

SENT VIA EMAIL ONLY



August 6, 2026

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

Re: Ushers Road Water Main Extension
MJ Project No. 964.146
Supplemental Proposal for Engineering Services

Dear Supervisor Tollisen:

MJ Engineering, Architecture, Landscape Architecture, and Land Surveying, P.C. (MJ) is pleased to provide the Town of Halfmoon (Town) this proposal for supplemental professional services associated with the Ushers Road Water Main Extension Project (Project). MJ's project understanding and associated Scope of Services are included below.

PROJECT UNDERSTANDING

Based upon previous discussions and site visits with the Town, MJ understands the following:

- The Town is proposing to install approximately 11,000 linear feet of 12-inch HDPE water main, hydrants, valves, and water services on Ushers Road from the western end of Tabor Road to Cary Road.
- The proposed water main routing will cross railroad tracks in two locations owned and operated by Canadian Pacific Kansas City Railway (CPKC). Representatives from Genesee & Wyoming Railroad Service, Inc (GWRS), the current operator of Pan Am Southern Railway LLC, have verified that the railway is owned by CPKC and work within the railway is permitted through CPKC, not GWRS.
- The two railroad crossings are at Tabor Road (Milepost 0471.84) and Ushers Road (Milepost 0470.41).
- The railroad authorities stipulate the allowable angle of utility crossings (i.e. new water main) underneath the racks and the required permits for installation.

Tabor Road Railroad Crossing (Milepost 0471.84):

- The proposed water main must be installed within the Town of Halfmoon municipal boundary. The Town of Clifton Park border is adjacent to the Tabor Road railroad crossing.
- To achieve a crossing within the allowable angle range and stay within the Town of Halfmoon, the alignment must be on the north side of Tabor Road. The proposed water main alignment is proposed beyond the northern highway right-of-way and into adjacent private properties.
- To accommodate the proposed water main alignment, private easements (permanent utility and temporary construction easements) are required for the following properties:



21 Corporate Drive
Clifton Park, NY 12065



518.371.0799
mj@mjteam.com
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Fishkill, NY
Levittown, NY
Picatinny, NJ
Melbourne, FL



- 260.-1-37 Gregoire, Kenneth A
- 260.9-1-4 Stiles, Michael E
- 260.9-1-5 Amoroso, Guy

Ushers Road Railroad Crossing (Milepost 0470.41):

- There are wetlands on both sides of Ushers Road. To meet the angle of crossing and minimize dewatering work in the wetlands, the water main alignment is proposed beyond the southern highway boundary into adjacent private properties.
- To accommodate the proposed water main alignment, private easements (permanent utility and temporary construction easements) are required for the following properties:
 - 260.-2-76.1 Floud, James W

CPKC Permitting and Geotechnical Protocol Requirements:

- MJ held a conference call on June 26, 2026, with the CPKC's Permit administrator Jones Lang Lasalle, Inc. (JLL) to discuss the requirements for obtaining a Utility Occupancy License for each railway crossing. JLL confirmed that a utility rail crossing, 12-inches in diameter and greater, requires an **"Intermediate" level permit review process**, subject to CPKC Geotechnical Protocol. This protocol is required to ensure the utility crossing does not cause rail settlement.
- CPKC Geotechnical Protocol for Crossing Construction on under Railway Tracks (CPKC Geotechnical Protocol) requires additional geotechnical design requirements and the applicant (Town) must designate a Geotechnical Engineer of Record (GER) to provide services during the design and construction phases of the project as follows:
 - Design Phase:
 - The GER must submit a Geotechnical Report for the project with a summary of subsurface exploration findings and a railway settlement monitoring plan.
 - The GER must be contracted by the applicant (Town) to ensure the utility crossing complies with CPKC Geotechnical Protocol.
 - Terracon Consultants-NY, Inc. is proposed as the GER.
 - Construction Phase:
 - On-site observation by the GER is required to document the field conditions and review settlement monitoring field measurements.
 - GER services during the construction phase will be incorporated into the bid documents to be paid under the general construction contract.
- CPKC Geotechnical Protocol also requires a third-party independent geotechnical review during the design (review of Geotechnical Report) and construction phase (review geotechnical related submissions and settlement monitoring data). The third-party review



consultant must be contracted by the applicant (Town) to provide services from project start-up to project closeout. GEI Consultants, Inc. is proposed as the third-party reviewer.

