments and recommendations throughout the project.

**9.3 Public Safety:**

Hold public safety paramount throughout the project. If the Consultant determines that any activity of the Contractor poses an imminent hazard to the public, the Consultant shall direct the Contractor to immediately cease the activity and to close the affected lanes of traffic until the deficiency is addressed.

**9.4 Timely Resolution:**

Prioritize the Department's goal of the timely and successful completion of the project. Work to actively develop solutions to issues encountered on the project in an expedient manner and work to ensure that issues do not persist for long periods without resolution.

**9.5 On-site Inspection:**

Monitor the Contractor's on-site construction activities and inspect materials in accordance with the Contract Documents for the Construction Contract to determine that the projects are constructed in reasonable conformity with such documents. Maintain detailed accurate records of the Contractor's daily operations and of significant events that affect the work. The Department will monitor off-site activities and fabrication unless otherwise stipulated by this Agreement.

Monitor and inspect Contractor's Temporary Traffic Control Plan and review modifications to the Temporary Traffic Control Plan, including Alternate Traffic Control Plan, in accordance with the Department's procedures. Consultant employees performing such services shall be qualified in accordance with the Department's procedures.

Perform underwater bridge construction inspections of bridges with permanently submerged structural members in compliance with CPAM Section 10.6, Underwater Bridge Construction Inspection.

#### **9.6 Sampling and Testing:**

Perform sampling and testing of component materials and completed work in accordance with the Contract Documents. The minimum sampling frequencies set out in the Department's Materials Sampling, Testing and Reporting Guide shall be met. In complying with the guide, provide daily surveillance of the Contractor's Quality Control activities and perform the sampling and testing of materials and completed work items for verification and acceptance.

The Department will perform inspection and sampling of materials and components at locations remote from the project site and the Department will perform testing of materials normally performed in a laboratory remote from the project site.

Determine the acceptability of all materials and completed work items based on either test results or verification of a certification, certified mill analysis, DOT label, DOT stamp, etc.

The Department will monitor the effectiveness of the Consultant's testing procedures through observation and independent assurance testing.

Sampling, testing and laboratory methods shall comply with the Contract Documents.

Prepare and submit sampling and testing documentation reports to the Department the same week that the construction work is performed.

Transport samples to be tested in a Department laboratory to the appropriate laboratory or appropriate local FDOT facility- within 24 hours after the initial cure. The Project Administrator will provide the VT Laboratory ID number for sample delivery. Transmittal card must accompany the sample. A chain of custody (if provided by the VT firm) must be signed by the CCEI and VT representatives for sample tracking purposes and maintained by both the CCEI and VT firms.

Input verification testing information and data into the Department's Materials Acceptance and Certification (MAC) database within 24 hours of sampling using written instructions provided by the Department.

#### **9.7 Engineering Services:**

Assist in coordinating the Construction Contract inspection activities of all parties other than the Contractor involved in completing the construction project.

Services shall include maintaining the required level of surveillance of Contractor activities and interpreting the Contract Documents for the Construction Contract.

Maintain complete, accurate records of all activities and events relating to the project and properly document all project changes. The following services shall be performed:

- (1) Attend a pre-service meeting for the Agreement in accordance with CPAM. Provide appropriate staff to attend and participate in the pre-service meeting. At the time of this meeting submit the FDOT Computer Security Access Request for use of FDOT Data Center Facilities and access to the Department's computer systems to the Construction Project Manager for approval.
- (2) Schedule and coordinate a Final Estimate informational meeting with the District Construction Final Estimates Office. Provide appropriate staff to attend and participate in this meeting.
- (3) The Department will provide Community Outreach Services.
- (4) Provide a digital camera for photographic documentation of pre-construction state and of noteworthy incidents or events during construction. Provide photos to Project Administrator weekly or upon request.

#### **9.8 Geotechnical Services:**

Become familiar with the existing site conditions and the Construction Contract documents. Observe and record the progress and quality of foundation work to determine that the foundations are constructed at the correct location and elevation, identify discrepancies, submit monthly progress reports to the District Geotechnical Engineer and direct the Contractor to correct such observed discrepancies. Attend the pre-services meeting for the Construction Contract. All services under this section will be performed in accordance to FDOT Specification Section 455. The Geotechnical Engineer will provide the following services with the assistance of a qualified inspector who has completed the FDOT Drilled Shaft/Pile Driving Qualification Courses.

