



*Soil Suitability for Domestic  
Sewage Treatment and  
Disposal Systems*

---

Old Coats Road  
Lillington, NC  
Harnett County

PIN 0661-72-5304, 0661-72-0302, and  
0661-51-5157

---

Prepared For: Beverly Pollock, Owner  
Prepared By: Sloan Griffin, SanLee Environmental, LLC  
Report Date: May 13, 2021



**Soil Suitability for Domestic Sewage Treatment and Disposal Systems  
Old Coats Road, Lillington, NC (Harnett County)**

PREPARED FOR: Beverly Pollock, Owner

PREPARED BY: Sloan Griffin, LSS #1333

DATE: May 13, 2021

Soil suitability for domestic sewage treatment and disposal systems was evaluated on April 10, April 17, and May 8, 2021, for property located off Old Coats Road in Lillington, NC. Sloan Griffin of SanLee Environmental, LLC conducted the soil evaluation. The detailed soil evaluation of the land area will follow. A property reference map is provided in Attachment 1. A review of the soil and landscape characteristics that dictate soil suitability for domestic sewage treatment and disposal systems can be found in Attachment 2. The property is primarily within agricultural fields on an upland side slope and includes a pond, wells, and several existing structures (Attachment 3). Portions of the property were in dense vegetation and were not evaluated at this time due to poor landscape position, unsuitable soils, standing water, creek setbacks, and the presence of wetland indicators.

**Soil Suitability for Domestic Sewage Treatment and Disposal Systems (General)**

The aerial map in Attachment 3 details the approximate property boundaries, soil boring locations, soil types, and soil areas for septic systems. Approximately 85 soil borings were advanced to delineate the provisionally suitable soils area on the property (Attachment 3). This evaluation was merely a preliminary review to determine what potential this land might have for domestic sewage treatment and disposal systems. Therefore, specific types of septic systems, exact locations of future drainfields and repair areas, plus buffers from property lines (current and potential future lot lines), building foundations, wells, etc. are not fully considered. These things will need to be more fully considered as the plans develop for the potential future of this site. The suitable soils area, as denoted by the green hatched area on the lot (see map in Attachment 3), exhibited soil characteristics and soil depths (24" or greater) that is provisionally suitable for

conventional trench septic systems. The surface water setback areas are denoted by the red hatched area and are excluded from the usable soils area.

Typical profile descriptions of the provisionally suitable soil for this property are in Attachment 4.

The provisionally suitable soil borings had the following characteristics. Soil texture was provisionally suitable and was estimated to be loam to sandy loam near the soil surface (A horizons) and sandy clay loam to clay in the subsoil (B horizons). Soil structure was provisionally suitable and was estimated to be granular near the soil surface (A horizons) and weak subangular blocky in the subsoil (B horizons). Clay mineralogy was provisionally suitable with very friable to firm moist soil consistence and non-sticky to slightly sticky and non-plastic to slightly plastic wet soil consistence.

The major soil type on this property is a Norfolk loamy sand (map symbol NoA, NoB, and NoC) and Lillington very gravelly sandy loam (map symbol LnB). The Harnett County Soil Survey indicates that moderate to severe limitations exist for septic systems installed in these soils types (Attachment 5).

The land area required for a conventional or shallow conventional septic system is calculated based on the size of the proposed home and the Long-Term Acceptance Rate (LTAR) of the soil. The LTAR range for the provisionally suitable soils on this property is 0.1 – 0.4 GPD/ft<sup>2</sup> based on the most restrictive soil texture in the subsoil. Table 1 below presents estimated conventional or shallow conventional septic system land area requirements for several home sizes and LTAR's on this property. The most limited LTAR suggested by SanLee Environmental, LLC for a portion of the provisionally suitable soil is 0.25 GPD/ft<sup>2</sup>, but the final LTAR for specific septic system types and septic drainfield locations will be set by the Harnett County Health Department depending on the final house site and drainfield location. The detailed computations are in Attachment 6.

Table 1. Estimated Conventional Septic System Land Requirements (including repair area) for Several Home Sizes and Long-Term Acceptance Rates (LTAR) on this Property.

