

TASK ORDER NO. 14

SCOPE OF SERVICES AND FEE PROPOSAL

ORANGE LAKE RESTORATION AND IMPROVEMENTS

CITY OF NEW PORT RICHEY

I. PROJECT SCOPE

Description:

The City of New Port Richey (CITY) is currently undergoing a major redevelopment of the downtown Sims Park and Orange Lake areas. As part of the redevelopment goals, the CITY seeks to implement water quality improvements to Orange Lake and the Pithlachascotee River with restoration activities within the 2.4 acre Orange Lake that include dredging operations to remove sediments, the addition of sediment control units at the major stormwater outfall pipes entering the lake, and incorporating the boardwalk structures originally designed for construction with the Sims Park Improvements project. It is understood that this project will entail the following components:

- Dredging, dewatering, and disposing of approximately 3,600 cubic yards of sediments from Orange Lake
- Stormwater outfall pipe modifications, including one (1) continuous defllective separator (CDS) Unit at the 42" pipe and two (2) baffle and sump manholes at the 24" and 15" pipes
- Flood control slide gates at the two Pithlachascotee River outfall pipes
- Aeration/diffusion system
- Littoral shelves and plantings at selected locations at the lake edge
- Two (2) boardwalk structures that were designed in the Sims Park Improvements project.

A portion of this project has received cooperative funding from the Southwest Florida Water Management District (SWFWMD) through the Cooperative Funding Initiative (CFI) program. The CFI Agreement N746 will provide 50% matching funds for the water quality improvement components of this project. In addition, the CITY has received partial project funding from the RESTORE Act. The CITY has requested Stroud Engineering Consultants, Inc. (ENGINEER) assist the CITY in preparing design documents for the Orange Lake Restoration project.

Mr. Brent Heath, P.E. will serve as the ENGINEER's project manager on this task order for the duration of the scope of services. The ENGINEER will provide project management as part of this task order, which shall include: continuous management and coordination of the overall project; preparation of miscellaneous correspondence; coordination of subconsultant services; coordination with SWFWMD; necessary scheduling of design and construction activities; and attendance at monthly project meetings (as requested) with the CITY. The progress of the project will be discussed with the CITY's designated project manager during each regular monthly project status meeting at the Public Works Building and/or the scheduled on-site construction meetings, and as necessary throughout the remaining life of the project. A written summary of the project status and completed tasks will be provided with each invoice submitted by the ENGINEER.

Based on the above background discussion, the following specific tasks and services are anticipated for this project, and are included in this Scope of Services:

1.0 PRELIMINARY ENGINEERING

Prior to final design, the ENGINEER will gather background information needed to complete the

final design and support permit applications. The ENGINEER will acquire available stormwater system data from the CITY. The data will consist of all relevant plans, reports, studies, records, maps, and other relevant data concerning the CITY's current stormwater system contributing to Orange Lake.

Surveying: The ENGINEER will coordinate with a licensed professional surveyor to provide survey elevations of the existing stormwater structure rims, storm pipe inverts, and manhole bottoms at the proposed locations for the sediment control structures. The survey prepared for the Sims Park Improvements project will be used for general topographic ground elevations, tree locates, and right-of-way boundaries. The survey will be prepared using Florida State Plane West, NAD 83 coordinate system.

Geotechnical: The ENGINEER will use the soils and boring data and recommendations from the geotechnical investigations (Geotechnical Exploration, Universal Engineering April 2015, and Additional Geotechnical Exploration, Universal Engineering May 2015) that were conducted for the Sims Park Improvements project. It is anticipated no additional geotechnical investigation work will be required for this Task Order.

Boardwalk Value Engineering: The ENGINEER will perform a value engineering of the current Boardwalk and Observation Structure that was designed for the Sims Park Improvements project. The value engineering will include a review of the architectural and structural elements of the boardwalk to identify changes that could provide potential cost savings to the CITY during construction.

Sediment Analysis: The ENGINEER will conduct a soil survey and analysis to determine the depth of and type of sediments at various locations within Orange Lake, for use in developing a dredging plan.

