

Phase II

Lot #2

317 Union Ln. S.

November 16, 2020

Dave Liskany (Countrytyme Land Specialist, Ltd)
3451 Cincinnati-Zanesville Rd, SW
Lancaster, OH 43130

Dear Mr. Liskany:

We would like to thank you for requesting our assistance to identify the specific soil properties on your property (**Track #2 Union Pastures**), Chillicothe, in Ross County, Ohio.

Enclosed are the following:

1. Location map
2. Aerial Photo Sketch Map of Site
3. Soil Site Descriptions for the different Soil Areas
4. Soil and Site Evaluation and discussion, for the proposed waste water disposal

The information in this report is basic soils information as found on-site. This does not mean that this site is suitable for an STS, that is up to the Ross County Health Department. If I can be of further assistance, in helping to interpret, clarify or add additional information from my notes, please let me know at 304-372-4809 home or 304-532-4711 cell.

Thanks,



Carlos Cole
Soil Scientist

Cc: Logan Calhoun, R. S., Director of Environmental Health

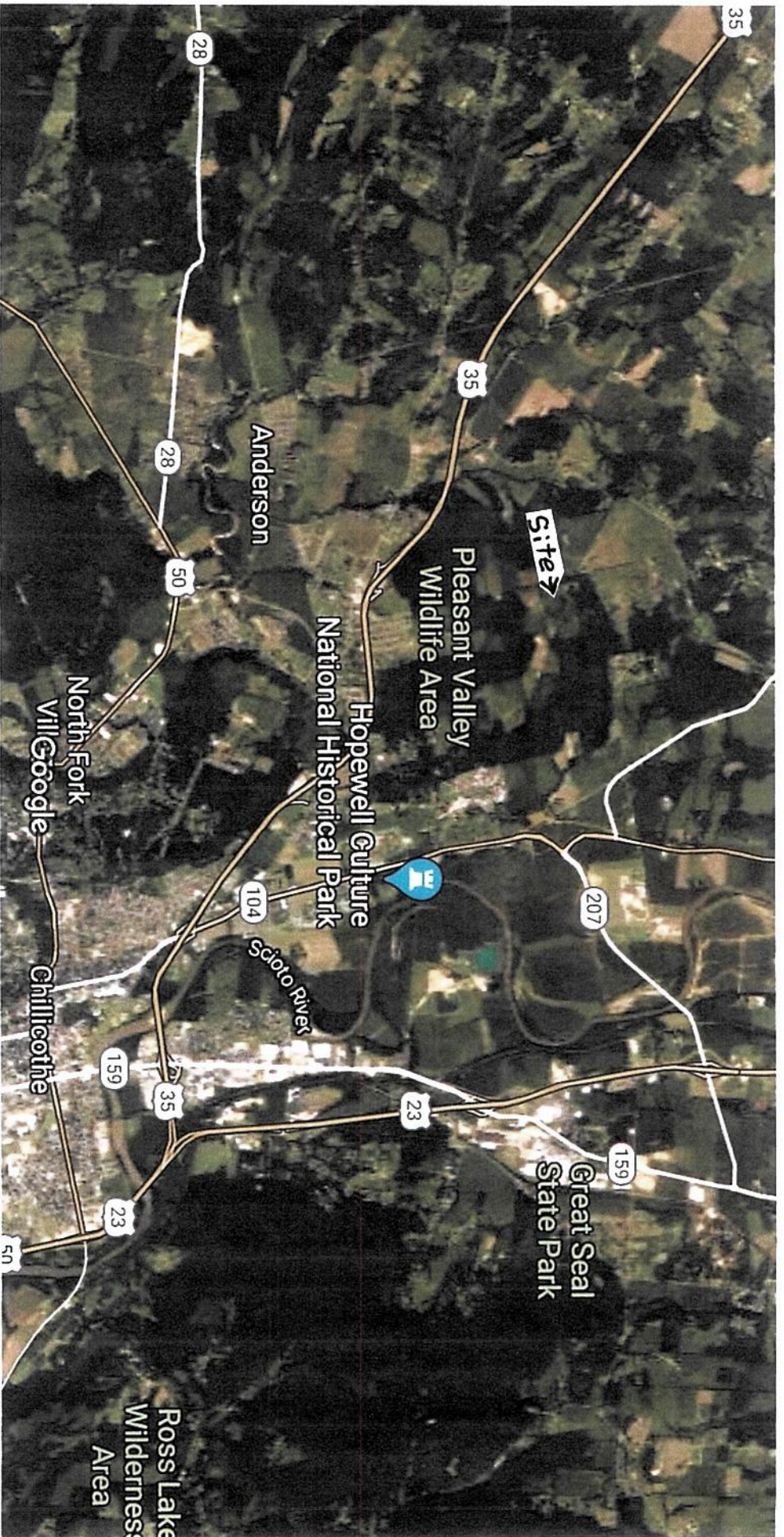
Soil and Site Evaluation Discussion

This soil evaluation is for a new STS (sewage treatment system) for a new 2-3 bedroom home (example that may change) on your property. We mainly evaluated the higher portion of the property near the center of the property and track #3 property for an STS. These soils have developed in mostly weathered glacial till, that over lays siltstone weathered sedimentary bedrock. The higher areas of this property is better drained, so this is the part of the soil we focused on for the leach field area. We flagged this area and dug our test pits, basically on the same elevation, as shown on the sketch map.

