
January 10, 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 # 7, Pleasant Valley Woods - Union Road**), 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

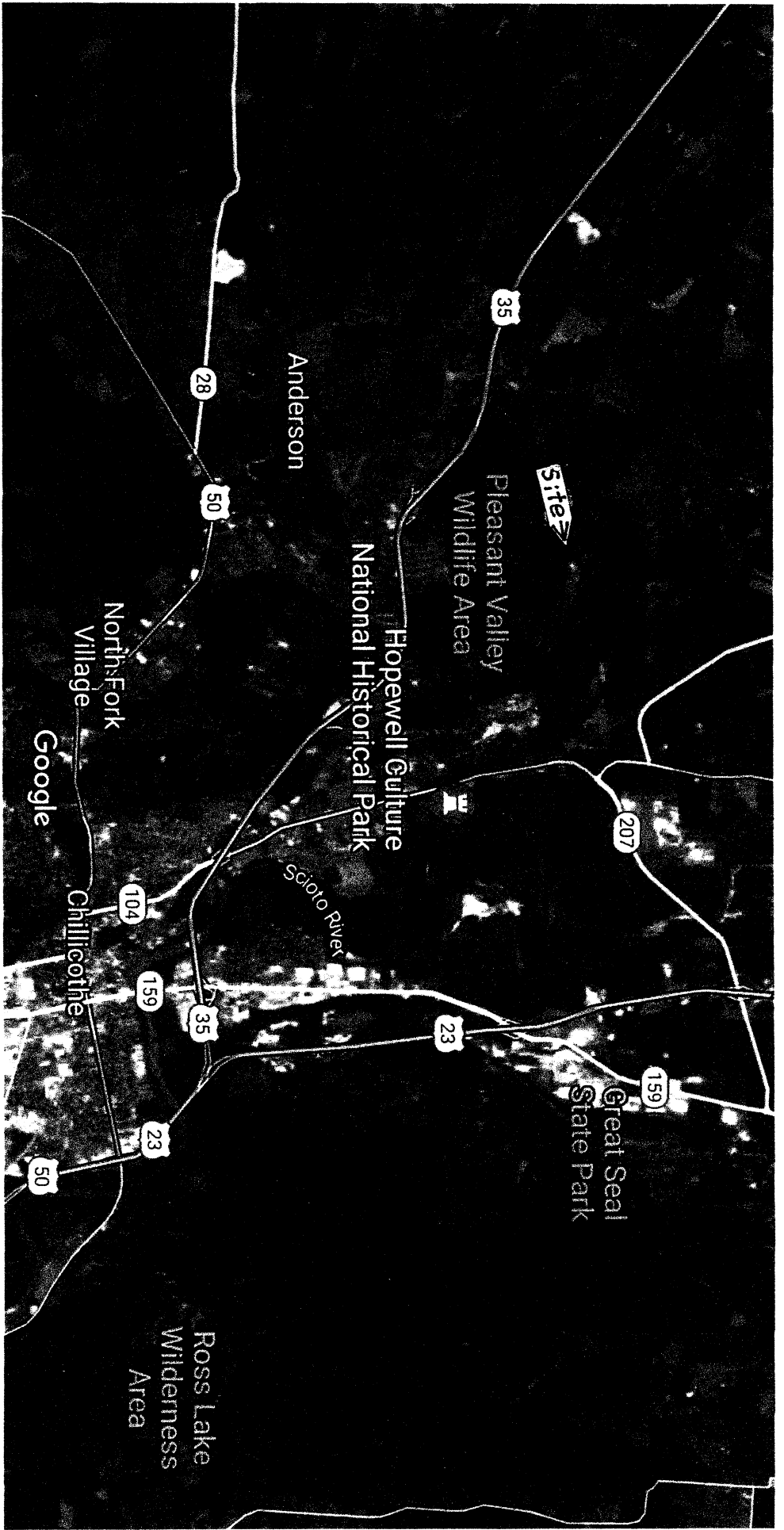
Soil and Site Evaluation Discussion

This soil evaluation is for a new STS (sewage treatment system) for a new home (we have located a possible new home location, but if changed make sure the new home is located upslope of the propose leach field, or plan on pumping the waste water upslope). We used a soils probe and examined the soils as best as possible to find the depth to seasonal high water table, soil textures, percent clay and any compacted or dense layers that would impact the ability of a leach field to work properly. We located these possible leach field areas on a sloping area on the upper side of the property, downslope and upslope of less sloping landforms. These soils have developed in glacial till parent material on a slight out-slope of a little more loamy till deposit. What appears to be a water well is in the center of the possible use area, we located the possible leach field areas 50 feet away from the water well locations. If the well is not used, the water well can be plugged and the new home can be located closer to the old well site and the leach field areas can be extended.

