



Town of
Bolton
Massachusetts
Incorporated 1738

Department of Public Works
12 Forbush Mill Road
Bolton, MA 01740
978-779-6402

Request for Qualifications
Engineering Services

Culvert Replacement & Roadway Improvement
Main Street – Route 117 at Mechanic Street
Due Tuesday, November 28, 2023; 1:00PM

GENERAL REQUIREMENTS

Qualified proposers are invited to submit a Statement of Qualifications in response to this Request for Qualifications (RFQ). Before submitting a response, each proposer must make a careful study of all specifications and contractual requirements and fully assure themselves as to the quality and quantity of the services required by this RFQ.

The successful proposer will be bound by all applicable statutory provisions of laws of the Federal Government, the Commonwealth of Massachusetts and the Town of Bolton.

Submittals that are incomplete, not properly endorsed or signed, or are otherwise contrary to these instructions may be rejected as informal. Submittals that are generic and do not address key aspects of the scope as defined, may also be rejected as informal. The Town reserves the right to reject any and all responses, to waive any irregularities, to allow exceptions to the attached specifications and to make an award in a manner deemed in the best interest of the Town.

As provided by Massachusetts General Law, Chapter 64H, section 6(d), purchases made by the Town of Bolton are exempt from the payment of Federal Excise Taxes and Massachusetts Sales Tax; any such taxes must not be included in the quoted price.

No subcontracting of any work is allowed under this bid/contract without prior approval and unless clearly identified in the submittal. The successful proposer will not be permitted to either assign or underlet the contract nor assign either legally or equitably, any monies hereunder, or its claim thereto, without the prior written consent of the Town.

All submitted responses to this RFQ must be guaranteed to the Town of Bolton for a period of sixty (60) calendar days from the RFQ submission date. By or before that date the Town of Bolton will make a decision to either issue a contract or reject all responses that were received.

On either the date a contract is issued or the 61st day after the submission date, whichever shall occur first, all submittals will become public information.

The successful Proposer will be required to indemnify the Town for all damages to life and property that may occur due to their negligence or that of their employees, subcontractors, etc., while under contract with the Town of Bolton.

If proposers have any questions concerning the terms and conditions set forth in this Request for Qualifications, the questions must be submitted in writing to Randall Heglin, Director of Public Works, at dpwdirector@townofbolton.com at least 7 days prior to the due date of submission of Statement of Qualifications.

Responses may be withdrawn without penalty prior to the time and date specified for the proposal submission deadline.

All RFQ requirements, including these General Requirements shall constitute a part of the contract of services. A copy of the successful proposer's submittal will be incorporated herein and made a part of the contract as well.

Governing Law & Entire Agreement

The Contract awarded in response to this RFQ and any disputes hereunder will be construed and interpreted in accordance with the laws of Massachusetts. The Vendor agrees that any and all legal proceedings between the parties, regardless of legal theory, will be brought exclusively in a state or federal court in Massachusetts and the Vendor consents to such jurisdiction.

The Contract, including all documents incorporated herein by reference, constitutes the entire integrated agreement between the parties with respect to the matters described. The Contract will not be modified or amended except by a written document executed by the parties hereto.

Background

The Town of Bolton, MA, Department of Public Works seeks Statements of Qualifications from qualified Engineering Firms for Engineering Services related to the design, funding, permitting, bidding assistance, and construction supervision for the replacement of culvert parallel and under Main Street (Route 117) at Mechanic Street including replacement of retaining wall, and sidewalk replacement.

Responses to this RFQ are due at the office of the Department of Public Works, 12 Forbush Mill Road, Bolton, MA 01740, no later than **1:00 PM on Tuesday, November 28, 2023.**

An unnamed tributary of Great Book traverses property parallel and on the north side of Main Street in a generally easterly direction from the Bolton Common to the town-owned Houghton building (Bolton Access TV), where the waterway goes subsurface, makes a turn southerly toward and under Route 117 to its outlet at the northern end of Pond Park.

This RFQ is for the replacement of the approximate 4' x 3' culvert from the Houghton property to its outlet, a total estimated length of approximately 220 feet. The existing culvert is a stone culvert with a concrete slab top and small section being cast in place concrete.

As part of the Town's Townwide Culvert Assessment Management Program an evaluation of the culvert was undertaken in August 2022 and February 2023. A letter report on the findings is included with this RFQ.

It is the Town's desire to commence the preliminary design to replace this culvert. Included with the culvert replacement is the replacement of the existing mortared stone masonry wall with concrete cap. This wall serves as the headwall of the culvert and vehicular and pedestrian protection. The wall is failing with loose stones and mortar. The railing and cap are also in failure. Also included with this project, it is desired to improve the sidewalks from the terminus of previous sidewalk improvement west of Mechanic Street easterly to Town Hall on the north side and to the Bolton Bean on the south side of Main Street.

Scope of Work

Engineering design services relative to the replacement of Culvert #1 to are expected to include, but not limited to

- Site survey including topographic
- Wetland delineation
- Hydraulic Analysis including scour analysis
- Geotechnical services including borings
- Preliminary design for appropriately sized culvert or bridge as determined by regulations.
 - If bridge, comply with MADOT (i.e. Chapter 85 and load rating), AASHTO and Federal highway requirements as appropriate.
 - Design to incorporate retaining wall replacement.
 - Preliminary cost estimate
- Preliminary design of sidewalk improvements
 - Preliminary cost estimate
- Grant & Funding Assistance
 - Identification of applicable grants for the construction of the replacement of the subject culvert, retaining wall and sidewalk improvements.
 - To include both Federal and State opportunities; MVP; Hazard Mitigation; TIP etc.
 - Preparation of grant applications including and revisions to application or design as may be appropriate after agency review.
 - Coordination with Regional Planning Authority as appropriate
- Permitting (including attendance at meetings as appropriate)
 - Geotech & Boring- Conservation Commission Application as appropriate
 - Culvert/wall/sidewalk replacement Notice of Intent
 - Section 404 Permit if necessary
 - Project Notification Form if necessary
 - Others as may be determined