<u>House Size</u>	<u>Long-Term Acceptance Rate (LTAR)</u>	<u>Area Required for Conventional Septic System</u>	<u>Minimum Area Required for Innovative Conventional Septic System</u>
	-----GPD/ft <sup>2</sup> -----	-----ft <sup>2</sup> -----	-----ft <sup>2</sup> -----
3 bedrooms	0.1 – 0.4	6,750 – 32,400	8,100 – 24,300
3 bedrooms	0.25	~12,960	~9,720
4 bedrooms	0.1 – 0.4	9,000 – 43,200	6,750 – 32,400
4 bedrooms	0.25	~17,280	~12,960
5 bedrooms	0.1 – 0.4	11,250 – 54,000	8,438 – 40,500
5 bedrooms	0.25	~21,600	~16,200

Conclusions

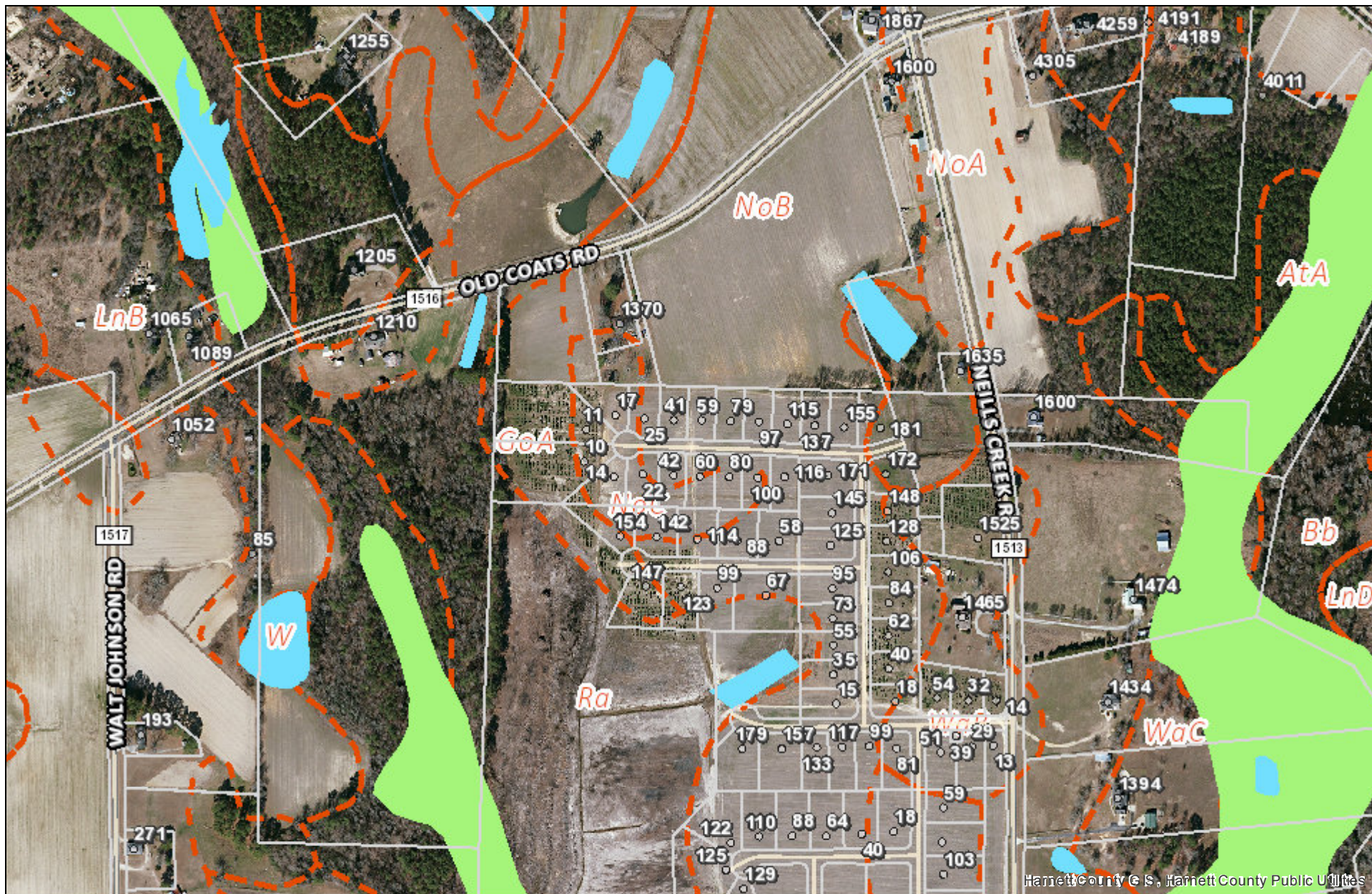
Based on the results of this evaluation, the installation of a conventional septic systems seems probable within the area evaluated, however house size, location, property lines and setbacks may affect usable soils area and available space.

