



City of New Bern Request for Qualifications: Duffyfield Canal Restoration Project

CNB # 2025087

Release Date: October 14, 2024
Responses Due: 5:00 PM October 29, 2024

City of New Bern, North Carolina

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INTRODUCTION

The City of New Bern is requesting qualified professional engineering firms to submit a qualifications based proposal to provide engineering services for the Duffyfield Canal Restoration Project.

This project is funded by the North Carolina Environmental Enhancement Grant (EEG) and a FEMA / North Carolina Emergency Management Grant (FEMA-NCEM).

BACKGROUND – OVERVIEW

The City of New Bern is low-lying (elevation of 5 ft and under in areas) at the confluence of the Trent and Neuse Rivers in Craven County, North Carolina. The Duffyfield Canal began as a natural drainage feature adjacent to what is now Henderson Park in the Duffyfield Community. The City then constructed a concrete canal connecting various ditches and streams running through the area and formalized a 1.2 square mile (782 acre) drainage basin that today comprises over half of the Duffyfield Community and includes the Carolina East Medical Center. The drainage basin extends nearly to Glenburnie Road on the western end of the City, to Green St on the eastern side, to Trent Blvd to the south, and to Rose Street to the north. K-12 schools, schools, parks and numerous businesses follow the drainage basin in relation to the canal and all have been impacted with repetitive loss over the years with increasing frequency.

The Duffyfield Canal runs from Green Park Terrace to the east to Henderson Park where it turns north. The canal then traverses through residential neighborhoods where it flows under Williams Street, Washington Street, and Beaufort Street where it enters the Duffyfield Canal Retention Basin. From the basin, the canal flows under Rose Street and the northern adjacent railroad before it ultimately discharges into Jack Smith Creek. The canal was built decades ago, before development and stormwater standards were in place, using concrete, hardened walls. The original concrete armoring is deteriorating, leading to significant erosion of embankments and flooding. The Duffyfield Canal and surrounding areas experience frequent nuisance flooding during small storm events. During the past decade, the City has experienced inundation in the drainage basin from Hurricanes Irene, Matthew, Florence and Dorian. Rescue calls have consistently come from these neighborhoods, with more than 800 people rescued from the drainage basin area during Hurricane Florence. Flooding in this area has resulted in recurring damage to properties and infrastructure.

Unrepaired damage to homes in the already disadvantaged Duffyfield Community has resulted in many vacant properties, furthering the gradual degradation of the neighborhood. Currently 47% of the 1,899 parcels in Duffyfield are vacant contributing to the area's continued lack of appeal for business and real estate investment. The frequent occurrence of nuisance flooding exacerbates this decline. Uncontrolled growth of plants on these undevelopable lots attracts illegal dumping, exacerbating the contamination of stormwater, and contributing to the visual blight. Areas along the canal are overgrown and strewn with litter contributing further to disinvestment in Duffyfield and surrounding neighborhoods.

OBJECTIVES

The City will first undertake development and analysis of the extent and depth of flooding by developing a hydrologic and hydraulic (H&H) model. First, a topographic survey of the study area will be conducted to determine contributing drainage areas and the location, size, and condition of the existing infrastructure. Next, a hydrologic and hydrographic study will be completed to estimate the volume and peak flow rates of stormwater runoff, the capacity of existing infrastructure to accommodate that volume and flow, and the capacity of the receiving watercourse.

In addition, NC State University Department of Biological and Agricultural Engineering will be involved as they have established several water quality monitoring stations along the Canal and will assist in data collection and analysis.

Community outreach is an important component of the project. Outreach will also be performed to gather local knowledge regarding the areas of most concern. Community outreach includes distribution of a survey questionnaire requesting input from local citizens on the location, frequency, severity and potential causes of flooding in their communities. The City also plans to host multiple public meetings throughout the various phases of the scoping project to elicit community input on current flooding issues as well as potential improvement options.

Project activities will include: public surveys, stakeholder meetings, partnerships, intergovernmental and industry collaborations, DHHS CEDS plan and other related resiliency products intended to drive resiliency with diversity and inclusivity such that all members of the overburdened Duffyfield Community and subneighborhoods such as historic Dryborough are included. This local knowledge and the results of the H&H model will be analyzed to determine the feasibility and effectiveness of various flood mitigation strategies and to develop concept plans. The concept plans developed from the Restoration of Duffyfield Canal Project Planning and Scoping will be the basis for a future BRIC application.

PROJECT PHASING

Once the project scoping study is complete and concept plans have been created, the City envisions Phase 1 will address areas of restoration and construction pertaining specifically to Canal infrastructure. This will likely include stream bank stabilization, culvert repairs and improvements, and upgrading the Duffyfield Canal Retention Basin and associated pump station at the downstream end of the canal.

