Deaton Soil Services, LLC
1427 Concord Fairhaven Rd.
Eaton, OH 45320
Cell: (937) 533-9991

Monday, March 23, 2026

Brian Barnard
11193 Elm Tree Rd.
Waynesville, Ohio 45458

Dear Mr. Barnard,

Enclosed you will find the requested soil evaluation for the property on Elm Tree Road in Warren County Ohio. The soil evaluation was the result from the need for a potential sewage treatment system for the potential new home and possible lot split.

Two detailed soil descriptions, along with a series of approximately 30 soil borings, were conducted at the proposed location. The sample locations have each been marked with pink glow metal flags and were labeled accordingly to their soil site numbers. The boundary of the proposed location has been marked using pink glow metal flags.

In the packet, you will find 2 technical soil descriptions, a site map marking the locations of the sample sites, and an abbreviations sheet. Copies of this letter, soil descriptions, and site map should be submitted to the Warren County Health Department. The Health Department will make the determination as to whether the soil and site area is suitable for onsite sewage treatment.

The soils described in the proposed treatment area represented by site 1 contains dense glacial till that ranges from 28 to 40 inches from the surface with a representative depth of 35 inches. As a result of the dense glacial till, the soils of this area contain a perched seasonal high water table at a depth that ranges from 9 to 15 inches from the surface with a representative depth of 13 inches to the 5 percent 2 chroma iron depletions.

The soils described in the proposed treatment area represented by site 2 contains dense glacial till that ranges from 25 to 35 inches from the surface with a representative depth of 30 inches. As a result of the dense glacial till, the soils of this area contain a perched seasonal high water table at a depth that ranges from 8 to 11 inches from the surface with a representative depth of 9 inches to the 5 percent 2 chroma iron depletions.

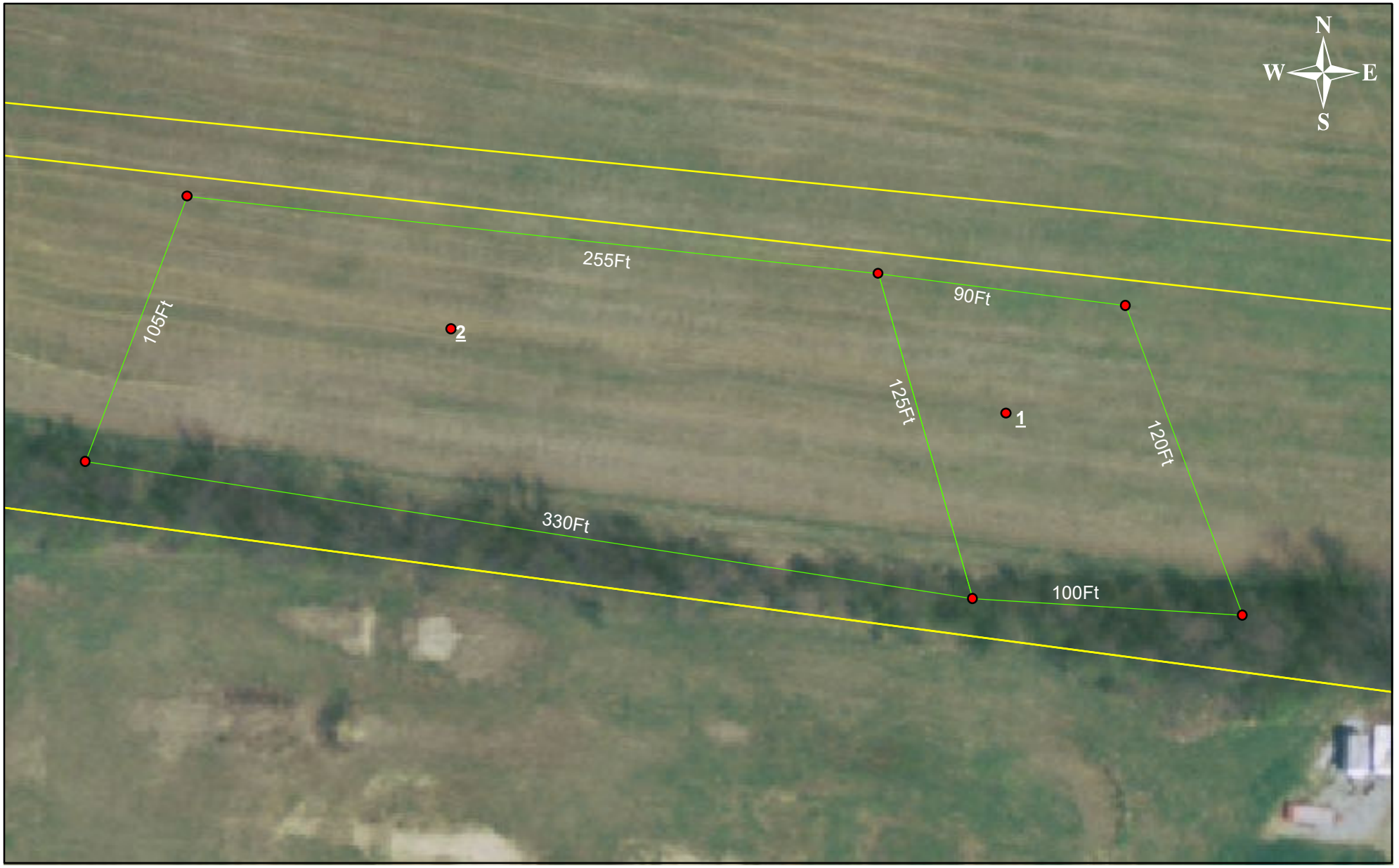
Please protect the proposed location from any disturbances by clearly marking the area. Disturbances to the area could result in compaction of the soils and subsequent failure to the sewage treatment system.

