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SENT VIA EMAIL

May 15, 2023

Mr. John Franceschina 41 Kelder Road Apt 1 Olivebridge, NY 12461

RE: SOIL INVESTIGATION FOR SBL 53.4-1-41

Dear Mr. Franceschina:

I visited the above-referenced property on May 13<sup>th</sup> to determine its suitability for a residential septic system. This was found by checking that at least one foot of usable soil exists on site and that the soil percolation rate is under 60 minutes per inch.

Two 2-foot-deep holes were dug on site and no boundary layer (bedrock or mottling) were observed in these holes. I conducted three soil percolation tests (two of them being within 15 feet of the 2-foot-deep holes) with results of 13, 17 and 23 minutes/inch. I have enclosed the percolation test data sheet with this letter.

Based on this information, the site is suitable for a residential septic system.

Please do not hesitate to contact me with any questions or concerns at (914) 388-7998 or ajemrich@gmail.com.

Sincerely,

Andrew J. Emrich, PE

Andrew J. Emrich

enclosure

(see instructions on reverse side)

KELDER ROAD	
Development Site: $\underline{SB}$ $\underline{S3.4-1-41}$	(T/V/C): DLIVE County: ULSTER
	1
Date: $\frac{5/(3/2.3)}{}$	Tests Conducted By: ANDREW EMPICH
Weather Conditions: PARTLY LLOUDY	\$1°F

Test Hole No.	Test Hole Depth (inches)	Lot No.	Soil Profile Description and Groundwater Depth (if identified)	Presoaking Date & Time	Time	Percolation Test						
						1	2	3	4	5	6	
1	12"			End	1:59	2:13	2:29	2:46				
				Begin	1:47	1:59	2:13	2:29				
				Result	12	14	16	17				
2	12"				End	2:04	2:27	2:50				
				Begin	1:49	2:04	2:27					
				Result	15	23	23					
	3 124			End	3:10	3:22	3:36					
3				Begin	3:00	3:10	3:23					
			R	Result	10	12	13					
			ı	End								
					Begin							
					Result							
V					End							
			Begin									
				Result								
					End							
				Begin								
					Result							

Begin time, end time, and result in minutes for a water elevation change from 6" to 5" above the bottom of the test hole.

## **INSTRUCTIONS**

## Procedure:

- 1) At least two percolation tests shall be performed within the proposed absorption area. At least one percolation test should also be performed within the proposed absorption system expansion area.
- (2) Dig each hole with vertical sides approximately 12 inches in diameter. If an absorption field is being considered, the depth of test holes should be 24 to 30 inches below final grade or at the projected bottom of trenches in shallower/deeper systems based upon test hole evaluation.

  The sides of the percolation holes should be scraped to avoid smearing. Place washed aggregate in the lower two inches of each test hole to reduce scouring and silting action when water is poured into the hole.
- (3) Presoak the test holes by periodically filling the hole with water and allowing the water to seep away. This procedure should be performed for at least four hours and should begin one day before the test (except in clean coarse sand and gravel). After the water from the final presoaking has seeped away, remove any soil that has fallen from the sides of the hole.
- (4) Pour clean water into the hole, with as little splashing as possible, to a depth of six inches above the bottom of the test hole.
- (5) Observe and record the time in minutes required for the water to drop from the six-inch depth to the five-inch depth.
- (6) Repeat steps (4) and (5) a minimum of three times until the time for the water to drop from six inches to five inches for two successive tests is approximately equal (i.e., ≤ 1 min. for 1-30 min./inch, ≤ 2 min. for 31-60 min./inch). The longest time interval to drop one inch will be taken as the stabilized rate of percolation.
- (7) Percolation test results shall be consistent with soil classification and if different results are obtained for multiple holes in a proposed absorption area, the slowest stabilized rate shall be used for system design.

<u></u>	ANDREW J. EMP	ICH, PE	, the undersigned certify that the percolation tests were conducted by me or
unde	ler my direction in accord with the above	procedure. The data a	and results are true and correct.
Date	e: 5/13/23		
Sign	nature: Lun	1	
Lice	ense No (PERALS) 6972	68	