

NOTICE TO ARCHITECTS, ENGINEERS, AND PLANNERS

NOTICE IS HEREBY GIVEN, that the City of Oklahoma City has a project that requires the services of a consulting firm.

In order to be considered, the Consultant must comply with the Resolution establishing procedure for "Selection of Architects, Engineers, and Planners" adopted by the City Council on November 18, 1986, a copy of which may be obtained at <http://okc.gov/departments/public-works/engineer-architect-resources/notice-to-a-e> from the office of the Public Works Department Director.

The Project is as follows: **WT-0222, Various Draper Water Treatment Plant Improvements**

Estimated Cost: \$11,000,000

Scope of work: The engineer will provide a comprehensive facilities audit to identify and prioritize system improvements required within the next 5-10 years. System improvements related to age and design limitations are; pipe gallery improvements, high service pump station roof, large valve automation, polymer feed system improvements, and administration/filter building and laboratory facility improvements. The contract may be amended for final plans and specifications.

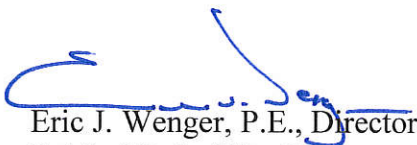
A question and answer meeting will be held from 3:00 to 4:00 pm on August 9, 2018 at 420 W. Main Street, Suite 500, Conference Room A. Please address your questions at the meeting. The Utilities Department contact is Bryan Mitchell at (405) 297-3811.

As a part of your Letter of Interest, provide your understanding of the project and your expertise and experience on similar projects.

Refer to the basic contract located on <http://okc.gov/departments/public-works/engineer-architect-resources/notice-to-a-e>. All contracts with the City or its related Trusts use this contract. Please review the contract to ensure insurance and indemnity requirements will be met.

Please include a 254 Form with your Letter of Interest.

Time Schedule for the above project: Preliminary Report required within one hundred twenty (120) days of the issuance of the Work Order. Last date for submitting Letter of Interest (**two copies of letter and all attachments and an electronic copy, provided on a CD or flash drive**) to the Public Works Department Director, 420 W. Main Street, Suite 700, Oklahoma City, OK 73102: prior to 5:00 p.m. August 27, 2018. Emailed submittals are not being accepted at this time.



Eric J. Wenger, P.E., Director
Public Works/City Engineer



The City of
OKLAHOMA CITY
UTILITIES DEPARTMENT

June 27, 2018

Project Title: Various Draper Water Treatment Plant Improvements

Project Location: Draper Water Treatment Plant

Project Number: WT-0222

Estimated Project Cost: \$11,000,000

Background: OCWUT operates and maintains the Draper Water Treatment Plant to provide drinking water to its citizens and wholesale customers. The Draper Water Treatment Plant operates continually and over time has developed the need for system improvements related to age and design life limitations.

Project Intent: Several items are included in the scope of this project. The Engineer will provide a report that discusses and prioritizes the projects discussed below:

Pipe Gallery Improvements

- A. The Pipe Gallery is located below the Filter Gallery in the Filter Building. Existing piping in the Pipe Gallery needs to be sandblasted and repainted. Existing paint will need to be tested for the presence of lead and Engineer will recommend lead paint abatement procedures. All sandblasting and painting activities within the Pipe Gallery will occur in a limited space and must meet all required work place safety requirements. Lead paint abatement, sandblasting, painting and workspace details must be coordinated with Plant Staff to ensure continual access to critical infrastructure at all times. Items to be protected during abatement, sandblasting and repainting includes all water quality monitoring equipment, chlorine scrubbers, flow meters and other items as necessary. Engineer will evaluate the existing pipe supports and hangars for replacement.
- B. Engineer is to evaluate and recommend improvements to upgrade and update the facility, repair failing components, and meet current code requirements.

Replace High Service Pump Station Roof

The existing High Service Pump Station roof needs to be replaced. Engineer will evaluate the roof and recommend a new replacement roof system. This will include design of a handrail system around the perimeter of the roof structure that meets OSHA requirements.

