



8866 Synergy Drive
McKinney, TX 75070
972.542.2995

May 13, 2024

Jim Bolz
Public Works Director
City of Sanger, Texas
502 Elm St, Sanger, TX 76266
Office: 940-458-2571

**RE: Proposal for Professional Engineering Services
City of Sanger – WWTP site selection & water servicing study
Study Phase
KSA Project No. 103153**

Dear Mr. Jim,

KSA Engineers, Inc., (KSA) is pleased to present this letter to serve as our understanding of the proposed project and the scope of the professional engineering services necessary to assist you with completion of the work. This proposal is not a contract for professional services. Upon acceptance of the proposal, KSA will prepare and submit a professional services agreement to be executed by both parties.

KSA's understanding of the project serves as the basis for the scope, schedule and fees presented herein.

The city currently owns and operates the Wastewater Treatment Plant (WWTP) located in 300 Jones Street, Sanger, Denton County, TX 76266. The WWTP is permitted for 0.98 MGD average daily flow and a 2-hour peak of 2,917 gallons per minute. In light of significant commercial and residential development projected in the comprehensive plan, the city has purchased over 400 acres of land parcels in the southeastern portion of the city for future subdivisions such as parklands, designated facilities, new WWTP and new residential development.

The new WWTP proposed in the new parcel of land shall initially service sewer flows from South Bottom Lift Station, and to ultimately service most of the flow (if not all) from both existing and future development city areas. KSA has been tasked with evaluating footprint requirements and developing the engineering study to accommodate for current and future growth per TCEQ requirements.

KSA proposes to provide professional services in accordance with a Professional Services Agreement (Agreement) which will be subsequently prepared following your acceptance of the information presented in this proposal. The broad scope of work will include the following:

- 1) Evaluate a potential property (located outside the floodplain) within the newly acquired city lands to site a new WWTP to initially service flows from city's existing South Bottom Lift Station and to subsequently service all existing and future areas of the city ETJ.
- 2) Determine footprint requirements for three phases of development (Phase I to service South Bottom Lift Station, Phase II to service all current service areas within city limits, Phase III to service future development in the current ETJ including city baseline growth).
- 3) Determine suggested site location(s) for water servicing including an EST/GST, pump station and potential new well to service the south-east portion of city.

Scope of Services

KSA proposes to provide the services outlined in the Study Phase of the attached General Services Agreement with the City, for the scope of work listed above. More specifically those services include:

1. Project management and coordination including preparation of a project plan, Kick-off meeting and a site visit, Invoicing and project administration, Monthly Progress meetings.

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2. Validation of South Bottom Lift Station flows, existing WWTP flows and future development flows:
 - o Review two to three years of sewer flow data (South Bottom Lift Station, WWTP influent flow meter data & wastewater effluent meter flow data)
 - o Review WWTP plans, hydraulic profile (if any), wastewater quality data (influent and effluent)
 - o Review growth projections, and future flow demand needs (including baseline growth & new development growth) previously presented in the 2022 Water and Sewer Master Plan.
3. Develop site plans and footprint requirements for Phase I, II & III new WWTP expansion.
 - o Establish sewer flow for Phase I, II & III WWTP development.
 - o Prepare a Biowin model of the new WWTP processes and validate recorded influent wastewater quality data to simulate new WWTP conditions. The biowin model will require reliable sampling data (influent and effluent ww quality) to be provided by the City.
 - o Pre-consultation meeting and co-ordination with TCEQ to receive guidance with respect to future permit discharge requirements for the treatment plant site.
 - o After completing the biowin model, develop a preliminary design basis (10% design development) and evaluate footprint requirements for Phase I, II and III plant expansion for current and potential future TPDES permit requirements.
 - o Additional factors/criteria to be used in the qualitative evaluation of the WWTP site will include: site size, grading, ability to accommodate future plant growth, proximity to receiving water body (for effluent discharge), road access, utility access, proximity to existing collection system infrastructure, general land use, general geology of the area (obtained from USGS) and their suitability to house potential WWTP, general wetlands in the area (based on available wetland inventory mapping data).
4. Develop water servicing options to service southeast portion of the city:
 - o Utilize and update 2020 Water GEMS model (prepared by KSA) to determine storage and pumping requirements against TCEQ requirements for servicing southeast portion of city
 - o Determine strategic locations (minimum of 2) within the city purchased lands to house storage, treatment and well site equipment
5. Prepare a report to summarize the results of the study and provide recommendations for next steps in the site selection and development process.

The following services are excluded from this proposal:

1. Permitting services.
2. Site specific studies such as endangered species study, archeological study, cultural resources study, geotechnical study, topographic study etc.
3. Evaluation of existing wells in the area.
4. Hydrogeological study, potential well sites, production capacities and/or exploratory drilling.



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Compensation

We propose to perform the services described in the outlined scope for the following lump sum fees:

Design Project Management (Project Plan, Kick-off meeting, Site visit, Invoicing and project administration, Monthly Progress meetings)	\$ 19,020
Validation of South Bottom Lift Station flows, existing WWTP flows and future development flows	\$ 8,680
Develop site plans and footprint requirements for Phase I, II & III new WWTP expansion.	\$ 30,900
Develop water servicing options to service southeast portion of the city	\$ 31,840
Reporting (Draft and Final)	\$ 14,800
Total for Engineering Services	\$ 105,240

Schedule

We propose to perform the scope of work in accordance with the following schedule.

