March 15, 2023

Mr. Doug Finch, Town Manager
Town of Canandaigua
5440 Routes 5 & 20 West
Canandaigua, New York 14424

RE: NELSON RESIDENCE – 0000 MIDDLE CHESHIRE ROAD
SITE PLAN REVIEW
TAX MAP NO. 97.00-1-58.200
CPN NO. 22-093
MRB PROJECT NO.: 0300.12001.000 PHASE 313

Dear Mr. Finch:

MRB has completed a review of the submitted Site Plan regarding the above referenced project, dated November 18, 2022, last revised March 9, 2023, prepared by Marks Engineering. We offer the following comments for the Planning Board's consideration. A brief written response to each comment should be provided by the design engineer.

1. The onsite stream should include the regulation number (898-222) and standard (C) in the label.
2. Additional dimensions should be shown for the driveway emergency vehicle pull off, such as length excluding the taper, and width.
3. Erosion control note #8 currently states that a SWPPP will be required if the project disturbs more than 1 acre of land. Please update erosion control note #8 to state "…disturb 1 or more acres of land…"
4. The site plan sheet included in the NWP packet do not appear to show the impacts of the proposed infiltration trench through the wetlands. The trench limits should be revised or provide proof of the trench being accounted for in the permitted wetland impacts.
5. The proposed retaining wall does not appear to be high enough on the upstream side as the culvert invert is 912', with a 5' diameter, resulting in a top of culvert of 917', whereas the top of wall is 916.5' at that location. Also, the proposed contours and spot elevation for the roadway do not show sufficient cover (at least 1') over top of the culvert on the upstream side. Lastly, the stream cross section detail from the NWP site plan exhibit is to be added to the Canandaigua PB site plan set.
6. The infiltration trench detail only refers to performing soil exploration. Has infiltration testing been performed? If so, please provide the results. If not,

infiltration testing will need to be performed and demonstrate a satisfactory infiltration rate per NYSDEC requirements. Also, please indicate the height of the underdrain above the bottom of the trench. The geotextile should fully encompass the stone drainage layer. Care should be taken to minimize compaction to the existing soils. A sand or fine gravel filter layer should also be provided, as well as monitoring wells. Please revise the detail to show these features.

7. The construction sequence should be revised to provide more detail regarding the stream construction portion of the project. Does the mapped stream have any baseflow that would require diverting or pumping? This should be reflected in the sequence and on the plans. Also, the plans should include a suitable dewatering detail.
8. The construction sequence should include delineating the limits of disturbance, and should also indicate that the infiltration trench shall not be excavated and installed until after all contributing drainage areas have achieved final stabilization.
9. In the culvert sizing calculations, the overflow is set at 617.50', whereas the proposed driveway is as low as 615' directly west of the proposed culvert. The spillway elevation should be lowered to match the lowest effective point along the roadway. Consider raising the driveway to at least 616'. Also, please show contour information (such as from a GIS source) on the drainage catchment map. Also, while agricultural uses are generally required to be modeled as meadow conditions when determining water quantity requirements for development; when evaluating culverts, it is generally more appropriate to model agricultural uses as agricultural uses as "meadow" conditions may underestimate the runoff generated. The time of concentration surface conditions may also need to be revised similarly.
10. The following comments pertain to the WQv design calculations:
    a. The surface area and volume indicated in the HydroCAD modeling does not match the surface area and volume indicated in the infiltration trench sizing worksheet. Please resolve these discrepancies.
    b. If feasible, the underdrain should be raised such that no flow occurs through the underdrain outlet during the 1-year, 24-hour storm event.

If you have any questions, comments or concerns regarding any of the above comments please contact me.

Sincerely,

Lance S. Brabant, CPESC
Director of Planning & Environmental Services