- (l) Drilled Shafts:
  - a) Review the drilled shaft installation plan submitted by the Contractor for materials, methods, equipment, etc., and provide recommendations to the Department within five (5) working days of the Contractor's submission.
  - b) Observe installation of test hole (methods shaft(s)) such that it is constructed in accordance with the plans, specifications, and special provisions for the Construction Contract. The Consultant shall report on the adequacy of the Contractor's methods within three (3) working days of completion of the test hole (methods shaft(s)) construction.

- c) Observe construction of test holes, load test shafts, and production shafts. This includes review of testing of drilling slurry, core drilling and core logs, and other procedures as required.
- d) Inspect the bottom of the shafts for cleanliness using manual soundings or shaft inspection device as required in the contract documents.
- e) Provide all necessary forms and keep a log of all inspections made of the shafts. These logs made during the shaft inspections shall be turned over to the Department within three (3) working days after completion of any shaft.
- f) When conditions occur, which are different from those indicated on the plans, they shall immediately be reported to the Project Administrator and District Geotechnical Engineer.
- g) Evaluate problems encountered during construction and coordinate with the Project Administrator and District Geotechnical Engineer to resolve such problems.

(2) Piles:

- a) Review Contractor's Pile Installation Plan and provide comments to the Senior Project Engineer and to the District Geotechnical Engineer within five (5) working days of the Contractor's submittal.
- b) Ensure dynamic testing is performed (per the Contract documents and when deemed necessary by the District Geotechnical Engineer) during initial driving and re-drives.
- c) When monitoring the test pile driving process, determine proper fuel settings, thickness of pile cushions and when they need changing. Record all pertinent information that is needed to determine the driving criteria such as jetting, preforming, pre-drilling, reference elevation, hammer serial number, hammer cushion material and thickness, pile cushions material and thickness, etc. This information shall be provided to the District Geotechnical Engineer within 24 hours after the test pile driving process is completed. In most cases this information will be

**10.0 PERSONNEL:**

**10.1 General Requirements:**

Provide prequalified personnel necessary to carry out its responsibilities efficiently and effectively under this Agreement. Method of compensation for personnel assigned to this project is outlined in Exhibit "B."

**Unless otherwise agreed to by the Department, the Department will not compensate straight overtime or premium overtime unless approved in advance of the work.**

## **10.2 Personnel Qualifications:**

Provide competent personnel qualified by experience and education. Submit to the Construction Project Manager the names of personnel proposed for assignment to the project, including a detailed resume for each containing at a minimum: certifications, TIN number, education, and experience. The Consultant Action Request Form (ARF) along with any needed electronic access approval requests for personnel approval shall be submitted to the Construction Project Manager at least 14 calendar days prior to the date an individual is to report to work.

Personnel identified in the Consultant technical proposal are to be assigned as proposed and are committed to performing services under this Agreement. Personnel changes will require written approval from the Department. Staff that has been removed shall be replaced by the Consultant within seven (7) calendar days of Department notification.

Minimum qualifications for the Consultant personnel are set forth as follows:

Exceptions to these minimum qualifications will be considered on an individual basis. For CTQP certifications which require training specifically developed for Department specifications, the Consultant may propose project staff possessing an equivalent certification from a national or other state DOT accreditation program. These exceptions may be granted under the stipulation that the appropriate CTQP certification be obtained prior to the corresponding work activity, or such other time as approved by the District Construction Engineer. The District Construction Engineer or designee shall have the final approval authority on such exceptions.

Except as noted herein, before the project begins, all project staff shall have a working knowledge of the current CPAM and must possess all the necessary qualifications/certifications for fulfilling the duties of the position they hold. Cross training of the Consultant's project staff is highly recommended to achieve a knowledgeable and versatile project inspection team but shall not be at any additional cost to the Department and should occur as workload permits. Visit the training page on the State Construction Office website for training dates.