Phase 2 will incorporate nature-based conveyance and flood mitigation solutions for the contiguous land areas. As part of this project, fallow land adjacent to the canal will be restored creating natural wildlife habitats throughout the Canal Drainage Basin. Areas of land adjacent to the canal will be used to develop a pedestrian trail/bike path which will create a complete Citywide trail loop connecting the downtown commercial district and the City's three historic districts to underserved and socially and economically challenged neighborhoods. This trail linkage will provide enhanced accessibility to employment opportunities and medical care for residents who currently do not have accessibility to transportation.

PROFESSIONAL SERVICES REQUESTED

The City of New Bern is requesting qualifications from professional engineering firms to provide project management, funding administration, community engagement, hydrologic and hydraulic analysis, planning, surveying and subsurface utility engineering, and design services related to the Duffyfield Canal Restoration project. Services shall also include development of construction documents, permitting, bidding, and construction administration should future phases be funded.

The selected consultant should be prepared to meet the General Liability and Professional Liability Insurance requirements of the City. Project scope, duration, and terms shall be negotiated with the selected consultant.

CONTENTS OF RESPONSE

This Request for Qualifications is intended to provide consultants with an opportunity to demonstrate their ability to perform the required tasks. The content of the response should respond to the information presented in this Request for Qualifications. The City will require the electronic submittal of the responses from all interested firms. All responses shall not exceed 10 (8½" x 11") pages and must contain the following information:

1. Cover.
2. Cover Letter.
3. Table of Contents.
4. Background information about the Consultant Firm.
5. A proposed project schedule identifying the length of time required for each phase of the work.
6. A description of the background, experience, and qualifications of the project team including identification of the project manager, project engineer, and other key team members. Include an organizational chart showing the proposed project personnel and office location.
7. Similar projects completed by the firm.
8. Other Grant Funded and Stormwater projects.
9. References.
10. Resumes of Key Team Members.

The Cover, Cover Letter, Table of Contents, and Resume of Team Members will not be counted within the page limit. Responses are to be less than 15 megabytes in size or need to be hosted on an outside file sharing service. It is the engineering firm's responsibility to confirm that the outside file sharing service was received.

METHOD OF SELECTION

Responses will be reviewed by a selection committee consisting of City staff for the purpose of identifying and recommending, to the City of New Bern Board of Alderman, those Engineering Firms offering, in total, the highest qualifications and experience with this type of project. The individuals or firms recommended may also be interviewed by members of the selection committee for the express intention of recommending a final shortlist of individuals or firms, however, such is not required.

CRITERIA	POINTS
Qualifications, background, and prior experience of the firm and the proposed project team in executing similar projects.	30
Firm's capability to meet time and project budget requirements.	15
Management ability and familiarity with federal and state regulations.	20
Content, technical approach, and understanding of the scope of the project.	25
Recent and current work for the town or a nearby local government.	10
Maximum Total Points	100

SUBMITTAL

Please submit your Qualifications, by **electronic submittal** using the subject of "*Statement of Qualifications for Duffyfield Canal Restoration Project*", to be received by the City of New Bern **no later than 5:00 pm, Friday, October 29, 2024** to the attention of:

David Fishel, P.E.
Assistant Director of Public Works
fishel.david@newbernnc.gov

In the interest of fairness to all submitting firms, proposals received after the scheduled receipt time stated above will not be accepted and will be marked "LATE". All submittals received become the property of the City of New Bern and will not be returned. **Faxed documents will not be accepted.** Early submission of Qualifications is welcome and appreciated.

CONTACT PERSON

In the event clarification or additional information is needed, contact:

David Fishel, P.E.
Assistant Director of Public Works
fishel.david@newbernnc.gov

Email is the preferred method of communication for questions or clarifications. Clarifications and/or additional information will be provided to all interested parties by the Owner by addenda to this package. **Questions asked after October 22, 2024 at 5 pm will not be answered.**

DISCRETION AND LIABILITY WAIVER

- The City of New Bern reserves the right to reject any and all proposals, waive any irregularities in the proposal, revise the scope of the project, and award the project to the consultant they believe to be the most qualified to perform the work. If a contract is not able to be negotiated, the City reserves the right to terminate all negotiations and select one of the other finalists or issue a new RFQ.
- The City of New Bern reserves the right to request and obtain, from consulting firms submitting proposals, supplementary information or request clarification of information submitted as may be necessary for City staff pursuant to the selection criteria contained herein.
- The City of New Bern does not compensate for the cost of proposal preparation, and all materials submitted with the proposal become the property of the City.
- The City of New Bern reserves the right, through this RFQ, to contract engineering services for the design and construction administration of any alternative process that is identified, as the result of this study, with the firm selected for this RFQ or enter into an agreement with another consulting engineering firm.
- The City of New Bern is an Equal Opportunity Employer and will not discriminate on the basis of race, color, religion, sex, national origin, age, or handicap.
- The City of New Bern encourages submittals from small and minority firms.

END OF REQUEST FOR QUALIFICATIONS