Based upon the above understanding, MJ offers the following Scope of Services for your consideration.

SCOPE OF SERVICES

Task 01: Easement Mapping Preparation

MJ will provide survey and mapping services required to prepare four (4) temporary and four (4) permanent easement acquisition maps in support of proposed water main construction, over the following privately owned parcels of land:

- Lands N/F Gregoire - TMP 260.0-1-37 (1 TE & 1 PE Map)
- Lands N/f Floud - TMP 260.0-2-76.1 (1 TE & 1 PE Map)
- Lands N/F Stiles - TMP 260.9-1-4 (1 TE & 1 PE Map)
- Lands N/F Amoroso - TMP 260.9-1-5 (1 TE & 1 PE Map)

The associated scope of services is as follows:

1. Perform record research at appropriate agencies to obtain current deeds of record and maps for the subject parcels, highways, and adjoining properties.
2. Perform field reconnaissance and survey to locate existing evidence of occupation and monumentation along boundary lines.
3. Perform office computations and analysis to reconcile record boundary information with the physical evidence located, resulting in a boundary line determination.
4. Prepare maps and descriptions suitable for use in developing the easements and filing with the Town of Halfmoon and Saratoga County.

Task 02: Supplemental Topographic Survey & Mapping

MJ will provide supplemental topographic survey and mapping services for the water main design at the two (2) railroad crossing locations within the project boundary. The total area of supplemental survey is approximately 1.2 acres as shown in Figures 1 and 2. Data will be merged into existing base mapping.

Task 03: Supplemental Geotechnical Investigation

MJ, through our subconsultant, Terracon, will complete supplemental subsurface exploration and geotechnical investigation services at each proposed rail crossing jack and bore pit, to address CPKC Geotechnical Protocol requirements. Geotechnical investigation locations are shown on Figures 3 (milepost 0470.41) and Figure 4 (milepost 0471.84). The scope of services includes:

1. Obtain a total of four (4) soil test borings, each to a depth of thirty (30) feet, to assess the soil properties, groundwater conditions, and presence of rock. Soil borings will be advanced



using standard rotary drill rig using continuous flight augers, wash boring techniques, or a combination of each as appropriate for the conditions encountered.

2. Split spoon samples and Standard Penetration Testing will be performed continuously through the upper 12 feet of each boring and at standard intervals thereafter. Sampling will be conducted in accordance with ASTM D 1586 "Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils".
3. If bedrock or refusal-to-drilling conditions are encountered, rock coring may be performed using a NQ/NX rock core barrel, at the discretion of the GER. Where rock coring is performed, up to 10 feet of rock coring will be targeted.
4. Field boring logs will be completed as part of standard drilling operations, including sampling depths, penetration lengths, water level measurements and other relevant sampling information as applicable.
5. Recovery of soil samples from the boring locations will be obtained and taken to a soil laboratory for testing and visually classified the GER. Laboratory testing will be conducted to verify the engineering properties of soil (and rock) strata. Laboratory testing will include water content, grain size distribution, Atterberg limits, and unconfined compressive strength (rock samples).
6. Preparation of a field report, specific to the railroad crossings, will be prepared to summarize: Subsurface exploration procedures and conditions, soil stratification based on visual soil (and rock) classification, groundwater levels observed during and after the completion of drilling and results of laboratory testing.

Task 04: Geotechnical Engineer of Record Services

MJ, through our subconsultant, Terracon, will provide the Geotechnical Engineer of Record (GER) services per the CPKC Geotechnical Protocol for Crossing Construction under Railway Tracks. The information obtained in Task 03 will be used to prepare a project specific Geotechnical Engineering Report for the 12-inch watermain crossings at CPKC rail mileposts 0470.41 and 0471.84. The Geotechnical Engineering Report will include the following, for each location:

1. Geotechnical recommendations to assist in planning for the boring/receiving pit excavations and carrier pipe installations.
2. Temporary excavation support considerations.
3. Settlement monitoring plan and list of required observations during construction.
4. Applicable geotechnical drawings including plan, profile, and section views for the pipe sections.

