



City of Pflugerville

Legislation Text

File #: 2020-8806, **Version:** 1

Discuss and consider action to approve a professional services agreement with Ardurra Group, Inc. in the amount of \$1,947,512 for professional engineering services associated with the Water Treatment Plant Facility Expansion Project and authorizing the City Manager to execute the same.

This item is a follow-up City Council request from the October 27, 2020 meeting after selection of Ardurra Group, Inc. for professional engineering services associated with the Water Treatment Plant (WTP) Facility Expansion project. Staff requests approval of the professional services agreement (PSA) which includes planning/preliminary design and a 30% design for the expansion of the existing WTP to a capacity of 30 MGD.

The adopted 2020 Water Master Plan (WMP) recommended the City proceed with improvements associated with the WTP facility to address current and future needs. City staff has requested Ardurra to include Projects No. 2 and No. 9, with the intent of both projects to 1) provide a service growth area in the southeast portion of the Water CCN and 2) provide additional production capacity to serve future growth. Project No. 2 is the 6.0 MGD 800-foot Pressure Zone Pump Station, as Project No. 9 is the WTP High Service Pump Station, Lake Pump Station Expansion to 30 MGD.

The projects combined will allow for expansion of existing WTP to 30 MGD including expansion of the City's Lake Pump Station and High Service Pump Station (HSPS) to reach the 30 MGD target, as well as develop an 800-foot pressure plan. The 800-foot pressure plane will be served by the HSPS.

The expansion is to address deficiencies and improvements required by the WTP facility to meet and maintain regulatory compliance, safety, technology improvements, process innovations and aging infrastructure to meet current and future water demands.

Ardurra Group, Inc. has been selected by the City for engineering services associated with the WTP 30.0 MGD Expansion project and 6.0 MGD 800-foot Pressure Zone Pump Station projects. The professional service agreement negotiated between the City and Ardurra Group, Inc. has Preliminary Design and 30% PS&E, and composed of the following scope of services:

1. Project Management and Quality Assurance
2. Preliminary Engineering Design (extensive work tasks as detailed in the PSA)
 - o Data Collection and Review
 - o Specific Workshops (SCADA, Site build-out optimization, and PER Review)
 - o Unit Process Evaluations
 - o Plant Hydraulics
 - o Coordination with other active CIP projects
 - o Subdiscipline Design Support
 - o Preliminary Cost Estimate
 - o Constructability Review and Overall Construction Schedule

- o Preliminary Engineering Report (PER) and 30% Plans
- 3. Site Topographic Survey
- 4. Geotechnical Investigation
- 5. TWDB DWSRF Funding Application Support Services
 - o Environmental Review
 - o Engineering Feasibility Report
- 6. Construction Delivery Methods
- 7. Regulatory Agency Coordination with TCEQ and TWBD
- 8. WTP Background Drawing Development

The projects are shown and accounted for in the FY2021 budget document under the Water Utility Fund Capital Improvement Project as the Pump Station at the Water Treatment Plant and the Water Treatment Plant High Service Pump Station, Lake Pump Station Expansion, Pretreatment Trains to 30 MGD.

A supplemental agreement is forthcoming that will expand the scope of services to include final design, bidding and construction phase services.

Anticipated Project Schedule:

Please refer to the schedule attached to the PSA for more details of the project deliverables, as noted below are the major milestones for the current scope.

Project Kickoff Meeting	December 14, 2020
Construction Delivery Method	March 2021
Final PER/30% Plan Set	June 2021
Design Phase Completion	January 2022
Construction Phase Completion	Spring 2023

Background:

The City of Pflugerville solicited requests for qualifications from engineering firms for design services for the Water Treatment Plant Facility Expansion Project.

City staff issued a request for qualifications (RFQ) on August 12, 2020 and received three (3) statements of qualifications (SOQ) on September 23, 2020 which were reviewed, ranked and scored by a committee of City staff members. Ardurra was determined to be the most qualified firm for the project and was selected to provide professional engineering services associated with the Project by City Council on October 27, 2020. City staff has negotiated the professional services agreement included in the item for City Council consideration.

The 2020 Water Master Plan was adopted by City Council on April 14, 2020 and outlines the necessity of expanding the City's Surface Water Treatment Plant (WTP) from approximately 17 MGD to 30 MGD by 2022, project 9. In March 2020, the City retained Garver as the owner's representative for the expansion of water treatment plant to assist the City with the successful delivery of the project.

The scope of work in this professional services agreement includes engineering services associated with development of a Preliminary Engineering Report & 30% Design to expand the City's WTP to 30 MGD. As well as other projects at the WTP facility to meet and maintain regulatory compliance,

safety, technology improvements, process innovation and renew aging infrastructure.

Prior City Council Action

City Council approved the of Ardurra for professional engineering services associated with the Water Treatment Plant Facility Expansion Project at the October 27, 2020 meeting.

City Council approved a professional services agreement with Garver in the amount of \$199,820 for owner's representative services associated with the Surface Water Treatment Plant Expansion Project at the March 10, 2020 meeting. The services included an initial planning phase, in which Garver engaged with City Engineering and Operations staff to assess the suitability of the current treatment process technology, and performed a comparative analysis to determine the best path forward for the future expansion.

City Council approved a professional services supplemental agreement with Garver in the amount of \$1,220,657.00 for owner's representative services associated with the Surface Water Treatment Plant Expansion Project at the August 25, 2020 meeting. The Supplemental Agreement is for the design phase of the WTP Expansions project including consultant procurement and acting as the City's OR for preliminary engineering through 100% design and bid phase services.

Deadline for City Council Action

Action is requested on November 24, 2020.

Funding Expected: Revenue ☐ Expenditure ☒ N/A ☐

Budgeted Item: Yes ☐ No ☐ N/A ☒*

*This portion of the Capital Improvement Project is funded through utility bond funds.

Amount: \$1,947,512.00

1295 Form Required? Yes ☒ No ☐

Legal Review Required: N/A ☐ Required ☒ Date Completed: 11/30/2020

Supporting documents attached:

Professional Services Agreement

Project Exhibit

Recommended Action

Approve a professional services agreement with Ardurra Group, Inc. in the amount of \$1,947,512 for professional engineering services associated with the Water Treatment Plant Facility Expansion Project and authorizing the City Manager to execute the same.