



Procurement Bid Office
Customer Center 1st Floor, Room 002
21 W. Church Street
Jacksonville, Florida 32202

July 27, 2017

ADDENDUM NUMBER: One (1)

TITLE: Southwest Service Area Infiltration and Inflow Study and Remediation Plan

JEA RFP NUMBER: 111-17

PROPOSAL DUE DATE: ~~August 08, 2017~~ August 15, 2017

TIME OF RECEIPT: 12:00 PM

TIME OF OPENING: 2:00 PM

THIS ADDENDUM IS FOR THE PURPOSE OF MAKING THE FOLLOWING CHANGES OR CLARIFICATIONS:

1. JEA is extending the due date for this solicitation to August 15, 2017.
2. JEA has revised section 1.2.4.1 Professional Staff Experience. Please see the attached file labeled 111-17 Addendum 1 Evaluation Matrix, and below for a listing of the changes.

1.2.4.1 PROFESSIONAL STAFF EXPERIENCE

Maximum score for this criterion is: 30 POINTS - Points for each subsection will be awarded as described on the Evaluation Matrix attached to this RFP.

1. Team Members

The Proposer shall provide a maximum of ten (10) resumes of the professional staff to be assigned to perform the Work. The resumes provided shall identify the Project Manager, ~~Lead Design Engineer of Record~~, PACP Certified ~~Specialist Engineer~~, CCTV Crew Leader, QA/QC Engineer and the backups for each (collectively, the "Team Members"). **Primary positions (as shown in the attached Evaluation Matrix) shall only serve in one (1) role.** Note, the Project Manager must be from the company submitting the Proposal and not a Subcontractor. **All proposed engineering staff shall be registered professional engineers in Florida.** Persons whose resumes are submitted as a Team Member must actually perform the Work unless Proposer receives prior approval by the JEA Project Manager to use a backup Team Member. Finally, if Proposer submits a resume of a Subcontractor that is employed by a JSEB firm, please note this on the resume.

At a minimum, each resume shall present the Team Member's name, title, years of service with company, total years of experience, applicable professional registrations, education, and work experience. Resumes shall also identify any specialty or technical process expertise. **Resumes shall be no more than two (2) pages in length, single sided, and on 8.5" by 11" sized paper. If more than two pages are submitted, only the information contained on the first two pages will be evaluated by JEA. No more than ten (10) resumes will be evaluated.**

Years of Relevant Experience will be evaluated as detailed below:

- Project Manager and QA/QC Engineer:
 - o Greater than or equal to 25 years = 5 points
 - o Greater than or equal to 20 years but less than 25 years = 4 points
 - o Greater than or equal to 15 years but less than 20 years = 3 points
 - o Greater than or equal to 10 years but less than 15 years = 2 points
 - o Less than 10 years = 1 point
- Design Engineer, PACP Certified Specialist and CCTV Crew Leader:
 - o Greater than or equal to 15 years = 5 points
 - o Greater than or equal to 10 years but less than 15 years = 4 points
 - o Greater than or equal to 7 years but less than 10 years = 3 points
 - o Less than 7 years = 1 point

2. JSEB Firm

JEA will add ten (10) points if resume for a Primary Position is a JSEB consultant for the positions listed below.

- Design Engineer
- PACP Certified Specialist

~~2~~ 3. Share of Project Work

For purposes of awarding points for this selection criteria, "Share of Project Work" shall be defined as the number of assigned hours to the task for each individual primary Team Member divided by the total hours on the task, expressed as a percent. This information will be taken from the project schedule referenced in the Section below titled "Design Approach and Work Plan", and will be rounded two decimal places. **JEA prefers that the Share of Project Work information be submitted in a Microsoft Excel format. The same information should also be submitted with the hard copy of the Proposal.**

~~3~~ 4. Organizational Chart

Finally, Proposer shall provide an organizational chart delineating company's personnel responsibilities and functions associated with the Work. If applicable, this chart shall also delineate any responsibilities and functions of subcontractor(s) and/or JSEB firm(s).

Points will be awarded as described on the Evaluation Matrix attached to this RFP.

3. JEA has updated the Company Experience section on the Evaluation Matrix to combine the three past projects into one overall grade. No change in point value or information requested has been made. Please see the attached file 111-17 Addendum 1 Evaluation Matrix
4. JEA has updated the points available in sections 1.2.4.4 Project Manager Proximity To JEA and section 1.2.4.5 Jacksonville Small and Emerging Business (JSEB). Please see below and in the attached file label 111-17 Addendum 1 Evaluation Matrix.

