



**Request for Qualifications for
Engineering Services for Water
Plant Expansion from 12 to 16
MGD and Electrical Voltage
Conversion**

<i>Request for Qualifications:</i>	ENGINEERING SERVICES
<i>Soliciting Agency:</i>	City of Wilson, N.C.
<i>Project Title:</i>	Wiggins Mill WTP Expansion from 12 MGD to 16 MGD and Electrical Voltage Conversion.
<i>Services Solicited:</i>	Professional Engineering Services for the implementation of the project specified herein.
<i>Deadline for Submission:</i>	June 7, 2019

I. Purpose of Solicitation:

The City of Wilson Water Resources Department is requesting proposals from firms interested in providing Engineering services for a project that will result in the expansion of the existing Wiggins Mill Water Treatment Plant located at 3110 Forest Hills Road Wilson, N.C. from 12 MGD to 16 MGD of treatment capacity, and convert all remaining 2300 volt electrical systems to 480 volt, including back-up generator(s).

Background

The City of Wilson is a regional water treatment provider for the City of Wilson, the Northern District of Johnston County, the Town of Elm City, and the Southeast and Southwest Districts of Wilson County on an intermittent basis. The City has 52,500 direct customers, owns and operates 4 raw water reservoirs, and operates two water treatment facilities - the Toisnot Water Treatment Facility rated at 10 MGD and the Wiggins Mill Facility rated at 12 MGD. Both are conventional surface water treatment plants. Wiggins Mill also has tube settlers for more solids removal efficiency and a Trac Vac system for solids removal. The distribution system consists of over 427 miles of pipe ranging in size

from 4 to 30 inches in diameter with five 1,000,000 gallon elevated tanks, and 4,000,000 gallons of on ground storage. We also operate two booster stations that can provide water to our wholesale water customers.

II. Scope of Work and Services:

The following will outline the services to be provided by the engineer:

1. Design and permit complete 4 MGD treatment train addition including but not limited to: Additional basin 4 to be added on to existing basin structure to match existing, including tape drive Trac Vac system and tube settlers. Confirm flash mixer, piping and flocculator design for total 16 MGD capacity. Design filters and underdrain system and piping to expand capacity to 16 MGD. (4 original Roberts inverted pyramid design and 2 Leopold design). Confirm effluent and piping to and from reservoir adequate for 16 MGD. Design and permit additional chlorine contact chamber as necessary for compliance. Evaluate storage capacity and add additional finish water storage capacity and piping as necessary for reliable plant performance. Convert all remaining 2300V electrical systems to 480V, simplify design, and provide redundancy at critical failure locations. Replace existing generator with generator(s) for redundancy of service. Upgrade all finish pumping systems as necessary and evaluate and design additional station if needed for 16 MGD capacity. Evaluate existing finish water piping for capability for 16 MGD, review raw water capability for 16 MGD, and provide other additional tasks agreed to in the preliminary design phase to improve the reliability or capability of the facility not mentioned above. Including, typical engineering services as stated below:

2. Prepare complete construction plans and specifications in accordance with applicable regulations and permit approval requirements.

3. Prepare preliminary cost estimates and final detailed cost estimates for each portion of construction.

4. Prepare complete bid package including all required documents.

5. Provide all necessary information for the preparation of the project bid advertisements and advertise the project.

6. Manage competitive bidding process including the preparation of bid packages for prospective bidders, respond to bidder inquiries concerning the technical aspects of the project, prepare any and all necessary addenda to the bid packages, attend pre bid and bid opening to answer any questions as may arise, review bids for accuracy, investigate bid documents for eligibility and completeness, make recommendation to the City regarding the acceptance of the lowest eligible bid, and other technical assistance as may be requested.

7. Prepare formal contract documents, including any and all documents required for related execution of the construction contract.

8. Provide construction inspection and construction management services as necessary to expedite construction in a timely fashion, ensuring that total compliance with general and technical specifications are met by the successful bidder, and that construction is in strict accordance with the plans such that the City of Wilson receives professional workmanship

and materials, and accurate inspection files are maintained.

9. Prepare and issue change orders, and review all requests for change order from the successful bidder.

10. Investigate any and all requests for partial and final payments prior to approval to ensure payment to bidder in accordance with the contract documents as executed and amended.