If you have any questions, concerns, or need clarification, please feel free to contact me.

Sincerely,

Matthew H. Deaton - Certified Professional Soil Scientist

Brian Barnard Soil Evaluation
Elm Tree Rd. Waynesville, Ohio 45458



Proposed treatment area

Pedon Descriptions

Parcel Boundary - from GIS

0 12.5 25 50 Feet

Prepared by: Matthew Deaton

3/20/26

Landforms		
Glacial	Lacustrine & Rel.	Residuum
Till Plain	Lake Plain	Ridge
End Moraine	Beach Ridge	Peak
Outwash Plain	Dune	Knoll
Outwash Terrace	Fluvial	Crest
Beach Ridge	Flood Plain	Hillslope
Kame	Terrace	Interfluve
Esker	Alluvial Fan	

Profile Position
Summit
Shoulder
Backslope
Footslope
Toeslope
Flat
Talf

Shape of Slope
Convex
Concave
Linear
Complex

Horizon Nomenclature			
Master Horizons		**Common Horizon Suffixes**	
O	Predominately organic matter (litter & humus)	a	Highly decomposed organic matter
A	Mineral, organic matter (humus) accumulation, loss of Fe, Al, clay	b	Buried genetic horizon
E	Mineral, loss of Si, Fe, Al, clay, organic matter	d	Densic layer (physically root restrictive)
B	Subsurface accumulation of clay, Fe, Al, Si, humus;sesquioxides; loss of $CaCO_3$; subsurface soil structure	e	Moderately decomposed organic matter
		g	Strong gley
		i	Slightly decomposed organic matter
		p	Plow layer or artificial disturbance
		r	Weathered or soft bedrock
		t	Illuvial accumulation of silicate clay
C	Little or no pedogenic alteration, unconsolidated earthy material, soft bedrock	w	Weak color or structure within B
		x	Fragipan characteristics
		Horizon Modifiers	
L	Limnic Soil Material	Numeric Prefix: Lithologic Discontinuity	
R	Hard bedrock	Numeric Suffix: Subdivion of a master horizon	