We appreciate the opportunity to assist you in this matter. Please contact us with any questions, concerns, or comments.

**ATTACHMENT 1: Property Reference Map**

# Harnett GIS

NOT FOR LEGAL USE



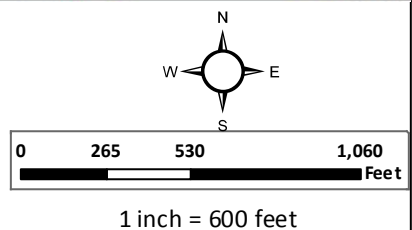
Harnett County GIS, Harnett County Public Utilities



GIS/E-911 Addressing

May 13, 2021

- |                               |                         |              |         |
|-------------------------------|-------------------------|--------------|---------|
| Recycle Center                | Harnett County Boundary | NC           | Parcels |
| Landfills                     | Address Numbers         | US           |         |
| Surrounding County Boundaries | Airport                 | Roads        |         |
| Federal Property              | <b>MajorRoads</b>       | Mile_Markers |         |
| City Limits                   | Interstate              | Railroad     |         |



**ATTACHMENT 2: Review of Rules Pertaining to Domestic  
Sewage Treatment and Disposal Systems**

Five categories of soil and landscape characteristics are evaluated to determine soil suitability for domestic sewage treatment and disposal systems and include: topography and landscape position, soil morphological characteristics, soil wetness conditions, soil depth, and restrictive horizons. The soil and landscape characteristics found in a particular location dictate the type(s) of domestic sewage treatment and disposal system that can be used on a parcel of land. The detailed rules can be found in Section .1900 – Sewage Treatment and Disposal Systems, but a general review of the five categories and other relevant rules can be found in the sections below.

#### .1940 TOPOGRAPHY AND LANDSCAPE POSITION

Uniform slopes less than 15 percent are considered suitable, uniform slopes between 15 and 30 percent are considered provisionally suitable, and slopes greater than 30 percent are considered unsuitable for domestic sewage treatment and disposal systems. Complex slope patterns and slopes dissected by gullies and ravines are considered unsuitable for domestic sewage treatment and disposal systems. Depressions and wetlands are also considered unsuitable for domestic sewage treatment and disposal systems.

#### .1941 SOIL MORPHOLOGICAL CHARACTERISTICS

Sandy and coarse loamy textured soils (sand, loamy sand, sandy loam, and loam) are considered suitable for domestic sewage treatment and disposal systems. Fine loamy and clayey textured soils (silt, silt loam, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, and clay) are considered provisionally suitable for domestic sewage treatment and disposal systems.

Crumb, granular, and single-grained soil structures are considered suitable for domestic sewage treatment and disposal systems. Blocky soil structures are considered provisionally suitable for domestic sewage treatment and disposal systems. Platy, prismatic, and massive soil structures are considered unsuitable for domestic sewage treatment and disposal systems.

Slightly expansive clay mineralogy is considered suitable for domestic sewage treatment and disposal systems. Slightly expansive clay minerals exhibit loose, very friable, friable, or firm moist soil consistence. Expansive clay mineralogy is considered unsuitable for domestic sewage treatment and disposal systems. Expansive clay minerals exhibit very firm or extremely firm moist soil consistence. Organic soils are considered unsuitable for domestic sewage treatment and disposal systems.

