

November 19, 2021

Dave Liskany (Countryyme 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 #5-Phase 4), 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

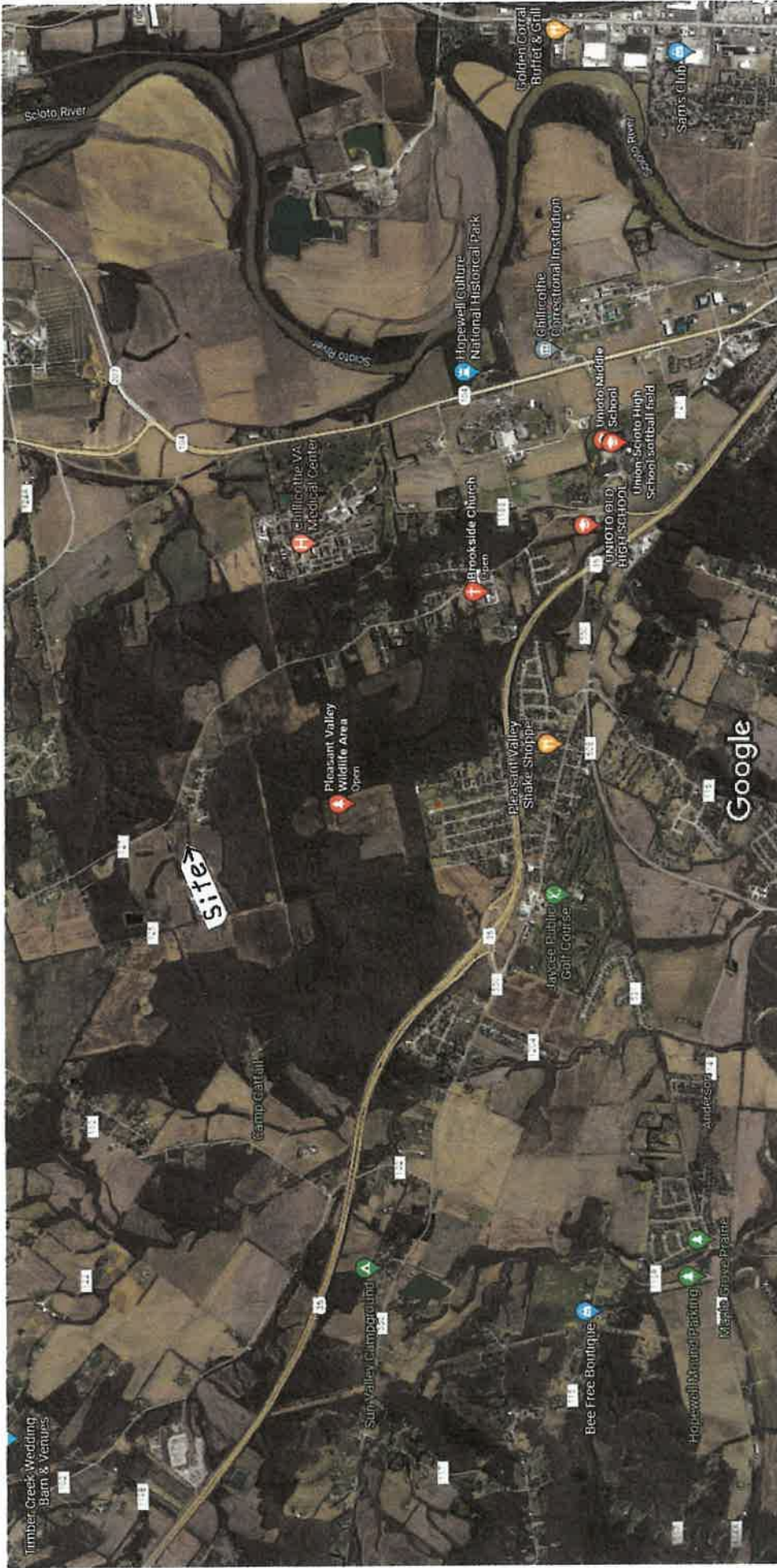
Cc: Kelly Spindler, R. S., Director of Environmental Health

