

**EL PASO WATER - PUBLIC SERVICE BOARD
REQUEST FOR SUBMITTALS**

RFS 61-18

April 10, 2018

TO: Invited Firms

RE: Request for Submittals to El Paso Water - Public Service Board (EPWater) Statement of Work – Professional Engineering Services

PROJECT: FRED HERVEY WATER RECLAMATION PLANT CLARIFIER REHABILITATION

ATTENTION:

RESPONSE SUBMITTALS to the attached Statement of Work for the referenced project are being accepted by the EPWater for consulting engineering services required for the construction of the **Fred Hervey Water Reclamation Plant Clarifier Rehabilitation** in northeast El Paso area. Under the project management of the Utility's Engineering staff, the firm selected will perform design, bid, and construction management services for the facilities. The Response Submittal for this project shall include sufficient but brief information as enumerated further below, which will be used to evaluate your firm for this project.

CONTACTS:

Please direct all questions in writing to the Senior Purchasing Agent, Rosemary Guevara, at rguevara@epwu.org.

SELECTION:

The consultant shall be selected on the basis of the responsiveness of the submittal, and in accordance with the Professional Services Procurement Act, Texas Government Code, Chapter 2254, which addresses selection of a professional services provider and subsequent negotiations. The Architect/Engineering Selection Advisory Committee will adhere to the position held by the American Council of Engineering Companies and the Texas Council of Engineering Companies, as adopted by the El Paso Chapter, that the selection of engineering firms should be based on the firm's qualifications, i.e., Quality Based Selection. The Committee may also consider a firm's current workload with the EPWater in making its final recommendations to the Public Service Board. The firm shall not be selected on the basis of cost or manpower estimates. Cost information or other information from which cost can be derived must not be submitted and may cause disqualification of the Response Submittal.

The selection shall be based on the following information required to be submitted, and which shall comprise the evaluation criteria with associated weighted point scores:

Technical Competence (20 points) – Provide your understanding of the Scope of Work described in the Statement of Work provided below by the Utility. Briefly outline any project similar or related experience with the name of the contact person and telephone number. A complete history of projects and contacts shall not be provided. Information provided shall consist of a minimum of two (2) and not more than five (5) similar projects within the past five (5) years. The Utility will evaluate the preparedness, enthusiasm, and capacity of the proposer to understand and deal with the requirements of the project. This includes prior experience in the engineering planning and design of project scope of work. The consulting firm shall not reiterate the tasks outlined in Exhibit A attached to the Statement of Work section discussed below in this document, except to summarize or reinforce its understanding of the Scope for this project.

Project Approach (40 points) – Provide a brief discussion on proposed technical solutions approach to the project. Suggestions or consideration of various alternatives are encouraged. A firm will be evaluated on its ability to address the project issues and objectives, within the page limitations indicated in the Response Submittal Content discussion below. Information provided may include but not be limited to a brief discussion of such factors as: cost-effectiveness of proposed design; understanding of existing problem(s) and key activities; understanding of materials, system appurtenances, and operation of facilities applicable to this project; understanding of federal, state, and local rules and regulations, laws, and design standards; specialized problem solving skills that would be required in the project; degree of commitment to Owner’s schedule; and if applicable, proposed use of innovative solutions and techniques, and any improvements to the statement of work. Proposed project schedule may be provided including personnel resources.

Team Organization and Availability (20 points) – Provide a hierarchal Organizational Chart indicating the Project Team which would include names of the proposed key project personnel, their area of responsibility, and relationships of sub consultants. Proposed organization shall reflect, where applicable, the planning, design, and construction phases of the project. Key personnel experience and strengths relative to the project at hand may be briefly discussed, but extensive staff resumes shall not be submitted. The Utility’s Project Engineering Manager for this project is Carlos Dominguez whose name shall appear in the organizational chart. Provide a table listing all active contracts and purchase orders with EPWater along with total dollar value for each and your project manager. Any contract or PO not closed-out per the El Paso Water Utilities' (EPWU) Procedures Manual for Administering and Managing Engineering and Construction Projects shall be considered “active.” This table shall be placed on its own page, and will not count toward the total submittal page count. The Utility will evaluate a firm’s proposed staffing organization based on factors such as how efficiently is the team structured; the qualifications of sub consultants; utilization of minority groups; and team members’ record of prior performance with the Utility.

