

**WORK AUTHORIZATION # CM1583-WA01
NASSAU COUNTY
BOARD OF COUNTY COMMISSIONERS
RFQ/BID NO. NC10-002**

Consultant:	England-Thims & Miller, Inc.
Contract Number:	CM1583
Contact Name:	Buckley Williams, P.E.
Contact Number:	904-642-8990
Email:	WilliamsB@etminc.com

CURRENT WORK AUTHORIZATION	
Project Short Title: CEI Services – US 301 at Ford Road Intersection Improvements	
Date Submitted	06/14/10
Amount	\$46,687.11
Scheduled Completion	

This Work Authorization is to the AGREEMENT between Nassau County and the Consultant known as the Continuing Contract for Construction Engineering Inspection (CEI) Services for Nassau County, Florida, dated June 28, 2010. The services to be provided under this Work Authorization are as follows:

ARTICLE 1. Services Described as:

England-Thims & Miller, Inc. shall provide CEI services in accordance with the scope of services, attached hereto as Attachment "A", for the US 301 at Ford Road Intersection Improvement Project.

ARTICLE 2. Time Schedule

England-Thims & Miller, Inc. shall begin upon written notification to proceed by the County. For estimating purposes, the Consultant will be allowed an accumulation of seven (7) calendar days to perform preliminary administrative services prior to the issuance of the Contractor's notice to proceed on the first project and fourteen (14) calendar days to demobilize after final acceptance of the last Contract.

ARTICLE 3. Budget

Budget is a limited amount based on time and material charges, as shown on the England-Thims & Miller, Inc. Fee Schedule Estimate, attached hereto as Attachment "B", as follows:

Total Direct Labor	\$43,189.73
Straight Overtime	\$ 2,331.59
Premium Overtime	<u>\$ 1,165.79</u>

Total Maximum Limiting Amount: \$46,687.11

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CONTRACT MANAGEMENT
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COUNTY COORDINATORS
OFFICE


Article 4. Other Provisions

The Services covered by this Work Authorization will be performed in accordance with the provisions set forth in the AGREEMENT referenced above and any of its attachments or schedules. This Work Authorization will become a part of the referenced AGREEMENT when executed by both parties.

In presenting this Work Authorization, Consultant agrees that:

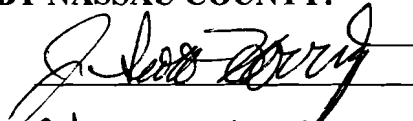
Unless detailed herein, all drawings, data, electronic files and other information required for this Work Authorization has been accepted by Consultant. Specifically, all electronic files have been reviewed and accepted for the purposes of this Work assignment. Any additional information, including detailed scope of services is attached.

AGREED TO BY:

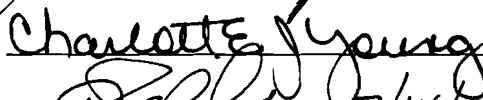
BY: 
Print Name: Buckley K. Williams, CCCA
Title: VP / Principal
Date: July 7, 2010

RECOMMENDED AND APPROVED BY NASSAU COUNTY:

Director of Engineering Services:



Contract Management:



Office of Management & Budget:

 7/14/10

County Manager:

 7/14/10

APPROVED by the BOARD OF COUNTY COMMISSIONERS designee, the ____ day of _____, 2010

SCOPE OF SERVICES
CONSTRUCTION ENGINEERING AND INSPECTION
US-301 at Ford Road Intersection Improvements NC10-013
14 June 2010

1.0 PURPOSE:

This scope of services describes and defines the Construction Engineering and Inspection (CEI) services which are required for contract administration, inspection, and materials sampling and testing for the construction projects listed below.

2.0 SCOPE:

The Consultant shall be responsible for providing services as defined in this Scope of Services, the referenced County and FDOT manuals, and/or procedures.

The projects for which the services are required are:

Descriptions: US-301 at Ford Road Intersection Improvements
County: Nassau

Services provided by the Consultant shall comply with County and applicable FDOT manuals, procedures, and the Florida Department of Transportation Standard Specifications for Road and Bridge Construction in effect as of the date of execution of the Agreement unless otherwise directed in writing by the County.

Other projects developing within geographical area of Nassau County may be added at the County's discretion. The Consultant must perform to the satisfaction of the County's representatives for consideration of additional CEI services.

3.0 LENGTH OF SERVICE:

The Consultant's services for the Construction Contract shall begin upon written notification to proceed by the County.

For estimating purposes, the Consultant will be allowed an accumulation of seven (7) calendar days to perform preliminary administrative services prior to the issuance of the Contractor's notice to proceed on the first project and fourteen (14) calendar days to demobilize after final acceptance of the last Contract.

4.0 ITEMS TO BE FURNISHED BY THE COUNTY TO CONSULTANT:

A. The County, on 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. Special Provisions,
3. Copy of the Executed Construction Contract, and
4. Utility Agency's Approved Material List (if applicable).

- B. The County will allow connection to the County Network (if applicable) by the Consultant through either dialup communications, authorized Virtual Private Network (VPN) or approved leased lines. Appropriate approvals must be received from the County prior to their use. (if applicable)
- C. The County will furnish, install, and support the software packages utilized by the County (if applicable).