Soil and Site Evaluation Discussion

This soil evaluation is for a new STS (sewage treatment system) for a new 2-4 bedroom home (example that may change) on your property. We used a soils probe and looked at these soils on the property mostly to a depth of 30 inches to find the better area for a leach field and the western portion of the property on the slightly higher elevation was the better area for a leach field, however these soils are all very similar. We separated the proposed leach field into a primary and secondary leach field areas with the western portion of the property being the primary leach field area, where the soils are a little deeper to a seasonal high water table. These soils have a loamy over-wash of approximately 15 inches (#1 soil) and 11 inches (#2 soil). These soils have some gray spots typical of depletions found at the level of a seasonal high water table in the soil. However these soils are to dry to have depletions at a depth of 7 inches (#2 soil) and 9 inch depth (#1 soil), so these are not real depletions, just moved to the area by erosion or these soils are prior converted wet soils. The prior converted wet soil means a series of underground tile drains lines are pulling the water out of the soil thus dropping the water level in the soil. These are over-wash soils and the gray colors do not reverse back to the normal brown soil color, prior to reduction of the iron in the soil (the iron has been washed out of the soil). These soils are loamy and they will drain water and the only restricting layers are deep in the soil, where the glacial till meets the weathered siltstone residual rock at an approximate depth of 44 inches. If an STS is installed at this location, I would install a French drain around the soil area used with the 4 inch perforated pipe and gravel to the soil surface to an approximate depth of 30 inches, depending on the drop in elevation to the drainage outlet. The perimeter drain will dry up the area and allow for water flow through the soil. This will have to be used with some type aeration system.

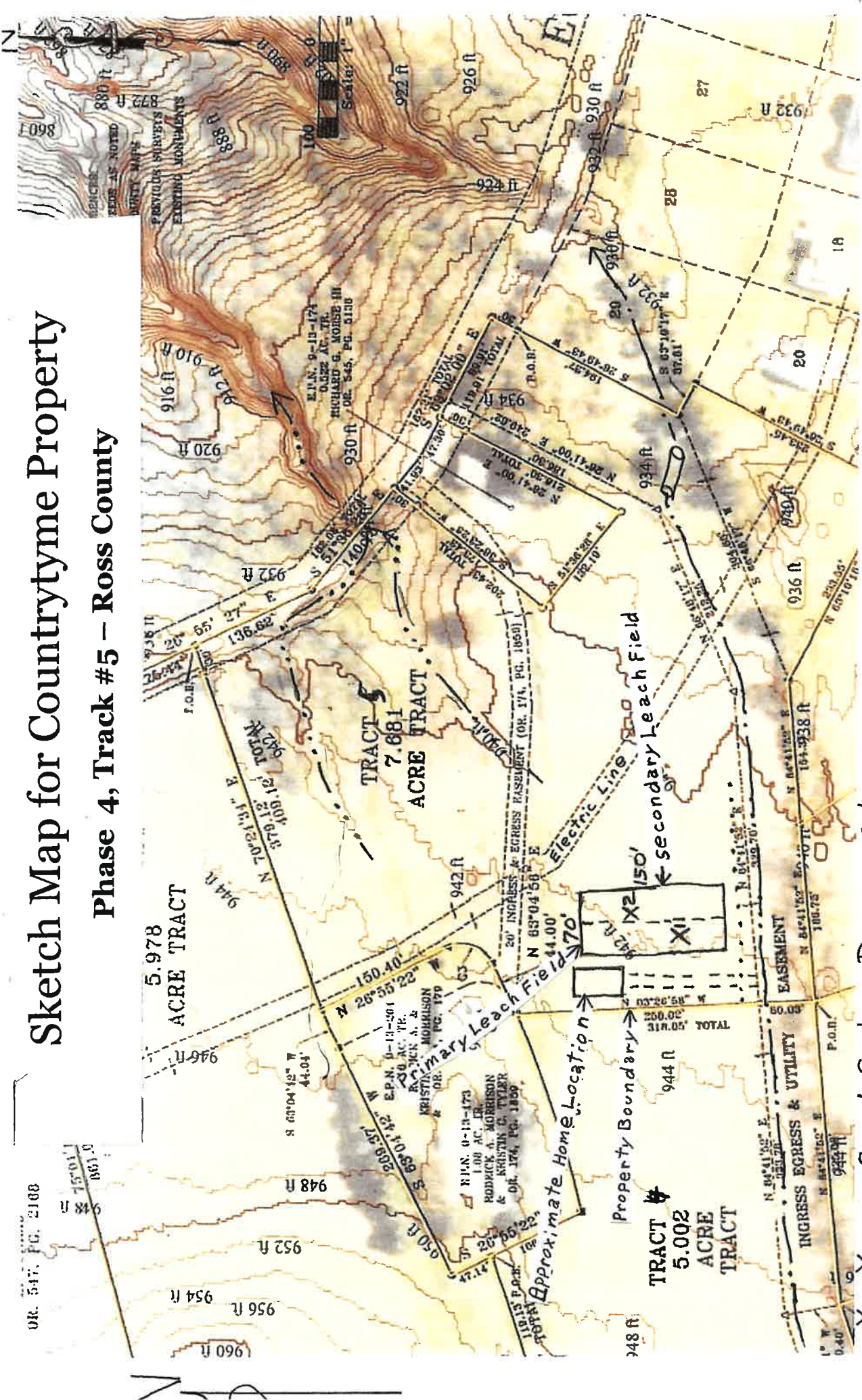
We have shown the location of the proposed STS leach field on the sketch map. We have located a possible new home location. We have marked the proposed leach field area with pink wire flags along the boundary and on the boundary corners. The soil description sites are marked with orange wire flags and the number of the description is marked on the flag. The approximate dominion, of the proposed leach field area, is marked on the sketch map. The proposed leach 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 leach lines will need to be located level on the contour around the slope. These soil descriptions were taken at random to show the soil properties at different areas within the proposed leach 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.