### **CEI CONSULTANT ENGINEER – LICENSURE:**

- Professional Engineer (PE) registered in the State of Florida
  - Ability to obtain endorsement in the State of Florida within six months of Project NTP if registered in another state

### **EXPERIENCE:**

- Two (2) years of engineering experience in relevant transportation projects
  - Exception for Complex Category 2 (CC2) and PTS bridge structures:
    - Five (5) years of general bridge construction CEI experience

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- Two (2) of those years of which must have been involved with the type of CC2 bridge construction project for which CEI services are being provided by this scope
  - In addition, a minimum of Twelve (12) months of experience must be as the Project Administrator/Project Engineer in primary control of the type CC2 construction project for which CEI services are being provided by this scope.
  - To be in primary control, a Project Administrator/Project Engineer must have supervised two or more inspectors as well as two or more support staff (Office Manager, Resident Compliance Specialist, and Secretary) and must have been directly responsible for all CEI services assigned.
  - CPTS years of experience must have included a minimum of Twelve (12) months experience in each of the following areas: (1) casting yard operations and related surveying; (2) segment erection and related surveying, post-tensioning (PT) of tendons and grouting of prestressing steel.
  - CPTCB years of experience must include monitoring of the following: girder erection, safe use of girder erection cranes, stabilization of girders after erection, false work for temporary girder support, and PT and grouting operations.
  - PTS years of experience must include monitoring of the following: installation of PT ducts and related hardware and post-tensioning and grouting of strands or be the level of experience that meets the criteria for CPTS or CPTCB bridges.
  - MB years of experience must have been in MB mechanical and/or electrical construction.
  - Post-tensioning experience is not required for precast prestressed concrete flat slab superstructures.
- A Master's Degree in Engineering may be substituted for one (1) year engineering experience.

#### QUALIFICATIONS/CERTIFICATIONS:

Must have the following as required by the scope of work for the project at the time of NTP:

- CTQP Quality Control Manager (Attend and pass the examination)
- CTQP Final Estimates Level II
- FDOT Advanced MOT
- Attend a FDOT accredited post-tensioning training course and pass the examination (for post-tensioned CC2 projects)
- Attend a FDOT accredited grouting training course and pass the examination (for post-tensioned CC2 projects)

Recommended when the scope of the project includes concrete pavement, grinding concrete pavement, or concrete pavement slab replacement. Courses are available from the Transportation Curriculum Coordination Council (TC3).

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- PCC Paving Inspection (TC3CN004-15-T1)
- Diamond Grinding and Grooving (TC3MN009-15-T1)
- Curing, Sawing and Joint Sealing (TC3CN032-16-T1)

**ABILITIES/RESPONSIBILITIES:**

- Responsible for: Performing Quality Assurance reviews
- Responsible for: Monitoring the performance of assigned inspectors on a semi-annual basis by reviewing all project records prepared by CEI inspection staff assigned to projects
- Responsible for: Preparing a report of the Quality Assurance Review for approval of the Construction Project Manager
  - Reports should address inspector compliance with Department specifications, procedures, and accuracy of data being collected

**CEI PROJECT ADMINISTRATOR/PROJECT ENGINEER -**

**EDUCATION:**

- High School Diploma or Equivalent

**LICENSURE (FOR CEI PROJECT ENGINEER):**

- Professional Engineer (PE) registered in the State of Florida
  - Must obtain endorsement in the State of Florida within six (6) months of Project NTP if registered in another state

**EXPERIENCE:**

For personnel with Engineering, Engineering Technology or Construction Management degrees:

- Two (2) years of engineering experience in relevant transportation projects.
- A Master's Degree in Engineering, Engineering Technology, or Construction Management may be substituted for one (1) year of engineering experience

For personnel without Engineering, Engineering Technology or Construction Management degrees:

- Eight (8) years of CEI or roadway or bridge construction experience,
- Two (2) of those years involved in relevant transportation projects.

**QUALIFICATIONS/ CERTIFICATIONS:**

Qualifications/certifications for this position may be obtained within six (6) months from the date of hire provided that this position works under the supervision and direction of a Senior Project Engineer, all other requirements for the position are met, and a training plan is submitted detailing when the qualifications/certifications will be obtained.

