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 #4—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

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

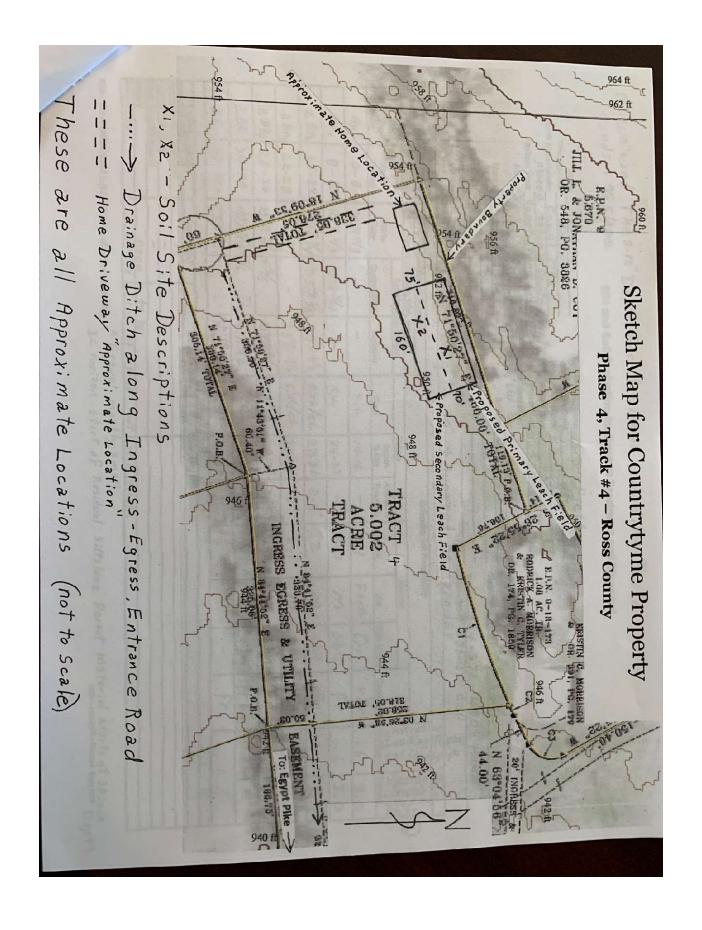
## Soil and Site Evaluation Discussion

This soil evaluation is for a new STS (sewage treatment system) for a new 3 bedroom home (example that may change) on your property. We used a soils probed 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 northern portion of the property on the higher elevation was the better area for a leach field. We separated the proposed leach field into a primary and secondary leach field areas with the northern portion of the property being the primary leach field area, where the soils are a little deeper to a seasonal high water table. The parent material of these soils is mostly glacial till with a thin silt cap 8 to 15 inches thick) in the #1 soils and the silt cap is missing in the #2 soil. At a depth of 38 inches in the #1 soil the soil parent material changes to weathered residual siltstone and #2 soil the residual weathered siltstone soil horizon starts at a depth of 39 inches,

The upper part (starts approximately 10 feet south of the property boundary)or primary leach field (#1 soil) is the better area for a leach field, where the soil is deeper to a seasonal water table (15 inch depth). These soils both #1 & #2 soils do have a slight increase in clay percentage at a depth of 15 inches but the percent clay decreases again at a depth of 34 inches. The #1 soils are loamy and do not have any restricting layers and bedrock is a depths of 50 inches or deeper. The secondary leach field area is very similar to the #1 soil but a little shallower to a seasonal high water table at a depth of 12 inches (#2 soil). The depth to bedrock in these soils will be greater than 60 inches. The depth to the residual weathered siltstone soil will be approximately 38 inches. The depth to a seasonal high water table will range from a depth of 12 inches (#2 soil) to a depth of 15 inches (#1 soil).

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.





(2) We used the 8-12" Depth For H. Linear Loading Rate Useds-9 % Slope Site and Soil Evaluation for Sewage Treatment and Dispersal