The ENGINEER's preliminary engineering scope will include the following:

- Assemble available City stormwater system maps and utilities record drawings.
- Coordinate and obtain a limited survey of the project areas.
- Conduct a value engineering evaluation of the boardwalk structures.
- Prepare a 30% design submittal to document the key design components of this project.
- Conduct a sediment analysis of Orange Lake.

2.0 FINAL DESIGN

Once the preliminary design and planning activities are completed, the ENGINEER will prepare detailed construction documents for the conceptualized facilities and furnish appropriate numbers of sets to the CITY for review. The final documents will be suitable for establishing a construction contract for the project while being in sufficient detail to permit construction by the contractor.

The ENGINEER's final design scope will include the following:

- Dredging Plan: Based on the sediment analysis data, the ENGINEER will prepare a dredging plan to include the timeline of the dredging, sediment removal calculations based on the soil analysis, dewatering plan of Orange Lake, spoil site location, dewatering of spoil and treatment of dewatering water and routing back to Orange Lake. This task item will include the preparation of bidding documents for the dredging contractor.
- Prepare and submit copies of construction drawings for the sediment control units, outfall

gates, aeration/diffusion system, and littoral zones at designated project completion milestones (60%, 90%, and final) for review, comment, and approval by the CITY. The construction drawings will include construction notes, plan sheets at appropriate scale for legible interpretation, and standard utility details. Four (4) copies of construction drawings will be provided in 11"x17" size at each submittal stage. The construction drawings will include civil and utility details.

- Prepare and submit copies of construction drawings for the boardwalk and shade structures at designated project completion milestones (90% and final) for review, comment, and approval by the CITY. The construction drawings will include construction notes, plan sheets at appropriate scale for legible interpretation, and standard utility details. Four (4) copies of construction drawings will be provided in 11"x17" size at each submittal stage. The construction drawings will include civil, architectural, structural, and electrical details.
- Attend design review meetings at the specified design intervals with the CITY. It is anticipated that there will be no more than three (3) design review meetings prior to project bidding.
- Prepare front-end bidding documents and technical specifications for the final design documents.
- Prepare a complete tabulation of material quantities and corresponding final estimate of probable construction cost, based upon experience with similar work in the area.

3.0 PERMIT ASSISTANCE

Dredging Permits – The ENGINEER will prepare the water use permit application from the Southwest Florida Water Management District for the dewatering of Orange Lake, the Florida Department of Environmental Protection permit, the Army Corps of Engineers permit or exemption, and the Pasco County permit or exemption for the dredging operations at Orange Lake.

Stormwater Permits – The ENGINEER will prepare and submit the permit applications, including associated sketches, drawings, and related incidental information required for submittal, necessary to perform the proposed construction activities as included on the final design documents. It is anticipated that a SWFWMD ERP permit application will be required as part of the stormwater system improvements.

The ENGINEER will provide routine follow up services in support of the permit applications by attending meetings, making field visits, responding to questions, etc. At the conclusion of the project construction phase, the ENGINEER will complete and submit the SWFWMD Construction Certification form.

4.0 BID PHASE SERVICES

It is anticipated that there will be two separate bidding phases for this project; one bid for the dredging operation and a second bid for the stormwater and lake improvements. Separate bid phases are necessary to complete the dredging of the lake prior to the remaining objectives being constructed. If the City chooses to obtain a dredging contractor through the use of a piggyback contract, the ENGINEER will provide support services for the procurement process. Both bid phases will include the following tasks:

- 4.1 Contract:** It is anticipated that Contract Documents will be prepared as part of this Task

Order. These Documents will be submitted to the CITY with the final design drawings.

- 4.2 **Document Sale:** Upon advertisement of the Contract and initiation of the bidding process, the ENGINEER will provide a compact disc to the CITY which contains the Contract Documents and Construction Plans in PDF and AutoCAD format. The ENGINEER will subsequently be responsible for sale of the bid documents to the interested bidders/parties upon request.
- 4.3 **Pre-Bid Meeting:** Upon scheduling of the Pre-Bid Meeting by the CITY, the ENGINEER will coordinate with the CITY to develop the proper meeting agenda. The ENGINEER will be directly involved in the meeting communications and adequately describe the project specifics to the attending bidders/parties. The ENGINEER will answer all pertinent questions and issue any necessary addendums that result from the Pre-Bid Meeting.
- 4.4 **Bid, Award, Bond and Insurance Assistance:** The ENGINEER will communicate with the interested bidders/parties during the time period between contract advertisement and bid submission. The ENGINEER will assist the CITY in preparing the required advertisement for bids, attend the bid opening, review bids, prepare a bid tabulation and make recommendations regarding the award of the construction contract.