- FDOT Advanced MOT
- CTQP Final Estimates Level II

- CTQP Quality Control Manager (Attend and pass the examination)

**ABILITIES/ RESPONSIBILITIES:**

- Ability to: Communicate effectively in English (verbally and in writing)
- Responsible for: Receiving general instructions regarding assignments and exercising initiative and independent judgment in the solution of work problems.
- Responsible for: Directing and assigning specific tasks to administrative and field staff and assisting in all phases of the construction project.
- Responsible for: Progress estimates and final estimates throughout the construction project duration.

**CEI ASSISTANT PROJECT ADMINISTRATOR/PROJECT ENGINEER –**

A Civil Engineering degree plus one (1) year of engineering experience in construction of major road or bridge structures, or for non-degreed personnel six (6) years of responsible and related engineering experience, two (2) years of which involved construction of major road or bridge structures with the exception of Complex Category 2 (CC2) bridge structures.

**QUALIFICATIONS:**

CTQP Final Estimates Level II

**CERTIFICATIONS:**

FDOT Intermediate MOT

**CEI SENIOR INSPECTOR**

**EDUCATION:**

- High school graduate or equivalent

**EXPERIENCE:**

- Four (4) years of CEI experience in roadway or bridge construction

**QUALIFICATIONS/ CERTIFICATIONS:**

Must have the following as required by the scope of work for the intended assignment on the project at the time of NTP:

- CTQP Final Estimates Level I
- CTQP Concrete Field Technician Level I
- CTQP Concrete Field Inspector Level II (Bridges)
- CTQP Asphalt Roadway Level I
- CTQP Asphalt Roadway Level II
- CTQP Earthwork Construction Inspection Level I
- CTQP Earthwork Construction Inspection Level II
- CTQP Pile Driving Inspection
- CTQP Drilled Shaft Inspection



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- Required for inspection of all drilled shafts including miscellaneous structures such as sign structures, lighting structures, and traffic signal structure foundations
- FDOT Intermediate MOT
- IMSA Traffic Signal Inspector Level I
- Nuclear Radiation Safety
- Florida Stormwater, Erosion, and Sedimentation Control Training and Certification Program for Inspectors and Contractors

Recommended when the scope of the project includes concrete pavement, grinding concrete pavement, or concrete pavement slab replacement. Courses are available from the Transportation Curriculum Coordination Council (TC3).

- PCC Paving Inspection (TC3CN004-15-T1)
- Diamond Grinding and Grooving (TC3MN009-15-T1)
- Curing, Sawing and Joint Sealing (TC3CN032-16-T1)

**ABILITIES/ RESPONSIBILITIES:**

- Ability to: Communicate effectively in English (verbally and in writing)
- Responsible for: Performing highly complex technical assignments in field surveying and construction layout, marking, and checking engineering computations, inspecting construction work, and conducting field tests
- Responsible for: Coordinating and managing the lower level inspectors
- Responsible for: Performing work under the general supervision of the Project Administrator

**SENIOR ENGINEER INTERN –**

**EDUCATION:**

- Engineering or Engineering Technology degree
- Senior Engineer Intern classification requires an EI certificate.

**EXPERIENCE:**

- One (1) year of CEI experience in construction of roadway or bridge structures

**QUALIFICATIONS/ CERTIFICATIONS:**

Must have the following as required by the scope of work for the intended assignment on the project at the time of NTP:

- CTQP Final Estimates Level I
- CTQP Concrete Field Technician Level I
- CTQP Concrete Field Inspector Level II (Bridges)
- CTQP Asphalt Roadway Level I
- CTQP Asphalt Roadway Level II
- CTQP Earthwork Construction Inspection Level I
- CTQP Earthwork Construction Inspection Level II
- CTQP Pile Driving Inspection
- CTQP Drilled Shaft Inspection

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- Required for inspection of all drilled shafts including miscellaneous structures such as sign structures, lighting structures, and traffic signal structure foundations
- FDOT Intermediate MOT
- IMSA Traffic Signal Inspector Level I
- Nuclear Radiation Safety
- Florida Stormwater, Erosion, and Sedimentation Control Training and Certification Program for Inspectors and Contractors

Recommended when the scope of the project includes concrete pavement, grinding concrete pavement, or concrete pavement slab replacement. Courses are available from the Transportation Curriculum Coordination Council (TC3).