Redox Locations	
mat	In the matrix
mad	In matrix around depletions
mac	In matrix around concentrations
tot	Throughout
bpf	Between ped faces
apf	On ped faces
spo	On surfaces along pores
rpo	On surfaces along root channels

Soil Texture			
Texture Class Abbreviations		Textural Class Modifiers	
Coarse Sand	cos	Gravelly	gr
Sand	s	Fine Gravelly	fgr
Fine Sand	fs	Medium Gravelly	mgr
Very Fine Sand	vfs	Coarse Gravelly	cgr
Loamy Coarse Sand	lcos	Very Gravelly	vgr
Loamy Sand	ls	Extremely Gravelly	xgr
Loamy Fine Sand	lfs	Cobbly	cb
Loamy Very Fine Sand	lvfs	Very Cobbly	vcb
Coarse Sandy Loam	cosl	Extremely Cobbly	xcb
Sandy Loam	sl	Stony	st
Fine Sandy Loam	fsl	Very Stony	vst
Very Fine Sandy Loam	vfsl	Extremely Stony	xst
Loam	l	Bouldery	by
Silt Loam	sil	Very Bouldery	vby
Silt	si	Extremely Bouldery	xby
Sandy Clay Loam	scl	Channery	cn
Clay Loam	cl	Very Channery	vcn
Silty Clay Loam	sicl	Extremely Channery	xcn
Sandy Clay	sc	Flaggy	fl
Silty Clay	sic	Very Flaggy	vgl
Clay	c	Extremely Flaggy	xfl
*Estimate approximate clay percentage within 5 percent			

Soil Structure					
Grade		Size		Type (shape)	
Structureless	0	Very Fine	vf	Granular	gr
Weak	1	Fine	f	Angular Blocky	abk
Moderate	2	Medium	m	Subangular Blocky	sbk
Strong	3	Coarse	co	Platy	pl
		Very Coarse	vc	Prismatic	pr
		Extr. Coarse	ec	Wedge	weg
		Very Thin*	vn	Columnar	col
		Thin*	tn	Single Grain	sgr
		Thick*	tk	Massive	ma
		Very Thick*	vk	Cloddy	cdy

* The sizes Very Thin, Thin, Thick, and Very Thick, are used when describing platy structure only. Substitute thin for fine, and thick for coarse when describing platy structure.

Moist Consistence	
Loose	l
Very Friable	vfr
Friable	fr
Firm	fi
Very Firm	vfi
Extremely Firm	efi

Effervesence	
ne	Noneffervescent
vs	Very Slightly Eff.
sl	Slightly Eff.
st	Strongly Eff.
ve	Violently Eff.

For a more detailed explanation on describing and sampling soils, please refer to the "Field Book for Describing and Sampling Soils". Schoeneberger, P.J., Wysocki, D.A., Benham, E.C., and Broderson, W.D. (editors) 2002. Field book for describing and sampling soils, version 2.0. Natural Resources Conservation Service, USDA, National Soil Survey Center, Lincoln, NE.

Site and Soil Evaluation for Sewage Treatment and Dispersal

County:	Warren	Land Use / Vegetation:	Cropland
Township / Sec.:		Landform:	Till Plain
Property Address/Location:	Elm Tree Rd.	Position on Landform:	Backslope
	Waynesville, Ohio 45458	Percent Slope:	0 to 3
Applicant Name:	Brian Barnard	Shape of Slope:	Linear Linear
Address:	11193 Elm Tree Rd.		
	Waynesville, Ohio 45458	Date:	Tuesday, March 17, 2026
Phone #:	404-886-0948	Evaluator:	Matthew Deaton - CPSS
Lot #:			Deaton Soil Services, LLC
Test Hole #:	1		1427 Concord Fairhaven Rd
Latitude/Longitude:	84° 7' 3.18"W 39° 34' 41.62"N		Eaton, Ohio 45320
Method:	___ Pit ___ Auger X Probe		

