



City of Denton

City Hall
215 E. McKinney Street
Denton, Texas
www.cityofdenton.com

AGENDA INFORMATION SHEET

DEPARTMENT: Procurement
ACM: Christine Taylor
DATE: April 14, 2025

SUBJECT

Consider recommending adoption of an ordinance of the City of Denton, a Texas home-rule municipal corporation, authorizing the City Manager to execute a Professional Services Agreement with Carollo Engineers, Inc., for engineering services at the Lake Lewisville Water Treatment Plant for the Water Utilities Department as set forth in the contract; providing for the expenditure of funds therefor; and providing an effective date (RFQ 8213-004 – Professional Services Agreement for engineering services awarded to Carollo Engineers, Inc., in the not-to-exceed amount of \$958,760.00).

STRATEGIC ALIGNMENT

This action supports Key Focus Area: Enhance Infrastructure and Mobility.

INFORMATION/BACKGROUND

At the Lake Lewisville Water Treatment Plant, several ongoing issues are impacting the plant operation's ability to successfully dewater the residual solids that are removed from the raw water during treatment. The ongoing issues are as follows:

- Inconsistent solids feed through the belt press system, and screw conveyor clogs.
- Poor capture efficiency in gravity thickener; solids are flowing over the weir.
- Sludge builds up in the Equalization Basin.
- Limited space for future expansions and modifications at the existing dewatering building.

The engineer will provide preliminary design, final design, and engineering services during construction for improvements to the solids handling system. The scope of services includes:

- Evaluation of the existing solids handling system.
- Separation of backwash water and sedimentation basin flow streams.
- Design of a sludge holding tank to improve the consistency of the solids fed to the belt press system.
- Design of pipe modifications to send backwash water from the equalization basin directly to the recovery basin, bypassing the sludge lagoon.
- Instrumentation and Control improvements by optimizing the residuals and increasing overall efficiency.
- Process improvement recommendations to optimize the plant during the design, construction, and commissioning phases of the project.
- Evaluate the capacity of the existing belt press system to determine if a third belt press is needed.

These services are necessary to address the ongoing issues the City of Denton is experiencing at the Lake Lewisville Water Treatment Plant, facilitating efficient progress on this critical infrastructure project.

Request for Qualifications for an engineering services list for various water and wastewater utilities projects for the Water Utilities Department was solicited using the City's formal solicitation process. City Council approved a pre-qualified list of professional service firms on March 5, 2024 (Ordinance 24-390).

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

On March 5, 2024, City Council approved RFQ 8213 for a prequalified list of firms for engineering services for various water and wastewater utilities projects for the Water Utilities Department (Ordinance 24-290).

RECOMMENDATION

Award a contract with Carollo Engineers, Inc., for engineering services at the Lake Lewisville Water Treatment Plant for the Water Utilities Department, in the not-to-exceed amount of \$958,760.

PRINCIPAL PLACE OF BUSINESS

Carollo Engineers, Inc.
Dallas, TX

SUSTAINABILITY MEASURES

The contract for engineering services will help the City of Denton in improving the solids handling process at the Lake Lewisville Water Treatment Plant. Protect health, safety, and the environment by maintaining a high level of drinking water quality in accordance with all regulatory requirements. The contract addresses the need to improve the solids handling process at the Lake Lewisville Water Treatment Plant as required by the City of Denton's Water Utilities Department.

ESTIMATED SCHEDULE OF PROJECT

The LLWTP Dewatering project will begin design in April 2025. The construction plans are anticipated to be completed in November 2025.

FISCAL INFORMATION

These services will be funded from the bond of the 5-year Capital Improvement Program account 630542523.1365.21100. Requisition #168599 has been entered into the Purchasing software system in the amount of \$500,000 for FY 25/26. The remainder of the funds will be available FY 26/27. The budgeted amount for this item is \$958,760.

EXHIBITS

Exhibit 1: Agenda Information Sheet
Exhibit 2: Ordinance and Contract

Respectfully submitted:
Lori Hewell, 940-349-7100
Purchasing Manager

For information concerning this acquisition, contact: Nicholas Dampf, (940) 349-8030.

Legal point of contact: Marcella Lunn at 940-349-8333.