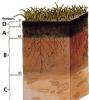
## Soil and Environmental Consulting Services, Inc.



Wednesday, November 08, 2023

Chip Carpenter United Country Real Estate and Auction Se chip@ucrealestateandauction.com 740-965-1208 | 614-206-1135

# Re: Soil investigation for on-site septic disposal for the parcel split north of 5500 State Route 657, Bennington Township, Licking County, Ohio

Enclosed you will find the requested detailed soil descriptions for the parcel split north of 5500 State Route 657, Bennington Township, Licking County, Ohio

The soils of the selected sites were mapped and described on the enclosed sheets for your records. The locations of the soil borings have been located using GPS and the locations have been delineated on the enclosed map. Copies of this letter, soil boring descriptions, sketch, and system drawing should be submitted to local health department. The health department will make the determination if the soil and site area is suitable for onsite sewage treatment.

Please protect all areas approved for septic disposal by having the contractor stake and rope off the proposed locations prior to driveway and basement excavation. No soil, building, or waste material should be stored on the proposed absorption areas. Disturbance to the areas may result in compaction and the subsequent failure of the system. Any disturbance to the504 absorption area voids the results of this analysis.

If you have any questions or want to move forward with the septic design process feel free to contact us.

Steven Miller, CPSS



Property A	County: ownship / Sec.: ddress/Location: oplicant Name: Address: Phone #:	Bennin North of 550 Marion Chip Car	ennington of 5500 SR 657 Position on arion Road Per p Carpenter Shap			Se / Vegetation:       Wooded         Landform:       Till Plan         on on Landform:       Backslope         Percent Slope:       0.5 to 1.0%         Shape of Slope:       Linear / Lnear         drooms or GPD:       4         Date:       Monday, November 06, 2023         Evaluator:       Steven Miller, CPSSc				Į,		CRECECCES STEVENA MILLER CERTIFIED PROFESSIONAL SOLE SCIENTIST
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BEg	6 to 10	10YR 5/2			sicl	30	2	1	m	sbk	fi	
Btg	10 to 45	10YR 5/1	25%10YR 5/4		sicl	36	2	2	m	sbk	fi	
BC	45 to 50	10YR 5/3		35%10YR 5/2	sicl	34	2	1	m	sbk	fi	
Cd	50+	10YR 4/3		30%10yR 5/1	cl	32	5	0		m	vfi	
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Bedrock		>60										
Restrictive Layer		50		glacial till								

	County:	Licki	*	Land	Use / Vegetation:		Wooded					
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Btg	11 to 52	10YR 5/1	25%10YR 5/4		sicl	38	2	2	m	sbk	fi	
BC	52 to 55	10YR 6/3		35%10YR 5/2	sicl	35	2	1	m	sbk	fi	
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Township / Sec.:     Bennington     Landform:     Till Plan       Property Address/Location:     North of 5500 SR 657     Position on Landform:     Backslope	A Start
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Phone #:     Steven Miller, CPSSc       Lot #:     Soil & Environmental Consulting, Inc.       Test Hole #:     3         Signature:	- 28423
Test Hole #: 3 P.O. Box 1121	
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Btg 9 to 44 10YR 5/1 40%10YR 5/3 sicl 35 2 2 m sbk fi	
BC 44 to 48 10YR 6/3 30%10yR 5/2 sicl 32 2 1 m sbk fi	
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Highly Permeable Material >60	
Bedrock >60	
Restrictive Layer 48 glacial till	