- PCC Paving Inspection (TC3CN004-15-T1)
- Diamond Grinding and Grooving (TC3MN009-15-T1)
- Curing, Sawing and Joint Sealing (TC3CN032-16-T1)

**ABILITIES/ RESPONSIBILITIES:**

- Ability to: Communicate effectively in English (verbally and in writing)
- Responsible for: Performing highly complex technical assignments in field surveying and construction layout, marking, and checking engineering computations, inspecting construction work, and conducting field tests
- Responsible for: Coordinating and managing the lower level inspectors
- Responsible for: Performing work under the general supervision of the Project Administrator

**CEI INSPECTOR**

**EDUCATION:**

- High School Diploma or Equivalent

**EXPERIENCE:**

- Two (2) years of experience in construction inspection,
  - One (1) year of which shall have been in bridge and/or roadway construction.

**QUALIFICATIONS/ CERTIFICATIONS:**

Qualifications/certifications for this position may be obtained within six (6) months from the date of hire provided that the position works under the supervision and direction of a Senior Inspector or Senior Engineer Intern, all other requirements for the position are met, and a training plan is submitted detailing when the qualifications/certifications will be obtained.

Must have the following as required by the scope of work for the intended assignment on the project at the time of NTP:

- CTQP Final Estimates Level I

Financial Project ID (s): TBD

- CTQP Concrete Field Inspector Level I
- CTQP Asphalt Roadway Level I
- CTQP Earthwork Construction Inspection Level I
- CTQP Pile Driving Inspection
- CTQP Drilled Shaft Inspection
  - Required for inspection of all drilled shafts including miscellaneous structures such as sign, lighting, and traffic signal structure foundations
- IMSA Traffic Signal Inspector Level I
- FDOT Intermediate MOT
- Nuclear Radiation Safety
- Florida Stormwater, Erosion, and Sedimentation Control Training and Certification Program for Inspectors and Contractors

Recommended when the scope of the project includes concrete pavement, grinding concrete pavement, or concrete pavement slab replacement. Courses are available from the Transportation Curriculum Coordination Council (TC3).

- PCC Paving Inspection (TC3CN004-15-T1)
- Diamond Grinding and Grooving (TC3MN009-15-T1)
- Curing, Sawing and Joint Sealing (TC3CN032-16-T1)

#### **ABILITIES/ RESPONSIBILITIES:**

- Ability to: Communicate effectively in English (verbally and in writing)
- Responsible for: Receiving general supervision from and assisting the Senior Inspector in the performance of their duties

#### **ENGINEER INTERN**

##### **EDUCATION:**

- Engineering or Engineering Technology degree

##### **EXPERIENCE:**

- Engineering intern classification requires an EI certification
- Ability to earn the required qualifications and certifications within one year.

##### **QUALIFICATIONS/ CERTIFICATIONS:**

- Qualifications/Certifications for this position may be obtained within one year from the date of hire provided that the position works under the supervision and direction of a Senior Inspector or Senior Engineer Intern, all other requirements for the position are met, and a training plan is submitted detailing when the qualifications/certifications will be obtained

Must have the following as required by the scope of work for the intended assignment on the project at the time of NTP:

Financial Project ID (s): TBD

- CTQP Final Estimates Level I
- CTQP Concrete Field Inspector Level I
- CTQP Asphalt Roadway Level I
- CTQP Earthwork Construction Inspection Level I
- CTQP Pile Driving Inspection
- CTQP Drilled Shaft Inspection
  - Required for inspection of all drilled shafts including miscellaneous structures such as sign, lighting, and traffic signal structure foundations
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- Florida Stormwater, Erosion, and Sedimentation Control Training and Certification Program for Inspectors and Contractors

Recommended when the scope of the project includes concrete pavement, grinding concrete pavement, or concrete pavement slab replacement. Courses are available from the Transportation Curriculum Coordination Council (TC3).

