Subject: RE: [External] Re: [External] 33 Maplewood Road Septic Sketch

Date: Wednesday, November 26, 2025 at 2:20:53 PM Eastern Standard Time

From: Scott Freyburger
To: Andrew Sciarabba

CC: Craig Modisher, Justin Neu

Attachments: image002.png, image004.png, image005.jpg, image006.jpg

That seems like are reasonable design with the ETU. Thanks for checking.

Scott Freyburger, P.E., M. Eng. Public Health Engineer

Tompkins County Whole Health Division of Environmental Health 55 Brown Road Ithaca, New York 14850 607-274-6688

http://www.tompkinscountyny.gov/health



From: Andrew Sciarabba

Sent: Wednesday, November 26, 2025 11:29 AM

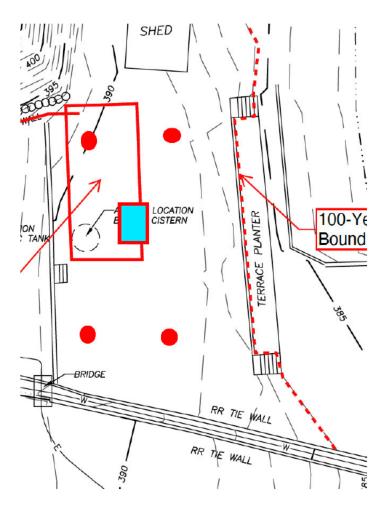
To: Scott Freyburger Cc: Craig Modisher

Subject: [External] Re: [External] 33 Maplewood Road Septic Sketch

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Sorry - I should have added them to the sketch. The DTH is the blue rectangle and the PT's are the red dots below.

Andy



Andrew J. Sciarabba, P.E. Owner/Principal Engineer

Sciarabba Engineering, PLLC

9664 Kingtown Road, Trumansburg, NY 14886

607-327-0578



From: Scott Freyburger

Date: Wednesday, November 26, 2025 at 10:42 AM

To: Andrew Sciarabba

Cc: Craig Modisher

Justin Neu

Subject: RE: [External] 33 Maplewood Road Septic Sketch

Andy,

Where were the DH and PTs taken? I am sorry if I missed this.

Scott Freyburger, P.E., M. Eng. Public Health Engineer

Tompkins County Whole Health Division of Environmental Health 55 Brown Road Ithaca, New York 14850 607-274-6688

http://www.tompkinscountyny.gov/health



From: Andrew Sciarabba

Sent: Monday, November 24, 2025 3:48 PM

To: Scott Freyburger

Cc: Craig Modisher ; Justin Neu

Subject: [External] 33 Maplewood Road Septic Sketch

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Scott,

Attached are the soils information and preliminary calculations for a replacement septic system at 33 Maplewood Road in the Town of Ulysses.

We would appreciate your review of the system to see if you approve of it in concept. We will certainly submit a formal application if we receive site plan approval from the Town but are seeking any preliminary comments you may have as we move through the Town approval process.

We meet with the Town on December 2nd for sketch plan so, if possible, we would appreciate a response ahead of the meeting.

Best for a great holiday!

Andy

Andrew J. Sciarabba, P.E.

Owner/Principal Engineer

Sciarabba Engineering, PLLC 9664 Kingtown Road, Trumansburg, NY 14886

607-327-0578



Project No. 25-22 33 Maplewood Road SOIL INVESTIGATION - DEEP TEST HOLES

DEEP TEST HOLE							
DATE: 11/6/2025							
HOLE NUMBER	TOTAL DEPTH	HORIZON RANGE	SOIL DESCRIPTION	MOISTURE CONDITION			ROCK OBSERVED? DEPTH?
1	66"	0"-4"	TOPSOIL	MOIST	N	N	N
		4"-14"	BROWN SILTY CLAY LOAM W/ MIXED SHALE	MOIST	N	N	N
		14"-28"	MOSTLY SHALE FILL WITH SOME LIGHT BROWN SILT LOAM	MOIST	N	N	N
		28"-66"	LIGHT BROWN SILT LOAM W/ SOME SHALE	DRY	N	N	N