Location Map



Sketch Map for Countrytyme Property

Phase 4, Track #5 - Ross County



X1, X2 - Soil Site Descriptions

- → Swale in Landscape for Surface water Drainage
- .-.-.-.- → Drainage Ditch along Ingress-Egress Entrance Road ~~or~~ Culvert
- ==== → Approximate New Home Driveway
- Approximate Public Water line

These are all Approximate Locations (not to scale)

② We used the 8-12" Depth for H. Linear Loading Rate used 0-4% slope

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Ross Land Use / Vegetation: Crop Field
 Township / Sec.: Union Landform: Glacial Till
 Property Address/Location: Egypt Pike Position on Landform: Till Plain with Recent overwash Deposition
 Phase: Tracks Countrytime Property Slope of Slope: 3
 Applicant Name: Countrytime Realty Shape of Slope: Convex
 Address: Dave Liskany, Countrytime Land Specialist
3451 Cincinnati - Zanesville Rd, SW Date: 10-16-21
 Phone #: 614-429-8152 Evaluator: Carlos Cole
 Lot #: Track #5
 #1 Test Hole #: 1
 Latitude/Longitude: N39°23.779', W83°02.828'
 Method: V Pli V Auger Probe

Certification Stamp or Certification #: 24835
 Signature: Carlos Cole
 Phone #: 304-372-4809 Home
304-532-4711 cell