This proposed filter field area is large and can serve as both the primary and secondary filter field areas. The soil site descriptions give you a good picture of the soils on site. In general these soils are all very similar, we tried to find some variation in the physical properties but nothing consistent. The upper 11 inches of these soils is loam or silt loam, the following 15 to 20 inches is silty clay loam or clay loam and the remaining portion of the soil is loam or silt loam. The seasonal high water table (depth of depletions) is at a depth of 11 inches. So these soils will allow water to flow, but the water table during wet periods will be at an approximate depth of 11 inches. The STS will require pretreatment and a very shallow leach field.

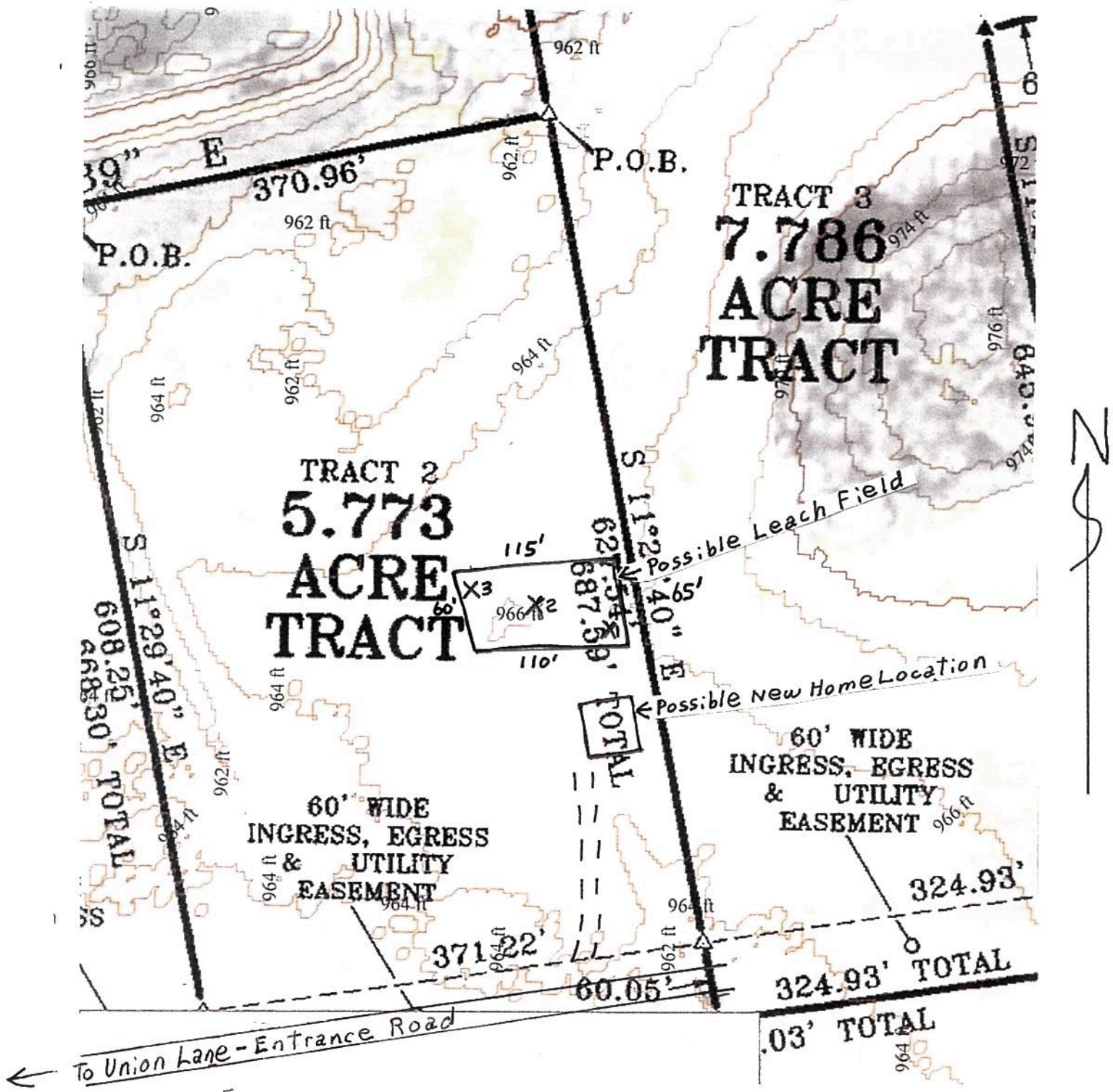
We have shown the location of the proposed STS leach field on the sketch map. We have located a possible new home location. We have marked the proposed filter field area with pink wire flags along the boundary and/or on the boundary corners. The soil description sites are marked with orange wire flags and the number of the description is marked on the flag. The approximate dominion, of the proposed filter field area, is marked on the sketch map. The proposed filter field area is just an indication of the area that can be used, the installer or the health department will determine where the filter lines will be located. The filter field lines would need to be located level on the contour around the slight slope. This will be a difficult system to install and the installer will have to keep track of his elevations. The depth to the seasonal high water table is totally based on elevation. These soil descriptions were taken at random to show the soil properties at different areas within the proposed filter field area and the sketch map is not to scale. We gave a house site location (example that may change with new owner) on the sketch map to give you a possible reference point, for this report. The new home will probably need to be elevated some, with house foundation in order to get gravity flow to the STS leach field.