5.0 ITEMS FURNISHED BY THE CONSULTANT:

5.1 Office Automation: (As Applicable)

The Consultant shall provide and have available for their use a computer, modem, printer, and software capable of emulating a terminal on the County's mainframe computer. The computer will be used by the Consultant for all transactions with the County's mainframe computer.

The Consultant shall use Microsoft Word 2000 and Microsoft Excel 2000 or latest version in order to be compatible with the County's word processing and spreadsheet software.

The Consultant will furnish computer services/software needed for project scheduling, documentation, and control (Primavera/Suretrak, Claim Digger, etc.).

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

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

5.2 Vehicles:

Vehicles will be equipped with appropriate safety equipment and must be able to effectively carry out requirements of this Agreement. Vehicles shall have the name and phone number of the consulting firm visibly displayed on both sides of the vehicle.

5.3 Field Equipment:

The Consultant shall supply survey, inspection and testing equipment, essential in order to carry out the work under this Agreement. Such equipment includes those non-consumable and non-expendable items, which are normally needed for a CEI project and are essential in order to carry out the work under this Agreement.

Hard hats shall have the name of the consulting firm 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.

The Consultant's handling of nuclear density gauges shall be in compliance with their license.

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 in operational condition at all times.

5.4 Licensing for Equipment Operations:

The Consultant will be responsible for obtaining proper licenses for equipment and personnel operating equipment when licenses are required. The Consultant shall make the license and supporting documents available to the County for verification, upon request.

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

6.0 LIAISON:

The Consultant shall keep the Construction Project Manager informed of all significant activities, decisions, correspondence, reports, and other communications related to its responsibilities under this Agreement, and seek input from the Construction Project Manager in order for the Construction Project Manager to oversee the Consultant's performance.

Agreement administrative duties relating to Invoice Approval Requests, Personnel Approval Requests, Time Extension Requests, and Supplemental Amendment Requests shall be reviewed and approved by the County Construction Manager.

7.0 PERFORMANCE OF THE CONSULTANT:

During the term of this Agreement and all supplements thereof, the County will review various phases of Consultant operations, such as construction inspection, materials sampling and testing, and administrative activities, to determine compliance with this Agreement. The Consultant shall cooperate and assist County representatives in conducting the reviews. If deficiencies are indicated, the Consultant shall implement remedial action immediately upon the approval of the County Construction Manager. County recommendations and Consultant responses/actions are to be properly documented by the Senior Project Engineer. 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 necessarily limited to the following:

- A. Further subdivide assigned inspection responsibilities, reassign inspection personnel, or assign additional inspection personnel, within one week of notification.
- B. Replace personnel whose performance has been determined by the County to be inadequate. Personnel whose performance has been determined to be unsatisfactory shall be removed immediately.
- 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.

8.0 REQUIREMENTS:

8.1 General:

It shall be the responsibility of the Consultant to administer, monitor, and inspect the Construction Contract such that the project is constructed in reasonable conformity with the plans, specifications, and special provisions for the Construction Contract and provide Certification of same.

The Consultant shall observe the Contractor's work to determine the progress and quality of work, identify discrepancies, report significant discrepancies to the County, and direct the Contractor to correct such observed discrepancies.

Consultant shall verify that all testing and certifications required by FDOT for final acceptance of the signals and other work in the FDOT right-of way is completed per the plans, specifications and FDOT requirements. Consultant shall coordinate the efforts of the EOR, Contractor and County Construction Manager to provide timely acceptance of the improvements from FDOT and accept the traffic signal on behalf of Nassau County in accordance with section 611, "Signal Installation Acceptance Procedures" of the FDOT Standard Specifications for Road and Bridge Construction, 2010.

Consultant shall provide IMSA certified inspector or others, as required to meet the requirements of the FDOT Standard Specifications for Road and Bridge Construction section 611 referenced above and Consultant shall confirm that proper inspection sheets, equipment, materials and hardware meet FDOT specifications and are listed on the Qualified Products List and provide appropriate reports and forms to the Engineer of Record.

The Consultant shall advise the County Construction Manager of any significant omissions, substitutions, defects, and deficiencies noted in the work of the Contractor and the corrective action that has been directed to be performed by the Contractor. Work provided by the Consultant shall not relieve the Contractor of responsibility for the satisfactory performance of the Construction Contract.

8.2 On-Site Inspection:

The Consultant shall monitor the Contractor's on-site construction activities and inspect materials entering into the work in accordance with the plans, specifications, and special provisions for the Construction Contract to determine that the projects are constructed in reasonable conformity with such documents. The Consultant will monitor all off-site activities and fabrication as applicable. The Consultant shall keep detailed accurate records of the Contractor's daily operations and of significant events that affect the work.

8.3 Sampling and Testing:

The Consultant shall provide daily surveillance of the Contractor's Quality Control activities at the project site and perform the sampling and testing of materials and completed work items that are normally done in the vicinity of the project for verification and acceptance including Asphalt Plant Verification testing.

