

Request for Qualifications (RFQ) 2024-015 – Geographic Information System (GIS) Mapping Project

City of Mercedes, Texas

April 13, 2024

The City of Mercedes, Texas, is requesting a list of qualifications and a proposal from qualified professional service firms (consultant) to complete a GIS mapping project. Proposals will be accepted until 4:00 P.M, April 29, 2024 and are to be submitted to:

Rey Trevino

Contract Specialist

City of Mercedes

400 South Ohio Ave

Mercedes, TX 78570

Please submit one (1) electronic PDF and four (4) paper copies of the RFQ submittal shall be provided by the Consultant to the City. The submittal shall be limited to twelve (12) single-sided pages of the information identified in the ‘RFQ Submittal Requirements’ section, plus a cover/back sheet. The proposals pages should be in 8 ½-inch by 11-inch, 11-inch by 17-inch size sheets folded is permissible but shall count as two pages each

Introduction – The City of Mercedes, Texas (City) is seeking a qualified professional services firm (Consultant) to complete a GIS mapping project.

The project is the development of a Utility GIS system for the drinking water distribution system and sanitary sewer collection system. The City of Mercedes has engaged an engineering firm to evaluate the condition and potential needs of the City’s water and wastewater utility systems through a Water and Wastewater System Master Plan. The engineering firm tasked with the Master Plan will create hydraulic models for each of these systems. It is anticipated that the GIS data assembled in this project will be used to create this model. In addition, the City desires to

use the GIS system to monitor and house construction and maintenance information of each utility.

The City of Mercedes serves approximately 17,000 residents. The water distribution system consists of approximately 300 miles of water distribution piping, 1,700 valves and 980 hydrants. The sanitary sewer collection system consists of approximately 150 miles of sanitary sewer piping and 1,200 manholes. These quantities are approximate and should be used for estimating purposes only. The Consultant will be responsible for the actual field measured with no adjustment in payment.

Scope of Services – The scope of services provided will include, but not be limited to, the following.

Task 100 Project Kickoff Meeting

Project kickoff meeting to describe the goals of the project. This meeting can be held in person or virtual.

Task 200 Database Creation and Data Import

The consultant shall prepare a file geodatabase schema of feature datasets, features classes, geometric networks, attributes, subtypes, and domains. The provided GIS data features will be appended to the file geodatabase feature classes. Original data provided by the city to the engineering firm has been converted to GIS and will be provided to the consultant. A geometric network shall be used to ensure data consistencies and network connectivity. At a minimum the attribute fields described below will be included in the file geodatabase. Additional fields may be determined during pre-collection meeting. Domains shall be utilized in file geodatabase creation in fields where standard coded values or ranges can be assigned, some are identified next to the associated fields:

Sanitary Sewer Feature Class Design

- Pipe ID/Manhole ID (Domain)
- Pipe Size (Domain)
- Pipe Material/Manhole Material (Domain)
- Pipe up and down elevations
- Manhole Rim and Invert Elevations
- Pipe Status (Domain)

Water Feature Class Design

- Pipe ID/Hydrant ID/Valve ID (Domain)
- Pipe Size/Valve Size (Domain)
- Pipe Material (Domain)
- Elevation based on a set depth from the ground elevation.

Prior to submitting the final data a geometric network will be used to validate feature classes and network connectivity. A meeting will be scheduled for file geodatabase review prior to final field collection.

Task 300 Field Data Collection

A pilot sample size of data will be collected as determined during the pre-collection meeting held in Task 200. The pilot collection will be submitted for review prior to continuing collection. During the pilot review coordination with the consultant will include any updates to the file geodatabase schema and collection plan. After approving the pilot file geodatabase the consultant will continue the field collection.

Data Collection Plan

The consultant will develop a data collection plan to be used to manage the data collection, communicate with staff and public regarding the progress, work effort and schedule. The plan will include:

- Pilot sample of data collection.
- Dividing the City into sub-areas.
- Identifying attributes to be collected.
- Data will be collected in NAD 1983 State Plane Texas S FIPS 4205 (US Feet). The City also has a Local Mercedes coordinate system that should be surveyed as well for cross referencing.
- Setting collection goals and schedule.
- Traffic Control and Safety Plan – Consultant will be required to provide traffic control and signage necessary for data collection.

Anticipated Data Collection

- Sanitary Sewer Mapping:
 - Utilize survey grade GPS equipment to provide a northing, easting, and elevation on the center of the manhole rim.
 - Utilize a level rod instrument to determine the diameter and invert elevation of all incoming and outgoing pipes 6-inches and greater in diameter (not including private services).
 - Visually observe the interior of the manhole for significant structural or hydraulic issues and record issues on standard manhole mapping form.
 - Full manhole inspection not included
 - Take one photograph showing the general manhole interior attached to the file geodatabase feature class through a related attachment table.
- Water System Mapping
 - Utilize survey grade GPS equipment to provide a northing, easting, and elevation on the center of valve boxes and hydrants. Take one photograph showing the hydrant model.
- Horizontal and Vertical Accuracy
 - Horizontal GPS accuracy requirement of sub 1 foot.
 - Vertical GPS accuracy requirement of sub 1 inch.