#### .1942 SOIL WETNESS CONDITIONS

Soil wetness conditions are caused by seasonal high water table, perched water table, tidal water, seasonally saturated soils, or lateral water movement. Soil wetness conditions are indicated by soil colors, either in mottles or mass, with a chroma of 2 or less according to the Munsell color charts. Soil wetness conditions detected 48 inches in depth or deeper are considered suitable for domestic sewage treatment and disposal systems. Soil wetness conditions detected between 36 to 48 inches in depth are considered provisionally suitable for domestic sewage treatment and disposal systems. Soil wetness conditions detected 36 inches in depth or shallower are considered unsuitable for domestic sewage treatment and disposal systems.



#### .1943 SOIL DEPTH

Soil depths to rock, parent material, or saprolite greater than 48 inches are considered suitable for domestic sewage treatment and disposal systems. Soil depths to rock, parent material, or saprolite between 36 and 48 inches are considered provisionally suitable for domestic sewage treatment and disposal systems. Soil depths to rock, parent material, or saprolite less than 36 inches are considered unsuitable for domestic sewage treatment and disposal systems. Saprolite has a massive, rock-controlled structure, and retains the mineral arrangement of its parent rock in at least 50 percent of its volume. Saprolite only forms from metamorphic and igneous rock parent materials and is typically referred to as “rotten rock”.

#### .1944 RESTRICTIVE HORIZONS

Restrictive horizons are capable of perching ground water or sewage effluent and are strongly compacted or cemented. Restrictive horizons resist soil excavation or augering. Soils with restrictive horizons three inches or more in thickness at depths greater than 48 inches are considered suitable for domestic sewage treatment and disposal systems. Soils with restrictive horizons three inches or more in thickness at depths between 36 and 48 inches are considered provisionally suitable for domestic sewage treatment and disposal systems. Soils with restrictive horizons three inches or more in thickness at depths less than 36 inches are considered unsuitable for domestic sewage treatment and disposal systems.

#### .1950 LOCATION OF SANITARY SEWAGE SYSTEMS HARNETT COUNTY ENVIRONMENTAL HEALTH DEPARTMENT

No area for domestic sewage treatment and disposal system installation (or repair in Harnett County) may be disturbed by clearing, excavation, filling, vehicle or equipment traffic, or storage of building materials.

#### .1947 DETERMINATION OF OVERALL SITE SUITABILITY

##### .1948 SITE CLASSIFICATION

All of the criteria for the five categories above are to be determined and classified as suitable, provisionally suitable, or suitable according to the respective rules described above. If all criteria are classified the same, that overall site classification will prevail. If there is a variation in the classification of several criteria, the most limiting classification will be used to determine the overall site classification.

A suitable classification generally indicates soil and landscape conditions favorable for the operation of a domestic sewage treatment and disposal system or slight limitations that can be readily overcome by proper design and installation. A provisionally suitable classification indicates soil and/or landscape conditions have moderate limitations for the operation of a domestic sewage treatment and disposal system, but modifications and careful planning, design, and installation can result in satisfactory system function. An unsuitable classification indicates severe soil and/or landscape limitations for the operation of a domestic sewage treatment and disposal system.

#### SUMMARY

Suitable/provisionally suitable landscapes and soils to a depth of 36 inches can, in general, be used for conventional gravity driven septic systems. Suitable/provisionally suitable landscapes

and soils to a depth of 24 –36 inches can, in general, be used for alternative septic systems such as shallow conventional and low pressure pipe systems, among others. All alternative systems for provisionally suitable landscapes and soils must be proposed to and approved by the Harnett County Environmental Health Department. Any landscapes or soils classified as unsuitable maybe reclassified as provisionally suitable by the Harnett County Environmental Health Department after a site investigation by department personnel.