The draft Geotechnical Engineering Report will be issued for review by a CPKC-approved third-party independent consultant (See Task 05). Based on review comments, the final Geotechnical Engineering Report will be issued. Up to two (2) virtual meetings will be held with the third-party review consultant and the selected contractor to review findings and discuss recommendations.



Task 05: Geotechnical Third-Party Review Services

MJ, through our subconsultant, GEI Consultants, Inc. (GEI), will provide the required third-party independent engineering peer review of GER-prepared documents (Task 04), per the CPKC Geotechnical Protocol for the two railway crossings.

A. Design Phase Services

This work will include:

1. An independent review of the Geotechnical Report along with the design plan and sections at each crossing.
2. An independent review of the surface and subsurface settlement calculations for each crossing.
3. An independent review of the track movement monitoring plan.
4. A cursory review of technical specifications pertaining to the railway crossings.
5. A cursory review of the proposed launching and receiving shafts, and if deemed necessary, a detailed review of the pertinent temporary support design calculations for the potential impact of the shaft construction on CPKC rail.
6. Limited independent calculations (such as estimated ground and track settlement magnitude), if necessary, to verify the geotechnical evaluation on result and recommendations by the project GER.
7. Preparation of a written report summarizing our findings and pertinent recommendations.
8. Participation in two (2) conference calls to clarify any issues or questions that may arise during our review work and to discuss findings.

B. Construction Phase Services

This work will include:

1. Review of Contractor's geotechnical submittals pertaining to the crossings.
2. Review of Contractor's pertinent shop drawings.
3. Review of Contractor's means and construction methods (i.e., work plan).
4. Review of Contractor's proposal for remedial or stabilizing works in case of failure or occurrence of excessive ground or track movements (i.e., recovery plan).
5. Review of geotechnical instrumentation and settlement monitoring readings.



Task 06: Supplemental Permit and Application Fees

MJ will submit the required fees to CPKC to obtain a Utility License Agreement for the two railway crossings, via the JIL application portal.

1. Based on the June 26, 2026, conference call, a \$3,000 review fee will be required to cover each CPKC Utility Crossing. A permit review fee of \$3,000 was included in the original proposal. Therefore, an additional \$3,000 permit fee is required.
2. Following review, a fee of \$9,375 per crossing will be required to issue the CPKC Utility Occupancy License (\$18,750 total).
3. Right of Entry License Fees (\$1,500) per crossing.

ASSUMPTIONS

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

1. Existing electric, gas, and telephone conduits and structures will be shown on the mapping based on record information.
2. NYS Prevailing Wage Rates apply for survey and geotechnical investigation services.
3. Payment of any fees, including applications, permits and other reviewing authority and municipal fees will be paid for by the Town.
4. No warranty, or guarantee, is expressed, or implied concerning the granting of permits or approvals required for this project, or timelines for review and action, by regulatory agencies.
5. Traffic control measures (signage or flaggers) required for the soil borings will be provided by Town. It is anticipated this will be required at boring location B1, shown on Figure 3.
6. Property access to collect soil borings will be coordinated by Town. It is anticipated this will be required at boring B2 (Figure 3), B3 (Figure 4), and B4 (Figure 4). It is anticipated that access will be required prior to obtaining easement agreements with these property owners.
7. During geotechnical field work, water will be used as a drilling fluid for rock coring, and the spent water will be discharged on site. It is assumed water suitable for drilling operations is available from the Town water system within 5 miles of the site.
8. The Utility Entry Agreement will apply to jack and bore installation of the watermain, within the CPKC right-of-way, and does not apply to any repair work required on the surface, within the CPKC right-of-way. No surface work within the CPKC right of way is anticipated at this time.
9. The JIL application portal notes that installation within 150 feet of a railroad bridge, culvert or switch may require variance approval. The crossing at milepost 0470.41 is less 25-feet from a 12-inch storm sewer that crosses the railway. Need for an additional waiver and fee will be determined during the railroad permit review process by the reviewing agency.