The Consultant will perform inspection and sampling of materials and components at locations remote from the vicinity of the project and the Consultant will perform testing of materials normally done in a laboratory remote from the project site, as required.

The Consultant shall be specifically responsible for job control samples determining the acceptability of all materials and completed work items on the basis of either test results or verification of a certification, certified mill analysis, DOT label, DOT stamp, etc.

The County will monitor the effectiveness of the Consultant's testing procedures through surveillance and obtaining and testing independent assurance samples.

Documentation reports on sampling and testing performed by the Consultant shall be submitted to responsible parties during the same week that the construction work is done.

The Consultant shall be responsible for transporting samples to be tested in an approved laboratory.

The Consultant will input verification testing information and data into the Consultant's database.

8.4 Engineering Services:

The Consultant shall coordinate the Construction Contract administration activities of all parties other than the Contractor involved in completing the construction project. Notwithstanding the above, the Consultant is not liable to the County for failure of such parties to follow written direction issued by the Consultant.

Services include maintaining the required level of surveillance of Contractor activities, interpreting plans, specifications, and special provisions for the Construction Contract, maintaining complete, accurate records of all activities and events relating to the project, and properly documenting all significant project changes. The Consultant shall perform the following services:

1. Schedule and attend, after the Notice to Proceed, a pre-service conference for the project in accordance with County's procedure. The Consultant shall provide appropriate staff to attend and participate in the pre-service meeting.
2. The Consultant shall record a complete and concise record of the proceedings of the pre-service meeting and distribute copies of this summary to the participants and other interested parties within seven (7) calendar days. The Consultant shall submit Action Request packages for Personnel Approval for immediate staff needs and a copy/computer file of the final negotiated staffing to the Construction Project Manager, either at this meeting or within seven (7) calendar days.
3. Schedule and attend, after the Notice to Proceed, a Final Estimate informational meeting with the County Final Estimates Office. The Consultant shall provide appropriate staff to attend and participate in this meeting.
4. Schedule, after the Notice to Proceed, a date to attend a meeting with the County Construction Manager prior to the Pre-construction Conference. The Resident Compliance Officer shall attend this meeting.

5. Schedule and conduct the pre-construction conference and produce minutes from same. Confirm the County has all required submittals and facilitate the Notice to Proceed to the Contractor.
6. Provide personnel proficient in the use of computers and scanner operation to input construction documents into the County System. This will require familiarity with the documents and guidelines, which will be provided by the County. Duties will include scanning, attributing and retrieving documents that are to be archived electronically.
7. The Consultant shall schedule and conduct a meeting with the County Construction Manager after the Notice to Proceed and another meeting prior to project final acceptance. The purpose of the meetings is to discuss the required documentation, including as-builts, necessary for permit(s) compliance.
8. Verify that the Contractor is conducting inspections, preparing reports and monitoring all storm water pollution prevention and MOT measures associated with the project as well as adherence to any special conditions of any permits. Consultant shall immediately notify the Contractor and the County should the Contractor not comply with permit conditions, NPDES reporting requirements or should the Contractor fail to maintain MOT devices appropriately.
9. Analyze problems that arise on a project and proposals submitted by the Contractor, work to resolve such issues, and process the necessary paperwork.
10. Monitor, inspect and document utility construction for conformance with Utility Agency's Water and Sewer Standards and the Utility Agency's Approved Materials List. Facilitate coordination and communication between Utility Agency's representatives, County's staff and contractors in execution of the work. Identify potential utility conflicts and assist in the resolution of utility issues. Consultant shall also facilitate and monitor the installation of all utility items of work. Consultant shall verify that the appropriate materials and testing is performed by the Contractor and coordinate with the County Construction Manager the EOR and the utility companies for required submittals to the utility companies and shall facilitate transference of all items required to obtain the utility companies' acceptance of the work.
11. Produce reports, verify quantity calculations and field measure for payment purposes as needed to prevent delays in Contractor operations and to facilitate prompt processing of such information in order for the County to make timely payment to the Contractor. Consultant shall also notify the County if any item appears to be potentially overrun and indicate potential cause thereof. Consultant shall monitor spread rates, etc. to limit overrun of quantities by the Contractor.
12. Prepare and make presentations as part of the County's Alternate Dispute Resolution process in connection with the project covered by this Agreement.
13. Monitor each Contractor and subcontractor's compliance with specifications and special provisions of the Construction Contract in regard to payment of predetermined wage rates in accordance with County procedures.

14. Provide a Resident Compliance Specialist for surveillance of the Contractor's compliance with Construction Contract requirements. The Resident Compliance Specialist is responsible for reviewing, monitoring, evaluating and acting upon documentation required for Construction Contract compliance, and maintaining the appropriate files thereof. Typical areas of compliance responsibility include EEO Affirmative Actions for the prime contractor and subcontractor, DBE Affirmative Action, Contractor Formal Training, Payroll, and Subcontracts. The Resident Compliance Specialist must keep all related documents and correspondence accurate and up to date; attend all compliance reviews and furnish the complete project files for review; and assist the County Contracts Manager, as requested.
15. Prepare and submit to the Construction Project Manager bi-weekly, a Construction Status Reporting System (CSRS) report, in a format to be provided by the County.
16. Video tape the pre-construction conditions throughout the project limits. Provide a digital photo log or video of project activities, with heavy emphasis on potential claim items/issues and on areas of real/potential public controversy.