- WWTP & Water servicing study20 weeks from NTP
 - ↳ Background data review..... week 2
 - ↳ Kick-off meeting and site visit week 3
 - ↳ TCEQ Meeting and co-ordination week 6
 - ↳ WWTP Biowin Modeling week 9
 - ↳ Water GEMS system Modeling week 12
 - ↳ Draft report week 15
 - ↳ City review comments received week 17
 - ↳ Final Report) week 20
- Total from NTP to completion..... 20 weeks

Next Steps

Please let us know if this proposal is acceptable. This proposal is not a contract for professional services. Upon acceptance of the proposal, KSA will prepare and submit a professional services agreement to be executed by both parties.

KSA appreciates the opportunity to provide the above proposal for your review. Please let us know of any questions you may have.

Respectfully,

KSA Engineers, Inc.

Shriram Manivannan

Digitally signed by Shriram Manivannan
DN: cn=US,
email=shriram@ksaeng.com, o=KSA
Engineers Inc., ou=Municipal,
cn=Shriram Manivannan
Date: 2024.06.11 16:10:22-0500

Shriram Manivannan, P.E.
Project Manager

TASK ORDER FORM

This is Task Order No. 103153,
consisting of 3 pages,
dated _____.

KSA Project Number: 103153

Owner Project (or Purchase Order) Number:

Project Name: Wastewater Treatment Plant Study

In accordance with paragraph 1.01 of the Standard Form of Agreement Between Owner and Engineer for Professional Services – Task Order Edition, dated September 8, 2020 ("Agreement"), Owner and Engineer agree as follows:

1. Specific Project Data

- A. Owner: City of Sanger, Texas
- B. Title: Wastewater Treatment Plant Study
- C. Description: Study and Report services in connection with the WWTP site selection.

2. Services of Engineer:

Engineer shall provide, or cause to be provided, the following services:

Evaluate TCEQ requirements and develop a report to address current and future growth and develop water servicing options.

3. Owner's Responsibilities

Owner shall have those responsibilities set forth in Article 2 and in Exhibit B, except as modified by this Task Order.

4. Times for Rendering Services

Engineer shall complete its services in accordance with the following schedule:

Final report to be submitted within 20 weeks of Notice to Proceed from Owner. A detailed schedule of the individual tasks is included in Attachment 1.

5. Payments to Engineer

Owner shall pay Engineer for services rendered as follows:

\$105,240 Lump Sum. A detailed breakdown of the task fees is included in Attachment 1.

6. Hourly Rates and Reimbursable Expenses Schedule

Rates for hourly work and reimbursable expenses effective on the date of this Agreement are:

Senior Advisor	\$300.00/hour
Principal	\$280.00/hour
Senior Aviation Planner	\$225.00/hour
Aviation Planner	\$185.00/hour
Electrical Engineer	\$190.00/hour
Electrical Design Engineer	\$155.00/hour
Senior Project Manager	\$250.00/hour
Project Manager	\$185.00/hour
Senior Project Engineer	\$180.00/hour
Project Engineer	\$160.00/hour
Senior Design Engineer	\$140.00/hour
Design Engineer	\$120.00/hour
Senior Project Architect	\$240.00/hour
Project Architect	\$145.00/hour
Design Architect	\$105.00/hour
Senior Engineering Technician	\$210.00/hour
Engineering Technician	\$115.00/hour
Senior Design Technician	\$135.00/hour
Design Technician	\$ 95.00/hour
Safety Manager	\$135.00/hour
Safety Specialist	\$100.00/hour
Regulation Compliance Specialist	\$120.00/hour
Project Assistant	\$ 90.00/hour
Senior CAD Technician	\$ 90.00/hour
CAD Technician	\$ 85.00/hour
Senior Project Representative	\$120.00/hour
Project Representative	\$105.00/hour
Graphic Designer	\$ 80.00/hour
Administrative Assistant	\$ 85.00/hour
Secretary	\$ 55.00/hour
Three-Man Survey Crew	\$210.00/hour
Two-Man Survey Crew	\$180.00/hour
Senior Registered Surveyor	\$180.00/hour
Registered Surveyor	\$155.00/hour
Senior Survey Technician	\$120.00/hour
Survey Technician	\$100.00/hour
Mileage	\$ 0.66/mile
ATV (4-Wheeler)	\$100.00/day
GPS	\$100.00/day

Reimbursable Expenses (Travel, Lodging, Copies, Printing)	Actual Cost
Outside Consultants	Cost + 15%

NOTE: The Standard Hourly Rates and Reimbursable Expenses Schedule shall be adjusted annually as of January to reflect equitable changes in the compensation payable to Engineer.

7. Terms and Conditions: Execution of this Task Order by Owner and Engineer shall make it subject to the terms and conditions of the Agreement (as modified above), which Agreement is incorporated by this reference. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

The Effective Date of this Task Order is _____.

OWNER: City of Sanger, Texas

By: _____

Name: John Noblitt

Title: City Manager

Date Signed: _____

ENGINEER: KSA Engineers, Inc.

By: 

Name: Joncie H. Young, P.E.

Title: Director of Client Services

Date Signed: June 13, 2024

Engineer License or Firm's
Certificate No. F-1356

State of: Texas

DESIGNATED REPRESENTATIVE FOR
TASK ORDER:

Name: Jim Bolz

Title: Public Works Director

Address: 502 Elm Street

Sanger, TX 76266

E-Mail Address: jbolz@sangertexas.org

Phone: 940.458.7930

Fax: _____

DESIGNATED REPRESENTATIVE FOR TASK
ORDER:

Name: Shriram Manivannan, P.E.

Title: Municipal Team Leader

Address: 140 E. Tyler Street

Suite 600

Longview, TX 75601

E-Mail Address: smanivannan@ksaeng.com

Phone: 972.542.2995

Fax: 888.224.9418

ATTACHMENT 1



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