

Town of Carthage

Request for Qualifications (RFQ)

Wastewater Asset Inventory and Assessment Study

Introduction

The Town of Carthage is seeking letters of interest from qualified Engineering firms to perform professional services including preparation of engineered plans, specifications and related documents and services for the funding assistance, design, project coordination, construction management and general project oversight for numerous projects to be funded with American Rescue Plan Funding, local funds and other related sources. The proposed improvements for this work will include system mapping updates, digital mapping, I&I evaluation, CCTV inspections and other miscellaneous needs of the sewer system. Engineering firms must comply with all State, Local and Uniform Guidance procedures for this project.

Qualification packets should be submitted to Emily Yopp, Town Manager, at 4396 Hwy 15-501, Carthage, NC 28327, on or before **September 1st, 2023, at 5:00 P.M.** The submittal package should be clearly marked **“Statement of Qualifications-Sewer System AIA Project”** and clearly identify the firm submitting the proposal. The proposals should include a table of contents and/or tabs to facilitate review.

Scope of Work

The Town of Carthage is seeking letters of interest from qualified Engineering Firms to perform professional services on various tasks such as:

- 1. Collection System Mapping Update:** The Town has completed an accurate map of the system in recent years, but recent development has resulted in multiple utility extension projects that need to be located and incorporated in the system map. The updated map will include location of all features, size, age, type of materials, flow direction, capacity of pumps, and develop a reference system (manhole identification, line segment numbering, pump station location and technical data) for work orders and reporting to NCDEQ regional staff. This mapping update will have the added benefit of referencing all planned maintenance activities and required repairs for incorporation into the utility software for asset management. The updated maps will be maintained digitally, and it is anticipated that a cloud-based GIS mapping system will be used that will allow maintenance and administrative staff view and query location and assessment data compiled as a part of the project. The system would also allow data to be edited by the appropriate staff.
- 2. Digital Mapping Implementation and Training:** The project will include identification and purchase of a software platform or hosting service that will allow the appropriate staff to view and maintain system mapping information. In addition, the mapping will be updated and details for assets will be updated and expanded to include condition, service life, age, and other details as appropriate.
- 3. Critical Asset Evaluation & Reporting:** This project will include a detailed inspection of all of the Town’s critical assets within the collection system. This will include all sanitary sewer pump stations, high-priority sewer lines, and critical segments of the collection system. Engineering inspectors and

licensed electricians will be visiting each critical asset within the Town's collection system. The Town staff will be encouraged to accompany the Engineering staff during these inspections to provide any feedback they have experienced during day-to-day operations, knowledge of the infrastructure, and any concerns they may have regarding the infrastructure. The Engineering staff will provide their feedback on what they see and find to the Town staff during these inspections. In addition to the site visits, the Engineer will digitize any available operation and maintenance manuals and any other relevant documents regarding critical assets and make these available to the Town.

4. **I/I Evaluation & Flow Monitoring:** Flow monitoring / metering will be completed in order to quantify and locate I/I within the collection system. The AIA project will include system wide flow monitoring to identify sections within the collection system where flow reduction efforts should be targeted. This information along with the Town's ability to complete internal inspections with their CCTV equipment will allow the capital improvement plan to prioritize the most effective sewer rehabilitation / replacement projects.
5. **CCTV Inspection and Data Review:** This project will include CCTV and line inspections as part of the field work for this project. The Engineering staff will meet with the Town staff to determine the known problem areas in the system based on their experiences. Any Notices of Violation (NOVs) or Sanitary Sewer Overflows (SSOs) will also be used to help determine these problem areas. The oldest areas of the collection system will be a main focus as well, as these are likely to be problem areas leading to extraneous flows entering the system through inflow and infiltration (I/I). These inspections will include a detailed condition assessment as well as verifying the material and size of each asset.
6. **Asset Inventory and Assessment:** All tasks noted above will be used to develop an Asset Management Plan (AMP) for the Town's wastewater system. This will include all the results from the field work, a detailed inventory and condition assessment of all assets within the collection system, updated mapping of the Town's entire collection system, recommendations on annual replacement / repair projects within the system, a staffing plan to implement the AMP/CIP, a 20-Year Capital Improvement Plan, an Operation and Maintenance Plan, and a Utility Rate Study along with recommendations for setting utility rates. Following completion of this report / project, the Engineer will attend a Town Council meeting to present the findings of this study and allow the Board and citizens the opportunity to ask any questions about the project. This report will be a living document and the Asset Management Team will continue to meet on an annual basis following completion of this project to evaluate the AMP and make any updates as necessary.
7. **System Development Fee Update:** This project will also include an update to the system development fee study that was completed several years ago. This update will ensure that the town is charging the correct fees based on recent projects and needs identified through this project. As development pressure increases, it will be important to identify the appropriate fees to limit financial impacts to the existing customer base. Proposed fees will be recommended for the Town to adopt and incorporate into their existing fee schedule.