Property A	County:	Bennington			l Use / Vegetation: Landform: tion on Landform: Percent Slope: Shape of Slope: Bedrooms or GPD: Date:		WoodedTill PlanBackslope0.5 to 1.0%Linear / Lnear4Monday, November 06, 2023					STEVEN A MILLER	
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BEg	6 to 12	10YR 5/2			sicl	34	2	1	m	sbk	fi		
Btg	12 to 39	10YR 5/1	25%!0YR 5/4		sicl	36	2	2	m	sbk	fi		
BC	39 to 44	10YR 6/3		25%!0YR 5/2	sicl	32	2	1	m	sbk	fi		
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BEg	6 to 10	10YR 6/2			sicl	35	2	1	m	sbk	fi	
Btg	10t o 43	10YR 6/1	25%!0yR 5/4		sicl	36	2	2	m	sbk	fi	
BC	43 to 50	10YR 6/3		30%10YR 5/2	sicl	34	2	1	m	sbk	fi	
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Image: Normal conditionsImage: Normal co	Btg	11 to 47	10YR 6/1	30%10YR 5/4		sicl	36	2	2	m	sbk	fi		
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$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	BC	47 to 52	10YR 6/3		25%10yR 5/4	sicl	32	2	1	m	sbk	fi		
Image: constraint of the second se														
Image: constraint of the second se	Cd	52+	10YR 5/4		20%10vR 5/4	cl	30	5	0		m	vfi		
Perched Seasonal Water Table       6       perched on glacial till       Surface water should be diverted around system. Subsurface ag drainage may be present.         Apparent Water Table       >60           Highly Permeable Material       >60           Bedrock       >60	00	02	101110/1		20/0109100/1	•	50	Ű	Ũ		m	VII		
Perched Seasonal Water Table       6       perched on glacial till       Surface water should be diverted around system. Subsurface ag drainage may be present.         Apparent Water Table       >60           Highly Permeable Material       >60           Bedrock       >60														
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Perched Seasonal Water Table       6       perched on glacial till       Surface water should be diverted around system. Subsurface ag drainage may be present.         Apparent Water Table       >60           Highly Permeable Material       >60           Bedrock       >60	Limiting	Conditions	inches		Description				Ren	narks / Risk Fa	ctors:			
Apparent Water Table     >60       Jighly Permeable Material     >60       Bedrock     >60			6	nero	-	Surface wate	r should be di	verted around s				esent.		
Jighly Permeable Material     >60       Bedrock     >60				point	0 4444				, <u>.</u>		6 j - 5 pr			
Sedrock >60														
	Restrictive Layer		52		glacial till									

Landforms
Upland*
Terrace
Flood Plain
Lake Pain
Beach Ridge
*Includes glacial till
plain and end moraine

Position on Landform
Depression
Flat
Knoll
Crest
Hillslope
Footslope

Shape of Slope
Convex
Concave
Linear
Complex

	Master Horizons Predominantly organic matter (litter & numus)	a	Horizon Suffixes	Horizon Modifiers
]	<b>J</b>	а		IIIIIZOII MIUUIIICI S
	numus)		Highly decomposed organic matter	
Α	(unitab)	b	Buried genetic horizon	Numerical Prefixes: Used to denote
11	Mineral, organic matter (humus)	d	Densic layer (physically root restrictive)	lithologic discontinuities.
i	accumulation, loss of Fe, Al, clay	e	Moderately decomposed organic matter	
E	Mineral, loss of Si, Fe, Al, clay, organic	g	Strong gley	
1	natter	i	Slightly decomposed organic matter	Numerical Suffixes: Used to denote
В	Subsurface accumulation of clay, Fe, Al, Si,	р	Plow layer or artificial disturbance	subdivisions within a master
]	numus; sesquioxides; loss of CaCo <sub>3</sub> ;	r	Weathered or soft bedrock	horizon.
5	subsurface soil structure	t	Illuvial accumulation of silicate clay	-
С		w	Weak color or structure within B	
]	Little or no pedogenic alteration,	х	Fragipan characteristics	
	unconsoilidated earthy material, soft bedrock			
R I	Hard bedrock			

	Soil	Τ	exture	
Texture Class Abbreviation	ons		Textural Class Modifiers	
Course 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	1		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	VFL
Clay	с		Extremely Flaggy	XFL
*Estimate approximate cl	ay perc	cei	ntage 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	Columnar	cpr						
		Very Thin*	vn	Single Grain	sg						
		Thin*	tn	Massive	m						
		Thick*	tk	Cloddy	CDY						
		Very Thick*	vk								

\* 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	1
Very Friable	vfr
Friable	fr
Firm	fi
Very Firm	vfi
Extremely Firm	efi

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.