



REQUEST FOR QUALIFICATIONS

River Pumping Station Relocation Project

Issued By: Hillsborough Utilities Department

Issue Date: Feb. 28, 2024

Pre-Proposal Meeting: 2 p.m. March 14, 2024

Questions Due Date: 3 p.m. April 2, 2024

Direct Inquiries to: Environmental Engineering Supervisor Bryant Green, PE
bryant.green@hillsboroughnc.gov

Proposals Due Date: 3 p.m. April 9, 2024

Delivery of Quotes: *By Email:*
bryant.green@hillsboroughnc.gov

By Mail:
Town of Hillsborough
Attn: Bryant Green
PO Box 429
Hillsborough, NC 27278

In Person:
Town of Hillsborough
Utilities Department
105 E. Corbin St.
Hillsborough, North Carolina

GENERAL OVERVIEW

Introduction

In accordance with N.C. General Statute 143-64.31, the Town of Hillsborough (“town”) is soliciting proposals from qualified vendors for professional engineering services to confirm design conditions, conduct preliminary evaluations and surveying; prepare complete design plans, calculations, and specifications; assist with easement acquisition; prepare permit applications; and permit the installation of a quadruplex submersible pump station known as the River Pumping Station. The selected firm also will provide surveying, geotechnical evaluation, subsurface utility exploration, and other related services either directly or via a subcontractor. In addition, the selected consultant will provide bid and award services and, if authorized, construction administration and observation services throughout construction and record drawings and permit certifications/close out.

A pre-proposal meeting will be held at 105 E. Corbin St., Hillsborough, NC. The pre-proposal meeting will be followed by a field visit to the proposed site. Both the pre-proposal meeting and the field visit are optional.

Work completed under this project will be partially funded by a grant the Town of Hillsborough received through the Federal Emergency Management Agency’s (FEMA) Building Resilient Infrastructure and Communities (BRIC) program. The selected consultant and subconsultants must be eligible to work on projects that receive federal funding and be willing to comply with all applicable federal tracking, reporting, and auditing requirements. The selected consultant must acknowledge receipt of and adherence to the conditions outlined in Appendix A – Required Federal Contract Provisions in a cover letter attached to their response to this solicitation.

Project Description and Goals

The intent of this solicitation is to select a qualified engineering consultant to design, permit, bid, award, and, if authorized, provide construction administration and observation for a new pumping station. The proposed pumping station will replace the existing River Pumping Station, which was built with the wastewater treatment plant in the mid-1970s and sits on the bank of the Eno River. The new station is envisioned to be a quadruplex submersible pumping station located on the River Park Elementary School Site further north and out of the 500-year floodplain. The town has not yet formally acquired the piece of land for the station but is ready to survey to prepare an exhibit for further school board negotiations.

The town had a conceptual analysis performed regarding the proposed station capacity, configuration and siting a few years ago before funding was applied for and obtained. This information was partly determined based upon a collection system hydraulic modeling report and plant records. The scope of the proposed project will include verification that initial schematic design recommendation is still appropriate. A preliminary site sketch (Figure 1) and pump station layout (Figure 2) are provided below.

The town also has a grant management consultant, ICF, to guide us through this funding process. With federal funding, there are many additional requirements to perform or adhere to such as historical, archeological, and environmental evaluations along with some work occurring within a floodway or floodplain and stream buffers. The selected consultant should have experience assisting with these preliminary evaluations and associated permitting and may at times need to liaise with ICF to ensure grant compliance.

BRIC funding is administered through the NC Department of Emergency Management and will be provided in two phased contracts. The first is Phase 1, which covers the project expenses through the bidding process and is funded as part of the current grant award. Phase 2 will cover the construction and project closeout. The town and/or ICF will perform monthly reporting and reimbursement requests.