Project Management and Quality Control (20 points) – Provide a brief discussion of the process and procedures in place and proposed for managing this project. Indicate what the key ingredients are for a successful project and what methods and organizational efforts are made to provide for constructability reviews and to ensure quality control in projects. The information provided may include the list of activities that may turn problematic as well as their proposed problem solving process, and the organization of key activities and their emphasis. In addition, a firm’s evaluation will be based on its track record of successful project management and construction administration relative to scheduling, reporting, cost-control, quality of deliverables, timely response to the Utility, and the ability to provide experienced construction quality control personnel and procedures. The consultant should be familiar with EJCDC Contract Documents adopted by the Utility as its standard.

This Request for Submittals has been posted on the EPWater website for downloading by interested consulting engineering firms. However, EPWater will review submittals prepared by firms that have been pre-qualified by the EPWater engineering staff, based on the qualifications submitted by each firm, past performance, experience on water, wastewater and reclaimed water projects, staff qualifications, and ability to complete projects on time and schedule. The Utility will consider these factors, along with current information on record, in the evaluation of Response Submittals. The intent of the Utility is to achieve a well-coordinated, quality and economical project for the **Fred Hervey Water Reclamation Plant Clarifier Rehabilitation**.

EPWater requires firms to become pre-qualified in order to ensure that their submittal is reviewed. To become qualified, please submit the required forms which can be downloaded from EPWater’s website at <http://www.epwu.org/bids>. Other information related to this RFS or other projects can be downloaded at the same website.

RESPONSE SUBMITTAL CONTENT:

The entire Response Submittal shall be limited to **ten (10) pages (front only, no double sided)** of information on 8-1/2” by 11” sheets, single-spaced. A suggested page count for each category of information required is as follows but may vary by firm:

1. Cover letter (not counted toward page count)
2. Technical Competence (two pages)
3. Project Approach (five pages)
4. Team Organization and Availability (one page)
5. Resumes (max 2 pages, not counted toward page count)
6. Table of Active Contracts and POs (1 page, not counted toward page count)
7. Project Management and Quality Control (two pages)

Brief resumes for Key Project Personnel may be submitted at the option of the consultant, for those persons new to the firm or with no history of having performed projects for the Utility. Such resumes shall be attached to the above Team Organization and Availability section, **all resumes shall fit on two (2) pages**. Resumes will **not** be included in the ten (10) page count described above.

PROCEDURE:

A mandatory pre-submittal meeting **will not** be held for this project. Firms wishing additional technical information should first contact in writing the Senior Purchasing Agent, Rosemary Guevara, at rguevara@epwu.org. Additional records, record drawings, or reports will not be available. Interested firms are encouraged to visit the project site indicated in the attached map. The Response Submittal will be first analyzed and rated by the EPWater Architect/Engineer (A/E) Short Listing Advisory Committee. The A/E Short Listing Advisory Committee will review submittals received for capital projects from architect and/or engineering firms and recommend the most qualified proposals to the A/E Selection Advisory Committee for their review. From the deliberations of the Short Listing Committee, at least five proposals will be short-listed and recommended to A/E Selection Advisory Committee for consideration. The A/E Selection Advisory Committee will select the most qualified firm and present a recommendation to the Public Service Board during a regularly scheduled meeting.

Respondents shall submit ten (10) hard copies **and** two (2) electronic files on CDs of their proposal by express mail or similar means no later than **3:00 p.m. on April 25, 2018** to:

Ms. Rosemary Guevara
Senior Purchasing Agent
El Paso Water - Public Service Board
1154 Hawkins Boulevard
El Paso, Texas 79925

After the selection by the A/E Selection Advisory Committee, but prior to recommendation to the Public Service Board, contract negotiations shall be conducted with the selected firm. In the event a mutually agreeable contract cannot be negotiated with the selected firm, negotiations shall be conducted with the next highest ranked firm. The selected firm must obtain professional liability insurance in the amount of \$1,000,000.

Firms are directed not to contact or lobby any member of the EPWater, Public Service Board, or the Committee. After the selection, each responding firm will be notified of their selection status by letter.

