

T.G. MILLER, P.C.

ENGINEERS AND SURVEYORS

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November 12, 2020

David Sprout
Stormwater Management Officer
Town of Dryden
93 East Main Street
Dryden, New York 13053

Re: Maifly Development -5 Freese Road
SWPPP and Utility Review

Dear Mr. Sprout,

We have received an electronic copy of the project drawings sheet C-1.0 through C7.0 dated October 16, 2020 along with a copy of a conceptual SWPPP dated August 19, 2020 for the above referenced project. These documents were prepared by Marathon Engineering. I have completed a review of the documents for compliance with Town regulations and offer the following comments:

Stormwater Management:

1. Provide confirmation from NYSDOT to allow installation of storm and sanitary piping within ROW. Include storm pipe sizing and invert elevations on the plans. Review storm/water separation with the Highway department.
2. Clarify who will own and maintain the existing 24-inch storm pipe that crosses through the site? Will this pipe be replaced or is it intended to install a second parallel pipe? If the system is replaced, it is recommended to install a mid-distance structure for maintenance/inspection purposes. Coordinate drainage easements with Highway Superintendent and Town Attorney if necessary.
3. Clarify who will own and maintain the proposed storm pipe along Freese Road. If this pipe is to be dedicated to the Town, provide 15' wide drainage easement. No structures (retaining wall/fence) to be located within the easement. Coordinate with Highway Superintendent.
4. The time of concentration (TOC) for POA#2 appears to increase from existing to proposed conditions. Review and depict TOC flow paths for the existing and proposed watersheds within the watershed maps.
5. Review the 90th percentile rainfall depth for the project location and update the water quality volume (WQv) calculations as necessary. Depth is closer to 1.0-inch as specified in Figure 4.1 of the NYSDEC Design Manual.
6. Areas provided within the required WQv calculations do not correspond with the areas in the HydroCAD calculations. The SWPPP narrative/WQv calculations specify a total proposed impervious area of 1.8 acres, but the HydroCAD calculations specifies a total proposed impervious area of 2.2 acres for Areas 1-8. The total site area within the NOI/WQv calculations (4.3 acres) does not correspond with the total site area within HydroCAD (4.8 acres). Review areas and ensures calculations correspond with each other. Consider clarifying areas within watershed maps.

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LEED A.P., C.P.E.S.C.

Lee Dresser, L.S.
Darrin A. Brock, L.S.

7. Bioretention design worksheets should be prepared for each of the three bioretention filters with associated drainage areas. The design worksheets do not appear to correspond with the areas draining to the practices as defined within the HydroCAD calculations. Please clarify.
8. 25% pretreatment is required for the bioretention filter practices. Stone at curb cuts is sufficient, but piped inlets currently are not provided with any pretreatment. Consider installing a forebay for piped inlet to bioretention filter #2.
9. Coordinate with Town Attorney for O&M agreement and attach to the SWPPP. Recommend including the entire project (Townhomes and single-family lots) and all proposed permanent stormwater practices. Clarify what legal mechanism will be used for long term O&M for all practices with cross-lot drainage. How will O&M be controlled if individual lots are sold?
10. Provide letter from SHPO for project specific evaluation submitted through the CRIS website and include with SWPPP.
11. Provide reasonable access to all stormwater practices for maintenance purposes.
12. Provide drainage easements for storm pipe crossing Lot 10. Consider providing drainage easement on lot 8 to allow adequate room to maintain storm pipe on steep slopes.

NOI:

1. Fill out #8, #40 and provide signatures for the SWPPP preparer certification and Owner/Operator certification.
2. #29 – Verify total contributing impervious area for bioretention filter practices.

Sanitary Sewer:

1. Label sanitary force main on plans and show parallel gravity and force main lines for graphical purposes.
2. Provide profile of new sanitary sewer to be dedicated to the Town. Clarify on the plans private vs. dedicate sewer main.
3. Review forcemain elevation with respect to new gravity main. Will adequate separation to be maintained horizontally and vertically to maintain either system? Recommend providing a cross section detail showing location of all utilities and proposed/existing grades near Lot 15.
4. Show utility easements on plans and overlay with landscaping and site utilities. Any landscaping and hardscape to be replaced by owner.
5. For the Reality Subdivision portion of the project (The Cottages), individual sewer connections from each lot are required to connect to a public main. Review private ownership option as shown on the plans with NYSDOH/NYSDEC.
6. Municipal sanitary sewer extension to be reviewed by NYSDEC.
7. No brick to be used within municipal Sanitary Sewer manholes. Provide precast concrete grade adjustment rings and invert to be poured concrete.
8. Add note to rework existing sanitary manhole and pour new invert and at the new along Freese Road.
9. Include Town sewer specifications on plans. See attached. Revise details accordingly.