5.0 SERVICES DURING CONSTRUCTION

- 5.1 **Pre-Construction Meeting:** Upon award of the construction contract, the ENGINEER will assist the CITY during the construction phase by attending the pre-construction conference.
- 5.2 **Work Recommendations:** The ENGINEER will communicate with the CITY and contractor throughout the construction phase and respond to any construction or design issues that are conveyed by either party. The ENGINEER will interpret the plans and specifications for the contractor and assist with resolution of construction difficulties encountered. If warranted, the ENGINEER will modify the design drawings to illustrate the required additional changes so that the project can be successfully completed.
- 5.3 **Shop Drawing Reviews:** In accordance with the Contract Documents, the selected contractor will be required to provide utilities-related equipment/material submittals to the ENGINEER and obtain approvals prior to installing the materials. The ENGINEER will review these submittals per the contract and return them to the CITY and contractor for subsequent processing.
- 5.4 **Construction Observation/Field Services:** It is anticipated that the construction of the Orange Lake improvements is to be started in May 2016 and that the construction duration will be six (6) months, with the majority of the required utility installation activities performed over a four (4) month time frame. The ENGINEER will conduct periodic site visits to observe the work in progress, especially during periods of major construction, and consult with the CITY's inspector to monitor conformance with the contract documents. An average field observation time of 4 hours per week has been estimated by the ENGINEER throughout the primary four (4) month period of the construction phase. It is anticipated that on-site observation of the work in progress will be conducted with assistance from the CITY's inspections staff at intervals necessitated by the contractor's schedule, capabilities and effectiveness, and as required to provide final regulatory certification. The ENGINEER will assist the CITY with operational questions associated with acceptance of the completed project.

- 5.5 Record Drawings:** Upon receipt of the as-built drawings and survey information from the contractor, we will provide signed and sealed record drawings along with the project certification documents to the CITY. The record drawings will also be included on the CITY's master drawing file. The record drawing submittal will include two complete sets of paper drawings (11"x17"), and one compact disc with the complete set of drawings in AutoCAD file format and PDF file format.
- 5.6 Project Closeout:** In order to properly close out the project, it is anticipated that the ENGINEER will be required to submit a Certificate of Substantial Completion. This Certificate will fix the date when the entire work, associated with the CITY's utilities, is considered substantially complete and ready for its intended use. It will identify significant items that need to be addressed or corrected before final payment can be recommended. Upon resolution and completion of the items mentioned in the Certificate and submittal of all contractual documents by the contractor, the ENGINEER will prepare and submit final Change Order to adjust the Contract amounts to the completed quantities and submit a Recommendation of Final Payment to the CITY.

6.0 COORDINATION WITH SWFWMD

- 6.1 Reporting Requirements:** The ENGINEER will provide the necessary documents, design submittals, construction reports, project meetings, etc. to assist the CITY with the SWFWMD CFI Agreement N746 reporting requirements.
- 6.2 Project Closeout:** In conformance with the SWFWMD CFI Agreement N746, the ENGINEER will develop and submit the Orange Lake project improvements to SWFWMD on ESRI Geodatabase.

II. DELIVERABLES

This Scope of Services is to include the following deliverables:

- Updated Design Drawings and Technical Specifications, as necessary, at project completion milestones
- Final Design Drawings
- Front-end Documents
- ENGINEER's Opinion of the Probable Construction Cost
- Certificate of Substantial Completion
- Recommendation for Final Payment
- Record Drawings & CD's
- ESRI Geodatabase on CD

III. ASSUMPTIONS

This Scope of Services is based upon the following assumptions:

- **Survey:** This Task Order is based upon the use of the existing survey data and buried utilities location information provided for the Sims Park Improvements project, as supplied by the CITY, for the purpose of preparing detailed design construction drawings. The ENGINEER will perform limited survey activities where existing survey information is missing, as necessary to properly illustrate the proposed stormwater system improvements for construction purposes.