|                   |           |              |   |                              | still frieble          | H                      | 28" but   | er At 22 to 28"   | THE STATE OF THE S | A little                       |   | Restrictivo Layer            |
|-------------------|-----------|--------------|---|------------------------------|------------------------|------------------------|---|---|--|--------------------------------|---|------------------------------|
|                   |           |              |   |                              | 1                      | 1                      | 1   | 50"   | 1  | 3 1                            | faterial  | Highly Permeable Materia     |
| 1                 |           | 1            | 1   | 1                            | -                      | 1                      | 1   | -   | 1  |                                | 5   | Apparent Water Table         |
|                   | -         | -            | -   |                              |                        | -                      |   |   |  | 15                             | ator Table  | Perchad Scatonal Water Table |
| -                 | -         | 1            |   |                              | lisk Factors:          | Remarks / Risk Factors | otes  | Descriptive Nates   | -  | Depth to (in.)                 | aditions  | Limiting Conditions          |
|                   |           |              |   |                              |                        |                        |   |   |  |                                |   |                              |
|                   | Fr        | ì            | 1   | -                            | 1                      | 24-30                  | s: 4/sich   | white<br>Powder   | 100  | 7.51/83/                       | 38-50+  | 30                           |
| 18                | 13        | 564          | 3   | -                            | 24                     | 25-28                  | 1   | 101/86/2  | 370 St.  | 10×8×4×8/01                    | 34-38   | 280                          |
| .22.              | 120       | SbK          | 3   | 1-2                          | 2-5                    | 28-31                  | C4/5;c1   | 10×186/2  | 3/6  | 16+ 1/2 stor                   | 28-34   | 2 Bt4                        |
| 4.                | Fr        | SPK          | 3   | 2-1                          | 5 +                    | 30-34                  | 5:04/04   | 7.51/25/2   | 1  | 7.5/n X                        | 22-28   | 2 Bt3                        |
| . 4 2             | Fr        | Sbr          | 3   | N                            | 2-5                    | 27-30                  | s;cl/cL   | 10×842  | 7,51/8%  | 10 YR 74                       | 15-22   | 2 Bt2                        |
| .6 3.             | 450       | Sbh          | 3   | 2-1                          | 1                      | 24-27                  | 7.5   | ı   | 107854   | 10YR 5/3                       | 8-15  | Bt,                          |
| .6 3              | VFr       | Gr           | F+m   | 2-1                          | ì                      | 14-16                  | 1,5   | 1   | ١  | 101/84/3                       | 0-8   | Ap                           |
| Other Sol         | Tal       | Type (shape) | Size  | Grade                        | Approx. %<br>Fragments | Approx.<br>% Clay      | Class   | Depletions  | Concentrations   | Mairix<br>Color                | Depth<br>(inches)                                       | Horizon                      |
| al,               | F:14      |              | Structure                                   |                              |                        | Taxture                |   | hio Features  | Redoximorphio Features   |                                |   |                              |
| din<br>Ida<br>Ira | fra       |              |   |                              |                        |                        |   | ohroma)   | Munsell Color (hus, value, chroma)   | Munsell C                      | 2011 1-101110   | 7 110%                       |
| 91                | Fi.       |              | Bille                                       | Estimatine Soil Permeability | P. dina                | -                      | 1   |   |  |                                |   |                              |
|                   | 4711 cell |              | Remainder                                   |                              | Augered                | 4                      | 10 30   | Dug   | - Probe D  | 19° 23, 790                    | Latitude/Longitude: W39° 23.790' Mothod: WPI WAuger     | Latitu                       |
| Lama              | 9-11000   |              |   |                              |                        |                        |   |   |  |                                | Tast Hole #:  |                              |
| 4000              | Cel r     | Onles        | Certification Stamp or Cert Signature: Quel |                              | -21<br>25 Cole         | Car 105                | SW Date:<br>Evaluator:                                    | esville Nd.   | 152<br>152   | Phone # 614-429-8152 Evaluator | Phone # 67  |                              |
|                   | ,         |              |   |                              | 5%                     | Con                    | Position on Landform: erry Porcent Slope: Shape of Slope: | Position on Landform: Property Porocus Slope: Ships of Slope: After two Land Specialist | me Really  | Egypt Pike                     | Property Address/Location: L Phase 4 Applicant Name: Ec | Property A                   |
|                   |           |              |   | 1                            | Glacial                | Crop                   | Land Use / Vegetation:<br>Landform:                       | Land 1  |  | Ross                           | County:   | 7                            |
|                   |           |              |   |                              | •                      |                        |   |   |  |                                | •   |                              |

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

3 C horizon start of Residual Siltstone Parent Material Starts At 38 inch
3 C horizon start of Residual Siltstone Parent Material Starts At 38 inch
3 C horizon

(2) We used the 8-12" Depth For H. Linear Loading Rate used 5-9 % slope Site and soil Evaluation for Seviace Treatment and Discount Site and Soil Evaluation for Sewage Treatment and Dispersal