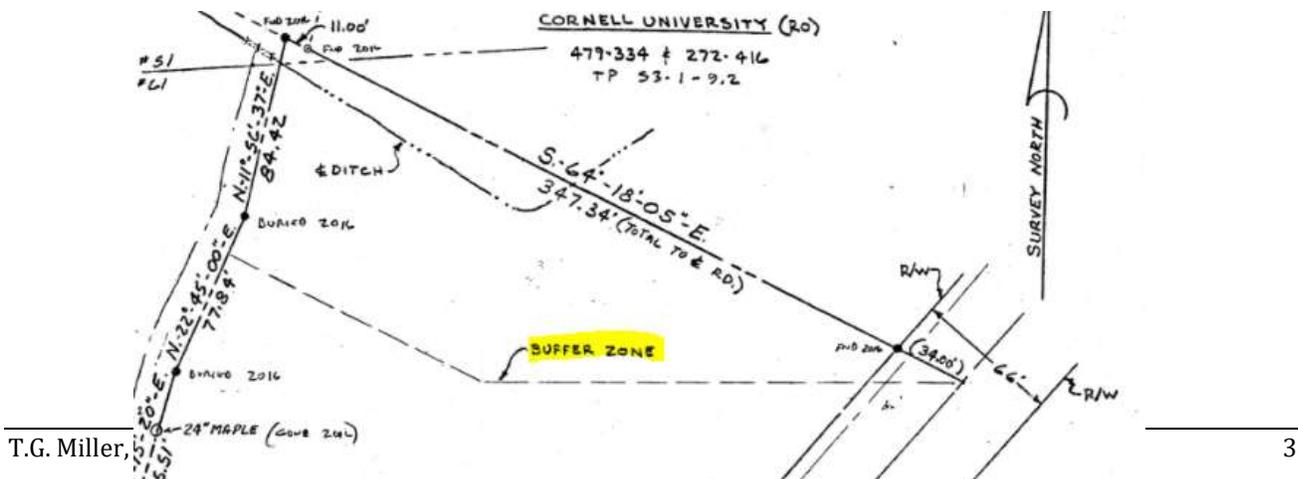
Watermain:

1. Provide profile of new watermains to be dedicated to the Town. Clarify on the plans private vs. dedicate watermain.
2. All public watermain to be 8" DIP w/ poly wrap.

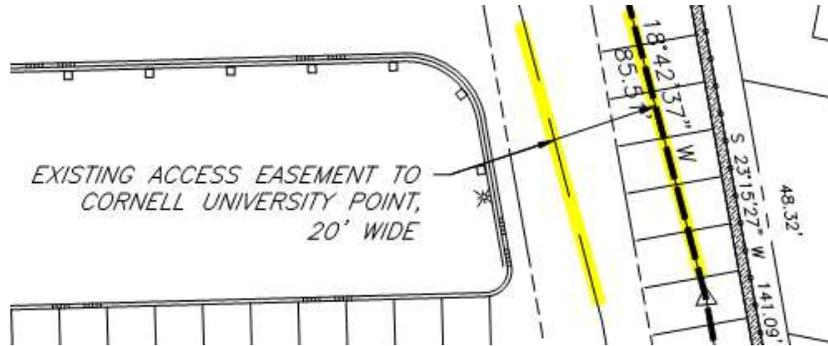
3. Provide 3-way valve with cut-in-tee and solid sleeve repair coupling at both connections to the public main on Freese Road and Dryden Road.
4. Show utility easements on plans and overlay with landscaping and site utilities. Any landscaping and hardscape to be replaced by owner.
5. Recommend installing a casing pipe under retaining wall near the Community Building for maintenances purposes.
6. Review horizontal thrust restraint at the new tee on Freese road with respect to the existing 30" storm.
7. For the Reality Subdivision portion of the project (The Cottages), individual water connections from each lot are required to connect to a public main. Clarify private ownership option as outlined with NYSDOH. If dead end mains are to be dedicated to the Town, provide hydrants for flushing purposes.
8. Municipal watermain extension to be reviewed by NYSDOH.
9. Revise note on C2.0 to show watermain easement to Town of Dryden, not Bolton Point.
10. Provide rubber end seals for watermain casing pipe. Void space within casing to be left empty.
11. Include Town Water specifications on plans. See attached. Revise details accordingly. Sand bedding will not be allowed.
12. Provide Bolton Point as-built requirements on the plans. See attached.

Drawings:

1. Will an easement be required for the parking area spanning the property line along the west side of The Cottages?
2. Recommend reserving water, sanitary and walk easement along Dryden Road for the entire frontage.
3. Install thickened concrete walk through drive entrance on Dryden Rd.
4. Review potential to gravity drain sanitary sewer for lots along Dryden Road. See record plans attached.
5. All signs to be relocated within Town ROW to be replaced with breakaway sign post base.
6. Provide Town with a copy of all NYS DOT permits upon approval.
7. Refer to Town Highway standards for concrete gutter detail (Figure 3). See attached.
8. Clarify who will own/replace and who will maintain the sidewalks along Dryden Road and Freese Road. Should the sidewalk easement be dedication to DOT and not the Town along Dryden Road?
9. Are there any existing landscape buffer easements with Cornell at the northeast corner of the property that need to be maintained? See image below.



10. Recommend reviewing the location of existing access easement with Cornell for the location with the proposed drive. Is parking permitted within the easement or should the easement be adjusted to align with the new drive?



11. Are there any existing gas easement along the west side Dryden Road? If so, show location on the plans.

If you have any questions please feel free to call.

Sincerely,

Donald Harner

Donald M. Harner, P. E., C.P.E.S.C
Project Manager

Attachments :

- Town Highway Specifications
- Water specifications
- Sewer Specifications
- Bolton Point As-built Requirements
- Record sanitary sewer maps

Cc (via E-Mail):

- R. Burger, Town Planner
- R. Young, Highway Superintendent