STATEMENT OF WORK:

This Statement of Work is provided by EPWater for a project which shall be referred to as the **Fred Hervey Water Reclamation Plant Clarifier Rehabilitation**. The project includes design and bid of the following:

1. Provide engineering services through 60% and 95% design for the rehabilitation of two – 1st Stage Clarifiers, two – 2nd Stage Clarifiers, two – Contact Clarifiers (Lime Reactors), and two Recarbonization Clarifiers. Rehabilitation scope includes: replacement of sweep mechanisms and drives; elevated access walkway; associated piping and valves as needed; new FRP weirs as required; and new FRP launder covers for the 1st and 2nd Stage Clarifiers; concrete repair and floor grout as needed. Materials of construction selection shall consider the O&M cost of maintenance over 30-year life cycle. The design shall include repair to damaged or corroded steel and concrete structural elements. Structural elements shall be protected with appropriate abrasion and corrosion protection measures. Electrical systems shall be upgraded to current Code, and I&C components integrated to the existing SCADA system hardware. Clarifier equipment replacement shall be performed in phases starting with the Train 1 Contact Clarifier and Recarbonization Clarifier.
2. Prepare 100% Design and Bid Services for bid of Phase 1 Rehabilitation, including: Train 1 Contact Clarifier (Lime Reactor) and Recarbonization Clarifier.
3. Subsequent tasks for the remaining three phases shall be completed to 100% design and issue for bid. The sequence of bids will be issued as budget allows, including: Train 2 Contact Clarifier (Lime Reactor) and Recarbonization Clarifier; Train 1 1st Stage and 2nd Stage Clarifiers; and Train 2 First 1st Stage and 2nd Stage Clarifiers. Install FRP weirs as required, and new FRP launder covers for the 1st and 2nd Stage Clarifiers.

Background Information

The Fred Hervey Water Reclamation Plant treats wastewater collected from Northeast El Paso service area to produce reclaimed water meeting state potable water standards for injection to the groundwater aquifer, for reuse irrigation water and for process water for the El Paso Electric Company's Newman power station. The plant was put in operation in 1985 with two treatment trains, rated at 10 MGD, and expanded with a third treatment train in 2009, including new preliminary treatment (headworks) screening and grit removal system, rated at 12 MGD. The clarifiers for Trains 1 and 2 are the subject of this request for submittals to rehabilitate the process equipment to extend the useful infrastructure for an anticipated 20-year life span. The existing equipment has reached its useful life having been in service for 33 years and the rake mechanisms are extensively corroded. The primary clarifiers are not included in this scope of work. Portions of the basins have been noted for concrete spalling, cracking, exposed aggregate and reinforcement bars, abrasive erosion and corrosion damage.

The wastewater treatment processes include: preliminary treatment, primary treatment, aeration utilizing a two-stage activated sludge with powder activated carbon (PACT[®] process), anoxic basins using methanol as a carbon source and secondary clarification. The water treatment processes include addition of lime and carbon dioxide to stabilize the pH and treat viruses, remove hardness, phosphorus, and heavy metals. Treated water is further processed by filtration, ozone disinfection, and granular activated carbon (GAC) bed filtration. Plant effluent is disinfected using chlorine to satisfy demand and free residual requirements and held in a clear well for testing prior to being pumped to the Newman pump station storage tank for utilization.

Tentative Scope of Work and Objectives

The scope of work for this project is the planning and design and possibly bid and construction management services of the following improvements. This effort includes, but is not limited to, the following selected activities:

- Review preliminary engineering reports;
- Consideration of FEMA flood zones;
- Consideration of flexibility to future development and impact on commercial development;
- Assessment of Archaeological/Environmental sensitive areas;
- Coordination with EPWater Engineering staff, City and County entities, and others if necessary;
- Comply with EPWater's Energy Management Master Plan;
- Field data gathering;
- Provide all necessary surveys and maps required for design of the project;
- Provide preliminary design;
- Provide legal descriptions and right-of-way maps and assist in the acquisition of Real Property, easements, and rights-of-way necessary for this project;
- Develop final design in coordination with local and state agencies as necessary;
- Prepare construction cost estimate to include all fees;
- A Basis of Design Technical Memorandum is not necessary or required;
- A Basis of Design Technical Memorandum is required and shall include *Details;
- Prepare bid documents;
- Obtain necessary approvals or permits for construction of the project;
- Conduct all activities in accordance with Owner's procedures manual;
- Obtain approval and coordinate the relocation of any utilities as necessary with respective owners;

- Construction administration;
- Evaluation of system alternatives;
- * Additional Details
- An initial conceptual layout of this system is shown in Exhibit B.