TASKS NOT INCLUDED IN THIS PROPOSAL

The following efforts are excluded from this scope of services:

1. Assessment of underground (buried) utilities
2. Construction-related survey services
3. Setting of boundary monumentation
4. Third-party geotechnical review fees for site observation and meeting attendance, beyond what is described above.
5. Review and permit fees, beyond what is described above.
6. GER services during the construction phase.
7. Daily construction observation (\$1,200/day) and railway flagging (\$1,500/day) fees during the installation of the water main in the CPKC right of way. CPKC inspection and flagging requirements during the construction phase will be incorporated into the bid documents.

SCHEDULE

Upon notice to proceed, MJ will perform the defined scope of work in coordination with the current project schedule.

FEE

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

Description	Billing Type	Fee
Task 01 – Easement Mapping Preparation (total of 4)	Lump Sum	\$8,600
Task 02 – Supplemental Topographic Survey & Mapping	Lump Sum	\$6,500
Task 03 – Supplemental Geotechnical Investigation	Not-to-Exceed (NTE)	\$26,150
Task 04 – Geotechnical Engineer of Record - Design	NTE	\$26,000
Task 05A – Geotechnical 3 rd Party Review - Design	NTE	\$10,000
Task 05B – Geotechnical 3 rd Party Review - Construction	NTE	\$12,000
Task 06 – Supplemental Permit and Application Fees	NTE	\$24,750
Total Fee		\$114,000

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



SUMMARY

Thank you for the opportunity to provide a proposal for this project. If the above scope of work is acceptable, please execute and return the Authorization to Proceed below in accordance with the Agreement between MJ and the Town. We look forward to the opportunity to continue to work with the Town on this project. Please do not hesitate to contact Carrie Dooley at 518-371-0799 or via email at carriedooley@mjteam.com if you have questions or require additional information.

Sincerely,

Michael D. Panichelli, P.E.
President

Cc:

Ca. Dooley
File

Attachments:

- Figure 1 & 2 - Proposed Easement Supplemental Survey Locations
(Drawings C-300 and C-302)
- Figure 3 - Anticipated Soil Boring Location CPKC Rail (Milepost 0470.41)
- Figure 4 - Anticipated Soil Boring Location CPKC Rail (Milepost 0471.48)