9.0 **PERSONNEL:**

9.1 **General Requirements:**

The Consultant shall staff the project with the qualified personnel necessary to efficiently and effectively carry out its responsibilities under this Agreement.

Unless otherwise agreed by the County, the County will not compensate straight overtime or premium overtime for the positions of Senior Project Engineer, Project Administrator, Contract Support Specialist, and Associate Contract Support Specialist.

9.2 **Personnel Qualifications:**

The Consultant shall utilize only competent personnel, qualified by experience, and education. The Consultant shall submit in writing 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 salary, education, and experience.

The Consultant Action Request form for personnel approval shall be submitted to the Construction Project Manager at least two weeks prior to the date an individual is to report to work.

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 obtaining 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 County and should occur as workload permits.

Minimum qualifications for the Consultant personnel are set forth as follows. Exceptions to these minimum qualifications will be considered on an individual basis. However, a Project Administrator working under the supervision and direction of a Senior Project Engineer or an Inspector working under the supervision and direction of a Senior Inspector shall have six months from the date of hire to obtain the necessary

qualifications/certifications provided, all other requirements for such positions are met and the Consultant submits a training plan detailing when such qualifications/certifications will be obtained and other training to familiarize with Department's procedures, Specifications and Design Standards. The County Construction Engineer or designee will have the final approval authority on such exceptions.

SENIOR PROJECT ENGINEER - A Civil Engineer degree and be registered in the State of Florida as a Professional Engineer (or if registered in another state, the ability to obtain registration in the State of Florida within six months) and six (6) years of engineering experience [(two (2) years of which are in major road or bridge construction)] or [(five (5) of which are in major bridge construction) - for Complex Bridge Projects], or for non-degreed personnel the aforementioned registration and ten (10) years of engineering experience (two (2) years of which are in major road or bridge construction). Qualifications include the ability to communicate effectively in English (verbally and in writing); direct highly complex and specialized construction engineering administration and inspection program; plans and organizes the work of subordinate and staff members; develops and/or reviews policies, methods, practices, and procedures; and reviews programs for conformance with Department standards. Also must have the following:

Qualification:

FDOT Advanced MOT

Pass the CTQP examination covering the training video "Grouting of Bridge Post-tensioning Tendons" (If applicable)

Attend the CTQP Quality Control Manager course and pass the examination.

Certifications:

None

A Master's Degree in Engineering may be substituted for one (1) year engineering experience.

PROJECT ADMINISTRATOR -A Civil Engineering degree plus two (2) years of engineering experience in construction of major road or bridge structures, or for non-degreed personnel eight (8) 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. For CC2 bridge structures, be a registered professional engineer in the State of Florida (or if registered in another state, have the ability to obtain registration in Florida within six (6) months) and have a Civil Engineering degree plus five (5) years, or be non-registered with eight (8) years, of general bridge construction experience of which two (2) years for registered project administrators, or four (4) years for non-registered project administrators, must have been with the type of CC2 bridge construction project for which CEI services are being provided by this scope. Additionally, a minimum of twelve (12) months of experience as the Project Administrator in primary control of the type of CC2 construction project for which CEI services are being provided by this scope. To be in primary control, a Project Administrator must have supervised two or more inspectors as well as two or more support staff (Office Manager, Compliance Officer, 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 pre-stressing 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.

MB years of experience must have been in MB mechanical and/or electrical construction.

Receives general instructions regarding assignments and is expected to exercise initiative and independent judgment in the solution of work problems. Directs and assigns specific tasks to inspectors and assists in all phases of the construction project. Will be responsible for the progress and final estimates throughout the construction project duration. Must have the following:

Qualifications: FDOT Advanced MOT Pass the CTQP examination covering the training video "Grouting of Bridge Post-tensioning Tendons" (If applicable) CTQP Final Estimates Level II

Certifications: SSPC course: C-3 Supervisor/Competent Person Training for Deleading of Industrial Structures (If applicable)

Other: Attend CTQP Quality Control Manager Course and pass the examination.

A Master's Degree in Engineering may be substituted for one (1) year of engineering experience

CONTRACT SUPPORT SPECIALIST - A High School diploma or equivalent and four (4) years of road & bridge construction engineering inspection (CEI) experience having performed/assisted in project related duties (i.e., CQR/LIMS, progress and final estimates, EEO compliance, processing Construction Contract changes, etc.) or a Civil Engineering. Should exercise independent judgment in planning work details and making technical decisions related to the office aspects of the project. Should be familiar with the Department's Procedures covering the project related duties as stated above and be proficient in the computer programs necessary to perform these duties. Shall become proficient in Multi-Line and Engineering Menu.