Owner’s Proposed Project Schedule:

<u>MILESTONE</u>	TENTATIVE DATE
Start Design:	July 16, 2018
Complete Design:	December 14, 2018
Receive Bids:	January 15, 2019
Start Construction:	April 2019

Schedule is subject to change depending on circumstances and availability of funds.

Extended and Specific Works Tasks

The Work Breakdown Structure by Tasks and Phasing of Services are described in **EXHIBIT A**, attached. This list comprises a guide to specific tasks and work elements to be performed as part of the overall Scope of Work for this project, and as estimated by the Utility’s Planning and Development, Project Administration Engineering Division, and Contracts Administration staff. The Tasks shown therein are not all inclusive and tasks or activities may be added, removed or deferred, by agreement between the Utility and the selected firm as a basis for negotiating a contract.

ATTACHMENTS:

1. Exhibit A – Work Breakdown by Tasks and Phasing
2. Exhibit B – Fred Hervey Water Reclamation Plant Site Plan

EXHIBIT A

WORK BREAKDOWN BY TASKS AND PHASING FOR FRED HERVEY WATER RECLAMATION PLANT CLARIFIER REHABILITATION

TASK 1 – PROJECT MANAGEMENT SERVICES

This effort includes, but is not limited to, the following selected activities:

- Provide a proposed timeline schedule for the completion of the Scope of Work with planned dates of deliverables, personnel resources, and responsibilities. The schedule should be provided within two (2) weeks of Notice to Proceed (NTP).
- Provide a monthly status report no later than the 10th day of each month accompanied by a progress schedule (Microsoft Project 2003 is preferable or one capable of being imported to Microsoft Project 2003).
- Monthly status report shall address percent complete by task as per negotiated scope of work and an overall project percent complete. Schedule shall track progress against the baseline schedule. Monthly status report shall address anticipated or actual variances from baseline and reason, along with recommendations for achieving established milestones or goals.
- Formal meetings will be required to discuss preliminary engineering, and 60 percent, 95 percent, and 100 percent final design documents.
- The consultant shall prepare the agenda and minutes of these meetings. Draft meeting minutes shall be prepared within five (5) working days of the meeting and shared for input.
- Utilize EPWU Project Administration Manual throughout the conduct of this project.
- Other

TASK 2 – PRELIMINARY ENGINEERING SERVICES

This effort includes, but is not limited to, the following selected activities:

- Gather, assemble, and review record facility data, maps, and engineering reports for identification of the system, and incorporation in the design of new system.
- Perform field investigation to determine suitable location and design for the new system and interconnections with the existing system. Conduct horizontal and vertical control surveys as necessary. Conduct preliminary subsurface investigations where necessary.

- Conduct geotechnical investigation on the project area if required by Owner. The investigation will be conducted by a qualified geotechnical engineer. The investigation will include [Choose an item] to obtain geotechnical data in order to be analyzed and develop recommendations necessary for project design.
- Establish digital base mapping for the project as may be appropriate for redesign and design functions. Coordinate with the Utility's Geographic Information Systems (GIS) department in establishing Global Positioning Satellite (GPS) control coordinates for existing and proposed facilities.
- Coordinate design locations with affected City/State departments, other utilities, and private entities that are impacted by the location of the proposed project.
- Represent Owner in making presentations to planning agencies, environmental groups, highway agencies, and other stakeholders and private groups impacted by the location of the proposed improvements.
- Provide Basis of Design Technical Memorandum summarizing the proposed design, public concerns, design details and connections, right-of-way issues, and preliminary construction cost estimates for the proposed design.
- Develop legal descriptions for easements including metes and bounds. The Engineering Consultant shall assist the Owner in acquiring easements, right-of-way, and other property, if necessary, for the pipeline facilities. These efforts shall involve coordination with Utility's Land Administrator and presentations to the PSB.
- Research and assess the necessary permits (temporary and permanent) for the project and the anticipated time for approval from the associated regulatory authorities. Develop a Technical Memorandum including the assessment, permitting schedule, and table of costs for obtaining various permits.
- Other

