Richard Scharf, CPSS The Soil Guy, LLC 9455 Neumann Circle Ypsilanti, MI 48197 (252) 402-7354

April 9, 2023

Ms. Laura Scofiled 8610 Schadel Road Waterville, Ohio 43566

Re: Soil evaluation for 8610 Schadel Road, Waterville, Ohio

Dear Laura:

As requested, I investigated the soils on your property on Schadel Road. It is understood that you need a soil evaluation for a septic system for your 4-bedroom home on the property. My findings are described in this report.

### Summary

Two soil borings were described at the locations shown on the attached diagram. The shallowest depth to the perched water table was found at 12 inches.

The surface horizons composed of loam. The infiltration loading rate is  $0.6 \text{ gpd/ft}^2$ . The linear loading rate is 3.3 gpd/ft.

#### Soils

The soils found in the *suggested drainfield area* appear to be of the Mermill series soils. These are deep, poorly drained soils with loamy surface textures overlying subsoils higher in clay.

The perched water table was found at a depth of 12 inches in both borings 1 and 2. No restrictive layer or bedrock was found within 43 inches of the surface.

The slope of the land is 0%.

The design parameters for a septic system are provided in the table below.

## **Design Parameters**

Texture	Structure/ Grade	Depth to Seasonal Saturation	Depth to Restrictive layer	Slope	Infiltration Loading Rate	Hydraulic Linear Loading Rate	
loam (S)	SBK/2	12"	>43"	0%	0.6 gpd/ft <sup>2</sup>	Sep <12": 3.3 gpd/ft	

For a 4-bedroom home, the distribution lines will be required to be about 150 feet long. The system can likely be designed for the suggested area. The area limitations on the suggested area would be the 10-foot setback from the northern property boundary. Other than that, the boundaries of the suggested drain field area are loose, and can be exceeded by about 20 feet in any other direction.

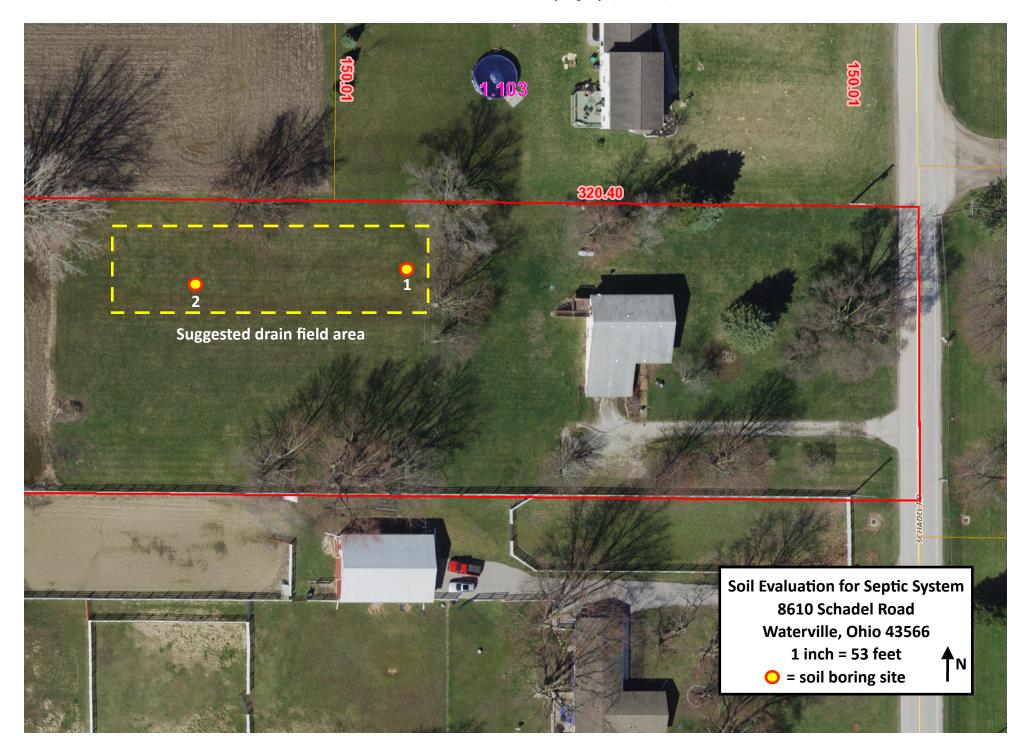
The soil boring sites are marked on site with red pin flags. GPS coordinates are also provided on the attached soil profile forms.

