



23-0116

TITLE: Consider/Discuss/Act on a Resolution Authorizing the City Manager to Execute a Contract and All Necessary Change Orders with Archer Western Construction, LLC for the University Pump Station No. 1 - Variable Frequency Drive (VFD) Replacement Project

COUNCIL GOAL: Operational Excellence
(2B: Balance available resources to accommodate the growth and maintenance needs of the city)

MEETING DATE: February 21, 2023

DEPARTMENT: Development Services / Engineering

CONTACT: Blake Sills, PE, Interim Engineering CIP Manager
Paul Tucker, PE, Senior Utility Engineer

RECOMMENDED CITY COUNCIL ACTION:

- Approval of Resolution.

ITEM SUMMARY:

- This Resolution authorizes the City Manager to execute a contract and all necessary change orders with Archer Western Construction, LLC for the University Pump Station No 1 - VFD Replacement Project (CIP Project WA2241) for a total contract amount not to exceed \$1,065,000.

BACKGROUND INFORMATION:

- The Engineering Department in collaboration with the Public Works Department schedules and facilitates major improvements to the City's water pump station facilities which is included in the annual Capital Improvement Plan (CIP).
- The University Pump Station Facility Pump Station is located along the north side of University Drive just west of the Tucker Hill Subdivision and provides water distribution for the City's 850 and 920 service areas. It is one of four water pump station facilities operated by the City of McKinney for both storage of water (delivered by the North Texas Municipal Water District) and distribution of water to the community.

- Pump Station No. 1 (PS-1) serves the 920 service area with a 20 Million Gallons per Day (MGD) capacity.
- PS-1 was built in 2004. The existing variable frequency drive (VFD) for pump number 2 in PS-1 needs replacement due to approaching a 20-year service life. The VFD has become obsolete and difficult to service and acquire parts.
- Replacement of the existing VFD will require modifications to the secondary access door and replacement of the existing HVAC system that was built in 2004.
- Birkhoff, Hendricks & Carter, LLP prepared the construction plans and specifications for this project.
- The City issued an Invitation to Bid (23-07CC) to solicit responses from qualified contractors for the construction of University Pump Station No 1 - VFD Replacement Project (WA2241)
 - Advertised in the McKinney Courier Gazette and Celina Record
 - Posted on McKinney TV
 - 1,039 matching eBid Supplier Notifications which included 47 historically underutilized businesses (HUB) suppliers.
- Out of 1,039 supplier notifications, one (1) bid was received and opened by Procurement Services on Thursday, January 26, 2023.
- Archer Western Construction, LLC (A-W) submitted the sole qualified low bid.
- The following is a summary of the bid cost:

Bidder	Base Bid Proposal
Archer Western Construction, LLC	\$969,000

- A-W has submitted references and qualifications that were evaluated in accordance with the bid specifications as shown in the attached Letter of Recommendation dated January 31, 2023.
- A-W has successfully completed similar construction projects at the City's University Pump Station No. 2, such as constructing Pump Building No. 2 with offices, SCADA/IT room, pump control room, and electrical room, including pumps and motors, electrical switchgear, and a 10 MG ground storage tank. Recently, A-W completed an additional installation of 920 service area pump with a variable frequency drive (VFD) and replacement of an obsolete VFD for an

existing pump in Pump Station No. 2.

- A-W has maintained a good working relationship with the Public Works and Engineering Departments and has coordinated well during those projects to make them successful for the City. The proposed A-W Project Manager has remained involved in McKinney projects since 2006 and will be the project manager for this project.
- A-W proposal cost exceeded the Engineer's estimated construction costs by 66%. Therefore, further costs analysis / value engineering were reviewed.
- Staff (Engineering and Public Works), as well as the project design consultant (BHC) researched cost savings/value engineering opportunities for this project based on the sole proposal received from A-W. Electrical switchgear costs are currently escalating at approximately 20% per year, thus it is not recommended to defer the improvements to future years.
- The contract documents require that this project be substantially completed within 335 calendar days and after issuance of the Notice to Proceed, which is expected in February 2023. Construction is expected to be substantially complete by February 2024. An additional 30 calendar days are allowed to reach final completion. Final completion is expected in March 2024.
- Staff (Engineering and Public Works) recommends awarding Archer Wester Construction, LLC the construction contract for the University Pump Station No 1 - VFD Replacement Project.

FINANCIAL SUMMARY:

- This Resolution authorizes a contract and all necessary change orders with Archer Western Construction, LLC for an amount not to exceed \$1,065,000.
- Funds are available in the Capital Improvements Program in WA2241.
- With approval of this item, \$10,400 will remain in WA2241.

BOARD OR COMMISSION RECOMMENDATION:

- N/A

SUPPORTING MATERIALS:

[Resolution](#)

[Location Map](#)

[Recommendation](#)