- Development of any applicable easement (Temporary and Permanent) plans and language as needed.
- Final Design including preparation of plans and specifications suitable for bid. Including
 - Construction design and details
 - Traffic Control Plan
 - Special Provisions
 - Opinion of Probable Construction Cost
- Bidding Phase Services
 - Advertisement
 - Distribution of plans and specifications to interested parties
 - Addressing questions on Bid Specifications and issuance of addenda
 - Review of bids received, reference checking and recommendation to Award
- Construction Phase Services
 - Review and approve Contractor submittals ensuring compliance with specifications.
 - Review and approval of Schedule of Values as appropriate.
 - On-site construction supervision at interval (full or part-time) as agreed to by the Town.
 - Review and recommendation for approval of periodic pay requisitions from the contractor.
 - Completion of disbursement requests to costs incurred by the Town to funding agencies as appropriate.
- As-Built drawings
 - Submitted to appropriate permitting authority
 - Paper copy and electronic PDF to Department of Public Works, as appropriate.
 - Electronic file of all approved shop drawings and submittals.

The above tasks are intended as a general guideline for the work. Any tasks not listed, but customary in the implementation of the project to be included. Proposers should indicate timeline for all milestone tasks.

Available Information

1. Letter Report Condition Assessment as prepared by Tighe & Bond (attached).

Evaluation Criteria

Submittals will be reviewed and assessed on the following criteria. Assessment criteria to be Highly Advantageous, Advantageous, Satisfactory, and Unsatisfactory

- Professional Qualifications
 - Experience in design, permitting and construction of culverts & bridges in full compliance with MADOT/MADEP regulations.

- Staffing – experience and where physically located – only provide names & resumes of employees that will be assigned the Bolton project.
 - Project Principal
 - Project Manager
 - Project Engineer
- List of anticipated sub-consultants, task identified and qualifications of the firm.
- Demonstratable experience in funding Public Works infrastructure projects
- Understanding of proposed work
 - Presentation of proposed tasks and tying tasks into firm’s qualifications
- Funding – demonstrable experience in funding for type of work proposed
 - Local funding assistance – bonding etc.
 - State funding – identified sources of funding obtained for clients
 - Federal funding - identified sources of funding obtained for clients; Hazard Mitigation; FEMA; STAG; TIP; etc.

Funding

This work is funded in part through a Special Appropriation (\$400,000 Earmark) through the MA House of Representatives Economic Development Bill (HB5374). The Town has not yet received notification of the administering authority at the state.

As this project may include Federal funding sources, specific contractual provisions are required and are to be included in any executed agreement.

Schedule

Work to commence on this Culvert Replacement Project within 30 days of the signing of the Professional Services Agreement. The Agreement will be executed after the Town receives authorization and Notice to Proceed from the administering authority.

Proposers should indicate timeline for all milestone tasks in their submittal. Final design and later phases to be undertaken when financing is secured for the project. Proposers should just indicate typical time duration for these phases.

Special Contractual Conditions

This Request includes several Federal requirements to ensure that the procurement and services included comply with Federal Requirements and will be eligible for possible Federal Funding of the project. 2 CFR Part 200.

The Proposer shall insure that all documents and provisions required by the proposer comply fully with Federal and State requirements.

Use of Other Professional Services Contracts – i.e. EJCDC is permissible if it includes all necessary and required provisions.

This RFQ and Response submittal shall be incorporated via reference into any agreement.

One contract will be awarded to the one responsive and responsible firm who the Town determines offers the most advantageous proposal, taking into consideration all evaluation criteria set forth in this RFQ. The contract that is awarded as a result of this Request for Qualifications will be effective upon completed execution of a contract signed by both the successful proposer and the appropriate Town officials.

The performance and payment obligations of the Town of this contract will be subject to appropriation or availability of funds. If the Town of Bolton should not, for any reason, at any time, appropriate or otherwise make available, funds to support continuation of performance in any fiscal year succeeding the first year, the Town will cancel any contract pursuant to this RFQ without penalty to the Town upon thirty (30) days' written notice to the Vendor.

Termination Clause

If at any time the Town of Bolton determines that the services of the vendor are no longer needed, for any reason, even for convenience; then the Town will have the option to terminate this contract immediately, without penalty to the Town, upon written notice to the vendor. The vendor would be paid for all work completed up to the point of termination of the contract. All work finished, reports, paperwork, etc., will become the property of the Town of Bolton. If at any time the vendor fails to fulfill or comply with any of the requirements of this RFQ and subsequent contract, such as shoddy workmanship, improper procedures, supplying sub-standard, improperly trained employees, not adhering to the work schedule, etc., the Town, at its option, can terminate this contract immediately, without penalty to the Town, upon written notice to the vendor.

In the event that the Engineer chooses to terminate their relationship with the Town of Bolton prior to the expiration of this contract the Engineer shall provide the Town of Bolton with a minimum of a 90-day notice.

The Engineer's transfer of contractual obligations to another firm, due to acquisition or for any other reason, the Town may Terminate the agreement.

Equal Employment Opportunity

The Engineer (Contractor), during the performance of this contract, agrees to as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin, such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices, to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
3. The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
5. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
6. The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
7. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
8. The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions,

including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, that if the applicant so participating is a state or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings."

Debarment and Suspension

Proposers shall certify that the company is not debarred or suspended to work on State or Federal programs.

This contract is a covered transaction for purposes of 2 C.F.R. Part 180 and 2 C.F.R. Part 3000. As such, the contractor is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

The contractor must comply with 2 C.F.R. Part 180, subpart C and 2 C.F.R. Part 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

This certification is a material representation of fact relied upon by the Town of Bolton, MA. If it is later determined that the contractor did not comply with 2 C.F.R. Part 180, subpart C and 2 C.F.R. Part 3000, subpart C, in addition to remedies available to the Town of Bolton, MA, the federal government may, pursue available remedies, including but not limited to suspension and/or debarment.