If you or the county health department have any questions regarding this report, please contact me at (252) 402-7354 or rischarfisol@gmail.com.

Certified Professional Soil Scientist RICHARD L. SCHARF 37187

Sincerely,

Richard Scharf CPSS #37167



# Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Luca 5 Township/Sec.: Providence	Land Use / Vegetation: res/q ass	
Property Address/Location: 8610 Schadel Rd.	Position on Landform:	Cartified Professional
Applicant Name: Laura Scofield	Percent Slope:	Soil Scientist RICHARD L. SCHARF
Address: (Some)	Date: 013/20/23	Certification Stamp or Certification #: \ 37167
Phone #: Lot #:	Evaluator: Richard Scharf 9455 Neumann Cir.	Signature
Test Hole #: 1 Latitude/Longitude: 41, 48469; - 83.79834	Ypsilanti, MI 48197	
Method: Pit × Auger Probe	The second secon	Phone#: (252) 402-7354

Soil Profile		Estimating Soil Saturation				(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)							
<del></del>		Munsel	ll Color (hue, value										
			Redoximorphic Features		Texture			Structure					
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features	
Ap	0-12	104R3/2	_	-	L	20	0	2	t	SBK	v.fc		
BE	12-21	104R5/3	104R3/2 104R5/4	104R5/2	CL	30	0	2	t	SBK	fr		
Bly	21-43	104R5/2	104185/4	104R 9/1 104R 5/1	CL	30	O	2	m	SBK	f;		
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				AN PERMIT								<b>国际表现上述"水学专项</b>	
Limiting Conditions Depth to (in.)		n.)	Descriptive Notes			Remarks / Risk Factors:							
parent Water Table			13										
ily Permeable		None None				<b></b>	7 - 77 - 00 - 00 - 190 H						
lrock		>43											
trictive Layer		>43				Too dep to influence system design							

Note: The evaluation should include a complete site plan or site drawing.

#### Site and Soil Evaluation for Sewage Treatment and Dispersal County: Land Use / Vegetation: Township / Sec.: Landform: Property Address/Location: Position on Landform: Percent Slope: Certified Professional Applicant Name: Shape of Slope: 1 mans Soil Scientist RICHARD L. SCHARF Address: 37167 Certification Standp or Certification Date: Phone #: Evaluator: Richard Scharf Lot #: Signature: 9455 Neumann Cir. Test Hole #: Ypsilanti, MI 48197 Latitude/Longitude: 41.484 (252) 402-7354 Phone#: Method: Probe

Soil 1	Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability						
		Munsel	ll Color (hue, value,	, chroma)				, <del>S</del>				
			Redoximorphic Features		Texture Structure							1
Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
AP	0-12	104R3/2	_	1	L	20	0	2	1	SBK	1. fr.	
Btg,	12 - 25	104R4/2	1041R3/2 164R4/3	,	CL	30	0	2	4	SBK	f;	Krotovinas
Begz	25-43	104R51,	104R516 104R519	7	CL	35	0	2	m	SBK	f;	Krotovinas Standy water
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Limiting (	THE RESERVE OF THE PERSON NAMED IN	Depth to (in	n.)	Descriptive N	otes	Remarks / R	isk Factors:					
erched Seasonal		12										
pparent Water Table		n.a										
	ghly Permeable Material		None					<u> </u>				
Bedrock Restrictive Layer		>43 >43				Topod	eap to in	fluence	Syst	em des	gn	

Note: The evaluation should include a complete site plan or site drawing.