



Additional Services Agreement

DATE: January 5, 2018
RE: Hallandale Beach - SW Quadrant Drainage Improvements
Construction Services
CLIENT: City of Hallandale Beach
630 NW 2nd Street
Hallandale Beach, FL 33009
ATTENTION: Ms. Mariana Pitiriciu, PE, PMP
CGA NO.: 09-2591.28

CGA HAS BEEN ADVISED TO PROCEED WITH THE FOLLOWING ADDITIONAL SERVICES:

Due to the client's request for work outside the original scope of services, Calvin, Giordano & Associates, Inc. will provide the following additional services:

Calvin, Giordano & Associates, Inc., (CONSULTANT) is pleased to provide this proposal for construction services for the above referenced project. The scope of services generally includes all services during the construction phase of the project, which includes but is not limited to, civil engineering, electrical engineering, instrumentation and controls, landscape architecture, structural engineering, architectural, mechanical engineering services, and resident outreach during construction for 540 calendar days (~18 months) of construction time, with 450 calendar days to substantial completion. In the event there are contract extensions that are not within CGA's control, an additional services agreement shall be required. The detailed scope is outlined below.

I. Professional Engineering Services During Construction

A. Civil Engineering

1. Pre-Construction Conference

- CONSULTANT shall prepare "as-bid" or "conformed" construction documents, incorporating changes made during the bid process through addenda, and provide electronic and paper copies of the conformed documents for use by the CITY, the contractor, and CONSULTANT's engineering team at the Pre-Construction Conference. CONSULTANT will attend Pre-Construction Conference meeting with Contractor and City representatives. CONSULTANT's Construction Manager will conduct this meeting and prepare minutes.

Building Code Services
Civil Engineering / Roadway
& Highway Design
Coastal Engineering
Code Enforcement
Construction Engineering &
Inspection (CEI)
Construction Services
Data Technologies &
Development
Electrical Engineering
Engineering
Environmental Services
Facilities Management
Geographic Information
Systems (GIS)
Governmental Services
Indoor Air Quality
Landscape Architecture
Planning
Project Management
Redevelopment
& Urban Design
Surveying & Mapping
Traffic Engineering
Transportation Planning
Water / Utilities Engineering
Website Development

1800 Eller Drive
Suite 600
Fort Lauderdale, FL
33316
954.921.7781 phone
954.921.8807 fax

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2. Shop Drawing Review

- Receive and review shop drawings, samples, and other data which the Contractor is required to submit for general conformance with design criteria and Contract Documents. Return shop drawings and submittals in accordance with the Contract Documents.

3. Construction Meetings

- Attend meetings, as requested by CGA's Construction Manager, with the Contractor, CITY, and appropriate regulatory agencies in regards to construction of the project.

4. Construction Clarifications

- Respond in writing to the Contractor's Requests for Information (RFI) regarding the design documents during the 18 month construction period. CONSULTANT shall issue interpretations and clarifications of the Contract Documents, along with associated support materials, as requested by the Contractor. These interpretations will be rendered and a response prepared and submitted to the Contractor in a timely manner, in accordance with the Construction Contract Documents. The Construction Clarifications item includes coordination with applicable design professionals as needed.

5. Construction Changes

- Assist in the review of Change Orders (CO) and Work Change Directives (WCD) during the 18 month construction period.

6. Substantial & Final Inspections

- Assist CONSULTANT's Construction Manager in the preparation of inspection punch list(s).

7. Instrumentation and Control Services During Construction

- CGA shall provide Instrumentation and Control (I&C) Construction Services which include shop drawing review, review and respond to contractor RFIs, field visits, contractor coordination, I&C inspections as required to certify the plans, I&C testing, and review of as-builts for project close-out.

8. Project and Client Management

- CGA shall provide project management and client coordination services throughout the construction process. This will include the preparation of monthly status updates to the CLIENT, review of subconsultant invoices, and addressing client concerns or questions. This task will also include the prompt resolutions of any issues which may arise during the construction process, periodic interim inspections to assist CONSULTANT's Construction Manager, and attendance of inspections requested / required by regulatory (permitting) agencies.

9. Certificate of Construction Completion

- Provide assistance to CONSULTANT's Construction Manager, who will serve as the certifying engineer, for necessary documents to close out applicable regulatory permitting for the project and to obtain acceptance for operation of the pump station and generator systems, and operational testing for wells.

B. Subconsultant - Hydrological for well construction observation and inspection services by Langan Engineering and Environmental Services.

1. Observation during construction of the 17 stormwater drainage wells to compare the geology at each well with the recommendations in the RAR, per the FDEP permit requirements.
 - Preparation of signed and sealed certification letter for each well stating either that the casing recommendation is sufficient or a different minimum casing is required.
2. Observation of installation for the four monitoring wells, two shallow and two deep, per FDEP requirements.
 - Determine proper depth for the deep monitoring wells per specifications in FDEP permit and provide a letter stating each well was constructed in substantial compliance with specifications and was properly developed.

C. Subconsultant - Structural, Architectural and Mechanical Engineering services for Pump Station, Control Structure, Sea Walls, and generator pad shall be provided by Lakdas/Yohalem Engineering, Inc.

- Construction Services include shop drawing review, review and response to contractor RFIs, limited meeting attendance, inspections as required to certify the plans, and review of as-builts for project close-out.