The bidder or proposer agrees to comply with the requirements of 2 C.F.R. Part 180, subpart C and 2 C.F.R. Part 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions."

References

Proposers must submit a list of references, preferably municipal, of similar size and complexity who they have performed similar services for over the past five (5) years (either one-time services or on-going). The list must indicate who each client is/was, a description of the services provided, dates of service, or any special projects that were undertaken for each client. Proposers should indicate whether services provided / projects undertaken were successfully completed or not; and if they were involved in any disputes or unique situations, as well as the outcomes of any such disputes or unique situations.

This reference list must include contact names, email addresses and telephone numbers. The Town is to have express permission to contact these people, either by telephone, written correspondence or in person, conduct a site visit, as to past performance. The Town reserves the right to contact any entity that the Engineer has conducted business with or for, either currently or in the past, for the purpose of reviewing past work history.

Interview

Proposers may be required to appear for an interview, if so requested, with the Director of Public Works, or a review committee which may include the CPO before any award is made. The purpose of the interview would be to review the Proposer's background and capabilities to satisfactorily undertake and oversee the Project and to provide the services called for in this RFQ.

Invoicing

The Vendor will bill the Town of Bolton in periodic installments based on work completed since the previous billing period.

Invoices will be addressed to the "Bolton DPW, Attn: Randall Heglin, 12 Forbush Mill Road, Bolton, MA 01740". Invoices may be emailed together with backup documentation to dpw@townofbolton.com. All invoices must clearly detail the work completed during the pay period. Invoices that are not submitted in this manner will not be paid and interest charges will

not be allowed to accrue. The Town will pay all invoices within forty-five (45) calendar days of receipt of the invoice. All invoices for work completed by June 30th of any year must be billed no later than July 10th.

If at any time the Town disputes an invoice or any portion thereof, the Town will submit a written claim (i.e. letter, e-mail, etc.) fully documenting the reasons the invoice is disputed. The Town will pay the undisputed portion of the invoice by the forty-five day payment schedule noted above. After receipt of the dispute, the vendor will investigate the disputed charges and either a) correct the invoice, or b) notify the Town if the vendor challenges the dispute and the reason(s) why. Once the dispute is resolved, the outstanding amount will become due and payable.

SUBMISSION REQUIREMENTS

Interested Engineering Firms must be able to comply with all of the requirements of this RFQ in order for your submittal to be accepted. Please read all of the RFQ specifications and follow all instructions in preparing your submittal to this RFQ response. Failure to respond properly may result in the REJECTION of your proposal. A generic submittal, not addressing any specifics of the project, may result in rejection of the submittal.

Responses to this RFQ – Culvert Replacement & Roadway Improvement; Main Street – Route 117 at Mechanic Street will be received in the Office of the Department of Public Works, 12 Forbush Mill Road, Bolton, MA 01740, until the deadline for submission stated in the RFQ. No proposals will be accepted after the time and date specified.

Respondents must submit **one (1) original and two (2) copies and one (1) electronic version** of the response to this RFQ. The submittal must be properly filled out, signed, sealed and endorsed, and must NOT include any pricing information.

Complete packages must be received by:

1:00 P.M. November 28, 2023

In the Office of the Department of Public Works
12 Forbush Mill Road
Bolton, MA 01740

Each firm desirous of consideration will include with the submittal

1. All Submittals must be signed by the Proposer or a representative of the Proposer authorized to act on behalf of the Proposer.
2. The Company Information form, Non-Collusion Statement, Addenda Acknowledgement form, Certificate of Good Faith, Certification that State taxes filed and paid, and Certificate of non-conflict of Interest, and Certification regarding lobbying, must be included with your submission.
3. Please include completed “Standard Designer Application Form”
4. Complete description and background information on the company replying to the RFQ. Who the Company is, what they do, how long they have been in business, why they are qualified to perform these services, etc.
5. Identify and provide resumes of key/lead personnel who will be assigned to the account, including what their role will be.
6. Information on any intended or expected subcontractors.

7. Indicate which individual will serve as the Project Manager on this project and Project Engineer, providing contact address, e-mail, and telephone number(s) for said individual(s).
8. List projects and references of similar scope who are familiar with your work on similar projects. The Town is to have express permission to contact these individuals, either in person, by phone, and/or written correspondence, as to past performance. Information to include project description and the OPCC and as bid construction cost. Include the funding mechanism used to complete the project.
9. Submit a list of all firm staff, their area(s) of expertise, and what tasks/responsibilities they will be assigned to for the Bolton project.
10. Indicate whether or not your firm has been dismissed or disqualified from a project within the past five years, and if yes, the reason why.
11. Delineate various funding experience provided to municipalities for similar projects. It is preferable that experience be in the last 7 years.
12. All other information as necessary to comply with the requirements of this Request for Qualifications as well as any other information that the Proposer believes would be beneficial to the Town in considering your proposal. It is understood that upon written request from the Town, a proposer may be required to submit further information to support the proposer's qualifications.

Comparative Selection Criteria

Each of the following questions pertains to requirements listed in this RFQ. These questions will be used by the Town in reviewing all submissions. Each question will receive one rating of either: Highly Advantageous, Advantageous, Not Advantageous or Unsatisfactory. The rating each question receives will be used to compile a composite rating for each submittal to be used in the Selection Process of this RFQ. These questions are listed herein for demonstration purposes only, not to be answered or responded to by a proposer.

Assessment criteria to be Highly Advantageous (**HA**), Advantageous (**A**), Satisfactory (**S**), and Unsatisfactory (**U**).

