

STAFF REPORT



SUBJECT: 536 Well Field Development – Professional Services
MEETING: Public Works Committee Meeting – 30 MAR 2021
DEPARTMENT: Public Works
STAFF CONTACT: Nick Williams

RECOMMENDATION:

Staff recommends entering into agreement with Provenance Engineering for the design of the 536 Well Field for \$428,000.

BACKGROUND:

In 2013, the City of Stephenville purchased a 536-acre tract adjacent to the city's existing Airport Well Field with the intention of utilizing the property to augment the city's existing groundwater production supply.

Development of the 536 Well Field is intended to supplement the existing groundwater production well system and system improvements include a 1,000,000-gallon ground storage tank and pump station at the existing Airport Pump Station, the installation of a 16-inch diameter transmission pipeline as well as the construction of the well field.

Construction of the well field includes five (5) new water production wells, collection piping, roadways, and electrical connections. Five (5) production wells are included to coincide with the remaining capacity in the diameter of the existing transmission pipeline. The estimated cost of the well field construction is \$5,429,000.

The estimated cost for a 1,000,000-gallon ground storage tank is approximately \$2,000,000. The 16-inch transmission pipeline will connect to the existing transmission pipeline at County Road 182 and extend approximately 1-½ miles to the 536-acre property. The estimated cost of the pipeline is \$785,000.

An agreement with Provenance Engineering was approved on December 1, 2020 for the design of the 1MG ground storage tank, pump station, and the transmission pipeline for the 536 Well Field. The design work is underway and is on schedule for delivery by September 2021.

PROPOSAL:

The attached proposal provides design services for five (5) new water supply wells including mechanical, civil, electrical, and instrumentation for system communication. The basic services provide for the design of the well casing and packing, pumps, wellheads, internal water transmission mains, roadways, power supply, as well as monitoring capability for well field management. Basic Services also include surveying and testing components as well as coordination with regulatory agencies: Texas Commission on Environmental Quality (TCEQ) and the Middle Trinity Groundwater Conservation District (MTGCD).

The proposal also provides budgetary cost estimates for Supplemental Services, which include an Aquifer Storage and Recovery (ASR) desktop feasibility analysis, engineering assistance with outside funding application requirements such as through the Texas Water Development Board, as well as onsite construction oversight. Supplemental Services must be approved in writing with council authorization prior to performing the work.

The proposal indicates the phase one Design Services will be complete within a 12-month timeline.

FISCAL IMPACT SUMMARY:

Funding was appropriated in the FY20-21 Budget in the amount of \$540,000 for design services for the 536 Well Field. The proposed agreement provides the phase one basic design services, including the preparation of construction drawings and detailed specifications as well as coordination with TCEQ and the MTGCD for \$385,000. Including Supplemental Services for assistance with funding agencies, such as the Texas Water Development Board (\$15,000) and the ASR Desktop Analysis (\$28,000) totals \$428,000 leaving a budgeted balance of \$112,000.

ATTACHMENTS:

[536 Well Field Development – Professional Services Proposal](#)