D. Electrical Engineering

1. Provide overhead and underground utility (FPL, Comcast, AT&T, GC, etc.) coordination prior to and during construction schedule.
2. Perform shop drawing review/approval for conformance with contract documents.
3. Issue clarifications and interpretations of the contract documents during the course of the construction schedule.
4. Perform periodic site visits during construction to observe the work and determine conformance with contract documents and electrical construction standards.
5. Participate in multiple progress meetings during the course of the electrical construction schedule.

II. Professional Construction Services

- A.** The following scope is based on an overall period of eighteen (18) months and fifteen (15) months of Construction /Contract Time, and on total hours specified below. Any additional time, beyond the Contract Time, that is outside of CGA's control (i.e. force majeure, Contractor delays, unforeseen existing conditions, etc.) will require an approved agreement.
1. Coordinate, schedule and conduct one (1) pre-construction meeting at Municipality location; record, prepare, and distribute meeting minutes.
 2. Assist (receive, log, coordinate the review of, and return) in the processing of shop drawings, samples, and other data which the Contractor is required to submit.
 3. Receive and review Contractor's Schedule of Values (S.O.V.'s), schedule of submittals, and initial construction schedule.

4. Attend and participate in meetings with Contractor and appropriate regulatory agencies when requested and necessary for consultation or conferences in regard to construction of the project.
5. Attend and participate in Community Awareness meetings during the construction phase at Municipality location.
6. Coordinate, schedule, and conduct construction progress meetings at Municipality location; record, prepare, and distribute meeting minutes.
7. Assist (receive, log, coordinate the review of, and return) in the interpretation and clarification of the Contract Documents, and evaluate requested deviations from the approved design or specifications. In connection therewith, review, prepare, and process any work change directives or change orders requested by the Contractor or City.
8. Receive and review Contractor's monthly application for payment. Provide recommendations to the City for Contractor's payment.
9. Provide daily observations (estimated at 8 hours per day / 40 hours per week for Resident Project Representative; 2,600 hours) of the civil engineering related work for compliance with plans and specifications. Make interim inspections for substantial completion and perform a final inspection to determine, in general, if the work has been completed in conformance with the intent of the Contract Documents and permits. Coordinate other disciplines' (structural, electrical, hydrogeologist) inspections / observations.
10. Prepare and report observed or identified deficiencies, unsatisfactory work, or work which does not conform with the Contract Documents.
11. Perform review of as-built(s) provided by the Contractor for civil engineering related work.
12. Assist EOR with Contractor supplied close-out documentation, and provide permit certification(s).
13. Perform Construction Management services to monitor and review Contractor's planning efforts, staffing, scheduled progress, and coordination of his subcontractors. Provide and prepare communiques to City and Contractor as needed to document and follow up on critical issues.

14. Document and maintain an "Issues Log" and monitor all items until final resolution.
15. CGA Resident Project Representative shall produce daily observation reports in digital format with pictures, shall be supplied with a laptop computer and digital camera, and shall utilize the City's templates for organizing all project documentation.
16. The City shall provide the CGA RPR a work station at the City's water treatment plant with Wi-Fi access.

III. Professional Landscape Architecture Services

- A. Attend Pre-construction Meeting with City staff and CGA team.
- B. Perform shop drawing review for the Irrigation system components.
- C. Issue clarifications and interpretations of the contract documents during the course of the construction schedule.
- D. Perform site visits at the beginning of the project to address tree protection and work with the contractor's sub to provide selective pruning on the trees which are overhanging the work zone and must be pruned.
- E. Perform site visits at the end of the project to address planting installation and work with the contractor's sub to ensure that the plant material meets the specifications prior to installation. Address selective pruning on any existing trees which may have been impacted by the construction activities.
- F. Assist with Public Outreach issues. Tree trimming, removals and relocations become very personal to residents that may have planted special trees/palms within the swales and adjacent to the right of way. This scope is to assist with any of those issues which may arise during the construction process.
- G. Participate in progress and field meetings on an as needed basis.
- H. Provide the design for the generator wrap and coordinate the design with City staff to ensure it is acceptable. We anticipate that the first design concept will not be the accepted version. In most cases multiple iterations of the design are necessary to arrive at a consensus. The approval also depends on the number of City staff members that are invited to participate in the final design selection.

IV. Professional Environmental Services

- A. Attend the pre-construction meeting and additional construction meetings as requested.
- B. Review environmental related shop drawings.
- C. Coordinate with environmental resource permitting agencies on required submittals and inspections for environmental permit close-out.

PROPOSED SCHEDULE OF FEES	
I Professional Engineering Services During Construction	
A. Civil Engineering Services	\$91,795.00
B. Hydrogeological Inspections (Langan Engineering)	\$146,000.00
C. Structural, Mechanical and Architectural Construction Services (Lakdas Yohalem Engineering)	\$152,750.00
D. Electrical Engineering Services	\$22,475.00
II Professional Environmental Services During Construction	\$5,000.00
III Professional Landscape Architecture Services During Construction	\$17,710.00
IV Professional Construction Management Services	\$346,670.00
IV Professional IT Services - Construction Website	\$5,000.00
V Meetings not included in I thru IV	Hourly
TOTAL	\$787,400.00

AUTHORIZATION

**Kindly sign and return this authorization at your earliest convenience.
Calvin, Giordano & Associates, Inc.
will proceed upon receipt of authorization.**

By: _____

Ms. Mariana Pitiriciu, PE, PMP
Assistant Public Works Director, City
Engineer

Date: _____

By: _____

Shelley Eichner, AICP
Senior Vice President

Date: _____