- Professional Qualifications
 - Experience in design, permitting and construction of culverts & bridges in full compliance with MADOT/MADEP regulations.
 - **HA** >10 projects in last 5 years
 - **A** 5-10 projects in last 5 years
 - **S** 1-5 projects in last 5 years
 - **U** no design, permitting or construction projects in last 5 years
 - Staffing – experience and where physically located – only provide names & resumes of employees that will be assigned the Bolton project.
 - Project Principal

- **HA,A,S** – Massachusetts PE
 - **U** – not registered in MA, or not registered
 - Project Manager
 - **HA,A,S** – Massachusetts PE
 - **U** – not registered in MA, or not registered
 - Project Engineer
 - **HA,A** – Massachusetts PE
 - **S** – Massachusetts EIT with >5 years experience
 - **U** – unregistered
- Experience in the design of roadway improvements.
 - **HA** >10 projects in last 5 years
 - **A** 5-10 projects in last 5 years
 - **S** 1-5 projects in last 5 years
 - **U** no design, permitting or construction projects in last 5 years
- List of anticipated sub-consultants, task identified and qualifications of the firm.
 - **HA** – no subconsultants anticipated.
 - **A** – Subconsultants with offices in Massachusetts and dedicated staff from Massachusetts
 - **S** – subconsultants with no offices in MA but staff experience in MA
 - **U** – experience of subconsultants not included
- Understanding of proposed work
 - Presentation of proposed tasks and tying tasks into firm's qualifications
 - **HA, A** Complete Understanding
 - **S** Understands scope but task delineation unclear
 - **U** Apparent misunderstanding of the project
- Funding – demonstrable experience in funding for type of work proposed
 - Local funding assistance – bonding etc.
 - **HA** Assisted with >10 communities in last 10 years
 - **A** Assisted with between 5 and 10 communities in last 10 years
 - **S** Assisted between 1 and 5 in the last 10 years
 - **U** no assistance with funding identified
 - State funding – identified sources of funding obtained for clients
 - **HA** Assisted with >10 communities in last 10 years; multiple programs
 - **A** Assisted with between 5 and 10 communities in last 10 years
 - **S** Assisted between 1 and 5 in the last 10 years
 - **U** no assistance with funding identified
 - Federal funding - identified sources of funding obtained for clients; Hazard Mitigation; FEMA; STAG; TIP; etc.
 - **HA** Assisted with >10 communities in last 10 years
 - **A** Assisted with between 5 and 10 communities in last 10 years
 - **S** Assisted between 1 and 5 in the last 10 years
 - **U** no assistance with funding identified

- References
 - **HA** Municipal references of similar scope prelim, design, bidding, permitting, CA, and funding assistance. Contacts current. Acceptable; would hire again. OPCC accurate. Construction Change Orders (design) (project) ≤ 3
 - **A** Municipal references of similar scope prelim, design, bidding, permitting, CA, and funding assistance. Contacts not current. Acceptable work; may/may not hire again; Construction Change Orders (design) (project) >3
 - **S** Municipal references of similar scope prelim, design, bidding, permitting, CA, and funding assistance. Contacts not current. Acceptable work; may/may not hire again; Construction Change Orders (design) (project) >5
 - **U** Municipal references of similar scope prelim, design, bidding, permitting, CA, and funding assistance. Contacts not current (very stale). Acceptable works; may not hire again; Construction Change Orders (design) (project) >5 ; multiple change orders directly related to design

Evaluation Criteria

The Town of Bolton will evaluate all qualifications submittals that offer all of the required services, to determine the most advantageous proposal from a responsible and responsive proposer.

In evaluating submittals, the Town will consider, but not be limited to, the following evaluation criteria:

1. The comparative selection criteria.
2. How well and to what extent the submittal meets all requirements of this RFQ. This includes an understating of the expectations and scope of work outlined in the RFQ.
3. If a proposal indicates any exceptions/deviations from the requirements, how well does the offered substitution meet or exceed the original specification/service that was required and explanation for such deviations or exceptions
4. The individual merits and features of each proposer's operation/company/personnel as compared against other proposers.
5. Experience level and knowledge base of the assigned Project Manager, Project Engineer and other key personnel assigned to this project.
6. Previous experience serving other municipal clients, particularly in Massachusetts.
7. Completeness, clarity, and responsiveness of the proposer's RFQ response submittal.
8. Project schedule

Selection Process

The Town will evaluate all proposals based upon the above criteria and will select the proposal deemed to be in the best interest of the Town.

One contract/purchase will be awarded to the one responsive and responsible Proposer who the Town determines offers the most advantageous proposal, taking into consideration all required qualifications, submission requirements and comparative selection criteria set forth in the RFQ.

The Town of Bolton reserves the right to reject any or all submittals if it shall be deemed in the best interest of the Town to do so.

The issuance of this Request for Qualifications does not commit the Town to award a contract, to pay any costs incurred in the preparation of a response to this request, or to procure or contract for any services.

Contract Execution

Under 2CFR section 200.320(b)(2), the selected firm deemed most qualified based on the evaluation shall negotiate fees with the Town. The fees shall be deemed fair and reasonable compensation for the tasks outlined. Fees deemed not fair and reasonable through negotiation with the firm, the Town reserves the right to cease negotiations with the selected firm and proceed negotiations with the next highest rated firm. A time and materials contract is not permissible. Fees will be by phasing of the project.

Certification Regarding Debarment

By submission of a response to the RFQ, the Engineer and all of its principals and owners certifies under penalties of law that they are not presently debarred, suspended or otherwise ineligible for the award of any contract by any governmental body (i.e. Town, town, govt. agency) within and including the Commonwealth of Massachusetts and the Federal Government; and that any/all subcontractors used in the performance of this contract meet these same qualifications.

COMPANY INFORMATION FORM

Proposer's attention is called to Chapter 268A of the Massachusetts General Laws. In connection with this statute, proposers are required to submit the following information and any other information deemed necessary by the proposer. All of the following information regarding the Proposer must be completed:

Please indicate business type by placing an X next to the appropriate category:

Corporation ☐ Partnership ☐ Proprietorship ☐

If a Corporation

Full Legal Name _____

State of Incorporation _____

If a Partnership

Full Legal Name _____

If a Proprietorship/Individual

Name of Owner/Individual or d/b/a _____

Principal Place of Business _____

Place of Business in Massachusetts _____

Business Mailing Address _____

Telephone Number: _____ Ext. _____

Qualified to do business in Massachusetts ☐ YES ☐ NO

Give full names and titles of all the persons and parties interested in the foregoing submittal.
(Note: give first and last names in full; in cases of corporations, give names of President, Treasurer and Manager; and in cases of partnerships give names of the individual partners.)