The upper part of the proposed leach field areas are more loamy and better drained. As you travel downslope the soils have more clay on the flatter slopes and the depth to a seasonal high water table is shallower as shown by the soil site descriptions. The #3 & #4 soil site description area seems to be a little better area for a leach field as shown by the soil site descriptions. However these soils are all very similar on this out-slope glacial fan area. The highest part of this landscape should be used for this STS leach field for the best infiltration of the waste water. The natural intermittent drainageway on the western side of the property should be kept open and maybe cleaned out and revegetated with a permanent grass cover. The intermittent drainageway can also serve as an outlet for any subsurface French drains on the lower side of the leach field, or along the driveway, if ever needed. These proposed filter field areas are large and can serve as the primary and secondary leach field areas.

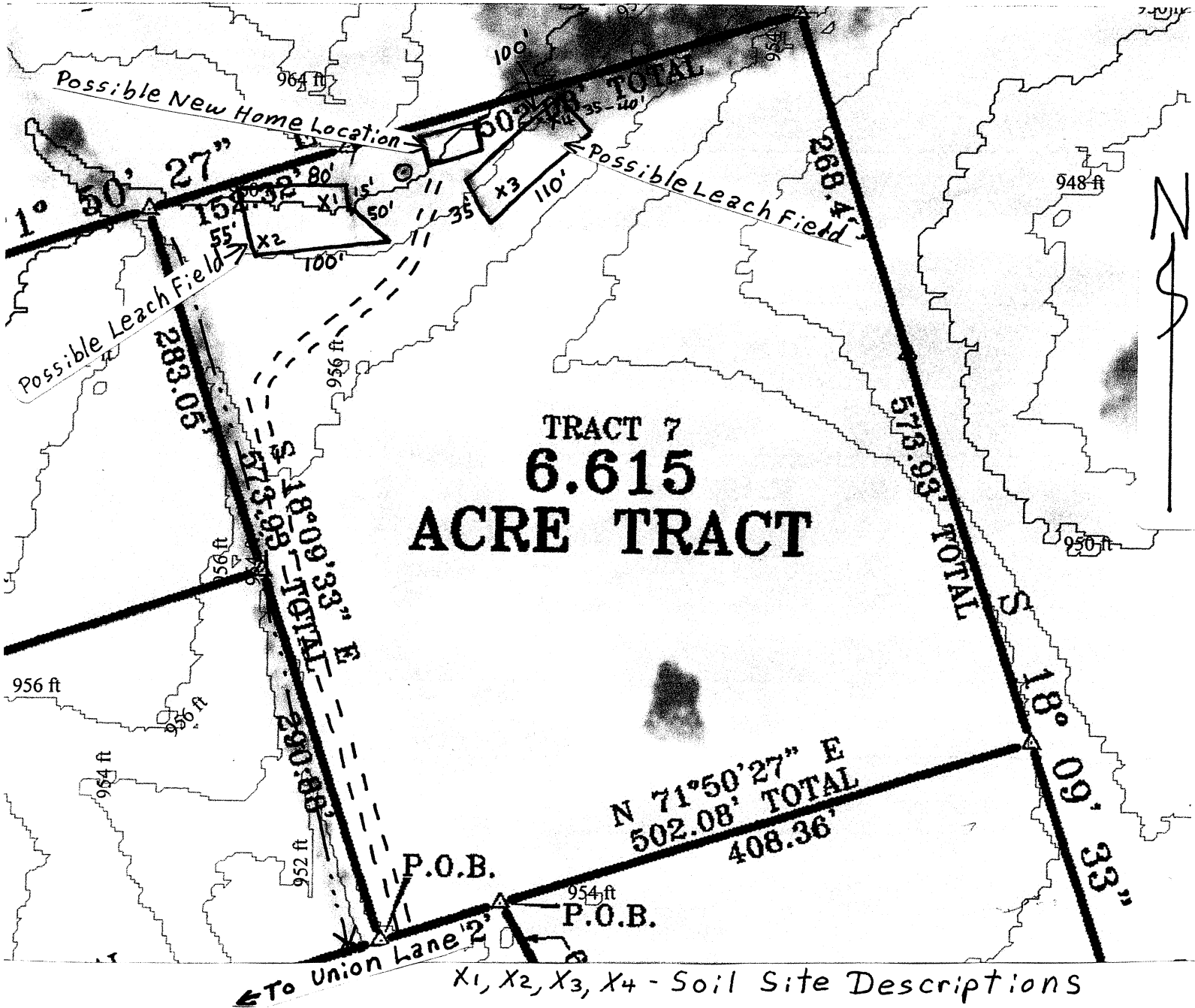
We have shown the location of the proposed STS leach fields on the sketch map. We have marked the proposed filter field areas with pink wire flags along the boundary and/or on the boundary corners. The soil description sites are marked with orange wire flags and the number of the description is marked on the flag. The approximate dominion, of the proposed filter field areas, are 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 filter field lines would 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 filter field area and the sketch map is not to scale. The proposed leach field can be extended around the slope, if needed, as long as you stay on the property. We gave a general house site location (example that may change) on the sketch map to give you a possible reference point, for this report.