1.2.4.4. PROJECT MANAGER PROXIMITY TO JEA

Maximum score for this criterion is: ~~40~~ **5** POINTS

Provide the address of Proposer's office that the proposed Project Manager normally works from and its distance from JEA Headquarters located at 21 West Church St. JEA will use Google Maps to verify distance.

In order to receive points for this criterion, Proposer's office must be occupied and staffed with at least three (3) employees for a duration of six (6) months prior to the Proposal Due Date stated in this RFP. Additionally, the office shall not be used as a residential premise. If necessary, JEA will use zoning records and tax rolls to validate this criteria.

1.2.4.5. JACKSONVILLE SMALL AND EMERGING BUSINESS (JSEB) - RFP

Maximum score for this criterion is: ~~5~~ **10** POINTS

Proposer shall indicate if it is certified as a Jacksonville Small and Emerging Business (JSEB) as defined by Jacksonville Ordinance 2004-602; Chapter 126, Part 6A and 6B.

If Proposer is not a certified JSEB, the Proposer shall list any JSEB certified subcontractors that it intends to utilize in the performance of this Work. The listing should include names of the JSEBs, the type of service they will provide, and the percentage of work being subcontracted. Points will be awarded based on the type and amount of work that will be conducted by JSEB firms.

The points will be awarded as follows:

Proposer is a COJ/JEA certified JSEB = ~~5~~ **10** pts;

Proposer is not a JSEB but will subcontract Work to JSEBs:

Non-JSEB with JSEB partner:

Greater than or equal to 10% of work = ~~4~~ **8** pts

Greater than or equal to 7%, but less than 10% of work = ~~3~~ **5** pts

Greater than or equal to 5%, but less than 7% of work = ~~2~~ **3** pts

Greater than or equal to 3%, but less than 5% of work = 1 pt

Less than 3% of work = 0 pts

5. JEA has updated Appendix A Technical Specifications. Please refer to the attached file 111-17 Addendum1 Appendix A Technical Specifications and the summary of changes below.

Task 2.6 Public Information Program - As deemed necessary (~~Time and Material Work~~)

Task 2.7 Florida Department of Transportation

Consultant shall prepare and submit a permit application to Florida Department of Transportation (FDOT) for their review for the installation of a JEA wastewater collection/transmission system in the FDOT right-of-way where appropriate based on the rehabilitation method. Consultant shall monitor the permit throughout the approval process. Consultant shall submit the permit application to FDOT for review and meet with FDOT as required (estimated to be three (3) meetings) to discuss FDOT's review comments. Consultant shall provide responses to three (3) Requests for Additional Information (RAI) and submit to JEA for review. Included in these three (3) meetings will be a Pre-Application meeting.

Consultant shall meet with representatives of FDOT to discuss the objectives of the overall project and to clarify the level of permitting needed for the permit. Three (3) meetings have been estimated for budgeting purposes. Additional meetings and/or RAIs will be considered outside of this scope of work and will be completed under a separate Task Authorization.

~~This proposal does not include the permit application fees.~~ This task does not include the preparation of any additional permit.

Task 2.8 City of Jacksonville 10-set Permit Application

If a permit determination requires a City of Jacksonville (COJ) Utility Permit, the Consultant shall prepare and submit a permit application to COJ for their review for the installation of a JEA water system in the COJ right-of-way along the proposed pipeline route. Consultant shall assist in gaining the COJ Right-of-Way Letter Approval Note which will include the preparation of a Stormwater Pollution Prevention Plan (SWPPP) that meets the minimum erosion and sedimentation control measures required by the COJ Ordinance 94-994-E. Consultant shall monitor the permit throughout the approval process. Consultant shall submit the permit application to COJ for review and meet with COJ as required (estimated to be one meeting) to discuss COJ's review comments. Consultant shall provide responses to one (1) Request for Additional Information (RAI) and submit to JEA for review.

Consultant shall meet with representatives of COJ to discuss the objectives of the overall project and to clarify the level of permitting needed for the permit. One (1) meeting has been estimated for budgeting purposes. Additional meetings and/or RAIs will be considered outside of this scope of work and will be completed under a separate Task Authorization.

~~This proposal does not include the permit application fees.~~ This task does not include the preparation of any additional permits.

