



16-1196

TITLE:

Consider/Discuss/Act on a Resolution Authorizing the City Manager to Execute a Contract Amendment to the Professional Services Contract with Freese and Nichols, Inc. of Fort Worth, Texas for Additional Professional and Engineering Services Related to the Water System Nitrification Action Plan Project - Phases 2 and 3

COUNCIL GOAL: Operational Excellence

MEETING DATE: December 6, 2016

DEPARTMENT: Public Works

CONTACT: Morgan Dadgostar, PE, Water Utilities Superintendent
Paul Sparkman, Assistant Director of Public Works
David Brown, PE, Director of Public Works

RECOMMENDED CITY COUNCIL ACTION:

- Approval of the Resolution.

ITEM SUMMARY:

- This Resolution authorizes the City Manager to execute a contract amendment with Freese and Nichols, Inc. to provide additional professional and engineering services related to the Water System Nitrification Action Plan Project - Phases 2 and 3 for an amount not to exceed \$110,000.

BACKGROUND INFORMATION:

- The City of McKinney receives treated water from the North Texas Municipal Water District. The treated water is disinfected by a chloramination process that provides for a longer lasting chloramine residual. Nitrification is a process that can occur in water systems that use chloramine for their residual disinfectant.
- The Texas Commission on Environmental Quality (TCEQ) requires that any

water system distributing chloraminated water must create a Nitrification Action Plan.

- Nitrification can degrade a distribution system's water quality and negatively affect regulatory compliance. Nitrification increases the rate at which the chloramine residual decays. By measuring the nitrite and nitrate levels at various locations throughout the distribution system, we will be able to identify those areas of the water distribution system where we will need to increase/adjust our maintenance practices to address these matters.
- Through a qualified-experience based selection process, Freese and Nichols, Inc. was selected to provide professional services for a three-phase project in the development of a Nitrification Action Plan for the city's water distribution system.
- Phase 1 was approved by the City Council under Resolution No. 2015-09-097 and enacted September 1, 2015. It was completed under a separate contract and involved the development and implementation of a focused sampling plan.
- Phases 2 and 3 were approved by the City Council under Resolution No. 2016-07-105 and enacted July 19, 2016. A professional services contract was executed thereafter in the amount of \$92,200 for the analysis and development of recommendations and operational modifications to maintain appropriate water quality, as well as assisting with the development and review of the city's Nitrification Action Plan.
- The amendment to the current contract is in the amount of \$8,846 and is for assisting with the development of operational approaches for the addition of chemical boosting equipment at the Trinity Falls elevated storage tank to address low chlorine residual in the area's water system and the upcoming CIP that will involve the installation of a new pump station on Redbud Boulevard.

FINANCIAL SUMMARY:

- The Resolution authorizes the City Manager to execute a contract amendment to the existing professional services contract for professional and engineering services related to the Water System Nitrification Action Plan Project and potential changes to that scope of services with Freese and Nichols, Inc. for an amount not to exceed \$110,000.
- Funds are available in the Water Utilities Operating Budget for Professional Services 003-8205-503-8516.

BOARD OR COMMISSION RECOMMENDATION: N/A

SUPPORTING MATERIALS:

[Resolution](#)