Name

Title

A foreign corporation is required to submit its' certification of corporation from the Massachusetts State Secretary's Office, as required by chapter 181 of the Massachusetts General Laws.

ADDENDA ACKNOWLEDGMENT FORM

RESPONSE SUBMISSION DATE: 1:00 PM Tuesday, November 28th, 2023

The proposer acknowledges receipt of the following addenda:

Addenda # _____

Addenda # _____

Addenda # _____

Addenda # _____

-- OR --

None: _____

Signature of Authorized Agent

Company Name (Please Type)

Printed Name & Title

(Date)

NON-COLLUSION STATEMENT

The undersigned proposed has not divulged to, discussed or compared his/her proposal with other proposers and has not colluded with any other proposer or parties to the proposal whatever.

SUBMITTED BY:

COMPANY: _____

ADDRESS: _____

CITY and STATE: _____

TELEPHONE NO.: (____) _____

PROPOSER MUST SIGN THE FOLLOWING IN INK:

BY: _____

PLEASE PRINT NAME AND TITLE OF SIGNER BELOW:

NAME: _____

TITLE: _____

NAME, SIGNATURE AND COMPANY MUST BE THE SAME ON EACH OF THE FOLLOWING PAGES OF THE PROPOSAL AS THEY APPEAR ABOVE.

INDICATE WHICH TYPE OF ORGANIZATION BELOW:

INDIVIDUAL _____ PARTNERSHIP _____ CORPORATION _____ OTHER _____

REQUIRED CERTIFICATIONS to be included in contract

Certification of Good Faith

Certification of Good Faith. Pursuant to section 10 of chapter 30B of the general laws, (and the Town's policy for all contract pursuant to MGL c. 30.39M or c. 149.44a-H) the following certificate must be completed and attached to the bid or proposal:

The undersigned certifies under the penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity, or group of individuals.

SIGNED: _____
Name of person signing bid or proposal

PRINTED: _____

DATE: _____

Certification that State Taxes are Filed and Paid

Certification that State Taxes are Filed and Paid: Pursuant to section forty-nine A of Chapter sixty-two C of the General Laws, the following certification must be completed and attached to the bid or proposal:

I certify under the penalties of perjury that I, to my best knowledge and belief, have filed all state tax returns and paid all state taxes required by law. My social security number (voluntary) or Federal Identification number is: _____.

By: _____ By: _____
Signature of Individual/Corporate Name (Mandatory) Corporate Officer (Mandatory, if applicable)

Date: _____

Approval of a contract or other contract or other agreement will not be granted unless this certification clause is signed by the applicant(s). Your Social Security Number will be furnished to the Massachusetts Department of Revenue to determine whether you have met tax filings or tax payment obligations. Providers who fail to correct non-filing or delinquency will not have a contract or other agreement issued, renewed or extended.

Certificate of Non-Conflict of Interest

The undersigned certifies under penalties of perjury that no official or employee of the governmental body for which the attached solicitation is proposed is pecuniarily interested in this proposal or bid or in the contract which it offers to execute or in expected profits to arise therefrom; and further that no official or employee of said governmental body will receive an commission, discount, bonus, gift, contribution, or received from or share in the profits of any person making or performing such contract. As used in this certification, the word “person” shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity or group of individuals.

Signed: _____ Date: _____
Name of Person signing bid or proposal

Typed: _____
Name of Business

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, Title 31, U.S.C. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure."

The Contractor, , certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official

Name and Title of Contractor's Authorized Official

Date"

Standard General Contract for Professional Services (SAMPLE)

Agreement effective the ____ day of _____, 2023 by and between the TOWN OF BOLTON, 663 Main Street, Bolton, MA 01740, a municipal corporation in the Commonwealth of Massachusetts, through its duly elected Board of Selectmen or its Town Administrator as signed below, with no personal liability to themselves hereinafter referred to as the "Town" and (name & address)

hereinafter referred to as the "Contractor".

RECITALS

WHEREAS the Contractor will furnish the Town with PROFESSIONAL SERVICES and;

WHEREAS the Town desires to obtain such Professional Services from the Contractor in a timely manner and;

WHEREAS it was one of the conditions of the award of this contract that a formal Contract should be executed, by the Contractor and Town, evidencing the terms and conditions for the award.

NOW THEREFORE in consideration of the mutual covenants contained herein the parties agree as follows:

ARTICLE I: Contractor shall furnish Town with: _____

subject to and in compliance with all conditions, covenants, stipulations, terms and provisions contained in the specifications, instructions to bidders and related documents, which if attached hereto are shown as lettered Exhibit(s) _____ and which are incorporated herein by reference, (the "Contract") for the sum equal to the aggregate purchase price of that described above to be furnished by Contractor at the prices and rates specified in the proposal, which if also attached hereto is shown as Exhibit _____ and which is incorporated herein by reference. The total contract price is not to exceed:
_____.

ARTICLE II: Contractor shall commence the performance of this contract within ____ days of receiving written notice to proceed and shall have completed the work on or before ____ days after notice was received. All provisions related to time of completion of the work are of the essence.

ARTICLE III: Reliance by Town - Contractor covenants and agrees to faithfully perform all of its obligations under this Contract and the incorporated documents hereto. Said performance shall be in a professional and workmanlike manner and in accordance with the standard of care and conduct that is generally acceptable in the business or profession. It is understood and agreed that the Contractor employees persons skilled in the disciplines necessary to perform the work agreed to be performed by it under this contract and that the Town relies upon the skill of such employees to do and perform the work in a skillful manner and that the Contractor agrees to perform such work. Acceptance by the Town of the work performed does not operate as a release of the Contractor from its responsibility. It is further understood and agreed that the Contractor's responsibility shall extend to all work and services required to be performed under this Contract.