- PCC Paving Inspection (TC3CN004-15-T1)
- Diamond Grinding and Grooving (TC3MN009-15-T1)
- Curing, Sawing and Joint Sealing (TC3CN032-16-T1)

**ABILITIES/ RESPONSIBILITIES:**

- Ability to: Communicate effectively in English (verbally and in writing)
- Responsible for: Receiving general supervision from and assisting the Senior Inspector in the performance of their duties

**CEI SENIOR ITS INSPECTOR-**

**EDUCATION:**

- High School Diploma or Equivalent, OR
- Civil, Electrical Engineering, or Electrical Engineering Technology Degree (with a EI certificate)

**EXPERIENCE:**

- Experience in Fiber Installation Inspection, OTDR Fiber Testing, and Controller Operation and Testing

For personnel with Civil, Electrical Engineering or Electrical Engineering Technology degrees:

- One (1) year of ITS CEI experience
- Demonstrated knowledge in the qualifications

For personnel without Civil, Electrical Engineering or Electrical Engineering Technology degrees:

- Four (4) years of CEI experience

Financial Project ID (s): TBD

- o Two (2) of those years involved in ITS CEI
- Familiarity with Existing Communication Equipment and Switches

**QUALIFICATIONS/ CERTIFICATIONS:**

- o IMSA Fiber Optics for ITS Level II Field (or equivalent)
- o FDOT ITS CEI Computer-Based Trainings
- o Managed Field Ethernet Switch Module
- o Closed Circuit Television Camera Module
- o Microwave Vehicle Detection System Module
- o Road Weather Information System Module
- o Dynamic Message Sign Module
- o FDOT Intermediate MOT

**ABILITIES/ RESPONSIBILITIES:**

- Ability to: Communicate effectively in English (verbally and in writing)
- Responsible for: Inspecting construction work
- Responsible for: Monitoring ITS and electrical installation techniques to ensure conformance with the plans, specifications, National Electrical code and other applicable manuals
- Responsible for: Coordinating and managing the lower level inspectors
- Responsible for: Escalating any deficiencies to the Project Administrator

**CEI ITS INSPECTOR-**

**EDUCATION:**

- High School Diploma or Equivalent, OR
- Civil, Electrical Engineering Degree, or Electrical Engineering Technology (with a EI certificate)

**EXPERIENCE:**

- Experience in Fiber Installation Inspection, OTDR Fiber Testing, and Controller Operation and Testing

For personnel with Civil, Electrical Engineering, or Electrical Engineering Technology degrees:

- The ability to earn the required qualifications within one (1) year

For personnel without Civil or Electrical Engineering degrees:

- Two (2) years of CEI experience
  - o One (1) of those years involved in ITS CEI
- Familiarity with Existing Communication Equipment and Switches

**QUALIFICATIONS/CERTIFICATIONS:**

- o FDOT ITS CEI Computer-Based Trainings
- o Managed Field Ethernet Switch Module

Financial Project ID (s): TBD

- o Closed Circuit Television Camera Module
- o Microwave Vehicle Detection System Module
- o Road Weather Information System Module
- o Dynamic Message Sign Module
- o IMSA Fiber Optics for ITS Level I (or equivalent)
- o FDOT Intermediate MOT

**GEOTECHNICAL TECHNICIAN for Pile Foundations-**

Qualified CTQP Pile Driving Inspector, knowledgeable in pile installation.

**GEOTECHNICAL TECHNICIAN for Drilled Shaft Foundations-**

Qualified CTQP Drilled Shaft Inspector, knowledgeable in drilled shaft installation.

**10.3 Staffing:**

Once authorized, the Consultant shall provide appropriate inspection staffing as authorized throughout the duration of construction and completion of the final estimate. Responsible personnel, thoroughly familiar with all aspects of construction and final measurements of the various pay items, shall be available to resolve disputed final pay quantities until the Department has received a regular acceptance letter.

Construction inspection forces will be required of the Consultant while the Contractor is working, subject to the oversight of the Consultant Engineer assigned responsibility for Quality Assurance reviews as described above.

**11.0 AGREEMENT MANAGEMENT:**

**11.1 General:**

- (1) With each monthly invoice submittal, the Consultant will provide a status report for the Agreement. This report will provide an accounting of additional Agreement calendar days allowed to date, an estimate of the additional calendar days anticipated to be added to the original schedule time, an estimate of the Agreement completion date, and an estimate of the Consultant funds expiration date per the Agreement schedule for the prime Consultant and for each subconsultant. The Consultant will provide a printout from the Equal Opportunity Reporting System showing the previous month's payments made to subconsultants. Invoices not including this required information may be rejected.
- (2) When the CEI Consultant Engineer identifies a condition that will require an amendment to the Agreement, communicate this need to the Construction Project Manager for acceptance. Upon acceptance, prepare and submit an Amendment Request (AR), and all accompanying documentation to the Construction Project Manager for approval and further processing. The AR is to be submitted at such time to allow the Department 12 weeks to process, approve, and execute the AR. The content

and format of the AR and accompanying documentation shall be in accordance with the instructions and format to be provided by the Department.