Large Valve Actuation

The WTP has 46 valves ranging in size from 24-inch to 60-inches that are operated by hand located in various parts of the WTP site. These valves need to be electronically automatically operated from the WTP's SCADA system. A 60-inch valve (V-12) in the yard of the existing High Service Pump Station needs its electric actuator replaced. Below is a table describing the valves:

Valve No.	Description/Size/Location	Existing State			New State	
		Actuator	Electric	Automated	Electric	Automated
V-1	24 inch Reservoir Release Valve Vault	Handwheel/Tee Handle			X	X
V-2	4 each 36 inch Suction Wheel Valves on new Low Lift Pumps	Handwheel			X	X
V-3	4 each 36 inch Discharge Chain Wheel Valves on new Low Lift Pumps	Handwheel/Chain			X	X
V-4	60 inch Butterfly on Draper Raw Water Line 1 Discharge new Low Lift	Handwheel			X	X
V-5	60 inch Butterfly on Draper Raw Water Line 2 new Low Lift Pump	Handwheel/Tee Handle			X	X
V-6	60 inch Butterfly Valve - Atoka Crossover	Handwheel/Tee Handle			X	X
V-7	2 each 36 inch Wheel/Tee Valves from Gravity Thickeners to Lagoon Bypass at Basin Inlet Structure	Handwheel/Tee Handle			X	X
V-8	30 inch Flow Equalization Basins to Gravity Thickeners Valve	Handwheel/Tee Handle			X	X
V-9	3 each 30 inch inlet valves to the Surge Building	Handwheel			X	X
V-10	3 each 36 inch butterfly Isolation valves on the 36 inch header in the High Service Pump Station	Handwheel			X	X
V-11	3 each 30 inch butterfly Suction Valves on the 3 constant speed pumps 1,3,5 in the High Service Pump Station	Handwheel			X	X
V-12	60 inch North Distribution Valve/Operator from the High Service Pump Station - Needs Replaced - valve damaged	X	X	X	Replace	Replace
V-13	48 inch South Distribution Valve from the High Service Pump Station	Handwheel/Tee Valve			X	X
V-14	2 each 30 inch inlet valves to Auxiliary Pump Station Surge Tanks	Handwheel			X	X
V-15	4 each 54 inch butterfly Suction Valve to 4 VFD Pumps in the Auxiliary	Handwheel			X	X
V-16	4 each 36 inch butterfly Discharge Valves to the VFDs 7-10 in the Auxiliary Pump Station	Handwheel			X	X
V-17	2 each 24 inch butterfly Suction Valves to Backwash Pumps 2 and 3 in the Aux Pump Station	Handwheel			X	X
V-18	48 inch Distribution Crossover to 60 inch Valve West of Water Plant Road and Water Tower	Tee handle			X	X
V-19	2 each 72 inch Slide Gates Isolation Valves to the Diversion Structure -	Handwheel			X	X
V-20	1 each 36 inch butterfly Isolation valve from the 36 inch header to the Surge Building Tanks in the High Service Pump Station	Handwheel			X	X
V-21	3 each 36 inch butterfly Suction Valves for VFDs 2,4,6 in the High	Handwheel			X	X
V-22	Service Pump Station	Handwheel			X	X

Polymer Feed System Improvements

Currently the PACL/Polymer blend systems do not have sufficient storage or permanent facilities to enable feed of polymer to the flocculation basins.

Key areas of focus will be as follows:

1. Evaluate polymer historical usage and size polymer system storage and feed system for primary and secondary coagulant.

2. Evaluate the existing ferric sulfate storage area and determine if existing ferric sulfate tank storage can be converted to store polymer. Recommend designs for enclosing the ferric sulfate storage area for new polymer storage.
3. Prepare Engineering Report summarizing design criteria for polymer systems, develop revised layouts of chemical storage and feed systems in existing buildings, and provide cost opinions for the recommended improvements.

Administration/Filter Building and Laboratory Facility Improvements

Evaluate and recommend improvements to upgrade and update the interior and exterior of the facilities, repair failing components, and meet current code requirements. The Engineer will assess and provide recommendations to update and upgrade the laboratory facilities to better function and maintain its certifications.