Qualifications: CTQP Final Estimates Level II

ASSOCIATE CONTRACT SUPPORT SPECIALIST - High school graduate or equivalent plus three (3) years of secretarial and/or clerical experience including two (2) years experience in construction office management having performed project related duties (i.e., CQR, progress and final estimates, EEO compliance, processing Construction Contract changes, etc.). Ability to type at a rate of 35 correct, words per minute. Experienced in the use of standard word processing software. Should exercise independent initiative to help relieve the supervisor of clerical detail. Assists the Project Administrator in office related duties (i.e., CQR, progress, and final estimates, EEO compliance, Processing Construction Contract changes, etc.) Project specific. Work under the general supervision of the Senior Project Engineer and staff. Note: This position will not be used if a Contract Support Specialist is utilized.

Qualifications: CTQP Final Estimates Level I

RESIDENT COMPLIANCE SPECIALIST - Graduation from an accredited high school or equivalent with one (1) year of experience as a resident compliance officer on a construction project or two (2) years of assisting the compliance officer in monitoring the project. Should have prior experience in both State funded and Federal Aid funded construction projects with FDOT and knowledge of EEO/AA laws and FDOT's DBE and OJT programs. Ability to analyze, collect, evaluates data, and take appropriate action when necessary. Must attend all training workshops or meetings for Resident Compliance Specialists as determined necessary.

SENIOR INSPECTOR/SENIOR ENGINEER INTERN - High school graduate or equivalent plus four (4) years of experience in construction inspection, two (2) years of which shall have been in bridge and/or roadway construction inspection with the exception of Complex Category 2 (CC2) bridge structures.

For CC2 bridge structures, be a high school graduate or equivalent and have five (5) years of general bridge construction experience of which two (2) years must have been with the type of CC2 bridge construction project for which CEI services are being provided by this scope. Additionally, a minimum of twelve (12) months of experience as the Senior Inspector 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 Senior Inspector must have supervised two or more inspectors and must have been directly responsible for all inspection requirements related to the construction operations assigned.

CPTS years of experience must have included a minimum of twelve (12) months of inspection experience in one or both of the following depending on which area the inspector is being approved for: (1) casting yard inspection; (2) erection inspection. In addition, two (2) years of geometry-control surveying experience is required for inspectors that perform or monitor geometry control surveying in a casting yard. CPTCB years of experience must include monitoring and inspection of the following: girder erection, safe use of girder erection cranes, girder stabilization after erection, false work for temporary girder support, and PT and grouting operations. MB years of experience must have included the inspection of MB mechanical components for machinery inspectors and MB electrical components/systems for electrical inspectors.

Must have the following:

Qualifications:

CTQP Concrete Field Inspector Level I

CTQP Concrete Transportation Construction Inspector (CTCI) Level II (all bridges)

CTQP Asphalt Roadway Level I (If applicable)

CTQP Asphalt Roadway Level II (If applicable)

CTQP Earthwork Construction Inspection Level I

CTQP Earthwork Construction Inspection Level II

CTQP Pile Driving Inspection (If applicable)

CTQP Drilled Shaft Inspection (If applicable – required for inspection of all drilled shafts including miscellaneous structures such as Sign structures, Lighting structures, and Traffic Signal structures)

CTQP Grouting Technician Level I (If applicable)

CTQP Post-Tensioning Technician Level I (If applicable)

FDOT Advanced MOT
CTQP Final Estimates Level II

Certifications:

Nuclear Radiation Safety

SSPC course: C-3 Supervisor/Competent Person Training for Deleading of Industrial Structures (If applicable)

or a Civil Engineering degree and one (1) year of road & bridge CEI experience with the ability to earn additional required qualifications within one year. (Note: Senior Engineer Intern classification requires one (1) year experience as an Engineer Intern.)

Responsible for performing highly complex technical assignments in field surveying and construction layout, making, and checking engineering computations, inspecting construction work, and conducting field tests and is responsible for coordinating and managing the lower level inspectors. Work is performed under the general supervision of the Project Administrator.

INSPECTOR/ENGINEER INTERN - High school graduate or equivalent plus two (2) years experience in construction inspection, one (1) year of which shall have been in bridge and/or roadway construction inspection, plus the following:

Qualifications:

FDOT Intermediate MOT CTQP Concrete Field Inspector Level I

CTQP Asphalt Roadway Level I (If applicable)

CTQP Earthwork Construction Inspection Level I

CTQP Pile Driving Inspection (If applicable)

CTQP Drilled Shaft Inspection (If applicable— required for inspection of all drilled shafts including miscellaneous structures such as Sign structures, Lighting structures, and Traffic Signal structures)

CTQP Final Estimates Level I

Certifications:

Nuclear Radiation Safety

or a Civil Engineering degree with the ability to earn additional required qualifications within one year. (Note: Engineer Intern classification requires E.I.T. certificate.)

Responsible for performing assignments in assisting Senior Inspector in the performance of their duties. Receive general supervision from the Senior Inspector who reviews work while in progress. Civil Engineering graduates must obtain certifications within the first year of working as an inspector or Engineer Intern. Exceptions will be permitted on a case-by-case basis so long as qualifications and certifications are appropriate for specific inspection duties.