Figure 1: Preliminary Site Sketch

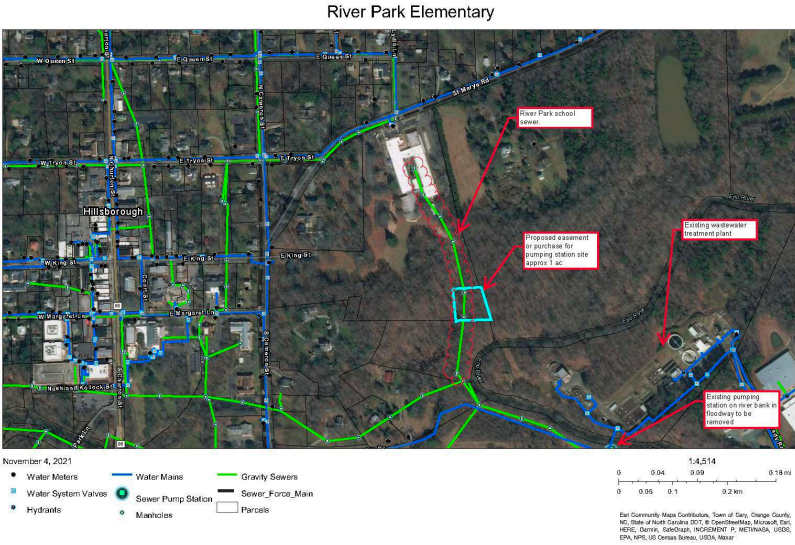
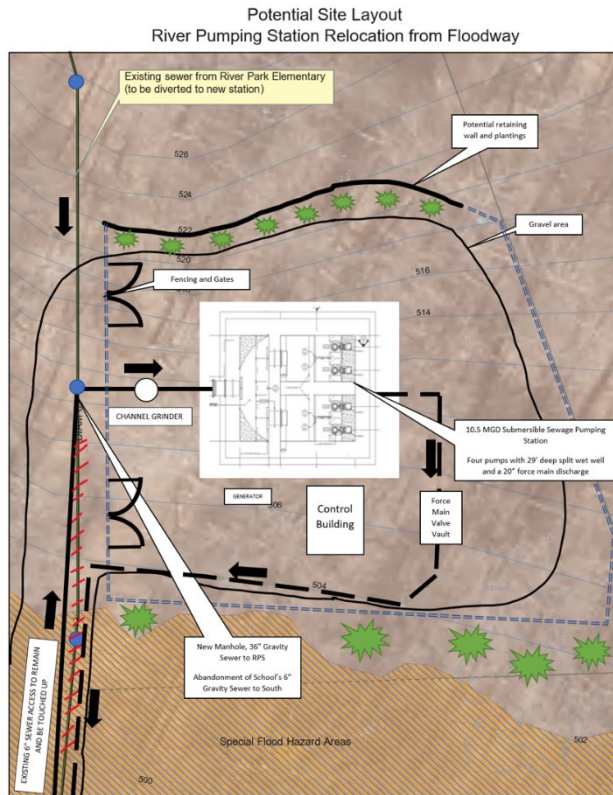


Figure 2: Preliminary Pumping Station Layout



The proposed pumping station will be constructed while the existing River Pumping Station indicated in Figure 1 remains in service. There is also an 8-inch water line that utilizes the existing walking bridge from the pumping station to the wastewater treatment plant. This water main serves the eastern part of the town’s service area and will need to be preserved if allowable or relocated as part of the project.

Standard Scope of Work

The bulk of the standard scope of work is to design a replacement River Pumping Station on the site referenced in Figure 1 and with the general configuration provided in Figure 2. The design shall include the following:

- Four submersible pumps arranged in a quadruplex configuration similar to what is shown in Figure 2. The firm capacity of the proposed pump station is recommended to be 10.5 million gallons per day (MGD). Proposed pumps will be selected by the consultant and included in the bid documents.
- A gravity sewer main to the new site to facilitate the proposed relocation. The gravity sewer mains will be 36” diameter, and manholes will be at least 8’ in diameter, or use “Tyndall Tee” style manholes where appropriate. Flotation and bedding calculations will be performed on all manholes and sewer mains to ensure flotation does not occur during flooding events.
- Pretreatment sized for the design flow using a channel grinder or appropriately selected and sized pretreatment.
- Structural design of a wet well approximately 30’ deep. Structural design will include supports for lifting cranes to allow removal of the submersible pumps for replacement. Structural design will include flotation analysis of the proposed wet well with spread bases or rock anchors as needed. All wet well channels and slopes will conform to Hydraulic Institute (HI) standards.