ARTICLE IV: In addition to any other warranties or guarantees in any documents incorporated herein by reference, Contractor warrants that what is being provided, described above in Article I, as the subject matter of this Contract, is fit for the use or purpose intended. Contractor further certifies the suitability, professionalism and capability of all individuals employed to furnish any services specified in Article I above.

ARTICLE V: The Contractor shall purchase and maintain such insurance as will protect it from claims which arise out of or result from the Contractor's operations under the contract, whether such operations be by itself or by any subcontractor or anyone directly or indirectly employed by any of them. The insurance required shall be with a company authorized to do business in the Commonwealth of Massachusetts and satisfactory to the Town, and shall be written for limits of the liability satisfactory to the Town, and shall include insurance in the following amounts:

PROFESSIONAL LIABILITY-	\$1,000,000 MINIMUM
UMBRELLA -	\$1,000,000 MINIMUM
WORKER'S COMPENSATION -	per statutory requirements

Other if Applicable:	Automobile Liability insurance:	\$	each person
		\$	each accident
	Property:	\$	

Certificates of Insurance acceptable to the Town, naming the Town of Bolton as an additional insured, shall be submitted to the Town simultaneously with the execution of the Contract.

ARTICLE VI: The Town has waived the cost of the building permits if required for this project. All permits must still be obtained by the appropriate Contractors as normally required.

ARTICLE VII: This project is Tax Exempt. The tax exemption number will be furnished to the General Contractor by the Owner after award of the Contract.

ARTICLE VIII: Non-Collusion- The Contractor declares that, as of the date of this Contract, no Town official, either directly or indirectly, has a financial interest in this Contract, and furthermore, the Contractor pledges that it shall notify the Town in writing should any Town

official acquire, either directly or indirectly, a financial interest in this Contract. The Contractor further declares that, as of the date of this Contract, it has not given or donated or promised to donate, either directly or indirectly, to any Town official or employee or to anyone else, for his/her benefit, any sum of money or other thing of value for aid or assistance in obtaining this Contract. The Contractor pledges that neither it nor any other officer, agent or employee of the Contractor shall give or donate or promise to give or donate, either directly or indirectly, to any Town official or employee or to anyone else, for his/her value, for aid of assistance in obtaining any Contract with the town.

ARTICLE IX: Termination/Right to Stop Work - The Town may terminate this Contract if (a) any material misrepresentation is made by the Contractor; (b) any failure by the Contractor to perform any of its obligations under this Contract, including but not limited to, the following: (i) failure to commence performance of this Contract at time specified due to a reason or circumstance within the Contractor's reasonable control; (ii) failure to perform this contract with sufficient personnel and equipment or with sufficient material to ensure the completion of this Contract within the specified time due to a reason or circumstance within the Contractor's reasonable control; (iii) failure to perform this Contract in a manner reasonably satisfactory to the Town; (iv) failure to promptly re-perform, within reasonable time, the services that were rejected by the Town as erroneous or unsatisfactory; (v) discontinuance of the services for reasons not beyond the Contractor's reasonable control; (vi) failure to comply with a material term of this contract; and, (vii) any other acts specifically and expressly stated in this contract as constituting a basis for termination of this contract.

The Town may order the Contractor in writing to suspend, delay, or interrupt all or any part of the work for such a period of time as it may determine to be appropriate for the convenience of the Town. The Town may terminate this Contract at any time, with or without cause, upon thirty (30) days written notice to the other party, sent by certified mail, to the usual place of business of the other party.

ARTICLE X: Damages - From any sums due to the Contractor for performance of this contract, the Town may keep for its own the whole or any part of the amount for expenses, losses and damages incurred by the Town as a consequence of the need to hire a third party to perform the work required by this contract, including the cost of labor and equipment as a result of any event of default, failure, omission or mistake of the Contractor in performing the work as provided in this Contract.

It is further agreed by the Contractor that, in the event the Town is sued in a court of law or equity, or demand is made upon the Town for payment of any damages arising out of the Contractor's performance or non-performance of this Contract, then the Contractor, without reservation, shall indemnify and hold harmless the Town against any and all claims arising out of the Contractor's performance or non-performance of the Agreement.

ARTICLE XI: Governing Ordinances and Laws - This contract is made subject to and shall be construed in accordance with the laws of the Commonwealth of Massachusetts and the By-laws of the Town of Bolton and if any such clause thereof does not conform to such Laws or Bylaws,

such clause shall be void (the remainder of this Contract shall not be affected) and such Laws or By-laws shall be operative in lieu thereof.

ARTICLE XII: Equal Opportunity - all work under this contract, will not discriminate on the grounds of race, color, sex, age, religious creed, disability, national origin or ancestry, sexual orientation, marital status, family status, military status, or source of income in the employment practices or in the selection or retention of subcontractors, and in the procurement of materials and rental of equipment. The Town may cancel, terminate or suspend the contract in whole or in part for any violation of this Article.

ARTICLE XIII: Assignability - The Contractor shall not assign, sell, subcontract or transfer any interest in this contract without prior written consent of the Town.

ARTICLE XIV: Access to Records – The Contractor agrees to provide the Town of Bolton MA, State or federal agencies, the FEMA Administrator, the Comptroller of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

The Contractor agrees to provide the FEMA Administrator or his authorized representatives access to the work sites pertaining to the work being completed under the contract.

ARTICLE XV: Compliance with Law – Contractor, by executing this agreement, agrees to comply with all applicable federal law, regulations, executive orders, Federal/State policies, procedures and directives.

ARTICLE XVI. Notice - Any notice to be given by either party to the other shall be deemed duly given if mailed, via certified mail, return receipt requested, as follows:

In the case of the Town to: ATTN: Town Administrator
663 Main Street
Bolton, MA 01740

In the case of the Contractor to: _____

ARTICLE XVII. Amendments - This contract represents the entire agreement between the parties and the terms of this contract may not be altered or amended except in writing and signed by the parties with the same formalities as the initial Contract.

ARTICLE XVIII. Severability - If any provision of this Contract or any portion of such provision shall be held invalid or illegal, then the remainder of this Contract or the remainder of such provision shall not be affected thereby.