Task 3.1 Attend Pre-Bid Meeting – As deemed necessary (~~Time and Material Work~~)

Task 3.2 Response to Questions for Bidders – As deemed necessary (~~Time and Material Work~~)

Task 3.3 Services During Construction – As deemed necessary (~~Time and Material Work~~)

ADDENDUM 1 APPENDIX A: TECHNICAL SPECIFICATIONS

111-17 Engineering Services for Southwest Service Area Infiltration & Inflow Study and Remediation Plan

PROJECT SUMMARY

General

This scope outlines Engineering Services for the identification and evaluation of sources of infiltration and inflow (I&I), preliminary design, final detailed design, permitting, bid phase services, and services during construction for the Southwest Service Area Infiltration & Inflow Study and Remediation Plan (I&I Study).

Background

Since 2000, the Southwest Service Area has experienced I&I issues, and two (2) studies have been completed in 2000 and 2002 with recommendations for rehabilitation projects to address I&I. JEA Grid Operations staff has identified specific pump station sub-basins in the Southwest Service Area where pumps experience extremely high run times and sewer system overflows occur during significant rain events. Through observations by Grid Operations staff, the increased collection system flows are partially due to a significant amount of I&I entering the systems through broken and leaking pipes, leaking manholes, cleanouts, manhole covers, yard and area drains, and cross connections to the storm sewer system.

The Southwest Service Area encompasses the sewer collection systems located in southwest Jacksonville and northern Clay County that convey wastewater to the Southwest Water Reclamation Facility (WRF). The sewer collection systems are divided among sub-basins served by wastewater pump stations located throughout the Southwest Service Area. The Southwest Service Area covers over 100 square miles of surface area and is comprised of approximately 600 miles of four inch (4") to fifty-four inch (54") pipes, including gravity sewers, force mains, and low-pressure mains. The sewer pipe materials of construction include approximately 420 miles of plastic pipe (PVC and HDPE), approximately 120 miles of vitrified clay pipe (VCP), and the remainder a mix of metal (cast iron and ductile iron) and concrete pipe. The average age of the pipes is approximately thirty (30) years.

Project Description

This I&I Study includes the evaluation of approximately fifty-two (52) miles of gravity sewers in thirteen (13) pump station sub-basins. The purpose of this I&I Study is to identify potential sources of I&I in select pump station sub-basins within the Southwest Service area identified by Grid Operations staff, evaluate remediation methods, and design the necessary improvements to reduce I&I. The recommended I&I remediation methods should cost effectively address sewer system defects to reduce operational costs related to the conveyance and treatment of clean water and reduce the risk to public safety by eliminating potential sources of wet-weather sewer system overflows. The pump station sub-basins included in the I&I Study are listed in Table 1. The locations of the thirteen (13) pump stations and the sub-basin impacted pipes are shown in Exhibit 1.

