

062-19 Water/Wastewater Capital Program Management

Appendix A - Technical Specifications

INTRODUCTION

JEA intends to issue a contract to a single firm to provide Integrated Program Management including program management, planning, permitting, design and construction services for select projects identified in JEA's five-year Capital Improvement Plan (CIP). JEA is seeking proposals from qualified management teams to provide these services on an as-needed basis. Project delivery methods to be used include Program Management at Risk (PMAR), Design-Bid-Build (DBB), Construction Management at Risk (CMAR) and Progressive Design Build (PDB).

JEA intends to select the most qualified Proposer and enter into negotiations for Task 1 that will cover program setup and review. After negotiations, Task 1 will be awarded. Subsequent tasks will be awarded separately after the guaranteed maximum price and project schedule for those individual tasks have been negotiated.

GENERAL PROGRAM BACKGROUND AND INFORMATION

JEA's Water/Wastewater five-year CIP is forecasted at approximately \$1.04 billion with a fiscal year average of \$210 million. Individual project budgets range in size from \$300 thousand to over \$50 million and will utilize various delivery models such as PMAR, DBB, CMAR and PDB. There are several programs within the CIP including the Southside Integrated Piping System (SIPS), Large Diameter Pipe Evaluation and Replacement Program, and Wellfield Rehabilitation Program.

The successful Proposer will be expected to manage the SIPS, Large Diameter, and Wellfield Rehabilitation Programs as well as other projects from the CIP on an as-needed basis. The selected Proposer will begin work immediately upon execution of the agreement for the work. Through all stages of the work, the Program Manager must strictly manage the schedules for delivery to avoid delays to programs and/or projects. JEA reserves the right to add to or delete items from the scope of the work for the program as design and construction of various projects proceed, as the program is defined and as it is determined what services the Program Manager will provide.

The successful Proposer will also assist JEA in the development and implementation of overall CIP processes and procedures such as an annual CIP review, project prioritization, risk management, alignment of projects with JEA corporate strategy and CIP reporting.

INITIAL PROJECTS AND INFORMATION

1. SIPS Program
 - a. JEA's iWater study identified six (6) projects critical to JEA's future water supply needs. The implementation of these projects will expand the hydraulic influence of the SIPS and offset the volume of water withdrawn from JEA's South Grid wellfields. The services required to deliver these projects are varied but will include. The installation of this infrastructure is critical to ensuring a stable and reliable water source is available to JEA customers. The six projects are comprised of approximately 160,000 linear feet of 16-inch, 24-inch and 30-inch water main. Execution of these projects will require a variety of services including route studies, design, construction, permitting, real estate and project closeout.
2. Large Diameter Pipe Evaluation and Replacement Program (construction only)
 - a. The Large Diameter Pipe Evaluation and Replacement Program provides condition and risk assessment, capital planning, design and construction administration services to rehabilitate or replace critical water and sewer pipelines within JEA's infrastructure. This includes sanitary sewer force mains \geq 16-inches, large diameter gravity trunk lines \geq 18-inches in diameter, system critical water and sewer transmission lines \geq 16-inches in diameter and potable water and sewer lines serving critical customers. JEA has a vendor under contract who is providing these services listed above. The selected Program Manager may be tasked with managing or constructing individual projects that are identified through this program. Services the Program Manager could perform

- include design, estimating, scheduling, construction, permitting, real estate and project closeout.
3. JEA Wellfield Rehabilitation and Replacement Program
 - a. JEA Wellfield Rehabilitation and Replacement Program will require the scheduling and implementation of projects to ensure an adequate and reliable water supply for JEA's customers while best managing and sustaining the available groundwater resource. Principal focus will be on the continued rehabilitation of existing wells and the construction of new raw water wells within the limits of JEA's capital budget. The general well rehabilitation services are varied but may include developing well investigation plans, conducting site surveys, preparing and implanting well rehabilitation plans using various methods, wellfield and raw water main modeling for hydrogeological and well pumping impact, and wellhead design and construction. New wells will need to be designed and permitted to fit various categories including new, replacement, backup or emergency. Real estate siting and selection assistance may be assigned as part of the project scope. Permitting will be required to meet St. Johns River Water Management District, Florida Department of Environmental Protection, City of Jacksonville and JEA requirements. JEA staff will assist with developing a prioritized list of wells to be drilled and rehabilitated. Raw water main design and construction may be assigned to ensure delivery of untreated water to the treatment plants.
 4. Other projects as assigned.
 - a. JEA's CIP includes various types of utility infrastructure projects such as water reclamation facilities, water treatment plants, pump stations, rehabilitation projects and water, sewer and reclaim pipeline projects. The Program Manager may be assigned projects from the CIP for execution on an as-needed basis. A copy of JEA's five-year CIP is included in Appendix C.

