## 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 <a href="http://okc.gov/departments/public-works/engineer-architect-resources/notice-to-a-e">http://okc.gov/departments/public-works/engineer-architect-resources/notice-to-a-e</a> from the office of the Public Works Department Director.

The Project is as follows: WT-0221, Various Hefner Water Treatment Plant Improvements

Estimated Cost: \$12,000,000

**Scope of work:** The engineer will provide a comprehensive facilities audit to identify and prioritize system improvements required within the next 5-10years. System improvements related to age and design limitations are; high service pump station, carbon dioxide system, plant water loop assessment, filter hall improvements, control room rehabilitation, laboratory facility improvements, administration/filter building and operations control tower improvements. The contract may be amended for final plans and specifications.

A question and answer meeting will be held from 2:00 to 3:00 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 Larry Hare at (405) 297-3681.

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 <a href="http://okc.gov/departments/public-works/engineer-architect-resources/notice-to-a-e">http://okc.gov/departments/public-works/engineer-architect-resources/notice-to-a-e</a>. 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



May 10, 2018

**Project Title:** Hefner WTP System Improvements

**Project Location:** Hefner Water Treatment Plant

**Project Number:** WT-0221

Estimated Project Cost: \$12,000,000

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

**Project Intent:** The overall goal of this project is to conduct a comprehensive facilities audit to evaluate every major process and support utility to identify and prioritize capital projects required within the next 5-10 years. At a minimum the following tasks will be completed:

#### **High Service Pump Station VFD HVAC Improvements:**

With the conversion of the existing pump starters to Variable Speed Drives, the existing HVAC systems at the pump station are not sufficient to provide the cooling required for the VFD's during the hot summer months. Improvements to the Hefner HSPS HVAC include:

- Installation of a non-structural wall between the VFD units and the pumps to create a single enclosure for the VFD's.
- Install prepackaged split system HVAC units for the VFD enclosure.
- Rehabilitate/replace fans for the HSPS pump room.

#### **Carbon Dioxide System Improvements:**

The existing carbon dioxide feed system utilizes settled water drawn from the effluent of the recarbonation channels for the feed water to the carbon dioxide system. The feed water is not stable and has caused significant maintenance issues through plugging of valves, strainers, sample lines, etc. In addition, the valves and actuators associated with the carbon dioxide feed system are not reliable and are a significant maintenance issue. Improvements to the carbon dioxide feed system shall include as a minimum:



- Replacement of valve and actuators.
- Install redundant horizontal centrifugal pumps at the filter effluent storage well from the "New" filters to provide a Primary source for the feed water to the carbon dioxide system. This pump system will need to use water prior to chlorine and ammonia feed points.
- Relegate the existing chlorine dioxide feed water system as a backup in case the new filters are taken off line.
- Install new actuators on the carbon dioxide feeders to allow for isolation of carbon dioxide feeders.

### Filter Gallery HVAC and Architectural Improvements:

Currently the HVAC for the filter operational floor includes both the filter gallery and the top of the filters. This has caused operational challenges to the filer control consoles since this creates a moist environment within the gallery and accelerates corrosion of the consoles. As a result, capital improvements are necessary to provide non-structural isolation between the filter gallery and the top of the filters (both sides) and provide additional HVAC within the filter gallery to effectively separate the HVAC between the three areas. Furthermore, a capital improvement project is necessary to replace the windows within the gallery.

#### **Control Room and Operations Tower Rehabilitation**

As part of the modernization and improvements to the Hefner WTP, the operations tower and associated control room will be upgraded to new LED lighting and the control room rearranged and upgraded to reflect modern control room.

#### **Facilities Audit and Modernization:**

Provide a treatment train review of all aspects of the Hefner WTP operation and maintenance practices. Assess all physical assets and prepare an organized system map identifying all physical assets, pipe routes, and other relevant attributes. Identify future improvements needed to meet either aged or capacity limitations.