Agenda Item Details

Meeting	May 14, 2024 - Bryan City Council Second Regular Meeting
Category	5. Consent (Automatic Approval) Agenda - This agenda consists of ministerial or "housekeeping" items required by law such as routine bids, contracts, purchases, and resolutions. Items may be removed from the consent agenda for separate consideration at the request of two Councilmembers.
Subject	B. Approval of a contract with CDM Smith in the not to exceed amount of $179,085 allowing development of a feasibility and cost study for construction of the new Brushy Creek Wastewater Treatment Plant
Type	Action (Consent)
Preferred Date	May 14, 2024
Absolute Date	May 14, 2024
Fiscal Impact	Yes
Dollar Amount	179,085.00
Budgeted	Yes
Budget Source	Wastewater Fund
Goals	Infrastructure Service

Summary:
Water Services respectfully requests City Council's approval of a professional services contract with CDM Smith (CDM) in the not to exceed amount of $179,085 allowing development of a feasibility and cost study for design of the new Brushy Creek Wastewater Treatment Plant (Brushy Creek).

The Texas Commission on Environmental Quality (TCEQ) has issued a discharge permit for Brushy Creek. The permit authorizes an annual average treated volume of not more than 6,000,000 gallons per day in the Interim Phase (initial build) and an annual average flow not to exceed 12,000,000 gallons per day in the Final Phase (final build). When constructed, Brushy Creek will provide sewer service to Bryan's eastside. Using systematic, planned progression construction of Brushy Creek will ultimately allow decommission of the Burton Creek Wastewater Treatment Plant.

CDM estimates the market rate for construction of the plant to be $15/gallon. If correct, this equates to $90 million to build the plant's Interim Phase (6,000,000 gallons per day). This estimate is based upon a conventional wastewater treatment strategy where sewage is treated to meet the water quality standards of the receiving stream. This estimate raises the need to restudy and confirm the Interim Phase is sized appropriately for the service area and is not unnecessarily oversized for the projected growth of the sewer basin.

This pause has opened the door for evaluating the possibility of reclaiming the plant's effluent for Aquifer Storage and Recover (ASR) by incorporating advanced treatment technologies into the plant's design. Advanced wastewater treatment will produce high-quality effluent that can be further treated and used as an indirect potable water source. The term ASR refers to storage of water in a suitable aquifer using an injection well during times when water is available, and the recovery of water from the same aquifer during times when it's needed. The stored water in this case will be reclaimed effluent. The addition of high-quality reuse water to ASR will allow Bryan to store significant amounts of water to meet future demand without the need for drilling new water wells or securing new water rights.

The presented contract allows CDM to study in-depth the feasibility and cost for plant construction and ASR viability. CDM will study: (1) reducing the permitted capacity with conventional treatment, (2) plant construction with advanced treatment strategies, and (3) development of an ASR field for potable reuse. CDM also will explore potential funding

options available and project qualifications for funding eligibility. These potential funding sources are a mixture of both federal and state programs and could present potential capital cost savings as well as reduced or delayed payments for awarded projects.

The work product from CDM's effort will provide staff with additional information so the greatest return on investment is achieved in design and construction of Brushy Creek.

The presented contract allows for four deliverables:

1. Project Kickoff and Alignment [$5,555]
2. Alternative Treatment Evaluation [$121,473]
3. Funding Opportunities [$25,294]
4. Recommendation and Findings [$26,763]

Staff Analysis and Recommendation:
Awarding this contract will bring the City one step closer to beginning design of the Brushy Creek WWTP. Completion of the study will provide valuable information to assist in finalizing design and construction of the Brushy Creek Wastewater Treatment Plant.

Options:
1. Award contract.
2. Do not award contract and provide direction.

Attachments:
1. Contract.

CDM Smith_Professional Srvcs Contract - Brushy Creek WWTP.pdf (2,753 KB)