- (3) The Consultant is responsible for performing follow-up activities to determine the status of each Amendment Request submitted to the Department.
- (4) The CEI Consultant Engineer will be compensated by charging up to a total of twelve (12) billable hours against the first task work order on the first invoice issued against the Contract for initial contract activities. Thereafter, one hour per month may be charged against an active task work order (identified as those tasks where inspector/technician hours are billed in a month) up to a maximum of eight (8) billable hours per month.
- (5) The CEI Consultant Engineer will perform Quality Assurance reviews of all project records prepared by CEI inspection staff assigned to projects and monitor the performance of the assigned inspectors on a semi-annual basis. Prepare a report of the Quality Assurance Review for approval of the Resident Engineer, Project Administrator and District Construction Services Manager. Review should address inspector compliance with Department specifications, procedures, and accuracy of data being collected.
  - a) Within thirty (30) days after receiving award of this Contract, the Consultant shall furnish a Quality Assurance Plan, specific to the Contract, to the Construction Project Manager. The QA Plan shall detail the procedures, evaluation criteria, and instructions of the Consultant's organization for providing services pursuant to this Agreement. Unless specifically waived, no payment shall be made until the Department approves the Consultant QA Plan.
  - b) The authority, responsibilities and autonomy of the QA organization shall be detailed in the QA Plan as well as the names and qualifications of the personnel who will be primarily responsible for conducting the QA reviews.
  - c) The Consultant will outline the types of reports, which will be generated and maintained during the execution of this QA Program.
  - d) The Consultant will detail the methods used to control sub-consultants and vendor quality.
  - e) The Consultant shall maintain adequate records of the quality assurance actions performed by his organization (including sub-consultants and vendors) in providing services and products under this Agreement.

### **11.2 Invoicing Instructions:**

Monthly invoices shall be submitted to the Department in a format and distribution schedule defined by the Department, no later than the 20th day of the following month.

If the monthly invoice cannot be submitted on time, notify the Department prior to the due date stating the reason for the delay and the planned submittal date. Once submitted, the CEI Consultant Engineer shall notify the District Construction Services Manager via e-mail of the total delay in calendar days and the reason(s) for the delay(s).

All invoices shall be submitted to the Department in electronic format in accordance with District Construction and Consultant Invoice Transmittal System (CITS) procedures.

All charges to the individual project will end no later than thirty (30) calendar days following final acceptance; or where all items of work are complete and conditional/partial acceptance is issued, unless authorized in writing by the Department.

A Final Invoice will be submitted to the Department no later than the 60<sup>th</sup> day following Final Acceptance of the individual project or as requested by the Department.

### **12.0 OTHER SERVICES:**

Upon written authorization by the District Construction Engineer or designee, the Consultant will perform additional services in connection with the project not otherwise identified in this Agreement. The following items are not included as part of this Agreement but may be required by the Department to supplement the Consultant services under this Agreement.

- A. Provide inspection services in addition to those provided for in this Agreement.
- B. Provide services determined necessary for the successful completion and closure of the Construction Contract.

### **13.0 CONTRADICTIONS:**

In the event of a contradiction between the provisions of this Scope of Services and the Consultant's proposal as made a part of their Agreement, the provisions of the Scope of Services shall apply.