- All electrical controls for the channel grinder and submersible pumps. The electrical design will include Variable Frequency Drives (VFDs) to control all four pumps, with soft start bypasses of the VFDs to allow VFD maintenance. The electrical controls will also include a permanent backup generator sized to start pumps while running other pumps and Automatic Transfer Switch (ATS).
- Instrumentation and Control (I&C) of the VFDS. The I&C will allow flow pacing using the VFDs and will rely on local control of the pumps only utilizing a Programmable Logic Controller (PLC). A flow meter and ultrasonic depth sensors will likely be required to facilitate flow pacing. Full integration of all pump station operations with the town's existing SCADA system will be required.
- Design of a 20" force main, or equivalent parallel force mains, from the proposed pumping station to the existing wastewater treatment plant (WWTP), including all routing and permitting of the proposed force main, and permitting of all crossings of the Eno River. The selected consultant will confirm a discharge location within the WWTP with operations staff and ensure that manifolded force mains are not needed to maintain operations.
- Operational requirements that ensure the pumps operate within HI's specified Preferred Operating Range (POR) as much as possible and within Allowable Operating Range (AOR) at all times. The selected consultant will provide affinity curves for different VFD setting with motor horsepower curves, Hydraulic Grade Lines (HGL) of all sewer and force main operational scenarios and recommended ultrasonic depth settings to ensure adequate Net Positive Suction Head (NPSHr) for all pumping scenarios. The operational requirements will include evaluation of equalization sites and needs for peak flows.
- All required site amenities including required site plans, historic district approvals, floodplain permits and buffer approvals, stormwater management plans, erosion control plans, access road design, water service, easement platting, and all other site development related activities. All architectural design required for site plan approval will be included in the selected consultant's scope, as well as all stormwater management plans and best management practice (BMP) design. The selected consultant will prepare drawings the contractor can use to obtain required building permits for the new structure.
- Demolition plans for the existing River Pump Station that maintain the operational integrity of the water line crossing adjacent to the station.
- Real estate services, including property appraisals and property acquisition negotiation services.

The selected consultant also shall demonstrate adequate experience in preparing detailed pumping station calculations and specifications for this type and size of station, bidding and award documents, and grant compliance paperwork (preferably with BRIC awards). The selected consultant also shall have the capability of providing qualified and detail-oriented construction administrators and observers.

The preparation of accurate project documentation including permit applications, grant compliance paperwork, observation logs, and record drawings is of utmost importance to the town. With the tight funding deadlines, there is no room for duplicate, erroneous or incomplete work.

The selected consultant may identify other recommended scope items that were not listed above in their response to this RFQ. These recommendations may be included in subsequent contract documents.

Firm Experience

The selected firm should have experience designing, permitting, and overseeing the construction of large, publicly bid municipal sewer pumping stations. Experience in design of a pumping station with a firm capacity of over 5 mgd in size will be considered. The firm should identify any omissions in the scope of services presented during advertisement so that an addendum can be issued. The town does not wish to execute amendments for items that are key to this type of design and funding that are known but not brought to our attention.

SUBMITTAL REQUIREMENTS

Any vendor that would like to be considered for this project shall submit the following information:

1. *Firm Credentials.* Provide a brief firm profile with a description and location of the firm. Indicate the name, credentials, and experience of the lead people who will be executing the work.
 - a. Indicate if the firm is local (pays North Carolina taxes).
 - b. Can you prioritize this project?
2. *Proposed Subconsultant and Suppliers.* If subcontracts are to be let, the prime contractor is required to take all necessary steps identified in 2 C.F.R. § 200.321(b)(1)-(5) to ensure that small and minority businesses, women's business enterprises, and labor surplus area firms are used when possible.
3. *Project Approach.* Provide a proposed approach to the design and permitting of the project, understanding that the federal funding guidelines require extra evaluations, paperwork, and tighter deadlines. Include a schedule of all field data collection, design, and evaluation/permitting tasks.
 - a. Phase I of this project, which includes Design, Permitting, and BRIC mandated Benefit Cost Analysis (BCA) must be complete by April 30, 2026. How will your firm meet this aggressive schedule?
 - b. As the construction of the proposed project must be complete by February of 2028, the proposed approach must show how this deadline will be met as well, including success in prior projects in meeting schedules and budgets.
 - c. Would you propose this project for a design-build? If so, what experience does your firm have with this type of project execution?
4. *Project Team.* Provide names and resumes of the proposed project team, including all proposed subcontractors. This can start with an organizational chart. The proposed project team must include a primary point of contact that will remain consistent throughout the project. Subcontractor resumes also should be provided, with relevant project experience provided.
 - a. Provide examples of similar project experience for the project team and the design firm and provide references with current contact information. The town expects the key staff indicated in the proposal will be the team helping with our project barring unforeseen circumstances.
 - b. Indicate the experience the selected team (including subconsultants) has with federally funded projects in conducting the extra evaluations, if stormwater BMP is required, and completing compliance paperwork.
 - c. Touch on the construction administration and observation skills of your firm or selected subconsultant. This is not the project for training, unfortunately.