TASK 3 – DESIGN AND BID PHASE SERVICES

This effort includes, but is not limited to, the following selected activities:

- Perform final design for the proposed project to the 60, 95, and 100% levels, to include detailed specifications, engineering report, construction contract documents, Engineer's final opinion of probable cost, project schedule, basis for liquidated damages amounts, and other requirements described in the EPWU Procedures Manual.
- Coordinate final design work with applicable City of El Paso and State agencies for review and approval. Submit evidence of coordination, issues, and resolutions. The engineering design shall be in accordance with all existing and/or applicable Federal and State regulations, as well as applicable standards, codes, and engineering practices or requirements.

- Conduct geotechnical investigation on the project area if required by Owner. The investigation will be conducted by a qualified geotechnical engineer. The investigation will include [] to obtain geotechnical data in order to be analyzed and develop recommendations necessary for project design.
- Prepare an engineering design report documenting the final design. The engineering design report shall include the information and narrative data necessary to support and describe the design developed. It shall be in sufficient detail to permit the complete understanding of the basis of the design.
- Prepare Traffic Control plan, if applicable, and submit to appropriate City or governing agency approval.
- Prepare contract documents bid specifications that conform to the requirements of the TCEQ;
- Conduct pre-bid conference and provide minutes of the meeting.
- Submit addenda to the contract documents as may be required for issuance by EPWater/Purchasing.
- Assist with bidding and contract award procedures including Recommendation of Award.
- Other

The Consultant shall work closely with the Utility's Project Engineering Manager to ensure that utility design standards are incorporated and that the designs are practical and economical. The anticipated bidding for this project is January 15, 2019.

The Utility requires the use of AUTOCAD to maintain standardization in information exchange where possible. Standard spreadsheet software operating in a PC environment for tabulation of data and results is also encouraged.

The Consultant shall complete the work delineated under this scope of work within 152 days from the NTP, excluding any time required for permitting agencies to grant permits. Additional time will be granted should review agencies take more time than allocated in the project schedule.

The Consultant shall be responsible for the professional quality by implementing a quality control process for each of the required milestones (60%, 95%, and 100%), technical accuracy, and coordination of all designs, drawings, specifications, and other services furnished by the Consultant. The Consultant, without additional compensation, shall correct or revise any errors or deficiencies in its designs, drawings, specifications, and other services.

In accordance with Texas Statutes, all engineering reports, drawings, and other technical documentation shall be signed and sealed by a professional engineer registered in the State of Texas.

TASK 4 – CONSTRUCTION PHASE SERVICES

This project may include construction phase services at the option of the Owner. Such services will include, but may not be limited to, general coordination and administration, special services as required by the Utility, and shall include the following selected activities:

- Hold Pre-Construction conference, develop agenda, list of invitees, and provide minutes of the conference to all attendees.
- Provide and supervise construction management and inspection staff for the project.
- Monitor and approve monthly updates to the contractor's construction schedule.
- Administer construction contract requirements, payroll reports, and partial payment requests.
- Review, recommend, and process work directive changes and change orders.
- Review shop drawings and resolve design related construction problems at no cost to the Owner.
- Provide construction inspection, resident project representative (RPR), quality control procedures and testing, construction photographs, record keeping, claim documentation, non-conformance reporting, punch lists, record drawings in AUTOCAD, and project closeout including an orderly turnover of warranties, Operation & Maintenance Manuals, and other requirements.
- Provide Engineer's Certificates of Substantial and Final Completion and revised project cost based on award contracts.
- Assist the Utility staff in the start-up and acceptance of facilities.
- Provide evaluation of Contractor's performance on this project.
- Provide a warranty inspection of the project improvements prior to expiration of construction contract warranty and a written report.
- Provide notice of closing/abandonment of any pits, tanks, ponds, lagoons, or surface impoundment.
- Other