Project No. 25-22 33 Maplewood Road SOIL INVESTIGATION - PERC TESTS

PERCOLATION TESTS								
DATE: 11/6/2025								
HOLE NUMBER	DEPTH	SOIL PROFILE	TEST NUMBER/RESULT (MIN/INCH)					
			1	2	3	4	5	6
1	24"	0"- 4" TOPSOIL 4" - 24" BROWN SILTY CLAY LOAM WITH SHALE	<1	<1	<1	<1	1	•
2	24"	0"- 4" TOPSOIL 4" - 24" BROWN SILTY CLAY LOAM WITH SHALE	<1	<1	<1	<1	1	•
3	24"	0"- 4" TOPSOIL 4" - 24" BROWN SILTY CLAY LOAM WITH SHALE	<1	<1	<1	<1	•	•
4	24"	0"- 4" TOPSOIL 4" - 24" BROWN SILTY CLAY LOAM LESS SHALE	1	2	3	3	-	-
5	12"	0" - 4" TOPSOIL 4" - 12" BROWN SILTY CLAY LOAM LESS SHALE	3	3	3			•

Browning 33 Maplewood Project No. 25-22

SYSTEM SIZING CALCULATIONS (PER NYSDOH APPENDIX 75-A)

NUMBER OF BEDROOMS (EACH)	3
DAILY DESIGN FLOW/BEDROOM (GALLONS)	110
TOTAL DESIGN FLOW (GALLONS/DAY)	330
REQUIRED SEPTIC TANK SIZE (GALLONS)	1000
DUE TO PROXIMITY TO STREAM AND LAKE AN ENHANCED TREATMENT UNIT (ETU) IS PROPOSED	
MINIMUM ETU SIZE PER APPENDIX 75-A = GREATER OF 400 GALLONS/DAY OR DESIGN FLOW = 330 (GALLONS/DAY)	400
PROPOSED ETU SIZE - FUJICLEAN USA MODEL CE-5 (GALLONS/DAY)	500
DETERMINE APPLICATION RATE	
DEPTH OF USEABLE SOIL (INCHES)	66
SHALE LAYER AT 14" REQUIRES INSTALLING FIELD AT A SHALLOWER DEPTH - USE 12" PERC TEST RESULT	
PERCOLATION TEST RESULT RANGE IN UPPER 12" (MINUTES/INCH)	3
PERCOLATION TEST RESULT RANGE USED FOR DESIGN (MINUTES/INCH)	1 TO 5
APPLICATION RATE PER APPENDIX 75-A TABLE 6D (GALLONS/DAY/SQUARE FOOT)	1.20

DUE TO HIGH GROUND WATER, SYSTEM WILL BE A SHALLOW TRENCH SYSTEM WITH ELJEN GRAVELLESS GEOTEXTILE SAND FILTER TRENCHES.

SYSTEM SIZING

GRAVELLESS GEOTEXTILE SAND FILTER TRENCH SIZING

ABSORPTION TRENCH OR BED PROPOSED?	TRENCH
SLOPES LESS THAN 15%?	YES 4% OR LESS
ABSORPTION TRENCH AREA REQUIRED = DESIGN FLOW/APPLICATION RATE (SQUARE FEET)	275.0
REQUIRED ELJEN TRENCH LENGTH = REQ ABSORPTION TRENCH AREA/6' (FEET)	45.8
REQUIRED TRENCH LENGTH GREATER OF APPENDIX 75-A TABLE 6D (46') OR ELJEN TABLE 3 (60')	60.0
REQUIRED NUMBER OF MODULES PER ELJEN TABLE 4 (EACH)	15.0
PROPOSED NUMBER OF MODULES (EACH)	15.0
NUMBER OF ROWS (EACH)	3.0
REQUIRED TRENCH LENGTH PER ROW = REQUIRED TRENCH LENGTH/ NO OF ROWS (FEET)	20.0
PROPOSED TRENCH LENGTH (FEET)	20.0
TOTAL TRENCH LENGTH = PROPOSED TRENCH LENGTH +1 FT (FEET)	21.0
TRENCH SPACING CENTER-TO-CENTER (FEET)	8.0
BASAL AREA - SLOPING SITE - UNDER TRENCHES AND DOWNHILL TAPER ONLY	
BASAL AREA REQUIRED = TRENCH AREA/0.80GAL/DAY/SQFT = 275.0/0.5 (SQUARE FEET)	343.8