8. **Operation and Maintenance Report / Critical Assets:** This project will include a detailed inspection of all of the Town's critical assets within the collection system. This will include, but not be limited to, all sanitary sewer pump stations, and high-priority sewer lines. Engineering inspectors and licensed electricians will be visiting each critical asset within the Town's collection system. The Town staff will be encouraged to accompany the Engineering staff during these inspections to provide any feedback they have experienced during day-to-day operations, knowledge of the infrastructure, and any concerns they may have regarding the infrastructure. The Engineering staff will provide their feedback to the Town staff during these inspections. In addition to the site visits, the Engineer will digitize any available operation and maintenance manuals and any other relevant documents regarding critical assets and make these available to the Town.
9. **Closeout & Final Coordination with NCDEQ:** The Engineer will assist Carthage with coordination of this project with the NCDEQ Division of Water Infrastructure staff throughout the length of the project. This will include, but not be limited to all reimbursement request, providing DEQ with monthly updates on the project, any necessary extension requests (though not anticipated), and the coordination of all deliverables / approvals throughout and at the end of the project. Following completion of the project and the adoption of the Wastewater AIA by the Town Board, the Engineer will present all deliverables to both the Town and DEQ. This will include but is not limited to all digital drawings and relevant documents, updated maps and shapefiles of the collection system, digital files of all critical asset, manhole, and line inspections, all photos taken during the study, and a full copy of the Asset Management Plan including the 20-Year Capital Improvement Plan.

Funding may include funds from the American Rescue Plan Act and as such will be required to meet all program regulations and requirements.

Engineering services for all work must comply with NCDEQ-DWI guidance documents and receive acceptance/approval from NCDEQ-DWI prior to payments from the Town of Carthage.

Qualification Submittal

The Town of Carthage is seeking to engage a firm who has experience in this type of design.

Interested firms should provide one (1) hard copy and one (1) electronic copy of a package containing the following:

1. Cover letter expressing interest in providing these services. The letter should address what makes the firm/team uniquely qualified to provide these services.
2. A project team including project manager, project engineers, designers, technicians, as well as subcontracting firms, including their key personnel.
3. Office Location of Project Manager who will be main point of contact. Location of office(s) where work would be performed. If work is shared between offices, please estimate and describe the split of this workload.

4. Resumes for project team members. These should be concise resumes with bullet points for specific project descriptions. Please specifically highlight the following:
 - a. Project experience specifically related to design of similar projects to our scope of work. These should be listed beginning with the most recent projects and should include reference contact information for the most recent projects.
 - b. Listing of previous projects performed for Municipalities including references and contact information for same. Limit projects to no more than 10 years previous.
5. List of example projects ranging throughout the listed infrastructure needs noted previously.
6. Project approach, specifically outlining the procedures each firm or team envisions taking to provide these services.
7. Availability: The firm should provide an explanation of their availability to execute the work and begin immediately upon selection. The Town intends to review the proposals and make a selection within one month of submittal. The importance of availability is important as the projects will require attention and a schedule for each task will be developed with the selected firm within two weeks of selection concurrent with contract negotiations.
8. Hourly Rate Fee Schedule: **In conformance with the MiniBrooks Act (NC GS 143-64-31) and the Uniform Guidance Section CFR 200.319, NO FEE PROPOSALS SHALL NEITHER BE SUBMITTED NOR CONSIDERED AT THE SELECTION STAGE. A standard hourly fee rate schedule for each employee classification proposed on the project team shall be submitted.**

Selection Criteria

The considerations below will be utilized for selection of the firm. Selection will be made after thorough review conducted by the Town of Carthage review panel. Actual interviews may be conducted after review of the initial responses by interested firms if the Town feels it is necessary to determine the most qualified engineer. The Town will provide a response to all submitting firms once a final decision is made. Selection criteria is as follows:

1. The firm's recent experience, knowledge, and familiarity with similar projects.
2. The successful experience and track record of the staff to be assigned to this project to perform the type of work required within budget with limited change orders.
3. The firm's ability to meet schedules for similar work. The firm must meet milestones for the funding for this project set by the Division of Water Infrastructure, unless otherwise amended. This project will require that the project be completed in accordance with various regulatory requirements, and it will be imperative to maintain those deadlines in order not to jeopardize funding. The selected firm will be required to provide a schedule based on details of all funding sources prior to final selection and award.

Deadline for Submittal

The above information should be submitted no later than 5:00 pm on September 1st to:

Emily Yopp, Town Manager
Town of Carthage
4396 Hwy 15-501
Carthage, NC 28327

The Town of Carthage is an Equal Opportunity Employer and invites the submission of proposals from small and minority and women-owned firms, and historically underutilized businesses.