| * B/2ch         | Bestrictive Liver  | Junet Links | righte Permeable Material | Annaront Water Table | Perched Sessonal Water Table | Limiting Conditions  | 3.CZ 5                       |              | 30, 3         | 282 3   | 2 Bt3          | 2 Bt2    | 28+1     | 284        | Ap      | Horizon             |                        |                                    | Soli Profile                 | Latitud.   | App  |
|-----------------|--------------------|-------------|---------------------------|----------------------|------------------------------|--|------------------------------|--------------|---------------|---------|----------------|----------|----------|------------|---------|---------------------|------------------------|------------------------------------|------------------------------|--|--|
|                 |                    |             | erial                     |                      | or Table                     | Hons   | 52-60+                       |              | 39-52         | 34-39   | 25-34          | 19-25    | 12-19    | 5-12       | 0-5     | Depth<br>(inches)   |                        |                                    | ofile                        | #2 Test Hole # 2 althude/Longitude: 1/39 Method: 1/91      | Propriy Address/Location:  Applicant Name:  Address: \( \frac{\pi}{2} \)  Address: \( \frac{\pi}{2} \)  Phone \( \frac{\pi}{6} \)  Lot \( \frac{\pi}{6} \)   |
| annialia dia    | none               | none        | 1                         | 1                    | 12                           | Depth to (m.   | 11. V. 10 10 0 21 W.         |              | 10×R4/,       | 101/8%  | 10×7 5/6 + 5/4 | 12 NY 01 | 10×85%   | 10×R 5/4   | 10YR4/3 | Matrix              |                        | Munse                              | Tr.                          | Latitude/Longitude: V 3 9° 23, 783'  Method: V Pit V Auger | Subcatalon E 9 V D T C 178 Phose # 4 Co Ma Try y me ant Name: Co Ma Try y me Address: Daye 4 5 Kany 6 179 179 179 179 179 179 179 179 179 179  |
| * B/2ch         | to                 |             | -                         | -                    |                              | 12   | 7/17/                        |              | 10YR 5/4 + 5/ | 10485/4 | +5/4           | 1        | 10×8 5/4 | 10/8%      | 1       | Concentrations      | Redoxin                | Munsell Color (hus, Yalus, ohroma) | Entimedine Sail Saturation   | 83', W.83<br>erProbe                                       | the Country  The Real  That:-2  -8152  |
| the ma costs (c |                    | to 60"      |                           |                      |                              | Description of the state of the | 1                            | 7/05/11/20/2 | 1/2+4         | 4       | 10×18611       | 107841   | 4 1078 % | -          | 1       | ns Depletions       | Redoximorphio Features | tue, chroma)                       | turation                     | WB3002.951   | Application: Egypt Fine Applicant Name: Colunt TYTME Resistant Super Applicant Name: Colunt TYTYME Resistant Super Address: Dave Liskany, Country Tyme Land Specialist 345/Cincinnati-Zanesville Rd., Sw. Date: Phone # 614-429-8152  Evaluation: Lot #: |
| s (concretions) |                    |             | 1                         | 1                    | 1                            | The state of the s | -                            | 7/7/5        | sict/sit      | 7       | 4/04           | 72       | 22       | 7          | 7       | Class               |                        |                                    |                              | to 30"   | Providion on Landform: Serty Parcant Stapes: Shape of Stopes: Shape of Stopes: Ad Special:St Rd., S W Date: Rd., S W Evaluator:  |
| (svo.           |                    | 1           | 1                         | 1                    | 1                            |  | Remarks / Risk Factors       | 24-30        | 26-32         | 23.26   | 25-28          | 26-30    | 29-32    | 20-24 1-2% | 14-16   | Approx.<br>% Clay   | Toxiuro                |                                    | 1                            | + A.   |  |
| XX SITSTONE     |                    | -           | -                         | -                    | -                            |  | isk Ractors                  | 5 5 ++       | 1             | 1-2%    | 29             | 28       | 2%       | 1-2%       | 0-2     | Approx. % Pragments |                        |                                    | Rollman                      | Augered  | Convex<br>  11-3-21<br>  Carlos Cole   |
| STONE           |                    | 1           | -                         | -                    | 1                            | -  | STATE OF THE PERSON NAMED IN |              | 1             | -       | 1-2            | 2-1      | 2-1      | N          | 2-1     | Grade               |                        | 9                                  | Redimediae Soll Permenhility |  |  |
| Fragment        |                    | -           |                           | -                    | -                            | -  |                              | 1            | 1             | 3       | Z              | 3        | m+c      | 3          | F+M     | Size                | Structure              | American                           | phillies .                   | Phones: 304<br>Remainder                                   | Cortification Sta  |
| ars             | -                  | 1           | -                         | -                    | 1                            | -  | -                            |              | 1             | 564     | 295            | Sbh      | 564      | Sbh        | Gr      | Type (shape)        |                        |                                    | 1                            | -532-4   | Cortification Stamp or Castification the   |
|                 | The second second  | -           | -                         |                      |                              |  |                              | Fr           | Fr            | Fr      | 25             | F        | 23       | ·Fr        | vfr     | Consistence         |                        |                                    | 2 13 6101                    | -372-4809<br>32-4711 cell                                  | 50)  |
|                 | -                  | 1           | 1                         | 1                    |                              |  |                              | 7            |               | ュー      | 1.4            | 1.4      | 4.       | .6         | .6      | Tother Sol          | 1/2                    | rat<br>ling<br>day                 | 100                          | ate Home   | 55842  |
|                 | Catalog Contractor | -           | -                         |                      |                              |  |                              |              |               | 3,3     | 3,3            | 2.7      | 2.7      | 3.6        | 3.6     | Features R          | ne                     | e                                  | 3                            |  |  |