ARTICLE XIX. Interpretation of Specifications and Contract Requirements - A decision of interpretation of the specifications, approval of equipment, material or any other approval, or progress of the work by the Contractor, shall be made promptly and, in any event, no later than thirty days after the written submission for decision by the Town, but if such decision requires extended investigation and study, the Town shall, within thirty days after the receipt of the submission, give the party making the submission written notice of the reasons why the decision cannot be made within the thirty day period and the date by which the decision will be made.

ARTICLE XX: Indemnification - The Contractor hereby assumes the entire responsibility and liability for any and all injuries to, or death of, all persons, including the Contractor's employees, and for any and all damage to property caused by, resulting from, or arising out of, any act, omission or neglect on the part of the Contractor or anyone directly or indirectly employed by the Contractor and shall indemnify, defend and hold harmless the Town of Bolton and all of its officers, agents, employees against all suits, claims of liability of every nature and name, for or on account of any injuries to persons or damage to property arising out of the proven negligence of the Contractor in the performance of the work covered by the Agreement, and/or failure to comply with the terms and conditions of this Agreement, whether by itself or its employees or subcontractors, or other agents, including reasonable attorney fees.

ARTICLE XXI: The Town agrees to faithfully pay the Contractor, when due and payable, and under the terms of all such incorporated documents and instruments to this Contract, all such contracted sums, subject to the provisions of Article X.

ARTICLE XXII: The Contractor acknowledges that if subcontracts are to be let, the prime contractor is required to take all necessary steps identified in 2 CFR §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.

IN WITNESS WHEREOF, the parties hereto have set their hand and seals to this Agreement on the _____ day of _____, 2023.

Availability of Funds:

Town Accountant

Town of Bolton by its
Select Board or Town Administrator
Date of Board Vote (if any) _____

Contractor:

Witness

Signature

Print

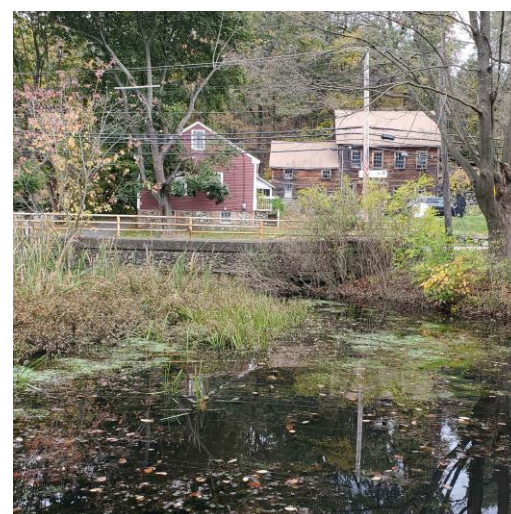
Title

Corporate Seal



Main Street (Route 117) @ Mechanic Street

Cross culvert





Main Street Culvert & Retaining Wall - Bolton, MA

SUBJECT: Field Report for the Main Street Culvert and Retaining Wall
Bolton, Massachusetts

To: Randy Heglin, Director of Public Works

FROM: Eric Ohanian, PE, Project Manager, Tighe & Bond

COPY: Daniel Roop, PE, Project Manager, Tighe & Bond
Jamie Fitzpatrick, Staff Engineer, Tighe & Bond

DATE: September 9, 2022; Revised April 10, 2023

Building upon our work for the ongoing Townwide Culvert Asset Management Program, Tighe & Bond conducted a site visit on August 2, 2022 to perform visual observations of the Main Street culvert and retaining wall in Bolton, Massachusetts. The culvert carries Main Street (MA Route 117) across an Unnamed Tributary of Great Brook and is located directly east of the intersection of Route 117 and Mechanic Street. Tighe & Bond conducted a follow-up site visit on February 10, 2023 to navigate an aquatic Remotely Operated Vehicle (ROV) through the culvert and obtain footage of the interior.

This field report presents our review of the condition of the culvert and retaining wall based on limited site observations and photographic documentation.



Figure 1 - Culvert Site (taken from Google Maps)

Culvert

Main Street, over the culvert, consists of two lanes of traffic and sidewalks on both sides (**Photo 1**). Visibly accessible portions of culvert are comprised of stone masonry abutment walls, and a top slab consisting mostly of cast-in-place concrete or stones in isolated locations. The culvert inlet is located between 697 and 703 Main Street, traverses in front of Bolton Access TV (697 Main Street), then angles south below Main Street to daylight east of Mechanic

Street. The culvert location was approximated in the field, and the actual angle location is currently unknown. The total culvert length is approximately 220 feet long. The culvert opening is approximately 4 feet wide by 3 feet tall at the inlet and 4'-8" wide by 3 feet tall at the outlet. The upstream channel is well defined by stone walls and the culvert discharges into a channelized wetland area in front of a retaining wall.

According to OSHA regulation, the culvert is considered confined space and was not entered as part of Tighe & Bond's field visit. Tighe & Bond used a pole-mounted GoPro camera (approximately 20-foot length) to gather data within the downstream portion of the culvert that supports the sidewalk and eastbound roadway shoulder. This assessment collected limited information due to access issues and the limited length of the pole. Based on review of the footage, there appears to be voids in the masonry walls (**Photo 6**). In addition, wooden forms remain in place and obstruct the observation of the concrete slab. However, approximately 20 feet into the outlet of the culvert, exposed rebar was identified between a gap in the forms (**Photo 7**). The concrete at this location appears to be poorly consolidated and exhibits severe honeycombing. The exposed rebar appears to be older Ransome bar (i.e. twisted steel rebar) which was generally used for construction until the 1940's, indicating a possible approximate time period of construction.

During Tighe & Bond's second site visit, recent rainfall had accumulated to provide a steady flow of water through the culvert. An ROV was placed in the water at the outlet of the culvert and navigated upstream into the culvert an approximate distance of 65 feet. Footage was recorded by the ROV and was primarily limited to the culvert walls.