Location Map



Sketch Map for Countrytyme Property

Pleasant Valley Woods-Track #7 Ross County



X₁, X₂, X₃, X₄ - Soil Site Descriptions

- ←... — Swale in Landscape for Surface water Drainage
- ==== Approximate "Possible" Driveway Location
- Possible water well, That could be used for water or removed?

These are all Approximate Locations "not to scale"

② we used the 12-24" Depth For H. Linear Loading Rate used 5-9 % slope site and Soil Evaluation for Sewage Treatment and Dispersal

Lot #7 Ross County: Union Land Use/Vegetation: Crop Field
 Township/Sec: S. Union Rd. Landform: Glacis Till
 Property Address/Location: Chillicothe, OH 45601 Position on Landform: out slope
 Applicant Name: Countrytyme Realty Percent Slope: 8-10%
 Address: ATT: Dave Lishner - Lead Specialist Shape of Slope: Convex
3451 Cincinnati - Zanesville Rd, SW Ohio
 Phone #: 614-427-8152 Evaluator: 1-4-21
 Lot #: 7 Charles Cole
 Test Hole #: 1 Certification Stamp or Certification #: 24835
 Lattitude/Longitude: N 39° 23.760', W 83° 03.065' Phone #: 304-372-4809 Home
 Method: Pit Auger Probe Dug to 28" + Augered Remainder Phone #: 304-532-4711 Cell
 Signature: Charles Cole

Soil Profile	Depth (Inches)	Matrix Color	Estimating Soil Saturation		Class	Texture		Grade	Structure		Infiltration Loading Rate gal/day/ft ²	Hydraulic Linear Loading Rate
			Moisture Color (hue, value, chroma)	Redoximorphic Features		Approx. % Clay	Approx. % Fragments		Size	Type (shape)		
Ap	0-8	10YR 4/3	+3/3	-	L/S:L	17-20	0-1*	2-1	F	Gr	Fr-vfr	.6 4.1
Bt1	8-17	10YR 7.5/4	+6/3	-	L/CL	25-28	2*	2-1	M	sbh	Fr	.6 4.1
Bt2	17-28	10YR 5/6	+5/4	-	CL	27-30	2*	2-1	M	sbh	Fr	.4 3.0
Bt3	28-34	10YR 5/6	+5/4	-	CL	30-34	2 1/4*	2-1	M	sbh	Fr-F!	.4 3.0
BC	34-39	10YR 5/6	5/4	-	CL/L	26-29	4-6*	1	M	sbh	Fr	.2 2.7
C1	39-52+	10YR 5/4	7.5/4	6/6	L	24-28	10-20*	-	-	-	Fr	wet
C2	52+	Auger	stopped	by Rock	not Bedro	ch just	coarse	Rock				