SCOPE OF SERVICES

1. Program Manager Overview
 - a. The selected proposer will provide a Program Manager for the contract. The Program Manager will oversee all aspects of services provided under the contract. This would include oversight of any members of the Program Management Team performing the various tasks involved in the Program. The assigned Program Manager shall have the demonstrated ability to lead and manage a Program of this size and complexity.
2. Program Management Services Overview
 - a. The following services shall be provided by Program Manager staff:
 - i. Overall Program Coordination:
 1. Lead program meetings with JEA Senior Leadership Team, Management Team, Project Managers, Construction Managers and staff regarding all aspects of the Program to include program status, project status, budget, schedule, risk, etc.
 2. Attend project technical and review meetings as needed to understand progress and verify project revisions are documented.
 3. Coordinate with JEA planning, design and construction groups and other JEA representatives.
 4. Coordinate with project stakeholders to ensure project expectations are being met.
 5. Prepare project budget modifications as necessary and track progress through JEA approval.
 6. Coordinate with City of Jacksonville departments as necessary.
 7. Coordinate with all local, state and federal agencies as necessary.
 8. Review notices of advertisement and change order requests to document schedule and budget changes.
 9. Provide technical review of project deliverables.
 10. Assist with and participate in Community Outreach events as applicable.
 11. Provide assistance with regulatory comments including public comments as requested by JEA. Attend meetings with JEA and regulatory agencies as requested.
 12. Provide assistance with JEA asset management program development for projects.

13. Establish Program Reporting format including developing appropriate level reports suitable for distribution to different management levels within the JEA organization as well as the Public. Provide reports monthly, quarterly, annually, or at other frequency to be determined by JEA.
 14. Prepare an overall program schedule to include all projects and validate project schedules from project implementation status including all design, permitting, procurement and construction and commissioning requirements.
 15. Develop, review, and monitor program schedules at various levels appropriate to the required management level.
 16. Identify and analyze dependencies, controls, and interfaces between programs or projects, with other operational activities, and with external projects by other governmental agencies.
 17. Provide program level cost and trend management services.
 18. Actively manage cost increases and decreases on assigned programs and projects.
 19. Assist with the establishment, implementation, and modification of program administrative procedures and processes.
 20. Assist with planning and programming studies.
 21. Implement and support an Action Item system to track key program activities and required decisions. Identify dates and timelines for action items and decisions to be completed.
- ii. Sub-Program and assigned individual projects:
1. Design Phase Services:
 - a. Perform informal and formal Partnering session between JEA and other stakeholders.
 - b. Prepare design documents for review at completion levels of 30%, 60%, 90% & 100% design for each assigned project.
 - c. Provide third-party constructability review as directed.
 - d. Develop progressive Construction Cost Estimates (Open Book) at each design completion level described above.
 - e. Pre-qualification of subcontractors as necessary.
 - f. Prepare work packages to allow competitive bidding of local firms.
 - g. Evaluate bids and select the lowest compliant bidders.
 - h. Prepare Guaranteed Maximum Price for review by the JEA as necessary.
 - i. Develop critical path method schedule to be submitted with the Guaranteed Maximum Price.
 - j. Acquire the necessary Permits necessary for construction.
 - k. Provide design management and administration of subconsultants.
 - l. Provide code analyses and detailed code reviews along with the City's Fire Department fire and Life Safety reviews.
 - m. Provide geotechnical investigations or hazmat inspection and testing services as required.
 - n. Assist in the development of project design standards.
 - o. Support the JEA Outreach program with suitable documentation in a variety of media.
 2. Construction Phase Services:
 - a. Perform informal and formal Partnering session facilitation between JEA and other stakeholders
 - b. Construct the project in accordance with the contract documents.
 - c. Develop project specific quality management plan.
 - d. Review, monitor, and assess construction activities.
 - e. Change management and risk management.
 - f. Prepare construction quality assurance/quality control plans.
 - g. Schedule and budget control.

- h. Respond to Requests for Information.
 - i. Prepare field safety instructions and emergency response plan.
 - j. Prepare inspection and engineer's reports for submission to City or other agencies.
 - k. Prepare as-built drawings, and documentation necessary for substantial and final completion.
 - l. Prepare agenda and lead job site meetings. Develop meeting minutes for distribution.
 - m. Develop and manage Owner Controlled Contingency/Supplemental Work Authorization.
 - n. Provide construction management personnel.
 - o. Perform startup and commissioning.
 - p. Perform project closeout activities.
 - q. Develop project lessons learned.
 - r. Develop Schedule of Assets for unitization purposes.
 - s. Complete equipment list documentation for submittal to JEA Asset Management.
3. Budget:
- a. Actively manage cost increases and decreases.
 - b. Maintain accurate cost data from all subconsultants and subcontractors.
 - c. Provide a wide range of project cost estimates including conceptual and budgetary.
 - d. Establish cost management system in alignment, and supportive of, JEA budgeting and accounting requirements and systems.
 - e. Establish, review and support management of contingencies.
 - f. Develop and maintain procedures to forecast project and program costs and advise JEA of budget issues.
 - g. Ability to interface with or provide support for an "off the shelf" cost management software tool.
4. Scheduling:
- a. Review and monitor design and construction schedules.
 - b. Generate project schedules as requested by JEA.
5. Document Control Services:
- a. Maintain files of all Master Plan Program documentation in an integrated, accessible electronic format with hard copy. Electronic format to be stored in a retrievable system which will be the property of the JEA.
 - b. Maintain status logs of project and program documents such as contractor Requests for Information, submittals, substitution requests, etc.
 - c. Develop and maintain systems for the efficient distribution of project documents to subcontractors, subconsultants, agencies, City departments, and other stakeholders as directed.