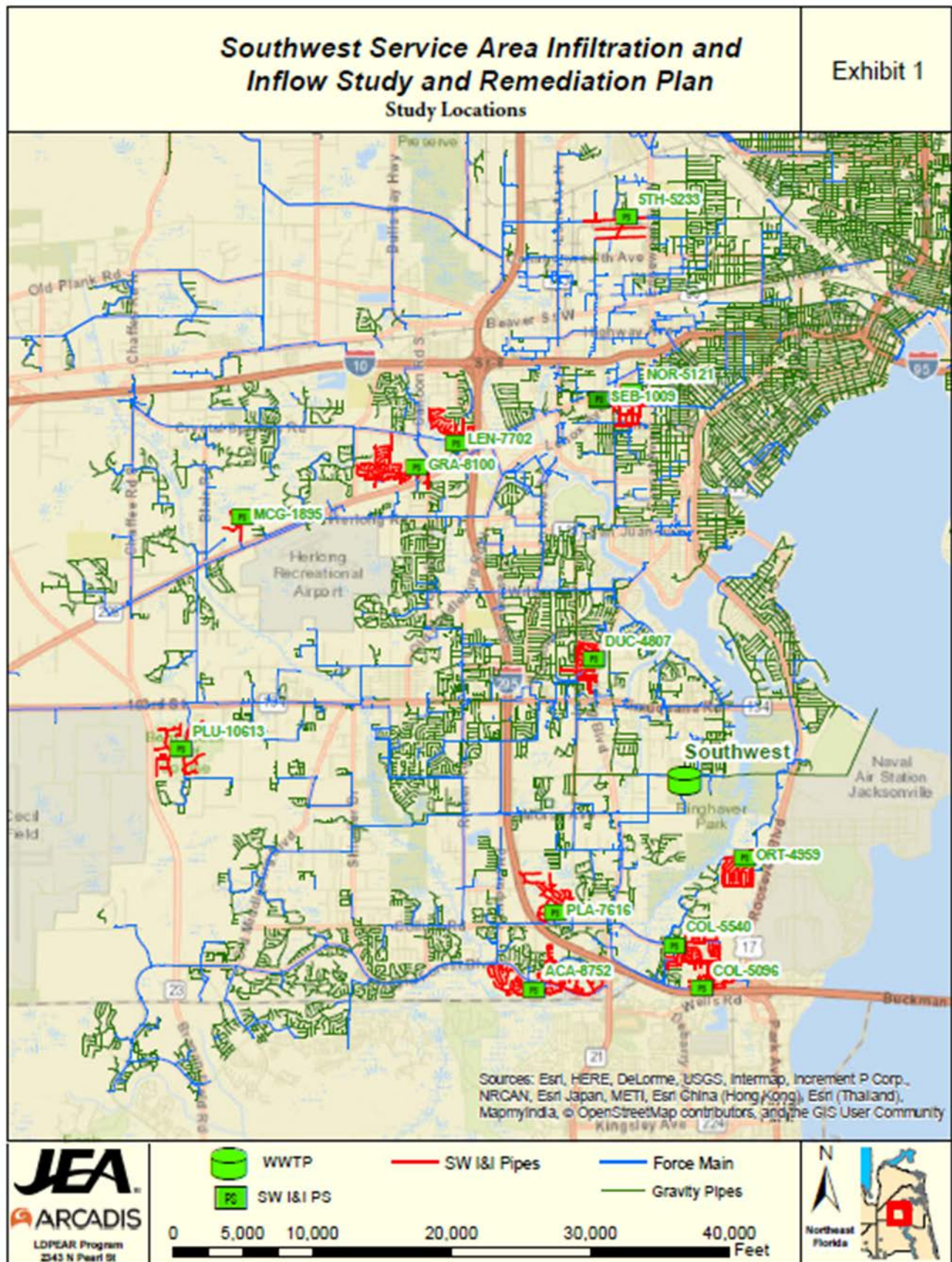


Table 1 I&I Investigation Sites

Sub-Basin #	Pump Station Location	Pump Station Name	Total Sub-Basin Pipe Length (ft)
1	1009 Seba Street	SEB-1009	1,294
2	4807 Ducheneau Dr	DUC-4807	21,255
3	4959 Ortega Hills Dr	ORT-4959	23,565
4	5096 Collins Rd	COL-5096	7,033
5	5121 Normandy Blvd	NOR-5121	27,144
6	5233 West 5th St	5TH-5233	13,783
7	5540 Collins Rd	COL-5540	40,724
8	7616 Plantation Bay Rd	PLA-7616	20,136
9	7702 Lenox Ave	LEN-7702	17,266
10	8100 Grampell Dr	GRA-8100	32,231
11	8752 Acanthus Dr	ACA-8752	42,712
12	10613 Plum Hollow Dr	PLU-10613	19,455
13	1895 McGirts Pt Blvd	MCG-1895	6,015

Pump performance data from the thirteen (13) identified pump stations comparing dry weather flow to peak flow conditions during storm events between September 2016 and November 2016 are shown in Table 2.

Table 2 Pump Station Runtime Analysis September 2016-November 2016

Pump Station Name	Location	Average Daily Runtime under Dry Conditions (min)	Peak Daily Runtime (min)	Peaking Factor	Ranking
SEB-1009	1009 Seba St	38.0	1604	4219%	1
MCG-1895	1895 McGirts Pt Bv	201.4	2339	1161%	2
NOR-5121	5121 Normandy Bv	224.9	1168	519%	3
DUC-4807	4807 Ducheneau Dr	577.0	2587	448%	4
PLU-10613	10613 Plum Hollow Dr	294.6	846	287%	5
COL-5540	5540 Collins Rd	442.5	1269	287%	6
ORT-4959	4959 Ortega Hills Dr	246.5	621	252%	7
LEN-7702	7702 Lenox Av	663.1	1495	225%	8
GRA-8100	8100 Grampell Dr	543.5	1209	222%	9
COL-5096	5096 Collins Rd	326.9	669	205%	10
PLA-7616	7616 Plantation Bay Dr	700.9	1227	175%	11
5TH-5233	5233 5th St W	776.7	1354	174%	12
ACA-8752	8752 Acanthus Dr	751.0	1125	150%	13