Remarks / Bulk Material / water
 Auger pit + stayed at 34" level appears to be better
 Drained, come paved to tray - Depletion colors

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

② we used the 12-24" Depth For H. Linear Loading Rate used 5-9% slope site and Soil Evaluation for Sewage Treatment and Disposal

Lot #7 County: Ross
 Township / Sec: Union
 Property Address/Location: S. Union Rd. Chillicothe, OH 45601
 Applicant Name: Countrytyme Realty
 Address: Attn: David Lis Henry - Land Specialist
 Phone #: 514-429-8152
 Land Use / Vegetation: Crop Field
 Landform: Glacial Till
 Position on Landform: Lower side slope
 Percent Slope: 4-7%
 Shape of Slope: convex
 Evaluation: 1-4-21
 Signature: Carlos Cole
 Certification Stamp or Certification #: 24835
 Phone: 304-372-4809 Home
 304-532-4711 cell

Soil Profile	Depth (Inches)	Matrix Color	Estimating Soil Structure		Class	Texture		Grade	Structure		Consistence	Infiltration Loading gal/day	Hydraulic Linear Loading Rate
			Manual Color (hue, value, chroma)	Redoximorphic Features		Approx. % Clay	Approx. % Fragments		Size	Type (Shape)			
Ap	0-7	10YR 4/3			L	17-20	1%	2-1	F	G-r	Fr-vfr	.6	4.1
Bt1	7-14	10YR 5/4	6/6 2.5YR 5/6		CL/L	26-29	2+	2-1	M	sbh	Fr	.4	3.3
Bt2	14-21	10YR 5/4			CL	29-32	2-4+	1-2	M	sbh	Fr	.2	2.7
Bt3	21-29	10YR 5/6	Mixed 10YR 5/4		CL	31-34	4-8+	2-1	M	sbh	Fr	.4	2.7
BC1	29-37	10YR 6/4	Mixed 10YR 5/6		CL	28-32	3-5+	1-2	M	sbh	Fr	.2	2.7
BC2	37-39	10YR 7.5YR 5/6			CL	31-35	4-5+	1	M	sbh	Fr-Fi	.2	2.7
C	39-55	10YR 7/4	6/6, 7 6/6		CL	32-38	4-5+	-	-	-	Fi-Fr	-	-

Limiting Condition: Depth to (in.)
 Perched Seasonal Water Table: 14
 Apparent Water Table: -
 Slightly Permeable Material: -
 Backrock: 255
 Restrictive Layer: 37+
 Remarks / Rate Factors: x gravel

② we used the 12-24" Depth For H. Linear Loading Rate used 5-9% slope site and Soil Evaluation for Sewage Treatment and Dispersal

Lot #7
 County: Ross
 Township / Geo.: Union
 Property Address/Location: S. Union Rd.
 Applicant Name: Chittico Thie Ohsgol
 Address: Countryside Realty
 Phone #: 614-427-8152
 Lot #: 7

Land Use / Vegetation: Crop Field
 Landform: Glacial Till
 Position on Landform: out slope
 Percent Slope: 6-7%
 Shape of Slope: convex
 Evaluation: 1-6-21
 Carlos Cole

Method: Pit Auger Probe
 Latitude/Longitude: N39° 23.759', W83° 03.037'
 Test Hole #: 3
 Due to 27" + Augered Remainder
 Phone #: 304-372-4809 Home
 Signature: Carlos Cole
 Certification Stamp or Certification #: 24835