ASPHALT PLANT INSPECTOR - High School graduate or equivalent plus one (1) year experience in the surveillance and inspection of hot mix asphalt plant operations and the following:

Qualifications: CTQP Asphalt Plant Level I CTQP Asphalt Plant Level II CTQP Final Estimates Level I

Certifications: None

INSPECTORS AIDE - High School graduate or equivalent and able to perform basic mathematical calculation and follow simple technical instructions. Duties are to assist higher-level inspectors.

SURVEY PARTY CHIEF - High School graduate plus four years of experience in construction surveying (including two (2) years as Party Chief). Experienced in field engineering and construction layout, making and checking survey computations and supervising a survey party. Work is performed under general supervision of Project Administrator.

INSTRUMENT-MAN - High school graduate plus three (3) years of experience in construction surveying one (1) year of which shall have been as instrument-man. Responsible for performing assignments in assisting Party Chief in the performance of their duties. Receives general supervision from Party Chief who reviews work while in progress.

ROD-MAN/CHAIN-MAN - High school graduate with some survey experience or training preferred. Receives supervision from and assists Party Chief who reviews work while in progress.

SECRETARY/CLERK TYPIST - High school graduate or equivalent plus two (2) years of secretarial and/or clerical experience. Ability to type at a rate of 35 correct words per minute. Experienced in the use of standard word processing software. Should exercise independent initiative to help relieve the supervisor of clerical detail. Work under general supervision of the Senior Project Engineer and their staff.

ENVIRONMENTAL SPECIALIST - A bachelors degree with a major in one of the physical or natural sciences or engineering and two (2) years of professional experience in environmental protection, regulation or health; one of the physical or natural sciences; or engineering; or a Masters degree in one of the physical or natural sciences or engineering and one (1) year of professional experience described above; or a Doctorate degree in one of the physical or natural sciences or engineering or one (1) year of experience as an Environmental Specialist I with the State Of Florida. Receives general instruction regarding assignments and is expected to exercise initiative, and independent judgment in the solution of work problems. Must have knowledge of the terminology, principles, data collection, and analytical techniques and procedures of the physical or natural sciences. Also must have ability to collect, evaluate, analyze, and interpret scientific or technical data.

CASTING YARD ENGINEER/MANAGER -CONCRETE POSTTENSIONED SEGMENTAL BOX GIRDER BRIDGES (CPTS) - Be a registered Professional Engineer in the State of Florida (or if registered in another state, have the ability to obtain registration in Florida within 6 months) with a minimum of one (1) year, or non-registered with a minimum of three (3) years, of experience with the use of geometry control computer programs and with the performance of surveying procedures required for the production of precast concrete box segments at a casting yard.

GEOTECHNICAL ENGINEER - Be a registered Professional Engineer in the State of Florida (or if registered in another state, have the ability to obtain registration in Florida

within 6 months) with a minimum of 5 years of experience in being in responsible charge of the geotechnical foundation construction engineering and dynamic testing work on at least five (5) Department bridge projects, including Department Structures Design Category 2 bridge projects, having driven pile foundations/drilled shaft foundations or similar projects for other State Department of Transportation. "Responsible charge" experience shall include verifiable and successful drilled shaft installation and coring inspections and constructions, static, Osterberg Cell and/or Statnamic load test experience, as well as Pile Driving Analyzer (PDA), WEAP computer program and CAPWAP computer programs to analyze concrete/steel/timber piling.

GEOTECHNICAL TECHNICIAN -Knowledge in the use and provisions of the PDA system, WEAP and CAPWAP computer programs to analyze concrete/steel/timber piling in conjunction with dynamic load tests with a minimum of three (3) years of experience on at least two (2) Department bridge projects.

Qualifications: CTQP Pile Driving Inspection CTQP Drilled Shaft Inspection

PUBLIC INFORMATION OFFICER – High school graduate or equivalent and be knowledgeable in public information and/or advertising involving mass circulation or distribution of literature, mass advertising or other similar activities and performed such work for a at least three (3) years.

UTILITY COORDINATOR - High school graduate or equivalent and be knowledgeable of Department's Standards, policies, procedures, and agreements and shall have a minimum of 4 years of experience performing utility coordination in accordance with Department's Standards, policies, procedures, and agreements.

SENIOR ITS INSPECTOR - High school graduate or equivalent plus four (4) years of experience in construction inspection, two (2) years of which shall have been in ITS construction inspection, plus the following:

Qualifications: Fiber Installation Inspection and OTDR Fiber Testing DMS Operation and Testing Controller Operation and Testing CCTV Installation, Operation and Testing Familiarity with Existing Communication Equipment and Switches

Certifications: IMSA Level II or a Civil Engineering degree and one (1) year of ITS CEI experience.

Responsible for performing highly complex technical assignments in field surveying and construction layout, making and checking engineering computations, inspecting construction work and conducting field tests and is responsible for coordinating and managing the lower level inspectors. Work is performed under the general supervision of the Project Administrator.