Based on this pump runtime data, it appears that four pump stations (SEB-1009, MCG-1895, NOR-5121, and DUC-4807) experienced wet weather flows between four (4) and forty-two (42) times normal operations, and their sub-basin areas should be considered top priority. Six (6) pump stations (PLU-10613, COL-5540, ORT-4959, LEN-7702, GRA-8100, and COL-5096) experienced wet weather flows between two (2) and three (3) times normal operations, and their sub-basin areas should be considered secondary priority. Three (3) pump stations (PLA-7616, 5TH-5233, and ACA-8752) experienced wet weather flows less than two (2) times normal operations, and their sub-basin areas should be considered tertiary priority.

The existing gravity sewer collection systems within the scope of the I&I Study are comprised of pipes with the characteristics shown in Tables 3 and 4. The extents of the sewer collection system in each sub-basin are presented as separate figures at the end of Appendix A.

Table 3 Pipe Sizes

Diameter (inches)	Length (miles)
4	0.2
6	1.5
8	45.4
10	3.7
12	0.5
15	0.1
18	0.1
Total	51.5

Table 4 Pipe Materials

Material	Length (miles)
Cast Iron (CI)	1.4
Ductile Iron (DI)	0.3
High Density Polyethylene (HDPE)	2.9
Polyvinyl Chloride (PVC)	22.6
Vitrified Clay Pipe (VCP)	24.3
Total	51.5

Regulatory/Permit Requirements

It is anticipated that permits will be required by the City of Jacksonville (10 set review and/or Right-of-Way Permit) and FDOT (Utility Permit). Other permits may be determined necessary during the design process and shall be obtained by the design team.

Real Estate Requirements

No permanent or temporary construction easements are required for the I&I Study. The I&I reduction projects are anticipated to be primarily trenchless rehabilitation or same-trench replacement, which would not require new permanent easements, but may require temporary construction easements to provide adequate space for construction. Actual easement acquisition needs for each site will be documented in the individual projects Project Definitions (PDs) developed in the second phase of the project.

Survey Requirements

GIS data and some record drawings are available for sanitary sewer utilities within the sub-basin study areas. The first phase of the project will not require any additional survey work. If any excavation is recommended in the Infiltration and Inflow Reduction Plan, topographical survey will be required for areas surrounding excavations. Actual survey needs for each recommended project will be documented in the individual PDs developed in the second phase of the project.

ENGINEERING SCOPE OF SERVICES

It is intended that the project objectives will be achieved through a hydraulic condition assessment (HCA). Various HCA techniques, such as sewer flow metering and smoke testing, will be employed to locate potential I&I sources. The HCA will be followed by visual inspection of those portions of the sewer collection systems determined to exhibit high potential for I&I to identify specific system defects, the extent of I&I, and the rehabilitation methods that may be implemented to eliminate the I&I. The I&I Study will be conducted in three phases as outlined in the following paragraphs.

Phase I - Hydraulic Condition Assessment

Task 1.1 Project Kick-Off Meeting

Consultant shall prepare and conduct a kickoff meeting with JEA staff to identify and discuss the critical aspects of the project. Consultant and JEA will work together to outline the project milestones and develop a schedule for the work activities.

Consultant shall provide an agenda and meeting minutes summarizing the findings of the meeting.

Task 1.2 Review Existing Data

Consultant shall review all available data, including previous I&I inspections, customer water consumption records, sewer system overflows, wastewater treatment plant flows, available precipitation data, and pump station runtime data to prioritize the HCA activities.

Task 1.3 Progress Meetings

Consultant shall participate in regular progress meetings at key milestones within the project. These meetings will be used for JEA to review the progress of Consultant and exchange vital ideas and information.

Consultant will provide an agenda and meeting minutes summarizing the findings of the meetings to JEA.

Task 1.4 Smoke Testing

Consultant will conduct smoke testing to identify potential sources of inflow such as storm sewer cross connections, open cleanouts, and roof drains illegally connected to the sanitary sewer. Smoke testing can also potentially identify locations where there are major defects in the pipe, such as pipe and lateral breaks and separated joints, depending on soil and groundwater conditions. Smoke testing will be conducted in all selected study areas during periods of low groundwater levels.

