



CITY OF MCKINNEY, TEXAS

Legislation Text

File #: 18-870, **Version:** 1

Consider/Discuss/Act on a Resolution Authorizing the City Manager to Execute a Contract with Lochwood, Andrews, & Newnam, Inc. to Provide Consulting Engineering Services for the WA1626 - McKinney Ranch Pump Station Improvements - Phase 1 Project and Authorizing Any Supplemental Agreements

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

MEETING DATE: October 16, 2018

DEPARTMENT: Development Services/Engineering

CONTACT: Nick Ataie, PE, 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 in the amount of \$500,641, as well as all required supplemental agreements thereto, with Lochwood, Andrews, & Newnam, Inc. for professional consulting engineering services for the McKinney Ranch Pump Station Improvements Project - Phase 1, for a total aggregate contract amount, inclusive of any supplemental agreements, not to exceed \$570,000.

BACKGROUND INFORMATION:

- Portions of the existing pump station are in need of pump and electrical building and electrical switchgear improvements to continue to provide safe operation and pumping capacity for the growing City population and businesses.
- The pump station serves the 850 and 920 Services Areas (SA). The existing pump station site has three separate operating pump stations and one obsolete pump station as follows:
 - Pump Station No. 1 (850 SA) - Not operational, to be abandoned.
 - Pump Station No. 1 (920 SA) - Improvements needed.
 - Pump Station No. 2 (920 SA) - Improvements needed.
 - Pump Station No. 3 (850 SA) - No proposed improvements required.

- The project will be separated into two design and construction phases to coincide with project funding availability.
 - Phase 1 includes the following tasks:
 - Abandonment of three old pumps and isolation of piping to eliminate dead ends at Pump Station No. 1 (850 SA) and,
 - Replacement of Pump Station No. 1 (920 SA) includes the following:
 - Replacement of 3 vertical turbine pumps and associated valves. Pumps to be selected will be of equal size and general capacity to fit the existing pump can installations. Engineer will analyze new pumps to improve efficiency and capacity for use with Variable Frequency Drives (VFDs).
 - Replacement/addition of surge protection valves and devices.
 - Any necessary piping changes to accommodate the new equipment.
 - A new building will be provided to house the pump equipment in one room and a separate room to house the electrical control equipment. The electrical control room will be sized to accommodate Phase 1 and Phase 2 (future phase) improvements. The building will include foundations, wall and roof structures, all lighting, access doors, HVAC and appurtenances for a complete operational building. The existing building is substandard and is in need of replacement.
 - The new electrical building will follow the site planning requirements during the site design process.
 - Demolition of the existing electrical building.
 - Pump analysis is included to select pumps to replace 2 vertical turbine pumps in Pump Station No. 2 (920 SA) and the 3 vertical turbine pumps in Pump Station No. 1 (920 SA).
 - Phase 2 design and construction will be provided in a future Agenda Item, but will include the following tasks:
 - Improvements to Pump Station No. 2 (920 SA) including a new building to house the pump equipment that are currently outdoors. The electrical equipment will be relocated to the new electrical room provided in Phase 1.
 - Improvements to Pump Station No. 2 (920 SA) includes, 10 isolation valves, 5 check valves, surge valve, air purge valves, 5 variable frequency drives (VFDs), electrical controls, Supervisory Controls and Data Acquisition (SCADA) and security systems, and appurtenances.
- Lochwood, Andrews, & Newnam, Inc. submitted a response to 18-46RFQ for Utility Design. They were one of eleven firms shortlisted by City Council on October 2, 2018.
- Construction of Phase 1 of this project is estimated to cost a total of approximately \$4,100,000.
- Lochwood, Andrews, & Newnam, Inc. submitted a proposal for this project in the amount of

\$500,641 (12.21% of the overall estimated construction cost) to perform the engineering services. The proposed fee is separated into basic services of \$354,475 (8.65% of construction cost) and \$146,166 (3.57% of construction cost) in special services. Unless otherwise noted in the contract, special services will be provided on an hourly basis, as needed during the design and construction.

- Upon approval of the engineering services contract, Lochwood, Andrews, & Newnam, Inc.. will prepare the design and provide construction administration services during construction.

FINANCIAL SUMMARY:

- This Resolution authorizes a contract with Lochwood, Andrews, & Newnam, Inc. for an amount not to exceed \$570,000.
- Funds are available in the Capital Improvements Program WA1626 (\$570,000).
- With the approval of this item, \$2,419,215 will remain in WA1626.

BOARD OR COMMISSION RECOMMENDATION:

- N/A