AUTHORIZATION TO PROCEED

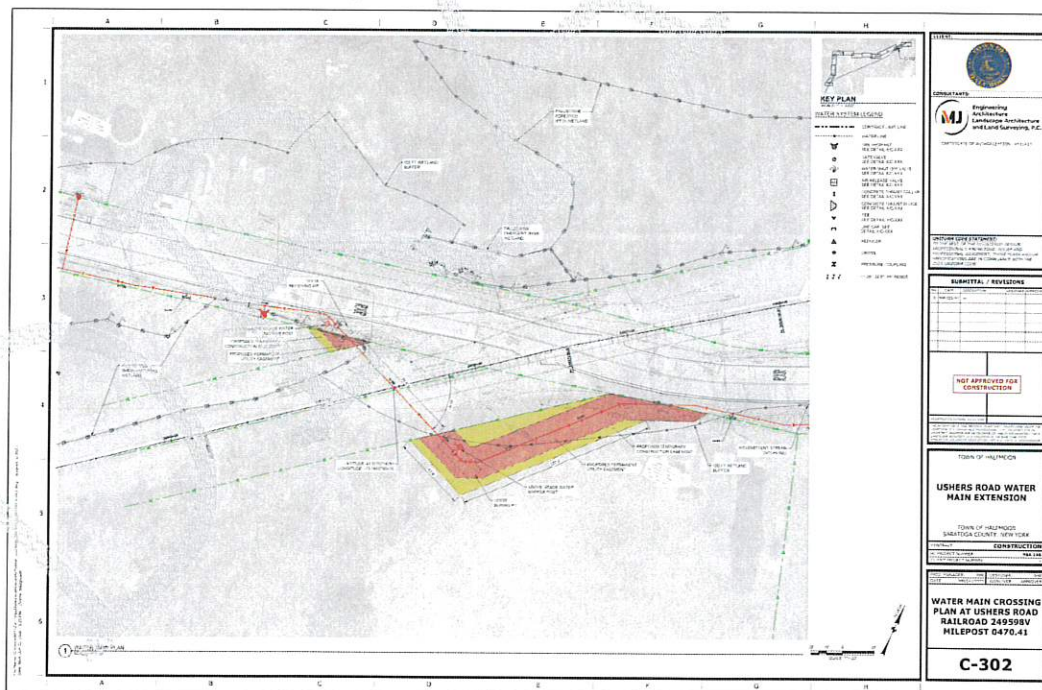
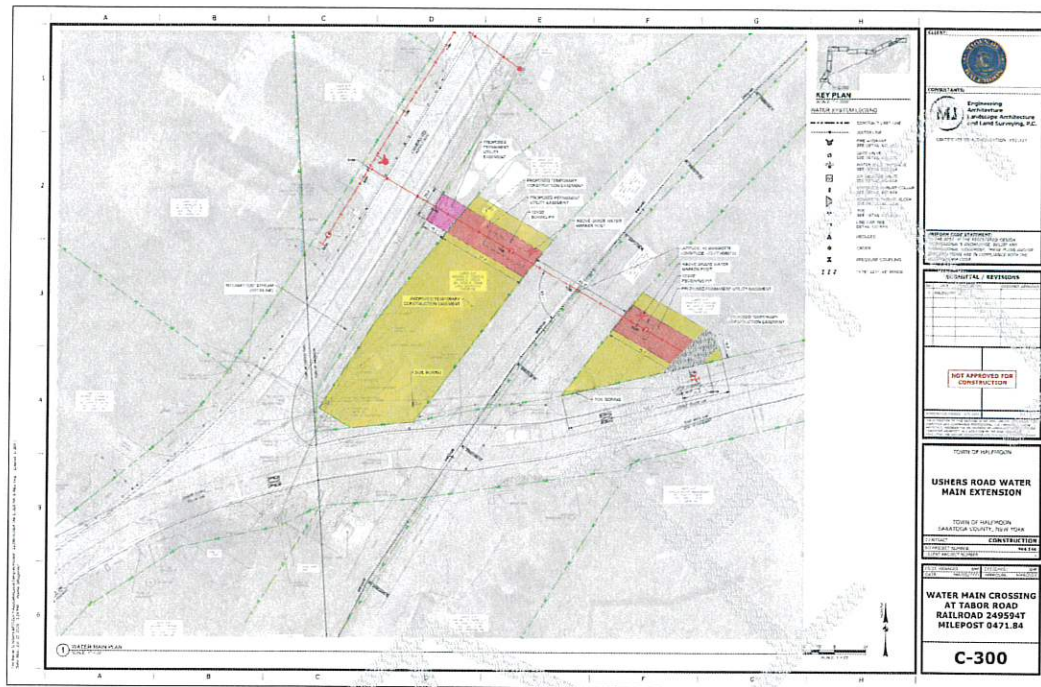
In accordance with the Agreement dated October 1, 2025, between MJ and the Town, I hereby authorize MJ Engineering, Architecture, Landscape Architecture, and Land Surveying, P.C. to proceed with the scope of services as described above.

Printed Name

Title

Signature

Date



FIGURES 1 & 2
SUPPLEMENTAL SURVEY AND PROPOSED EASEMENT LOCATIONS
(DRAWINGS C-300 AND C-302)



FIGURE 3
ANTICIPATED SOIL BORING LOCATION CPKC RAIL (MILEPOST 0470.41)



FIGURE 4
ANTICIPATED SOIL BORING LOCATION CPKC RAIL (MILEPOST 0471.48)