ITS INSPECTOR - High school graduate or equivalent plus two (2) years experience in construction inspection, one (1) year of which shall have been in ITS construction inspection, plus the following:

Qualifications: Fiber Installation Inspection and OTDR Fiber Testing DMS Operation and Testing Controller Operation and Testing CCTV Installation, Operation and Testing Familiarity with Existing Communication Equipment and Switches

Certifications: None or a Civil Engineering degree.

Responsible for performing assignments in assisting Senior Inspector in the performance of their duties. Receive general supervision from the Senior Inspector who reviews work while in progress. Civil Engineering graduates must obtain certifications within the first year of working as an inspector or Engineer Intern. Exceptions will be permitted on a case-by-case basis so long as qualifications and certifications are appropriate for specific inspection duties.

9.3 Staffing:

Once authorized, the Consultant shall establish and maintain an appropriate staff through 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 appropriate Construction Contract has been paid off.

Construction engineering and inspection forces will be required of the Consultant at all times while the Contractor is working. If Contractor operations are substantially reduced or suspended, the Consultant will reduce its staff appropriately.

In the event that the suspension of Contractor operations requires the removal of Consultant forces from the project, the Consultant will be allowed ten (10) days maximum to demobilize, relocate, or terminate such forces.

10.0 QUALITY ASSURANCE (QA) PROGRAM:

10.1 Quality Reviews:

The Consultant shall conduct reviews to make certain his own organization is in compliance with the requirements cited in the Scope of Services. Quality Reviews shall be conducted to evaluate the adequacy of materials, processes, documentation, procedures, training, guidance, and staffing included in the execution of this Agreement. Quality Reviews shall also be developed and performed to achieve compliance with specific QA provisions contained in this Agreement. The reviews shall be submitted to the County Construction Manager in written form no later than one (1) month after the review.

On short duration CCEI projects (nine (9) months or less), the CCEI shall perform an initial QA review within the first two (2) months of the start of construction.

11.0 FINAL ESTIMATES:

11.1 Final Estimate and Record Plans Submittal:

Prepare documentation and records in compliance with the Agreement and the County's procedures.

Submit the Final Estimate(s) and one (1) set of final "Record plans" documenting Contractor's work (one record set with two copies) as follows:

- A. Within thirty (30) calendar days of final acceptance; or
- B. Where all items of work are complete and conditional/partial acceptance is utilized (Lighting, Plant establishment, etc.) for a period exceeding thirty (30) calendar days, the final estimate(s) will be due on the thirtieth (30th) day after conditional/partial acceptance. A memorandum with documentation will be transmitted to the County's Final Estimate Manager at final acceptance detailing any necessary revisions to the pay items covered under the conditional/partial acceptance.

The Consultant shall be responsible for making any revisions to the Certified Final Estimate at no additional cost to the County.

11.2 Offer of Final Payment:

The Consultant shall prepare the Offer of Final Payment package as outlined by the County procedures. The package shall accompany the Final Estimates Package submitted to the County. The Consultant shall be responsible for forwarding the Offer of Final Payment Package to the Contractor.

12.0 AGREEMENT MANAGEMENT:

12.1 General:

1. With each monthly invoice submittal, the Consultant Senior Project Engineer will provide a reviewed and approved Status Report for the Agreement. This report will provide the Consultant Senior Project Engineer's accounting of the additional Agreement calendar days allowed to date, an estimate of the additional Agreement calendar days anticipated to be added to the original Agreement schedule time, an estimate of the Agreement completion date, and an estimate of the Consultant funds expiration date per Agreement schedule for the prime Consultant and for each sub-consultant.
2. When the Consultant identifies a condition that will require an Amendment Request (AR) to the Agreement, the Consultant Project Principal or Consultant Senior Project Engineer will communicate the need to the County Construction Manager for an approval in concept. Once received, the Consultant shall prepare and submit the AR, and all accompanying documentation to the Construction Project Manager for approval and further processing. The Consultant shall submit ARs to allow the County 45 calendar days 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 County.
3. When the Consultant identifies a condition that will require a Supplemental Amendment Request (SAR) to the Agreement, the Consultant Project Principal or Consultant Senior Project Engineer will communicate this condition/need to the Construction Project Manager and request approval in concept. Once received, the Consultant shall prepare and submit the SAR, and all accompanying documentation to the Construction Project Manager for approval and further processing. The Consultant shall submit SARs to allow the County 45 Calendar days to process, approve, and execute the SAR. The content and format of the SAR and accompanying documentation shall be in accordance with the instructions and format to be provided by the County.
4. The Consultant Project Principal or Consultant Senior Project Engineer for the project shall be responsible for performing follow-up activities to determine the

status of each AR and SAR submitted to the County.

12.2 Invoicing Instructions:

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

If the Consultant cannot submit their monthly invoice on time, the Consultant shall notify the County, prior to the due date the reason for the delay and the planned submittal date. Once submitted, the Consultant Project Principal or Senior Project Engineer shall notify the Construction Project 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 County in electronic and hard copy formats in accordance with County procedures.

A Final Invoice will be submitted to the County no later than the 30th day following Final Acceptance of the individual project or as requested by the County.