Location Map



Sketch Map for Countrytyme Property

Union Pastures-Track #2 Ross County



X1, X2, X3 - Soil Site Descriptions

==== Approximate Driveway Location

These are all Approximate Locations (not to scale)

② we used the 12-24 Depth For H. Linear Loading Rate used 1-3 % slope site and Soil Evaluation for Sewage Treatment and Dispersal

County: Ross Land Use / Vegetation: Crop Field
 Township / Sec.: Union Road Landform: Glacial Till
 Property Address/Location: 5, Union Road Position on Landform: Till plain
 Applicant Name: Chillicothe OH 45601 Percent Slope: 1-3%
 Address: 441 Dele Lister - Land Specialist Shape of Slope: convex
 Phone #: 614-429-8152 Evaluator: Carlos Cole
 Lot #: Union Pastors Trch #2
 #1 Test Hole #: 1
 Latitude/Longitude: N 39° 23.974' W 83° 03.162'
 Method: Pit Auger Probe Dug to 30" + Augered Remainder
 Certification Stamp or Certification #: 24835
 Signature: Carlos Cole
 Phone #: 304-372-4809 Home
304-532-4711 cell

Soil Profile	Depth (inches)	Matrix Color	Estimating Soil Saturation			Class	Texture			Structure			Consistence	Infiltration Loading Rate gal./day/ft ²	Hydraulic Linear Loading Rate
			Munsell Color (hue, value, chroma)	Redoximorphic Features	Depletions		Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)				
Ap	0-8	10YR 5/4	64/4	-	S:L	15-18	2*	2-1	Ftm	Gr	vFr	.6	3.0		
Bt ₁	8-11	10YR 6/3	†5/6	-	S:L	20-22	2*	2-1	M	sbh	Fr	.6	3.0		
Bt ₂	11-18	10YR 5/6	-	10YR 6/2	S:L/cL	27-30	5*	1-2	M	sbh	Fr	.2	2.5		
Bt ₃	18-27	10YR 5/6	-	10YR 6/2	S:L	28-32	2-5*	1-2	M	sbh	Fr-Fi	.2	2.5		
BC ₁	27-32	10YR 5/6	-	10YR 6/2	S:L/cL	26-29	5-10*	1	M	sbh	Fr	.2	2.5		
BC ₂	32-43	10YR 6/4	10YR 5/6	10YR 6/2	L/cL	25-28	10-15*	1	M	sbh	Fr	.4	3.5		
C	43-48	10YR 5/6	10YR 6/2	10YR 6/2	L	24-27	15-25*	-	-	-	Fr	larger gravel			
Limiting Conditions		10YR 5/6		L		23-25		40+*		-		FR			
Perched Seasonal Water Table		11"													
Apparent Water Table		-													
Highly Permeable Material		-													
Bedrock		none		to 60"											
Restrictive Layer		none													

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

+ gravel + x siltstone - sediments / rock

② we used the 12-24" Depth For H. Linear Loading Rate used 0-3% slope site and Soil Evaluation for Sewage Treatment and Dispersal

#2

County: Ross Land Use/Vegetation: Crop Field
 Township / Sec.: Union Landform: Glacial Till
 Property Address/Location: 5. Union Road Position on Landform: Till plain
 Applicant Name: Chillicothe, OH 45601 Percent Slope: 0-3%
 Address: Att: Dave Lister - Land Specialist Shape of Slope: convex
3451 Cincinnati - Zanesville Rd, SW date: Evaluator: 11-5-20
 Phone #: 614-429-8152 Lot #: "Union Pastures Track #2" Signature: Carlos Cole
 #2 Test Hole #: 2 Certification Stamp or Certification #: 24835
 Latitude/Longitude: N39°23.874', W83°03.175' Phone #: 304-372-4809 Home
 Method: Pit Auger Probe Dug to 30" + Augered Remainder 304-532-4711 cell