Consultant shall assist JEA Community Outreach to develop a Community Interaction Plan to be implemented. The Community Interaction Plan will include notifications to residents mailed by JEA, public meetings, and notices of impending smoke testing to be hand delivered by the smoke testing crew within several days of smoke testing.

Task 1.5 Sewer Flow Metering

Consultant will conduct sewer flow metering for a period of six (6) to twelve (12) months to establish baseline flows and evaluate inflow and infiltration. Flow metering should, at a minimum, capture baseline

flows during a period of low groundwater, a period of high ground water, and at least two (2) significant storm events resulting in elevated flows. One flow meter will be placed in each sub-basin study area, and an additional two (2) meters will be installed in similar sub-basins not included in the I&I investigation to be used as control readings for a post-rehabilitation evaluation of the effectiveness of I&I reduction methods.

Task 1.6 CCTV Inspections

Consultant will inspect sewer lines in sub-basins, where high pump runtimes appear to be infiltration driven (as opposed to inflow driven), utilizing closed circuit television (CCTV). The CCTV inspections will be reviewed to identify rehabilitation needs. Additionally, any potentially cross-connected storm sewers will be evaluated utilizing CCTV and dyed water testing to identify cross connection points. Manhole inspections may also be performed to identify potential sources of infiltration.

For data integrity and repeatability, all inspection results should be recorded utilizing the National Association of Sanitary Sewer Companies (NASSCO) Pipeline Assessment and Certification Program (PACP) and Manhole Assessment and Certification Program (MACP) standardized coding to identify all defects and document the overall structural and operations and maintenance scoring for each pipe or manhole asset.

It is anticipated that approximately twenty-five percent (25%) of the pipelines in the sub-basins will need to be inspected and up to twenty-five percent (25%) of the pipelines to be inspected may require cleaning to enable the CCTV inspections to be performed.

Task 1.7 Wet Weather Observations

Consultant will conduct wet weather observations to identify potential sources of inflow and to perform qualitative observations of relative flows in various pipe runs in each sub-basin under wet weather conditions.

Task 1.8 Infiltration and Inflow Reduction Plan

Consultant will prepare a Baseline Hydraulic Conditions Assessment based on the findings of flow metering, smoke testing, and CCTV and manhole inspections. This assessment will evaluate the field data to determine the nature, extent, and location of I&I flows in the sub-basins. Based on this assessment, Consultant will recommend rehabilitation methods for reducing peak flows. Primary rehabilitation methods may include:

- Manhole rehabilitation, including sealing walls and repairing frames and covers
- Removal of storm sewer cross connections
- Replacement of cleanout caps
- Chemical grouting of leaking joints
- Cured-in-Place Pipe (CIPP) lining of structurally defective pipes
- Excavated spot repairs of severe structural pipe defects
- Sealing of the service connection taps utilizing chemical grout, injected resin, or CIPP

Phase II - Design of Infiltration and Inflow Reduction Projects

Task 2.1 Project Definitions

Based on the Infiltration and Inflow Reduction Plan, Consultant will prepare a Project Definition (PD) report for each project location requiring rehabilitation. The PD report for each project will describe the necessity of the project, define the scope of work, and provide an estimated cost. The PDs will also determine the anticipated time required for design and construction and will constitute a conceptual level of design for the projects. The conceptual design phase will lock the design basis prior to the development of construction documents.

Task 2.2 Geotechnical Services

Based on the proposed rehabilitation method, Consultant shall provide the following preliminary geotechnical (soil) investigation as necessary:

1. Perform subsurface explorations necessary for the characterization of the existing subsurface conditions and development of preliminary design criteria for the proposed pipeline rehabilitation. For budgeting purposes, it is assumed that geotechnical borings will be required every 400 ft and to a depth of at least five (5) feet below the pipe invert and the drill pits. Pavement cores will extend two (2) feet below pavement surface. For budgeting purposes all subsurface explorations are assumed to occur within the roadway.
2. Perform SPT borings, as necessary.
3. Perform classification tests on selected samplings obtained from the borings.
4. Visually classify soil samples in general accordance with AASHTO and prepare Test Boring Records.
5. Summarize the results of the geotechnical investigations and provide recommendations for surface preparation and design of any proposed structures.
6. Review site specifications and revise as appropriate for site-specific requirements.
7. Identify any areas of suspected soil and/or groundwater contamination. Address required mitigation for dewatering and pipeline installation in design and bid documents.
8. If contaminated areas are found, then Consultant shall sample the groundwater and analyze the data to comply with FDEP Generic Permit for Groundwater Discharge. The laboratory analyses shall be completed in accordance to FDEP's Standard Operating Procedures (SOPs) and performed by a State of Florida certified laboratory.
9. If contaminated areas are found, prepare a Dewatering Plan for the construction project.

