



April 23, 2024

Kevin Tollisen, Town Supervisor  
Town of Halfmoon  
2 Halfmoon Town Hall Plaza  
Halfmoon, NY 12065

Re: Lower Newtown Road Culvert Replacement  
**MJ Proposal No. 2024190 for Engineering Services**

Dear Supervisor Tollisen:

**M.J. Engineering and Land Surveying, P.C. (MJ)** is pleased to provide the Town of Halfmoon (Town) with this proposal for professional services associated with the culvert failure on Lower Newtown Road at the Old Champlain Canal crossing. MJ's project understanding and associated Scope of Services are included below.

### **PROJECT UNDERSTANDING**

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On April 9, 2024, the Town was made aware of a sinkhole that had developed on Lower Newtown Road at the Old Champlain Canal crossing. Upon inspection, the Town was able to determine that the existing 18" corrugated metal pipe (CMP) beneath Lower Newtown Road had collapsed, creating a +/- 12" diameter hole in the asphalt surface. The Town temporarily closed the roadway to traffic, placed fill and cold patch in the hole, and opened Lower Newtown Road back up to traffic the same day. The Town is continuing to monitor the condition of the temporary fill. The Town contacted MJ on April 10, 2024, to request a field visit to evaluate the failure and develop potential solutions. While the cause of the culvert failure has not been determined, replacement of the culvert is necessary to maintain the integrity of the road and limit any disruptions in traffic flow.

Based on our April 10<sup>th</sup> site visit, MJ understands the following conditions:

- The Old Champlain Canal does not convey water; the water generally maintains a similar elevation year-round and appears to be stagnant on the north and south sides of the culvert. Following the site visit, MJ evaluated the purpose of the culvert at the request of the Town. While the canal water generally appears stagnant, McDonald Creek is hydraulically connected to the canal based on NYSDEC mapping, both north and south of Lower Newtown Road.
- The Old Champlain Canal is a historically significant feature. Coordination with NYS Office of Parks, Recreation and Historic Preservation (OPRHP) is required to determine if approvals or project review is required for the culvert replacement.
- The canal, and lands adjacent to the canal in the vicinity of the culvert, may be considered regulated wetlands. Coordination with NYS Department of Environmental Conservation (NYSDEC) and the US Army Corps of Engineers (USACE) is required to understand permitting requirements and need for delineation of wetlands.
- The fill and cold patch placed by the Town is expected to settle and may require regular maintenance until the culvert is replaced.





- The Town prefers to perform pipe replacement work outside of the school year to avoid school-related traffic impacts.
- The Town is requesting Professional Services to evaluate the existing conditions and prepare design documents to replace the culvert.

## **SCOPE OF SERVICES**

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### **Task 01: Site Evaluation & Existing Conditions**

1. Utilize the topographic and right-of-way mapping that was prepared by MJ in 2021 for the Lower Newtown Road Water Main Extension project.
2. Conduct a site inspection to obtain additional data, including approximate depth of pipe and approximate depth submerged. During the site inspection, the mapping will be field edited to capture any changes since the mapping was prepared.
3. Obtain survey information for the elevation of the top of the culvert pipe and the invert. Incorporate the culvert information into the base mapping.
4. Identify the as-built elevation of the existing 12" water main installed as part of the Lower Newtown Road Water Main Extension project through a review of record drawings, boring logs, and other field information obtained during construction.

### **Task 02: Construction Documents**

1. Prepare construction documents, including drawings and technical specifications, for the culvert replacement. The intent is to replace the culvert with an 18" smooth interior corrugated plastic pipe (SICPP). The elevation of the pipe will be coordinated with the elevation of the 12" water main below the eastbound travel lane. In addition to the culvert replacement, a guide rail design will be performed to ensure the existing guide rail is reset in the correct location during restoration of Lower Newtown Road.
2. Prepare and submit 100% construction documents to the Town for review and comment. The 100% documents will also be submitted to the involved regulatory agencies for their review and comment. The anticipated plan set will include:
  - o Title Sheet;
  - o General Notes, Legend and Index;
  - o Existing Conditions & Removals Plan;
  - o Roadway Typical Section;
  - o Erosion and Sediment Control Plan, including waterway diversion / dewatering as needed to access the pipe
  - o Work Zone Traffic Control Plan (full closure of Lower Newtown Road is assumed)
  - o General Construction Plan
  - o Miscellaneous Construction Details



3. Prepare an opinion of probable construction costs to ensure conformance with the project budget. The estimate will be based on recent NYSDOT item unit prices for the Region 1 area and will provide the Town with an estimated cost should the decision be made to bid out the work.
4. Finalize 100% construction documents, inclusive of any comments provided by the Town and regulatory agencies.
5. Provide final documents, stamped and signed by a NYS-licensed professional engineer, to the Town for their use.