11. Conduct final inspection of construction upon completion of work by the successful bidder, and ensure completion of punch list before final payment to successful bidder.

12. Prepare "AS-BUILT" record drawings and provide two (2) full size sets to City, digital copy in PDF format, along with certification of completion and satisfaction of project requirements, and recommendation of final acceptance by the City.

III. Schedule:

It is our goal to use the following tentative schedule *if possible*:

Advertisements start for selection of Engineer	March 15, 2019
Email questions related to RFQ	May 30, 2019
Deadline for submittal of Statements of Qualifications	June 7, 2019
Select Engineer	July 12, 2019
Execute contract between City and Consultant	August 2, 2019
Complete design and permit, ready for bid	August 14, 2020

IV. Evaluation Criteria:

Award of a contract for engineering services for this project shall be made to the responsible individual or firm whose proposal is most advantageous to the City of Wilson. Special consideration will be given to experience, technical ability, and familiarity with the services to be provided, reputation, and quality of work. Proposal evaluation will be based on five evaluation factors, to be rated on a point system. The City will select the most qualified individual or firm based on points awarded and attempt to negotiate with that Engineer.

1. Previous engineering/construction management experience in expanding water treatment facilities of similar or larger size, particular emphasis given to experience in converting electrical voltages at the facility. (25 Points)

2. Experience of staff assigned to the project. How strong is the electrical engineering division of the firm? (25 Points)

3. Experience of the firm's proposed Project Manager and willingness to work with City staff towards the best project possible. (20 Points)

4. Innovation of past designs with emphasis on problem solving for the client. Not a cookie-cutter approach to design. (20 Points)

5. Hourly Fee Schedule (for evaluation purposes only; no lump sum quotes). (10 Points)

V. *Proposal Contents:*

If you are interested in performing the services defined herein, please submit your proposal on or before 2:00 pm, May 16, 2019. Your proposal must specifically address each of the following items:

1. Information about your company.
2. Addresses and telephone numbers of at least three references (preferably more). References should be clients for whom you evaluated and/or designed plant expansions with emphasis on electrical conversions.
3. Statement concerning your ability to meet our tentative schedule.
4. A listing of previous plant expansion experience with medium to large water treatment facilities.
5. Provide your proposed staff plan by listing each individual who will work on the project. Provide a brief explanation of the specific function of each individual and the role each will play in carrying out the project and the experience of each individual. A resume for each individual to be assigned to the project should be attached.
6. Describe how the firm is prepared to be responsible to the local needs and local preferences. Include any special knowledge of the local area needs of the jurisdiction.
7. Describe innovative approaches that have been used in the past to solve special problems in design or function. How does the firm approach special challenges?
8. Experience with voltage conversions and continuation of operations at a medium-large water treatment facility.
9. Provide insurance coverage information. Coverage must be maintained during the life of the contract including:
 - a) Worker's Compensation Coverage
 - b) Comprehensive General Liability Coverage
 - c) Business Auto Policy Coverage
 - d) Professional Liability Insurance
10. Any additional information that you believe may be useful in our selection process.
11. Hourly Fee Schedule (for evaluation purposes only; no lump sum quotes).

VI. Location to Mail or Deliver Proposal To:

Mail to:

Barry Parks, Director of Water Resources
City of Wilson
P.O. Box 10
Wilson, N.C. 27894

Deliver to:

Barry Parks, Director of Water Resources
City of Wilson
3110 Forest Hills Road SW
Wilson, N.C. 27893

Any questions regarding this RFQ should be sent via email to bparks@wilsonnc.org with “Wiggins Mill Plant Expansion from 12 MGD to 16 MGD RFQ” in the subject line. Questions should be sent no later than 2:00 PM on May 9, 2019. Questions and responses will be sent to all interested parties.

Published: City of Wilson Website
DATE: March 14, 2019

VII. Selection Process:

A Committee involving City staff will review all submitted qualifications packages that adhere to the requirements contained in this document. The City will select one or more firms to engage in negotiations for services; or it may determine that interviews with top ranked firms are necessary before negotiating terms. The City reserves the right to reject any or all submittals, to waive technicalities, and to be the sole judge of the suitability of consultants to provide the desired services. The City reserves the right to engage in consultant services that are determined to best meet the interests of the City.