Soil Profile	Depth (inches)	Matrix Color	Estimating Soil Saturation		Class	Texture		Estimating Soil Permeability			Infiltration Loading Rate gal./day/ft ²	Hydraulic Linear Loading Rate	
			Munsell Color (hue, value, chroma)	Redoximorphic Features		Approx. % Clay	Approx. % Fragments	Grade	Size	Type (shape)			Consistence
Ap1	0-7	10YR 4/3	-	-	S:L	14-16	-	2-1	F	Gr	Vfr	.6	3.0
BA	7-11	10YR 6/4	5/6 + 7/3	-	S:L	16-20	-	2-1	M	Sbh	Fr	.6	3.0
Bt1	11-16	10YR 5/6	-	-	S:CL	29-33	0-2 ⁺	2-1	M	Sbh	Fr	.4	2.9
Bt2	16-26	10YR 5/6	limy	-	S:CL	32-36	2-5 ⁺	1-2	M	Sbh	Fr-Fi	.2	2.5
Bt3	26-35	10YR 5/6	10YR 5/4	10YR 7/2	L:CL	25-28	5-15 ⁺	1-2	M	Sbh	Fr	.4	3.5
BC	35-40+	10YR 5/6	.5/4	10YR 7/2	L:CL	25-28	5-15 ⁺	1	M	Sbh	Fr	.4	3.5

Limiting Conditions: Perched Seasonal Water Table: 11 Depth to (in.): 11 Descriptive Notes: Auger was stopped by Rock probably large gravel (not bedrock) at 40"
 Apparent Water Table: - Highly Permeable Material: - Restrictive Layer: none pickups in clay xx gravel xx larger gravel

Note: The evaluation should include a complete site plan or site drawing. ODH - Dec 2008 - Revised Sept 2007

② we used the 12.24" Depth for H. Linear Loading rate used 1-3% slope site and Soil Evaluation for Sewage Treatment and Dispersal

County: Ross Land Use / Vegetation: Crop Field
 Township / Sec.: Union Road Landform: Glacial Till
 Property Address/Location: Chillicothe OH 45601 Position on Landform: Till plain
 Applicant Name: Country Time Realty Percent Slope: 1-3%
 Address: 451 Cincinnati - Zanesville Rd, SW Date: Shape of Slope: convex
 Phone #: 614-429-8152 Evaluator: Carlos Cole
 Lot #: Union Pastures - Tract # 2
 #3 Test Hole #: 3 Certification Stamp or Certification #: 24935
 Latitude/Longitude: N39°23.875', W83°03.181' Phone: 304-372-4809 Home
 Method: Pit Auger Probe Dug to 30" + Augered Remainder 304-532-4711 cell

Soil Profile	Depth (inches)	Matrix Color	Estimating Soil Saturation		Class	Texture		Grade	Structure		Consistence	Infiltration Loading Rate gal./day/ft ²	Hydraulic Linear Loading Rate
			Munsell Color (hue, value, chroma)	Redoximorphic Features		Approx. % Clay	Approx. % Fragments		Size	Type (shape)			
Ap	0-8	10YR 4/4	+5/4	-	sil/L	14-16	2-5 ⁺	2-1	F	Gr	VFr	.6	3.0
BA	8-11	10YR 6/4	+6/3	-	L	16-19	2-5 ⁺	2-1	FtM	sbh ⁺	Fr-vfr	.6	3.8
Bt ₁	11-20	10YR 5/6	-	-	sicL/cL	26-30	10-15 ⁺	2-1	M	sbh	Fr	.4	2.9
Bt ₂	20-28	10YR 5/6	.5/4 .5/3	10YR 7/2	sicL/cL	26-30	10-15 ⁺	1-2	M	sbh	Fr	.2	2.7
Bt ₃	28-38	10YR 5/6	-	10YR 7/1	L/cL	25-28	10-15 ⁺	1-2	M	sbh	Fr	.4	3.5
BC ₁	38-46	10YR 5/6	-	10YR 7/1	L	24-27	15-20 ⁺	1	M	sbh	Fr	.4	3.5
BC ₂	46-52	10YR 5/6	-	10YR 7/1	sil/sicL	25-28	15-20 ⁺	1	M	sbh	Fr	.4	2.5
Limiting Conditions													
Perched Seasonal Water Table		Depth to (in.)		Descriptive Notes				Remarks / Risk Factors					
Apparent Water Table		-											
Highly Permeable Material		-											
Bedrock		none		to 52"									
Restrictive Layer		none											

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

x gravel small x gravel some larger, mostly small