Soil Profile	Depth (Inches)	Matrix Color	Estimating Soil Saturation		Class	Estimating Soil Permeability			Infiltration Loading Rate gal./day/ft ²	Hydraulic Linear Loading Rate			
			Redoximorphic Features	Depletions		Texture	Structure	Consistence					
Horizon	Depth (Inches)	Matrix Color	Concentrations	Depletions	Class	Approx. % Clay	Approx. % Fragments	Grade	Size	Type (Shape)	Consistence		
Ap1	0-6	10YR 4/3	-	-	L	25-27	2+	2-1	F	Gr	Fr-vfr	.6	4.1
BH/Bt	6-11	10YR 5/4	-	-	CL	28-30	2+	2-1	M+C	SbH	Fr-F!	.4	3.0
Bt1	11-18	10YR 5/6	4/4	-	CL/L	26-29	2+	2-1	M	SbH	Fr	.4	3.0
Bt2	18-35	10YR 5/4		10YR 6/2	L	25-28	2-5	2-1	M	SbH	Fr	.6	4.1
BC	35-44	10YR 6/6	.7/2-.7/1	-	CL	28-35	4-6	1	C	SbH	Fr-F!	.2	2.7
2C	44-60	10YR 6/6	6/1, 4/5/1	-	silt/sic	35-40	-	-	-	-	F!	-	-
✓ This appears to be weathered siltstone/shale Bedrock or Lake Deposited stratified layers													
Limiting Conditions			Depth to (in.)			Descriptive Notes						Remarks / Mark Factors	
Perched Seasonal Water Table			18			Some AT 35" gravel						But mainly AT 44"	
Apparent Water Table			-										
Easily Permeable Material			None										
Backrock			44										
Restrictive Layer			44										

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

© some completion from Farm equipment

CDH - Dec 2008 - Revised Sept 2007

② we used the 12-24 Depth For H. Linear Loading Rate used 5-9 % slope site and Soil Evaluation for Sewage Treatment and Dispersal

Lot # 7 County: Ross

Township / Sec: Union
 Property Address/Location: 5, Union Rd.
 Chillicothe, OH 45601

Applicant Name: Countrytyme Realty
 Address: Attn: Dave Lisheny - Land Specialist
 3451 Cincinnati - Zanesville Rd, SW Date: 1-6-21

Phone #: 614-422-8152
 Lot #: 7

Latitude/Longitude: N
 Method: Pit Auger Probe

Dug to 24" + Augered Remainder
 Test Hole #: 4
 Land Use / Vegetation: Crop Field
 Landform: Glacier Till
 Position on Landform: upper out slope
 Percent Slope: 5-6%
 Shape of Slope: convex
 Evaluator: Carlos Cole
 Signature: Carlos Cole
 Phone: 304-372-4809 Home
 304-532-4711 cell
 Certification Stamp or Certification #: 24835

Soil Profile	Depth (Inches)	Matrix Color	Watering Soil Saturation		Class	Texture	Estimating Soil Permeability			Infiltration Loading Rate gal./day/ft ²	Hydraulic Linear Loading Rate		
			Munsell Color (hue, value, chroma)	Redox/morpho Features			Approx. % Clay	Approx. % Frequency	Grade			Structure	Consistence
Ap1	0-6	10YR 3/3	-	-	L	17-20	0-1 ⁺	2	F	Gr	VFr-Fr	.6	4.1
Ap2	6-12	10YR 3/3	+4/3	-	L	15-18	0-1 ⁺	2	F+m	Gr	VFr	.6	4.1
Bt1	12-20	10YR 5/4	-	-	CL/L	27-29	1-2 ⁺	2	M	SbH	Fr	.4	3.0
Bt2	20-28	10YR 5/4	+5/6	very faint 10YR 6/2	CL	28-31	1-2 ⁺	2-1	M	SbH	Fr	.4	3.0
Bt3	28-35	10YR 5/6	+5/4	very faint 10YR 6/2	CL/L	26-29	2 ⁺	2-1	M	SbH	Fr	.4	3.0
Bt4	35-42	10YR 5/6	+5/4	10YR 6/2	CL/L	26-29	2-5 ⁺	1-2	M	SbH	Fr	.2	2.7
BC	42-49	10YR 5/6	-	-	L	22-27	10 ⁺	1	M	SbH	Fr	.4	3.8

Limiting Conditions: Depth to (in.) 20-35"
 Perched Seasonal Water Table: none
 Apparent Water Table: none
 Easily Permeable Material: none
 Backrock: none
 Restrictive Layer: none

at 49" Auger
 * gravel

Remarks / Bulk Factors: less... stopped by rock - gravels - not bedrock