13.0 SUBCONSULTANT SERVICES

Upon written approval by the Construction Project Manager and the County, and prior to performance of work, the Consultant may subcontract for engineering surveys, materials testing, or specialized professional services.

14.0 OTHER SERVICES:

Upon written authorization by the County 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. Assist in preparing for arbitration hearings or litigation that occurs during the Agreement time in connection with the construction project covered by this Agreement.
- B. Provide qualified engineering witnesses and exhibits for any litigation or hearings in connection with the Agreement.
- C. Provide on and off-site inspection services in addition to those provided for in this Agreement.

15.0 POST CONSTRUCTION CLAIMS REVIEW:

In the event the Contractor submits a claim for additional compensation and/or time after the Consultant has completed this Agreement, the Consultant shall, upon execution by the County and the Consultant of an Amendment to this Agreement providing for compensation for such services, analyze the claim, engage in negotiations leading to settlement of the claim, and prepare and process the required documentation to close out the claim. Compensation for such services will be negotiated and effected through a Supplement to this Agreement.

16.0 OTHER CONSIDERATIONS:

- A. Consultant will not assume responsibility for the Contractor's means, methods, techniques, sequences or procedures of construction and it is understood that field services provided by Consultant will not relieve the Contractor of his responsibilities for performing the work in accordance with the plans and specifications.
- B. The words "supervision", "inspection", or "control" are used to mean periodic observation of the work and the conducting of tests by Consultant to verify substantial compliance with the plans, specifications and design concepts.
- C. Continuous inspections by Consultant's employees do not mean that Consultant is observing placement of all materials.
- D. Full-time inspection means that an employee of Consultant has been assigned for 40 hours per week.

17.0 SERVICES EXCLUDED:

The consultant shall not be responsible for the following services: performance of materials testing with the exception of asphalt plant verification testing, review of MBE participation, management of project through warranty period/claims, geotechnical services or investigations (including underdrain evaluations), engineering design services, OSHA or other Regulatory Safety Inspections, Survey or Construction Stakeout, permitting or permit fees and Asbuilt Survey and Certifications.

18.0 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 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.

Consultant CEI: England-Thims & Miller, Inc.
Project Name: US-301 at Ford Road Intersection Improvements
Financial Project No(s): NC10-013

	2010 Hours	2010 Rates	2010 Labor	2011 Hours	2011 Rates	2011 Labor	Direct Labor
Senior Project Engineer ETM	49.2	\$157.06	\$7,727.35	0	\$157.06	\$0.00	\$7,727.35
Project Administrator ETM	98.4	\$123.44	\$12,146.50	0	\$123.44	\$0.00	\$12,146.50
Contract Support Specialist ETM	0	\$89.88	\$0.00	0	\$89.88	\$0.00	\$0.00
Administrative Support ETM	0	\$54.59	\$0.00	0	\$54.59	\$0.00	\$0.00
Senior Inspector ETM	287	\$81.24	\$23,315.88	0	\$81.24	\$0.00	\$23,315.88
Inspector ETM	0	\$67.38	\$0.00	0	\$67.38	\$0.00	\$0.00
Inspector ETM	0	\$67.38	\$0.00	0	\$67.38	\$0.00	\$0.00
3 Man Survey Crew ANGAS	0	\$0.00	\$0.00	0	\$0.00	\$0.00	\$0.00

Sub-Total 434.6 \$43,189.73 0 \$0.00 \$43,189.73

Total Hours 434.6 Total Direct Labor \$43,189.73

Straight Overtime @ 10% Direct Labor \$2,331.59
Subtotal \$45,521.32
Premium Overtiem \$1,165.79
Subtotal \$46,687.11

TOTAL MAXIMUM LIMITING AMOUNT \$46,687.11

CEI Consultant Estimated Staffing for Man-Hours

Consultant CEI: England-Thims & Miller, Inc.

Project Name: US-301 at Ford Road Intersection Improvements

Financial Project No(s): NC10-013

Project Startup/Closeout Acquisition Period

Project Staff	Year	2010						TOTAL	2011												TOTAL	PROJECT TOTAL MAN MONTHS	PROJECT TOTAL MAN HOURS					
		JUL	AUG	SEP	OCT	NOV	DEC		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC								
US-301 at Ford Road Intersection Improvements			C	C	C	C	C																					
Senior Project Engineer ETM		0.05	0.05	0.05	0.05	0.05	0.05	0.3																0	0.3	49.2		
Project Administrator ETM		0.10	0.10	0.10	0.10	0.10	0.10	0.6																0	0.6	98.4		
Contract Support Specialist ETM								0.0																0	0	0		
Administrative Support ETM								0.0																0	0	0		
Senior Inspector ETM		0.10	0.33	0.33	0.33	0.33	0.33	1.75																0	1.75	287		
Inspector ETM								0.0																0	0	0		
Inspector ETM								0.0																0	0	0		
3 Man Survey Crew ANGAS																												
Sub-Total																									2.65	434.6		

Award Date	June 2010
Start Construction	August 2010
Contract Duration	176 Days = 7 Pre-Construction, 124 Construction, 45 Close-out
Completion	January 2011