DESCRIPTION OF SCOPE OF SERVICES

GENERAL

Consultant agrees to provide Engineering Services for two co-located projects (Project #1 and Project #2) as outlined herein.

SCOPE OF SERVICES

The Scope of Work to be performed under this task consists in the final detailed design, permitting, bid phase assistance, and engineering support services during construction for both Project #1 and Project #2.

PROJECT #1 - SIPS - GREENLAND - SOUTHSIDE BLVD - DEERWOOD 3 TO GREENLAND WATER (102-37)

Approximately 40,500 LF of 30" DIP water main between the SIPS Deerwood WTP pipeline and the Greenland WTP. Refer to the 102-37 Project Description included with this solicitation for more detail.

In addition, Priority 1 work items which may be included in this project are as follows:

- 1. Water Quality Monitoring Stations
- Greenland WTP SIPS Intertie Station 2.
- 3. Supervisory Control and Data Acquisition (SCADA) System
- Greenland WTP Ground Storage Tank

PROJECT #2 – DAVIS – GATE PKWY TO RG SKINNER – RECLAIMED WATER PROJECT (417-47)

Approximately 15,000 LF of 30" DIP Reclaimed Water Main between Gate Parkway and RG Skinner Parkway. Refer to the 417-47 Project Description included in this solicitation for further detail.

TASK PLAN

- A. General tasks that are to be included in this project may include the following:
 - 1. Development of the design for the installation of Project #1 and Project #2 as defined herein
 - 2. Methods of construction including any necessary trenchless crossings
 - 3. Analysis of special crossings
 - 4. Real state acquisition requirements
 - 5. Survey requirements
 - 6. Geotechnical and Environmental requirements
 - 7. Permitting requirements
 - 8. Coordination of SCADA integration
 - 9. Engineering Services during Construction

B. Design Kickoff Meeting

Attend the design kickoff meeting at the date and time established by JEA. Prepare meeting minutes and submit to JEA.

C. Design Criteria

Appendix A - Technical Specifications

1410316648 Engineering Services for the SIPS Southside Blvd WM and Davis- Gate Pkwy to RG Skinner RWM

Comply with JEA Water & Sewer Standard Specifications; JEA Water, Sewer and Reclaimed Water Design Guidelines requirements; JEA Rules and Regulations for Water, Sewer & Reclaimed Water Services for water pipeline design and other applicable standards.

D. Opinion of Costs

Consultant will prepare opinions of construction cost at all stages of deliverables in accordance with the Association for the Advancement of Cost Engineering International, Inc. (AACE) for the purpose of assisting JEA in preparing budget funding request, evaluating design options. Expected accuracy will be as follows: Class 3 estimate for 30% design deliverable and System study; Class 2 estimate for 60% design deliverable, and Class 1 estimate for 90% and 100% design deliverable. Follow JEA estimate report guidelines, formats, and schedules.

E. Permitting Assistance

Assist JEA in filing and obtaining all the necessary permits from local and state agencies to include but not limited to:

- City of Jacksonville (10 set design review, tree if needed, and Right-of-Way permit)
- Florida Department of Environmental Protection (FSDWA, Dewatering, ERP Wetlands permitting)
- Army Corps of Engineers (ERP wetlands permitting)
- FDOT (Utility Permit)
- Florida Fish and Wildlife Conservation Commission (FWC) (Gopher Tortoise)

Assistance will include:

- Pre-meetings with permit authorities as needed to insure necessary approvals.
- Preparation of applications, exhibits, drawings, and specifications as needed for execution and submittal.
- Furnishing additional information about the project design as required for permit approval.
- Submittal of applications and associated documents to the permitting authorities.
- Identification of permit fees (JEA will provide payment for necessary permit fees)

F. Design Contract Documents

- 1. Prepare detailed drawings, specifications, and Bid Form for the proposed construction work and for materials and equipment required. The documents shall be prepared for selection of construction contractors on a competitive bid price basis. The documents shall be prepared as one contract.
- 2. Update the opinion of probable construction cost for the proposed work covered by the contract documents and provide with final construction contract documents.
- 3. Review the contract documents for completeness and constructability.
- 4. Provide Bid Form in the JEA Asset Management format
- 5. Provide PDF set of contract documents to JEA for review at 30 percent, 60 percent, 90 percent and final construction drawings. This item provides for four (4) meetings with JEA personnel to discuss review comments.
- 6. Bidding Documents to be provided to JEA include drawings, bid form, specifications, and text for inclusion into the JEA Special Conditions, if needed.
- 7. Provide paper and electronic drawing files, PDF and AutoCAD formats, of the final construction drawings to JEA. Provide one CD (or thumb drive) with electronic drawing files and two signed/sealed hard copies of the final construction drawings to JEA. If not directed otherwise by JEA, provide electronic files of specifications in Word and PDF formats.

G. Bid Phase Services

Appendix A - Technical Specifications 1410316648 Engineering Services for the SIPS Southside Blvd WM and Davis- Gate Pkwy to RG Skinner RWM

- 1. If requested by JEA, attend the pre-bid conference at the date and time established by JEA.
- Interpret construction contract documents in regard to Contractor questions. Support JEA with drawings and/or specification updates for addenda issuance. JEA will coordinate and issue all addenda.
- 3. JEA will conduct the bid opening. Attendance is not required by designer at the bid opening.
- 4. Provide Conformed drawings and specifications. JEA will be responsible for the coordination and distribution of conformed copies of the construction contract documents.

H. Construction Services

- 1. Provide design services during construction as requested
- 2. Participate in the pre-construction meeting to answer technical questions.
- 3. In case of special crossings: If requested, review and approve shop drawings, horizontal directional drill or auger bore plans, bore plans, and as built bore logs/reports. The contract will include the time for two (2) reviews per shop drawing submitted. The consultant will be funded for any additional reviews, subsequent to the second review not approved.
- 4. If requested, attend monthly status meetings/site visits.
- 5. If requested, respond to Contractor RFIs. Include two (2) responses per month. Responses that require corrections to drawings or specifications are not counted in this total.
- 6. If requested attend Substantial and final acceptance inspections.

I. DELIVERABLES

Consultant shall provide the following deliverables to include but not limited to:

30, 60 and 90% Design Documents

- 30, 60, and 90% engineering drawings and estimate reports
- 30, 60, and 90% written specifications if needed
- 30, 60, and 90% Engineer's estimate per JEA estimating guidelines
- Final design calculations
- Applicable permits
- Asset management documentation

100% Design Document

- Final engineering drawings
- 100% Engineer's estimate per JEA estimating guidelines
- Final written specifications, if needed
- Final QC performed
- Final survey
- Geotechnical Report

Bid Documents

- Bid set engineering drawings
- Bid set written specifications, if needed
- Bid Form- In asset management format
- Related Bid documents

Construction Documents

Conformed engineering drawings

Appendix A - Technical Specifications

1410316648 Engineering Services for the SIPS Southside Blvd WM and Davis- Gate Pkwy to RG Skinner RWM

J. INFORMATION BY JEA

The following shall be provided by JEA for this RFP.

- Project Descriptions for Project #1 SIPS Greenland Southside Blvd Deerwood 3 to Greenland Water and Project #2 – Davis – Gate Pkwy to RG Skinner – Reclaimed Water Project
- JEA Estimating Guidelines

K. SCHEDULE

The design/permitting phase services shall not exceed five hundred thirty five (535) days unless approved otherwise by JEA.