**Task 03: Regulatory Permits and Approvals**

MJ will evaluate permit needs and obtain the required permits. The following permits and approvals are assumed to be required:

1. Approval from the OPRHP to excavate within the limits of the Old Champlain Canal: MJ provided an initial summary of the issue and intended scope of work to OPRHP on April 19<sup>th</sup>. At the request of OPRHP, MJ submitted a brief project description for review through the Cultural Resource Information System (CRIS) on April 22, 2024. MJ will coordinate with OPRHP as needed to incorporate their requirements into the contract documents and secure approval for the work.
2. Wetland disturbance permit from the NYSDEC: The canal is mapped as a state-regulated wetland. MJ provided an initial summary of the issue and intended scope of work to NYSDEC on April 19<sup>th</sup>. The Regional Permit Administrator stated that the work will be permitted with an Emergency Approval (EA) when the Town (or contractor) is prepared to mobilize. MJ will continue to provide updates to NYSDEC as needed and will request the EA when appropriate. The EA will be valid for 60 days from the date of issuance.
3. Wetland and waterbody disturbance permit from the USACE: The canal is under the jurisdiction of the USACE. MJ provided an initial summary of the issue and intended scope of work to USACE on April 22<sup>nd</sup>. MJ will continue to coordinate with the USACE, submit a Joint Application, and provide the follow-up correspondence required to respond to questions.

**SCHEDULE**

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MJ is prepared to initiate the work identified in this proposal within 2 weeks of Notice to Proceed. MJ will perform the outlined tasks as follows:

- Task 01:** Site Evaluation & Existing Conditions .....2 weeks after Notice to Proceed
- Task 02:** Construction Documents .....6 weeks after Notice to Proceed
- Task 03:** Regulatory Permits and Approvals ..... Throughout Project Duration

The Task 03 schedule is dependent on the timeframe for agency review. As of the time of this proposal, the timeframe for USACE project review has not yet been determined.



**FEE**

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MJ proposes to complete the above-listed services for the following lump sum fees.

<b>Task 01:</b> Site Evaluation & Existing Conditions .....	\$ 2,000
<b>Task 02:</b> Construction Documents .....	\$ 8,000
<b>Task 03:</b> Regulatory Permits and Approvals .....	\$ 4,500
<b>Total Estimated Fee: \$14,500</b>	

MJ will invoice the Town on a monthly basis based upon a percentage of work completed in that period. The fee assumes there are no significant changes resulting from decisions, conditions and/or events beyond MJ's control.

**ASSUMPTIONS**

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The following assumptions were made in the development of this proposal:

1. The proposed improvements outlined in the construction documents will be performed by the Town Highway Department.
2. NYSDOT Standard Specifications and associated item numbers will be used.
3. Preparation of a public bid package in accordance with DOT requirements is not required.

**TASKS NOT INCLUDED IN THIS PROPOSAL**

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The following efforts are excluded from this scope of services:

1. Design of site structures (i.e., new retaining walls).
2. Relocation of non-municipal and municipal utilities.
3. Geotechnical investigation.
4. Wetland delineation.
5. Hydraulic analysis of the canal.
6. Watershed analysis of lands surrounding the canal.
7. Hazardous material investigations or remedial actions necessary during construction.
8. Cultural / archeological investigations.
9. State Environmental Quality Review (SEQRA) support.



10. Threatened / endangered species investigations.
11. Preparation of a project manual for public bidding.
12. Bid phase services.
13. Construction phase services.
14. Third party special inspections and/or certifications.

## **SUMMARY**

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Thank you for the opportunity to provide a proposal for this project. If the above scope of work is acceptable, please provide written authorization. We look forward to the opportunity to work with the Town on this project. Please do not hesitate to contact Lisa Wallin at 518-371-0799 or via email at [lwallin@mjteam.com](mailto:lwallin@mjteam.com) if you have questions or require additional information.

Sincerely,

  
Michael D. Panichelli, P.E.  
President

Cc: C. Dooley  
File



**AUTHORIZATION TO PROCEED**

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I hereby authorize M.J. Engineering and Land Surveying P.C. to proceed with the scope of services as described in this proposal.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

DRAFT