Task 2.3 Site Survey

Based on the proposed rehabilitation method, Consultant shall provide the following survey services as necessary:

1. A topographic survey in accordance with current JEA standards (ASCE 38-02 Quality Level B) shall be performed, in addition to a boundary survey. The survey shall include both sides of roadways along the project route and shall include all utility locates within the project area.
2. The Surveyor shall locate existing trees and determine the size and species of existing trees.
3. The Surveyor shall prepare a final AutoCAD survey meeting the standards set by JEA and Consultant. Signed and sealed copies will be provided for documentation.

Once the project approach and proposed rehabilitation method are locked, Consultant shall provide the following survey information using a subcontractor field services:

1. A subsurface survey in accordance with current JEA standards (ASCE 38-02 Quality Level A) will be performed.
2. Subsurface exploration will be performed at the locations identified during the design development.

After all survey has been completed, Consultant shall provide JEA with copies of the survey files.

Task 2.4 Sixty percent (60%) Design

Consultant shall provide engineering services to develop sixty percent (60%) design drawings for the pipeline rehabilitation that includes the following:

1. Preparation of a final pipeline route based on comments received under Task 2.1 showing pipeline location, potential utility conflicts, roadways, and demolition areas.
2. Coordination of any Roadway and Drainage replacement. No drainage design is included in this scope of work. However, if the pipeline design requires removal/replacement of roadway/drainage items they shall be repaired in accordance to FDOT and City of Jacksonville standards.
3. Compliance with the JEA Water and Wastewater Standard Specifications and the JEA Water, Sewer and Reclaimed Water Design Guideline for pipeline design.

Consultant shall provide JEA with three (3) full size (24"x36") set, and one (1) electronic (pdf) file of the sixty percent (60%) design drawings for their review and consideration.

Task 2.5 Prepare Project Estimate

Consultant shall prepare the project estimate at the following stages of the project: thirty percent (30%) design deliverable, sixty percent (60%), and ninety percent (90%). For the 100% design deliverable the estimate and quantity takeoff will be included in the 100% Final Design/Construction Bid submittal package. The Consultant will be required to provide a justification to any variance of the project estimate at the different deliverable stage. JEA will provide the Consultant with the format to be used.

Task 2.6 Public Information Program - As deemed necessary (~~Time and Material Work~~)

Consultant may be required to meet with JEA's personnel and assist them with the project presentation and discussions. A total of two meetings at locations chosen by JEA are included. The assistance with this task may include the following:

1. Preparation of applications, exhibits, and drawings to show the general layout of the work proposed.
2. Furnishing additional information about the project design required for public education about the project.

Consultant may be required to assist JEA in meeting with the representatives of the owners of affected facilities including utility companies, school districts, railroad companies, pipeline companies, developers and others to discuss the impact of the project. This will include the attendance of two public meetings established by JEA.

Consultant may be required to assist JEA with Public Outreach in conducting a public notification program for property owners; operators of business, commercial and industrial establishments; and private residents in the vicinity of proposed sites or along the proposed pipeline alignment who will be directly affected by the proposed construction activities. JEA will be responsible for the notifications and announcements.

Task 2.7 Florida Department of Transportation

Consultant shall prepare and submit a permit application to Florida Department of Transportation (FDOT) for their review for the installation of a JEA wastewater collection/transmission system in the FDOT right-of-way where appropriate based on the rehabilitation method. Consultant shall monitor the permit throughout the approval process. Consultant shall submit the permit application to FDOT for review and meet with FDOT as required (estimated to be three (3) meetings) to discuss FDOT's review comments. Consultant shall provide responses to three (3) Requests for Additional Information (RAI) and submit to JEA for review. Included in these three (3) meetings will be a Pre-Application meeting.

Consultant shall meet with representatives of FDOT to discuss the objectives of the overall project and to clarify the level of permitting needed for the permit. Three (3) meetings have been estimated for budgeting purposes. Additional meetings and/or RAIs will be considered outside of this scope of work and will be completed under a separate Task Authorization.

~~This proposal does not include the permit application fees.~~ This task does not include the preparation of any additional permit.