- d. What obstacles does the firm see with this project? Provide any innovative ideas to expedite the schedule.
 - e. Describe a challenge you encountered on a large municipal project and how you helped the client to overcome it.
 - f. What will you do if we are unhappy with your progress or work product? How would you prevent us from being unhappy with your progress or work product?
5. Include required certifications in the appendix and any acknowledgement of subsequent addendums to this request for qualifications.

Submitting firms shall provide one PDF copy of the statement of qualifications (SOQ) to the email address provided in the delivery of quotes section provided. These shall be limited to 30 pages, single spaced, with 12-point font. Divider pages, cover pages, and the cover letter shall not count toward the overall page count.

SELECTION PROCEDURES

Evaluation Criteria

Purchases or contracts will be awarded to the most qualified submitting firm in accordance with the Town of Hillsborough Procurement Policy and federal funding policy as applicable. Additionally, experience, location, reputation, past performance, proposed schedule, and references are a consideration.

Public Records

1. Upon receipt by the Town of Hillsborough, your quote is considered a public record except for material that qualifies as “trade secret” information under North Carolina General Statute 66-152 or 132-1.2. Your quote package could be reviewed by the selection committee, as well as other staff and members of the public who submit a public record request. To properly designate material as a trade secret under these circumstances, each firm must take the following precautions:
 - a. Any trade secrets submitted by a firm should be submitted in a separate, sealed envelope marked “Trade Secret — Confidential and Proprietary Information — Do not Disclose Except for the Purpose of Evaluating this Quotation Package.”
 - b. The same trade secret/confidentiality designation should be stamped on each page of the trade secret materials contained in the envelope.
2. In submitting a qualification, the firm agrees that the Town of Hillsborough may reveal any trade secret materials contained in such response to all staff and town officials involved in the selection process and to any outside consultant or other third parties who serve on the selection committee. Furthermore, each firm agrees to indemnify and hold harmless the town and each of its officers, employees and agents from costs, damages, and expenses incurred in connection with refusing to disclose any material that the firm has designated as a trade secret. Any firm that designates its entire quote package as a trade secret may be disqualified from the selection process.

Conditions, Clarifications and Reservations

1. The town reserves the sole discretion and right to:
 - a. Reject any or all responses.

- b. Waive informalities in a response.
 - c. Select a firm that has submitted a fully responsive qualification and that is determined by the town to be a qualified firm in the town's best interest.
 - d. Take whatever action or make whatever decision it determines to be appropriate, including a reduction or change of scope.
2. The town assumes no obligation in this general solicitation of qualifications and all costs and expenses of responding to this request shall be borne by the interested firms or individuals.
 3. It is federal and town policy to prohibit discrimination against any person or business in pursuit of these opportunities on the basis of race, color, sex, religion, national origin, age, disability, or veteran status.
 4. The town may utilize a small services contract and may ask that the selected firm prepare its own for town execution. The contract should include the following:
 - *E-verification.* The vendor shall comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes.
 - *Iran Divestment Act Certification.* Contractor shall certify that the contractor is not on the Iran Final Divestment List created by the North Carolina State Treasurer pursuant to N.C. General Statute 147-86.58. Contractor shall not utilize any subcontractor that is identified on the list.
 - *Divestment from Companies that Boycott Israel.* Contractor certifies that the contractor has not been designated by the North Carolina State Treasurer as a company engaged in the boycott of Israel pursuant to N.C. General Statute 147-86.81. It is the responsibility of each contractor to monitor compliance with this restriction. Contracts valued at less than \$1,000 are exempt from this restriction.
 5. The selected firm will need to complete an automated clearing house (ACH) authorization form for direct deposit of payments or opt out.
 6. Payment terms are net 30. Pay applications will be required monthly.

Minority, Women and Small Business Enterprises (MWSBE)

If subcontracts are to be let, the prime contractor is required to take all necessary steps identified in 2 C.F.R. § 200.321(b)(1)-(5) to ensure that small and minority businesses, women's business enterprises, and labor surplus area firms are used when possible. This means the selected firm must take affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used. The selected consultant must submit documentation that the affirmative steps described in the above statute were taken, this documentation will not count against the page limit of the proposal.