- **Geotechnical:** This Task Order is based upon the use of the existing geotechnical data obtained for the Sims Park Improvements project, as supplied by the CITY, for the purpose of preparing detailed design construction drawings. No additional geotechnical investigation services are anticipated for this project.
- **Property/Easement Acquisitions:** It is assumed that no easement acquisition activities are required as part of this Task Order.
- **Construction Phase Services:** It is assumed the CITY will provide staff for on-site observation for the duration of the construction phase.

IV. ENGINEER'S COMPENSATION

For Tasks 1 – 5 described above, the CITY will compensate the ENGINEER on a lump-sum basis. Compensation to the ENGINEER for the services included in the above tasks shall not exceed the following:

1.	PRELIMINARY DESIGN	\$ 13,270.00
2.	FINAL DESIGN	\$ 31,360.00
3.	PERMIT ASSISTANCE	\$ 12,830.00
4.	BID SERVICES	\$ 5,405.00
5.	SERVICES DURING CONSTRUCTION	\$ 15,710.00
6.	COORDINATION WITH SWFWMD	\$ 3,120.00
	TOTAL LUMP SUM AUTHORIZATION	\$ 81,695.00

V. ADDITIONAL SERVICES REQUIRING AUTHORIZATION IN ADVANCE

If required by the ENGINEER and authorized by the CITY, additional services related to this Task Order shall be provided by the ENGINEER for additional professional fees negotiated with and agreed to by the CITY.

VI. PROJECT SCHEDULE

The ENGINEER will begin the activities described herein within two weeks of receiving written notice to proceed. The estimated project schedule is outlined as follows:

<u>Task</u>	<u>Weeks to Complete After Notice to Proceed Issued</u>
Preliminary Engineering	4
CITY Review	5
30% Final Design Submittal	9

CITY Review	10
60% Final Design Submittal	14
CITY Review	15
90% Final Design Submittal	19
CITY Review	20
100% Final Design Submittal	22
Permitting	24
Construction Phase	52

TASK ORDER NO. 14

Orange Lake Restoration and Improvements

Stroud Engineering Consultants, Inc.

A. SCOPE OF SERVICES – The City of New Port Richey hereby authorizes the firm of Stroud Engineering Consultants, Inc. to perform the specific services summarized on the attached statement entitled TASK ORDER NO. 14, SCOPE OF SERVICES AND FEE PROPOSAL.

B. TIME OF COMPLETION – Work under this Authorization will begin upon Notice to Proceed from the City and will be completed within the schedule presented on the attached statement entitled TASK ORDER NO. 14, SCOPE OF SERVICES AND FEE PROPOSAL.

C. KEY PERSONNEL – Stroud Engineering Consultants, Inc. shall appoint a single representative with whom the City of New Port Richey shall coordinate. This representative shall have the authority to transmit instructions, receive information, interpret and deliver decisions, etc. Key personnel assigned to the project by Stroud Engineering Consultants, Inc. shall not be removed from the project without the prior written approval of the City of New Port Richey. For this authorization key personnel are as follows: Brent Heath, P.E.

D. COMPENSATION – Professional fees for this authorization will be lump sum in accordance with the PROFESSIONAL ENGINEERING AND WATER-RESOURCE AND ENVIRONMENTAL CONTINUING CONSULTING AGREEMENT with the City of New Port Richey, dated December 17, 2013.

E. ACCEPTANCE – By signature hereon, the parties each accept the provisions of this TASK ORDER NO. 14, and authorize the Consultant to proceed at the direction of the City's representative, in accordance with the SCOPE OF SERVICES AND FEE PROPOSAL.

Witness:

STROUD ENGINEERING CONSULTANTS, INC.

Date

Attest:

CITY OF NEW PORT RICHEY, FLORIDA

City Clerk

Mayor

Date