Task 400: QA/QC and Draft Deliverable

The consultant will perform QA/QC of the datasets and create a geometric network from the file geodatabase feature classes. Once QA/QC is complete a draft deliverable will be submitted for review. Upon completion of the review comments and updates will be sent to the

consultant. QA/QC will ensure all required attributes for feature classes are present. It will also validate all connectivity among features in the network.

Task 500: Final Deliverable

The final deliverable will include the following:

- A Geodatabase of all feature datasets and feature classes with a geometric network, related attachment table and photographs, and all attributes.
- Standard Operating Procedure Manual.

I. Schedule – The following approximate schedule will be used for the study.

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|--------------------------|------------------------|
| A. RFQ submittal due: | Monday, April 29, 2024 |
| B. Consultant selection: | Tuesday May 7, 2024 |

II. Request for Qualifications (RFQ) Submittal Requirements – The RFQ submitted by the Consultant shall include the following information:

- Cover Letter (1 page)** – Provide name and address of the firm and project contact person with address, telephone number and email address. Provide a one-page summary of why the City would benefit from hiring your firm.
- Project Understanding and Approach (2 pages)** – Provide a narrative description summarizing the expected tasks and activities, with a description of the analysis, reports and participation, which the Consultant expects to provide pertaining to that activity. This would include a summary of the steps to be completed to accomplish the scope of work, approaches to the project, and your firm understanding of the project requirements.
- Qualifications of Project Manager and Key Personnel (4 pages)** – Provide brief resume of key personnel comprising the Consultant’s team including: names, project role, experience, duration of service with firm(s). Identify the project manager / primary contact person for the Consultant’s team and identify any sub-consultants that will be used.
- Similar Project Experience (4 pages)** – Provide a statement of the Consultant’s experience and qualifications related to the proposed Plan. Provide examples of similar projects completed by the Consultant. The examples should include a brief description of the project, similarities to this Plan, key staff involved and other pertinent information.
- References (1 page)** – Provide the Contact person, email and telephone numbers of at least three (3) municipalities/utilities the City may contact for references regarding the Consultant’s past performance, preferably on similar studies or projects. If the references are for projects other than those identified in the ‘Statement of Qualifications’ section, provide a brief description of each project.
- Fee Summary Table (1 Page)**

III. Consultant Evaluation Criteria - The City will be evaluating each firm on the following general criteria:

- Key personnel’s qualifications and experience on similar projects (25%)
- Understanding of the project scope and challenges (20%)

- Possession of a resume of similar projects completed on schedule and within budget (30%)
- References (15%)
- Quality and thoroughness of proposal (10%)

I. RFQ Submittal Instructions – One (1) electronic PDF and four (4) paper copies of the RFQ submittal shall be provided by the Consultant to the City. The submittal shall be limited to twelve (12) single-sided pages of the information identified in the ‘RFQ Submittal Requirements’ section, plus a cover/back sheet. The proposals pages should be in 8 ½-inch by 11-inch, 11-inch by 17-inch size sheets folded is permissible but shall count as two pages each.

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Contract Specialist
City of Mercedes
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Mercedes, TX 78570

by Wednesday April 29, 2024 no later than 4:00 p.m. Any submittals received after the designated day and time will not be considered.

II. Questions and contact with the City of Mercedes. All questions about the RFQ shall be directed to Javier Ramirez at the contact information provided below. Mr. Ramirez may direct any questioning or contact with others. If Consultant requests an on-site visit, it shall be through the Director of Environmental Services.

Javier Ramirez
Assistant City Manager
City of Mercedes
400 South Ohio Ave
Mercedes, TX 78570
Phone: (956) 565-3114 **Cell:** (956) 532-0576
jramirez@cityofmercedes.com

III. Selection Process. The City of Mercedes plans to select the consultant based on the submitted proposals; however, we reserve the right to short list of consultants and request interviews.

IV. TERMS AND CONDITIONS

- A. This project is funded by local City funds.
- B. The City prohibits the acceptance of any proposal after the time and date specified on cover of the Request for Proposal. There shall be no exceptions to this requirement.
- C. The City reserves the right to reject any and all proposal submittals.

- D. The City reserves the right to reject any or all responses received as a result of solicitation; to extend the submission due date for; to modify, amend, reissue or rewrite this document; and to procure any or all services by other means.
- E. The City reserves the right to request clarification of information submitted.
- F. Submission of a qualifications indicates acceptance by the firm of the conditions contained in this Request for Qualifications (RFQ).
- G. The contract resulting from acceptance of a proposal by the City shall be in a form supplied or approved by the City, and shall reflect the specifications in the RFQ.
- H. The City will negotiate a scope and fee with the selected consultant. Should an agreement not be reached, the City reserves the right to terminate negotiations and enter negotiations with the next qualified firm.
- I. The consultant shall enter into a fixed price or cost reimbursement with an agreed maximum limit agreement with the City. A fee breakdown of costs for this agreement will be required.
- J. The City shall not be responsible for any costs incurred by the Proposer in preparing, submitting, or presenting its response to the RFQ.
- K. The contract shall be in effect until the execution of all scope items.
- L. Proposal submittals and evaluation materials submitted under this RFQ shall be considered public documents and will be available for inspection and copying by the public.