



City of Pflugerville

Legislation Text

File #: 2023-0703, **Version:** 2

Discuss and consider action to approve a Professional Services Supplemental Agreement with Ardurra Group, Inc. in the amount of \$775,252.00 for professional engineering services associated with the Water Treatment Plant Facility Expansion Project construction phase services, and authorizing the City Manager to execute the same.

Approving a Professional Services Supplemental Agreement with Ardurra Group, Inc. in the amount of \$775,252.00 for professional engineering services associated with the Water Treatment Plant Facility Expansion Project construction and post-construction phase services, and authorizing the City Manager to execute the same.

Resilient, robust and operational infrastructure that is designed to grow and to comply with the City's Water Master Plan is key to the Sustainable Infrastructure pillar of the City's Strategic Plan. The following Supplemental Agreement allows the City to implement the design of a new Membrane Building, which is a part of the overall plant expansion, that will ensure the City's investment in drinking water is sound.

This item approves the supplemental design services for a new pre-engineered metal structure to house the new water treatment membranes, chemical cleaning equipment and other treatment support facilities. The Engineer of Record, Ardurra Group will provide the design of this building as Construction Phase engineering services.

The current design of the membrane system for the 30-MGD plant expansion was based upon retrofitting existing building as recommended from a previous feasibility study performed by others. Upon further discussion with operations staff and the contractor, it is recommended that a new membrane building designed and constructed for the plant 30-MGD expansion. The new building design will greatly improve operational plant maintenance, constructability and minimize treatment process interruption during construction. This project will both reduce risk and maintain plant drinking water production as required. A new membrane building provides better operability, ease maintenance, and enhances system operational flexibility in the future, allowing for separate treatment trains to be brought on and off line as needed for maintenance. Therefore, it was collaboratively agreed by the city, the engineer of record, and contractor to recommend to proceed with this design change. The following outlines a basis of design for the membrane new building:

Engineering design of the new membrane building to a 30% level was provided in PSSA No. 4. This PSSA No. 5 describes the proposed scope of work to advance the design to 100% completion and additional engineering support pertinent to the new membrane building during construction phase services. The new pre-engineered metal building will house the new membrane basins, new membranes strainer and filtration equipment. Also, the building will house new clean in place (CIP) pumps, piping, valves and storage tanks, back wash pumps and tanks. Other items include a new air compressor room, two electrical rooms, restrooms, a storage room and a mechanical room. Also a new precast concrete building to house two new air scour blowers and piping, and blowers. The completed design will include architectural, structural, HVAC and plumbing building mechanical,

electrical, instrumentation and controls. The team has worked to provide a collaborative environment with the contractor, reduce and optimize design and ensure that as the contractor seeks bid pricing, any savings can be reported to the project contingency.

Prior City Council Action

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

On December 16, 2020, City Council approved a Professional Services Agreement with Ardurra Group in the amount of \$1,947,512.00 for professional engineering services associated with the City of Pflugerville Water Treatment Plant Expansion Project. The services included Preliminary Design (Preliminary Engineering Report) and 30% (Design) PS&E (to expand from 17 MGD to 30 MGD).

On July 13, 2021, City Council approved a Professional Services Supplemental Agreement No.1 with Ardurra Group in the amount of \$5,203,529 for professional engineering services associated with the City of Pflugerville Water Treatment Plant Expansion Project to include final design and bidding phase services.

On May 24, 2022, City Council approved a Professional Services Supplemental Agreement No.2 with Ardurra in the amount of \$3,277,458 for professional engineering services associated with the City of Pflugerville Water Treatment Plant Expansion Project to include construction and post construction phase services.

Deadline for City Council Action

Action is requested on August 8, 2022.

Funding Expected: Revenue Expenditure N/A

Budgeted Item: Yes No N/A

*This project is identified in the Water CIP budget as WTP, HSPS, and Lake PS Expansion to 30.0 MGD (WIFIA).

Amount: \$775,252.00

1295 Form Required? Yes No

Legal Review Required: N/A Required Date Completed: August 1, 2023

Supporting documents attached:

Professional Services Supplemental Agreement

Recommended Action

Approve Professional Services Supplemental Agreement No. 5 with Ardurra Group, Inc. in the amount of \$775,252.00 for professional engineering services associated with the Water Treatment Plant Facility Expansion Project construction and post-construction phase services, and authorize the City Manager to execute the same.