Dug to 30" + Augered Remainder

Soil Profile	Estimating Soil Saturation			Estimating Soil Porosity				Infiltration Rate gal/day/ft ²	Hydraulic Conductivity			
	Depth (inches)	Munsell Color (hue, value, chroma)	Redoximorphic Features	Class	Approx. % Clay	Approx. % Fragments	Grade			Structure		
Horizon	Matrix Color	Concentrations	Depletions					Size	Type (shape)	Consistence		
AP	10YR 4/3	-	-	SiL	14-16	0-2+	2-1	F+M	Gr	VFr	.6	2.7
Bt ₁	10YR 4/3	-	10YR 5/2	L	20-24	0-2+	2-1	M	sbk	Fr	.6	3.3
2Bt ₂	10YR 5/4 + 7.5YR 5/6	7.5YR 5/6	10YR 6/8	CL	26-30	2+	1-2	M	sbk	Fr	.2	2.0
2Bt ₃	Mixed 10YR 5/4	7.5YR 5/6	10YR 5/2	CL/L	25-29	2+	2-1	M	sbk	Fr	.4	2.4
2Bt ₄	Mixed 10YR 5/4	7.5YR 5/6	10YR 5/2	L	24-28	2-8+	1-2	M	sbk	Fr	.4	3.0
2BC	10YR 5/4	7.5YR 5/6	10YR 5/2	CL	26-30	2-5+	1-2	M	sbk	Fr	.2	2.0
3C	Black 4 10/B	-	-	slc/sic	32-40+	-	-	-	-	Fi	-	-
51 siltstone												
Probably Bedrock												
Remarks / Risk Factors:												
Limiting Conditions												
Perched Seasonal Water Table												
Apparent Water Table												
Highly Permeable Material												
Bedrock												
Restrictive Layer												

x small to Fine Gravel
 Note: The evaluation should include a complete site plan or site drawing.
 Top 15" of soil is overwash from up slope (just fines no gravel)
 This soil seems very Dry Like prior converted or "Drained" For Agriculture production

② We used The 8-12" Depth For H. Linear Loading Rate used 0-4 % slope

Site and Soil Evaluation for Sewage Treatment and Dispersal

County: Ross Land Use / Vegetation: Crop Field
 Township / Sec.: Union Landform: Glacial Till
 Property Address/Location: Egypt Pike Position on Landform: Till plain
 Phase 4: Tracks Countrytime Property Percent Slope: 3
 Applicant Name: Countrytime Realty Shape of Slope: Convex
 Address: Dave Liskany, Countrytime Land Specialist
3451 Cincinnati - Zanesville Rd, SW Date: 10-16-21
 Phone #: 614-429-8152 Evaluator: Carlos Cole
 Lot #: Tract #5

#2 Test Hole #: 2 Certification Stamp or Certification #: 24835
 Latitude/Longitude: N39°23.785', W83°02.823' Phone #: 304-372-4809 Home
 Method: V Pit V Auger Probe Signature: Carlos Cole
Dug to 30" + Augered Remainder Other Soil Features: Fr²

Soil Profile	Estimating Soil Saturation				Estimating Soil Permeability				Infiltration Rate gal/day/ft ²	Hydraulic Loading Rate			
	Horizon	Depth (inches)	Munsell Color (hue, value, chroma)		Class	Texture		Structure			Consistency		
			Matrix Color	Concentrations		Depletions	Approx. % Clay	Approx. % Fragments				Grade	Size
Ap1	0-7	10YR 4/3	-	-	SIL	14-17	5 ⁺⁺	2-1	FTM	Gr	VFR	.6	2.7
Ap2	7-11	10YR 4/3	-	very faint 10YR 5/2	SIL	14-17	2 ⁺	1-2	FTM	Gr + sbk	Fr	.6	2.4
2Bt1	11-19	10YR 7.5YR 4/4	7.5YR 5/6	10YR 5/2	SICL	26-30	2 ⁺	2-1	M	sbk	Fr some compaction	.4	2.4
2Bt2	19-29	Mixed 7.5YR 5/6	-	10YR 6/1	L/CL	24-28	2 ⁺	2-1	M	sbk	Fr	.6	3.3
2Bt3	29-41	7.5YR 5/6	-	10YR 6/1	L	23-27	2 ⁺	1-2	M	sbk	Fr	.4	3.0
2BC	41-45	7.5YR 5/6	-	10YR 6/1	CL	26-30	2 ⁺	1	M	sbk	Fr	.2	2.0
3C	45-49	10YR 2/1	Black	-	SIC	35-40+	-	-	-	-	Fi	-	-
Limiting Conditions											Remarks / Risk Factors		
Perched Seasonal Water Table											Auger stopped. At 49" probably siltstone bedrock.		
Apparent Water Table											7"		
Highly Permeable Material											-		
Bedrock											Auger stopped		
Restrictive Layer											49" 45" Black siltstone		

11" of over wash
 Note: The evaluation should include a complete site plan or site drawing.
 + large quartz fragments
 + mostly small gravels