Task 2.8 City of Jacksonville 10-set Permit Application

If a permit determination requires a City of Jacksonville (COJ) Utility Permit, the Consultant shall prepare and submit a permit application to COJ for their review for the installation of a JEA water system in the COJ right-of-way along the proposed pipeline route. Consultant shall assist in gaining the COJ Right-of-Way Letter Approval Note which will include the preparation of a Stormwater Pollution Prevention Plan (SWPPP) that meets the minimum erosion and sedimentation control measures required by the COJ Ordinance 94-994-E. Consultant shall monitor the permit throughout the approval process. Consultant shall submit the permit application to COJ for review and meet with COJ as required (estimated to be one meeting) to discuss COJ's review comments. Consultant shall provide responses to one (1) Request for Additional Information (RAI) and submit to JEA for review.

Consultant shall meet with representatives of COJ to discuss the objectives of the overall project and to clarify the level of permitting needed for the permit. One (1) meeting has been estimated for budgeting purposes. Additional meetings and/or RAIs will be considered outside of this scope of work and will be completed under a separate Task Authorization.

~~This proposal does not include the permit application fees.~~ This task does not include the preparation of any additional permits.

Task 2.9 Preparation of Contract Documents

The contract documents shall include detailed drawings, tables, charts, schedules, and other documentation as may be necessary for the bidding and construction of the pipeline. The plan and profile sheets will be developed at a plan view scale of 1" = 20'. This project will utilize JEA's standard technical specifications.

In the progress of the final design task, it is anticipated that two reviews will occur – at the ninety percent (90%) and 100% levels of document completion. For each review, Consultant shall appropriately address JEA review comments for final approval by JEA. Upon approval, the revised documents will establish the design basis for the next milestone.

Consultant shall provide JEA with three (3) full size (24"X36") sets and one (1) electronic (pdf) file of ninety percent (90%) Design Drawings for their review and consideration. Consultant shall work with their sub-consultant to review any comments on the design. At this time Consultant shall meet with JEA to review the ninety percent (90%) Design and discuss comments. The documents submitted at the ninety percent (90%) level will be essentially complete pending final QA/QC review.

Task 2.10 Finalize the Construction Documents

Consultant shall prepare final design drawings showing all notations for the installation of the proposed rehabilitation based on comments at the ninety percent (90%) design review. Consultant shall incorporate JEA and Permitting comments as well as work with their sub-consultant for a final QA/QC of the Contract Drawings. The Consultant shall provide electronic versions of the 2D drawings to JEA for bidding purposes. An estimate and quantity takeoff will be included in the 100% Final Design/ Construction Bid submittal package

Phase III - Bidding Services and Services During Construction

Consultant shall provide four (4) complete full-size (24"x36") signed and sealed sets, one (1) electronic (PDF) and one (1) electronic (AutoCAD) set of construction drawings including survey files to JEA.

Task 3.1 Attend Pre-Bid Meeting – As deemed necessary (~~Time and Material Work~~)

If requested, Consultant will attend one (1) pre-bid meeting/site tour and assist JEA in responding to questions from bidders.

Task 3.2 Response to Questions for Bidders – As deemed necessary (~~Time and Material Work~~)

Consultant may be required to assist with the preparation of addenda that will be issued as needed to provide clarification of the construction documents and respond to questions from bidders. JEA will be responsible for coordinating and issuance of all addenda. Consultant may be required revise the 100% design documents to incorporate changes made in the addenda issued to bidders.

Task 3.3 Services During Construction – As deemed necessary (~~Time and Material Work~~)

Consultant will provide services during construction to implement the projects that are designed during Phase II including:

- Responding to requests for information (RFIs)

- Reviewing submittals for technical compliance with Contract Documents
- Attending Progress Meetings as required/requested
- Preparing Record Drawings and GIS Updates

JEA RESPONSIBILITIES

JEA shall provide the following to the Consultant in a timely manner:

1. Available reports, studies, as-built drawings and other data.
2. Review of Consultant's work products.

PROJECT SCHEDULE

Consultant shall provide the services as outlined in Tasks 1 through 3 above within 1460 calendar days of Notice to Proceed. Below are the anticipated project milestone dates for the project:

Proposed Project Schedule:

175-38S – Southwest Service Area Infiltration & Inflow Analysis and Remediation

Project Kickoff Meeting – October 2017

Hydraulic Condition Assessment - October 2017 to January 2019

Design and Permitting - January 2019 to October 2019

Bidding and Construction – October 2019 to September 2021

ATTACHMENTS

Sub-Basin Figures