Certification Stamp or Certification #: 330813

Signature:

Phone#: (937)-533-9991

Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							
		Munsell Color (hue, value, chroma)										
			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	0-8	10YR 4/3	NA	NA	Silt Loam	20	1	1	M	SBK	FR	
Bt1	8-14	10YR 4/6	NA	NA	Silty Clay Loam	35	2	2	M	SBK	FI	
Bt2	14-22	10YR 4/6	15% 10YR 5/6 mad	15% 10YR 5/2 mac	Silty Clay Loam	38	2	2	M	SBK	FI	
Btg	22-32	10YR 4/2	25% 10YR 5/6 mat	Matrix is depleted	Clay	42	2	2	M	SBK	FI	
BC	32-37	10YR 4/4	25% 10YR 5/6 mad	25% 10YR 5/2 mac	Clay Loam	30	5	1	M	SBK	FI	
Cd	37-48	10YR 4/4	15% 10YR 5/6 rpo	15% 10YR 5/2 rpo	Loam	25	5	0	NA	MA	VFI	

Limiting Conditions	Depth to (in.)	Descriptive Notes	Remarks / Risk Factors:
Perched Seasonal Water Table	14	Dense Glacial Till	Presence of perched seasonal water table and dense glacial till.
Apparent Water Table			
Highly Permeable Material			
Bedrock			
Restrictive Layer	37	Dense Glacial Till	

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.

Site and Soil Evaluation for Sewage Treatment and Dispersal

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Property Address/Location:	Elm Tree Rd.	Position on Landform:	Backslope
	Waynesville, Ohio 45458	Percent Slope:	0 to 3
Applicant Name:	Brian Barnard	Shape of Slope:	Linear Linear
Address:	11193 Elm Tree Rd.		
	Waynesville, Ohio 45458	Date:	Tuesday, March 17, 2026
Phone #:	404-886-0948	Evaluator:	Matthew Deaton - CPSS
Lot #:			Deaton Soil Services, LLC
Test Hole #:	**2**		1427 Concord Fairhaven Rd
Latitude/Longitude:	84° 7' 5.82"W 39° 34' 41.9"N		Eaton, Ohio 45320
Method:	___ Pit ___ Auger X Probe		

Certification Stamp or Certification #: 330813

Signature:

Phone#: (937)-533-9991

Soil Profile		Estimating Soil Saturation			Estimating Soil Permeability							
		Munsell Color (hue, value, chroma)										
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Horizon	Depth (inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)	Consistence	Other Soil Features
Ap	0-9	10YR 4/3	NA	NA	Silt Loam	20	1	1	M	SBK	FR	
Bt	9-14	10YR 4/6	15% 10YR 5/6 mad	15% 10YR 5/2 mac	Silty Clay Loam	36	2	2	M	SBK	FI	
Btg	14-26	10YR 4/2	25% 10YR 5/6 mat	Matrix is depleted	Clay	42	2	2	M	SBK	FI	
BC	26-32	10YR 4/4	20% 10YR 5/6 mad	20% 10YR 5/2 mac	Clay Loam	30	5	1	M	SBK	FI	
Cd	32-48	10YR 4/4	15% 10YR 5/6 mad	15% 10YR 5/2 mac	Loam	25	5	0	NA	MA	VFI	

Limiting Conditions	Depth to (in.)	Descriptive Notes	Remarks / Risk Factors:
Perched Seasonal Water Table	9	Dense Glacial Till	Presence of perched seasonal water table and dense glacial till.
Apparent Water Table			
Highly Permeable Material			
Bedrock			
Restrictive Layer	32	Dense Glacial Till	

Note : The evaluation shall include a complete site plan or site drawing including all requirements in paragraphs (B)(1) through (B)(4) of OAC 3701-29-08.