



Department of Health

ANDREW M. CUOMO
Governor

HOWARD A. ZUCKER, M.D., J.D.
Commissioner

SALLY DRESLIN, M.S., R.N.
Executive Deputy Commissioner

May 5, 2016

Marathon Engineering
39 Cascade Drive
Rochester, NY 14614

RE: **PRIVATE SEWAGE**
Brewer Residence, 4727 West Lake Road
(REVIEW – Proposed OWWTS)
Canandaigua (T) - Ontario County

Attn: Peter Gorman

Gentlemen:

I have completed an initial review of the first plan submittal for the above-referenced project received on March 7, 2016. The following issues must be addressed before further review and approval can be considered:

1. Please clarify why a septic tank is proposed ahead of the Enhanced Treatment Unit (ETU). Also clarify the size. The Standard Design Table specifies a 1,500-gallon tank while the notes specify a 500-gallon "solids separator" tank.
2. Please verify if the CLW inspector had any comments or concerns regarding your current design.
3. Your plan did not specify all separation distances that cannot be met:
 - a. 20' separation between the absorption field and the dwelling – only 10' provided.
 - b. 20' separation between the absorption field and the drainage ditch – only 10' provided.

These non-complying separation distances in addition to depth to the 10-year flood elevation, the reduced tapers for a raised fill, reduction in trench length and basal area are too many waiver requests. Please consider reducing the number of bedrooms and/or the size of the dwelling to permit more space for the absorption area.

4. Non-wastewater flows (i.e., sumps, roof drains, etc.) should not be added to the system. A note should be added to the drawings.
5. Surface water should be diverted away from the absorption area with a diversion ditch or swale, as necessary. The swale shown on the drawing is only 3' upgradient of the toe of the slope of the taper. Please provide a detail of the swale.
6. The house sewer must be properly vented with a clean-out. Additional clean-outs may be needed since two more bends are shown prior to the septic tank. Please revise the drawing.
7. The system is not sized to handle the flow from a spa tub. This should be noted on the drawing.
8. Specifications on the proposed ETU were not provided with the submission. NSF Standard 40 Class 1 unit must be specified. Proof of a service contract must be provided. The ETU must be installed/maintained in accordance with the manufacturer's specifications. A visual and/or audible alarm located in a conspicuous place in the house must also be provided, separate from the pump station alarm. This should all be noted on the drawings with the detail of the proposed ETU unit.

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9. Please provide the calculations for your pump station dosing. The dose should be 75-85% of the volume of the leach lines. If the force main will drain back, this volume must be included in the dose volume. The "Pump Tank" detail on Drawing C2.0 shows the dosing volume to be both 100 gallons and 124 gallons. Please clarify. Dimensions of the pump tank must be provided to show 1-day storage above the alarm will be provided. Please add an inverted, screened vent to the pump tank. Please provide head calculations and a pump curve for the proposed effluent pump.
10. Please add a detail for the force main installation, showing frost protection, if applicable, sandy backfill, etc.
11. The trench length must be revised. You cannot take both the reduction in trench length and basal area following an ETU (i.e., No "Double Dipping"). I believe 375LF of conventional trench is required for a perc rate of 30 mpi.
12. Please clarify the separation between leach lines. The "Legend" shows "8' TYP." while the "Septic System Plan" shows "6' (TYP)" on Drawing C2.0.
13. Please specify the material to be placed in the trench around the pipe.
14. Please specify the perc rate for the fill to be used.

I have retained one set of the submitted plans for our files and am returning the other sets for revisions. I look forward to receipt of the required information and four sets of final drawings for review and approval. If you have any questions or would like to discuss the project further, please do not hesitate to call me.

Sincerely,

Sheryl C. Robbins, P.E.
Public Health Engineer 2

pc: Canandaigua Town Building Dept – Attn: CEO
CLW – Attn: Mr. Barden, Inspector



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