In general, the length of culvert wall that was visible during investigation appeared to be in fair condition. Several voids were present between stones, however, none were of a notably large size. Due to the irregularities of the stone walls, it is not possible to confirm that no stones have shifted over time based solely on the video footage. Mortar was present between stones along the length of the culvert wall assessed. Minor amounts of debris were observed along the length of the culvert, localized to a few locations along the investigated length.

At an approximate distance of 60 feet into the culvert from the outlet, the stone masonry walls transition to concrete. Route 117 was widened between 1953 and 1956, based on information obtained from the Town of Bolton's website¹, which could account for the transition. The concrete walls exhibit heavy scaling however, based on the video, no spalling or notable cracks are visible.

At approximately 65 feet into the culvert, a significant amount of debris blocking the culvert was observed. The debris also constricted the culvert and caused the velocity of water to increase significantly. Due to the obstruction of the culvert and the increased flow velocity, the ROV's investigation ended at approximately 65 feet. The debris (**Photo 8**), including branches is likely getting caught due to the transition from stone to concrete, and the bend in the culvert. The stone box culvert is antiquated construction, and the rough surface makes the culvert more susceptible to debris blockage.

The stone culvert is also susceptible to penetration from tree roots, particularly within the portion in front of Bolton Access TV.

¹ <https://www.townofbolton.com/discover-bolton/pages/late-modern-period-1945-present>

Retaining Wall

The downstream retaining wall supports the southern side of Main Street and consists of mortared stone masonry with a concrete cap, which supports railing for vehicular and pedestrian protection. The wall is approximately 120 feet long and also serves as a headwall to the culvert. The wall height varies but averages approximately 6 feet tall. A drain outfall penetration is located along the length of the wall. Various deficiencies were identified along the length of the wall, including loose and missing stones, loose and missing mortar, undermining, and heaving (**Photos 9-12**). Conditions are at their worst toward the east end near the storm drain outfall and near areas of heavy vegetation.

The railing along the top of wall consists of three steel tube rails and embedded steel posts. It is an older detail that doesn't meet current standards for crash testing, and lacks end protection. Various rail posts exhibit 100% section loss and are in critical condition (**Photo 13**). There are several posts that are no longer attached to the retaining wall.

Recommendations

Based on the deficiencies of the downstream retaining wall and guardrail, improvements are recommended with replacement guardrail to meet crash protection requirements. Various configurations could be evaluated based on wetland constraints, public access preferences, and maintenance of traffic.

As a result of the limitations of the assessment, a hands-on assessment of the culvert could be performed utilizing confined space provisions. This culvert would qualify as a non-permit confined space. Entry would require a detailed and strict OSHA compliant safety program with a rescue crew.

Based on the available information obtained from the GoPro and ROV footage, the culvert appears to be in fair condition at present. A full assessment including action items for repairs cannot be given without a hands-on inspection. However, based on the conditions observed, we recommend monitoring for roadway settlement and cracking above the culvert that could be indicative of advanced structural deficiencies. If the Town repaves Route 117 in the future, it is advisable to excavate to the top of the culvert to assess the condition of the roof slab and the depth and thickness.

Due to the age of the culvert and limited remaining service life, we recommend the Town plan for culvert replacement. It could be advantageous to coordinate replacement of the culvert with retaining wall improvements.

Based on initial discussions with the Town, federal grant programs are being considered for funding. Due to procurement requirements of these programs, a Qualifications Based Selection (QBS) process should be utilized to procure a design consultant to maximize eligibility for funding opportunities.



Photo 1: Roadway Section (taken from Google Streetview)



Photo 2: Culvert Inlet



Photo 3: Culvert Inlet Interior



Photo 4: Culvert Outlet



Photo 5: Culvert Outlet Interior



Photo 6: Voids in Culvert Walls (GoPro stillframe image)



Photo 7: Exposed Rebar in Concrete Slab supporting roadway (GoPro stillframe image)



Photo 8: Branches and Debris at Culvert Bend (ROV stillframe image)



Photo 9: Downstream Retaining Wall supporting Main Street



Photo 10: Dislodged Stones and Voids in Retaining Wall

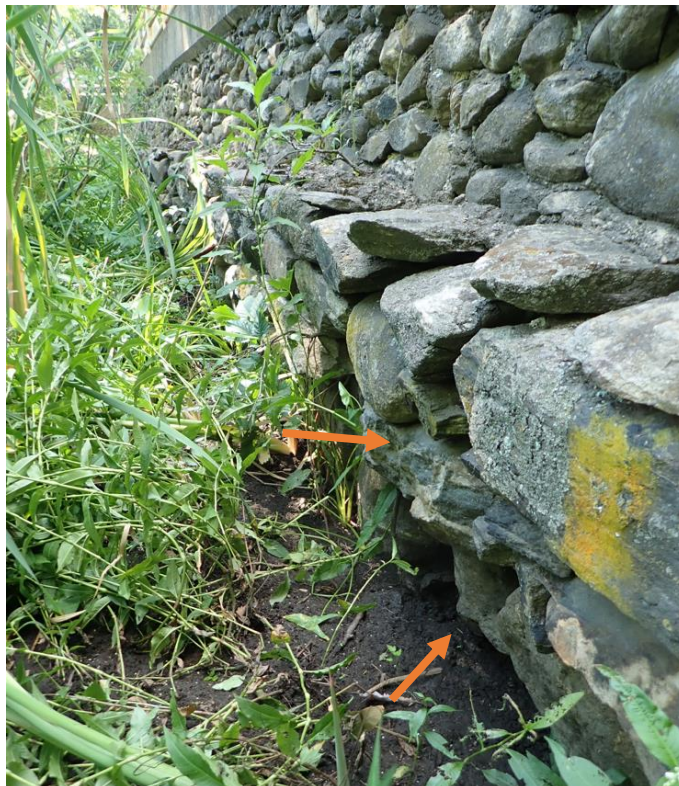


Photo 11: Heaving and Undermining of Retaining Wall



Photo 12: Undermining at Drainage Outfall



Photo 13: Guardrail Post with 100% Section Loss

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