### **14.0 THIRD PARTY BENEFICIARY:**

It is specifically agreed between the parties executing this Agreement that it is not intended by any of the provisions of any part of the Agreement to create in the public or any member thereof, a third party beneficiary hereunder, or to authorize anyone not a party to this



Financial Project ID (s): TBD

Agreement to maintain a claim, cause of action, lien or any other damages or any relief of any kind pursuant to the terms or provisions of this Agreement

**STATE OF FLORIDA**  
**DEPARTMENT OF TRANSPORTATION**  
**PROFESSIONAL SERVICES UNIT**  
**EXPANDED LETTER OF RESPONSE - CONSULTANT EVALUATION**

Name of Project: CEI for Traffic Operations Push Button Projects – Continuing  
Financial Project No(s): TBD  
Name of Consultant: \_\_\_\_\_

<b>Instructions:</b>	Each Technical Review Committee (TRC) member shall independently complete this evaluation form for each shortlisted firm's letter and include their signature and date of completion. Each TRC member shall include comments specific to each firm on their evaluation for each scoring area and a summary comment for the firms. This form will be used to summarize each reviewer's scores onto the Professional Services Selection Package 375-030-2A form prepared by Professional Services for the Technical Review Committee.	
<b>SCORE</b>		
<b>1.</b>	<div style="display: flex; justify-content: space-between;"><div><b><u>UNDERSTANDING THE SCOPE and CONTRACT APPROACH</u></b></div><div><b><u>(0-40)</u></b></div><div>_____</div></div> <p>The Consultant firm shall demonstrate their understanding of the scope of services including any unique issues involved in the projects listed and their ability to meet the challenges.</p> <ul style="list-style-type: none"><li>• Assumptions (if any) should be clearly stated</li><li>• Present their approach to the Contract and Task Work Orders</li><li>• Discuss their proposed method for coordinating work and cost savings suggestions</li><li>• Discuss the process for initiating Task Work Orders, tracking, and amending (if applicable) Task Work Orders once issued, and closing out Task Work Orders once completed.</li></ul>	
<b>2.</b>	<div style="display: flex; justify-content: space-between;"><div><b><u>PROPOSED PROJECT STAFFING</u></b></div><div><b><u>(0-40)</u></b></div><div>_____</div></div> <p>The Consultant firm shall discuss the availability of qualified Inspectors/Technicians.</p> <ul style="list-style-type: none"><li>• Provide the name of the CEI Consultant Engineer and names and roles of key personnel.</li><li>• Explain the organization of its team and functional responsibility of each sub-consultant.</li><li>• Discuss the staffing quality and availability, experience on similar projects.</li></ul>	
<b>3.</b>	<div style="display: flex; justify-content: space-between;"><div><b><u>QUALITY ASSURANCE</u></b></div><div><b><u>(0-10)</u></b></div><div>_____</div></div> <p>The Consultant shall demonstrate their implementation and commitment to a Quality Assurance Program that is specific to this FDOT Contract and key aspects of the firm's QA program that are most important to the success of this contract.</p> <ul style="list-style-type: none"><li>• Present their project review and QA/QC approach. Include discussion on types of documents to be reviewed, frequency of reviews, official and unofficial reviews.</li><li>• Discuss Project QA/QC responsibilities.</li></ul>	
<b>4.</b>	<div style="display: flex; justify-content: space-between;"><div><b><u>COMMUNICATION</u></b></div><div><b><u>(0-10)</u></b></div><div>_____</div></div> <p>The Consultant will illustrate their history including, but not limited to, timely submittal of invoices, personnel action requests, response for fee proposals and committing requested personnel in a timely manner. Discuss the Department's ability to communicate with the firm's CEI Consultant Engineer and the commitment of that Engineer in responding to the Department.</p>	
<b>Total Score:</b> _____		
The following space should be used to summarize any major comments which the Technical Review Committee member considers relevant to the firm's overall score.		
<div style="display: flex; justify-content: space-between;"><div>TRC Member: _____ (Print name and sign)</div><div>Date: _____</div></div>		

## Attachment D – Required Certifications

Note: A majority of the forms are available in Word format at the following web site: <http://www.fdot.gov/procurement/formmenu.shtm>

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Form numbers:

[375-030-83 Professional Services Commitment Form](#)

[375-030-60, Vendor Certification Regarding Scrutinized Companies Lists](#)

[375-030-30 Truth in Negotiations Certificate](#)

[375-030-32 Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion for Federal Aid Contracts](#)

[375-030-33 Certification for Disclosure of Lobbying Activities on Federal Aid Contracts](#)

[375-030-34 Disclosure of Lobbying Activities](#)

[375-031-06, E-Verify Form](#)

[050-020-26, Exempt Documents Form](#)