



City of Denton

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

AGENDA INFORMATION SHEET

DEPARTMENT: Procurement
ACM: Cassey Ogden
DATE: June 6, 2023

SUBJECT

Consider 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 Kimley-Horn and Associates, Inc., to provide regulatory permitting/approval support, process evaluation, design services, bidding assistance, and construction phase services for the Pecan Creek Water Reclamation Plant (PCWRP) Expansion to 26MGD Project for the Wastewater Department; providing for the expenditure of funds therefor; and providing an effective date (RFQ 7574-027 – Professional Services Agreement for design services awarded to Kimley-Horn and Associates, Inc., in the not-to-exceed amount of \$14,952,000.00). [The Public Utilities Board recommends approval \(6 - 0\).](#)

STRATEGIC ALIGNMENT

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

INFORMATION/BACKGROUND

The Pecan Creek Water Reclamation Plant (PCWRP) is the City's only Wastewater Reclamation Facility and is currently permitted for an annual average capacity of 21 million gallons per day (MGD) and 46 MGD Peak 2-hour flow (P2HF). The facility treats 14-15 MGD of wastewater, which is 71% of the permitted limit. The Texas Commission on Environmental Quality (TCEQ) requires a utility to begin design for capacity expansion when flows reach 75% of the permitted limit and to begin construction of improvements when flows reach 90% of the permitted limit. An updated discharge permit submitted to the Texas Commission on Environmental Quality (TCEQ) includes two additional phases of 26 MGD and 30 MGD, respectively. TCEQ has administratively approved the amended discharge permit and Water Utilities anticipates the issuance this summer.

The proposed expansion of PCWRP will include a new 5 MGD treatment train that will utilize membrane bioreactor (MBR) technology, new 26 MGD solids handling facilities, and ultraviolet disinfection (UV) facilities. The project will include the necessary piping and electrical/SCADA improvements to integrate the new facilities with the existing facilities to treat 26 MGD.

MBR technology, a new process for PCWRP, offers increased capacity in a similar footprint as a conventional treatment process. The effluent result from MBR treatment is free of suspended solids and contains reduced bacterial and viral content, requiring minimal disinfection. This process allows the treated effluent to be discharged into sensitive receiving streams or to be reclaimed for applications such as irrigation.

The proposed project utilizes proven new technology to effectively treat the influent at the location, resulting in high-quality discharge and ensuring environmental sustainability. This expansion will provide a capacity upgrade to provide safe wastewater treatment service associated with the increased growth within the City and surrounding communities.

The initial \$1 million is currently funded, with additional funds requested in the submitted Capital Improvement Budget for FY 24 through FY 27. The Utilities Extendable Commercial Paper Program is being utilized for contract appropriation authority.

Request for Qualifications for professional engineering services for Water and Wastewater was solicited using the City's formal solicitation process. City Council approved a pre-qualified list of engineering firms on March 23, 2021 (Ordinance 21-546).

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

On March 23, 2021, City Council approved RFQ 7574 for a prequalified list of professional engineering firms for Water and Wastewater (Ordinance 21-546).

On May 22, 2023, the Public Utilities Board (PUB) recommended this item to the City Council for consideration.

RECOMMENDATION

Award a contract with Kimley-Horn and Associates, Inc., to provide regulatory permitting/approval support, process evaluation, design services, bidding assistance, and construction phase services for the Pecan Creek Water Reclamation Plant (PCWRP) Expansion to 26MGD Project for the Wastewater Department, in a not-to-exceed amount of \$14,952,000.

PRINCIPAL PLACE OF BUSINESS

Kimley-Horn and Associates, Inc.
Raleigh, NC

SUSTAINABILITY MEASURES

The proposed 5 MGD MBR facility and the supporting process equipment allow the Pecan Creek Water Reclamation Plant to expand the existing location with a smaller equipment footprint, sustain quality service and improve the water quality to be discharged.

Relationship to Sustainability Framework

Focus Area: *Water and Wastewater*

Goal 1: Expand the wastewater treatment capacity at Pecan Creek Water Reclamation Plant.

Goal 2: Ensure wastewater is treated and discharged in accordance with regulatory requirements.

Goal 3: Protect the health, safety, and the environment by increasing the treatment capacity, improving reliability, and using advanced technology to discharge safer effluent.

FISCAL INFORMATION

These services will be funded from the Wastewater Utilities account 640496545.1360.20100. Requisition #159755 has been entered into the Purchasing software system in the amount of \$1,000,000. The Utilities Extendable Commercial Paper Program is being utilized for contract appropriation authority until future funding is available. The budgeted amount for this item is \$14,952,000.

EXHIBITS

Exhibit 1: Agenda Information Sheet

Exhibit 2: Presentation

Exhibit 3: Ordinance and Contract

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

For information concerning this acquisition, contact: David Brown, (940) 349-8480.

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