**ATTACHMENT 3: Property Map Detailing Soil Suitability  
for Septic Systems and Soil Types**











SanLee Environmental, LLC  
Phone: 919-842-6263  
SanLeeEnvironmental@gmail.com

Project:  
**Old Coats Road**  
Lillington, NC

Date:  
**June 14, 2021**

Soil Borings

- <20" 
- 20" - 24" 
- 24" - 36" 
- 36" - 48" 

Usable Soil Area

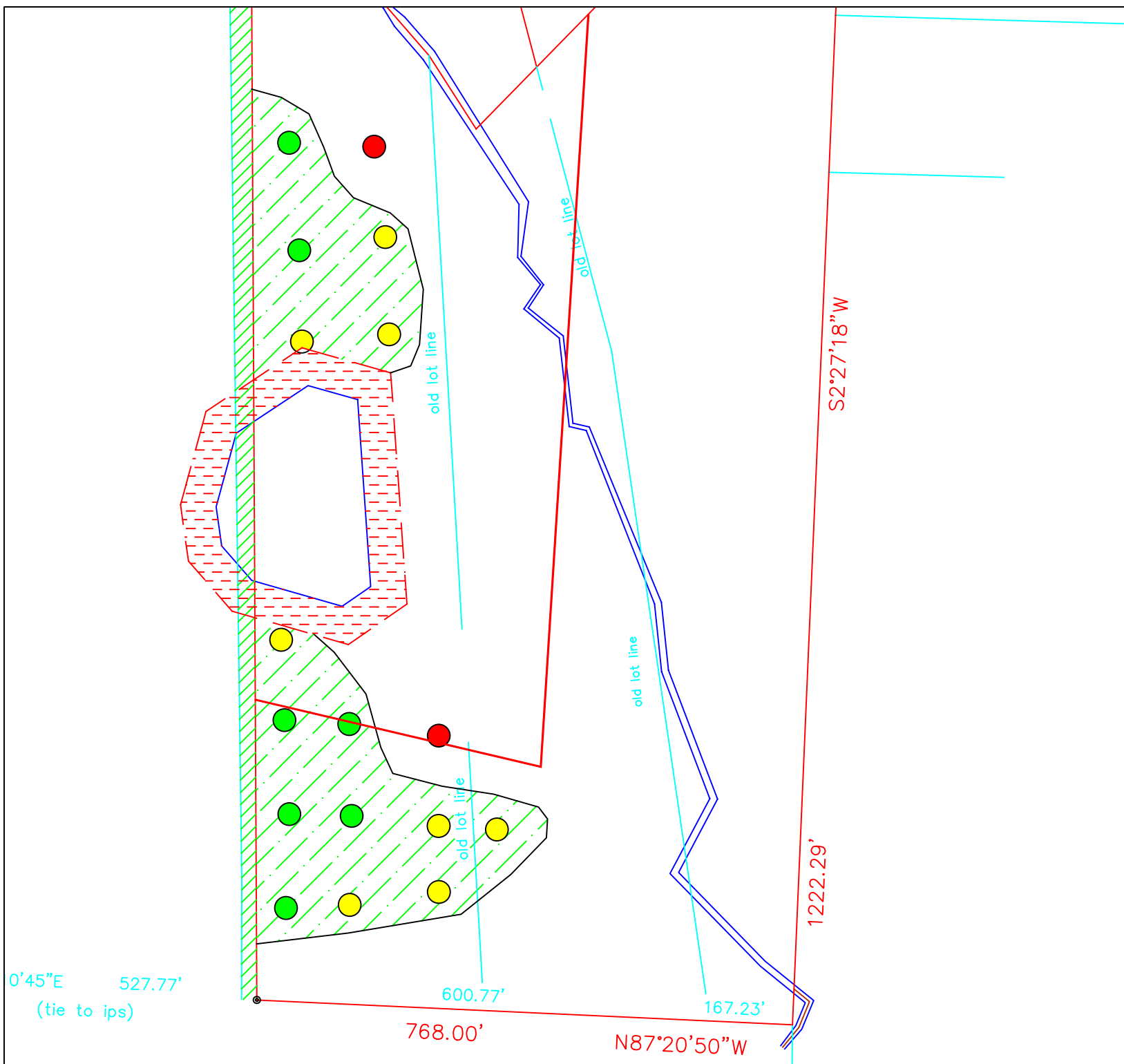
3.92 acres



Drawn By:

**Sloan Griffin**

1" = 200'





SanLee Environmental, LLC  
Phone: 919-842-6263  
SanLeeEnvironmental@gmail.com

Project:  
Old Coats Road  
Lillington, NC

Date:  
June 14, 2021

Soil Borings  
<20" ●  
20" - 24" ●  
24" - 36" ●  
36" - 48" ●

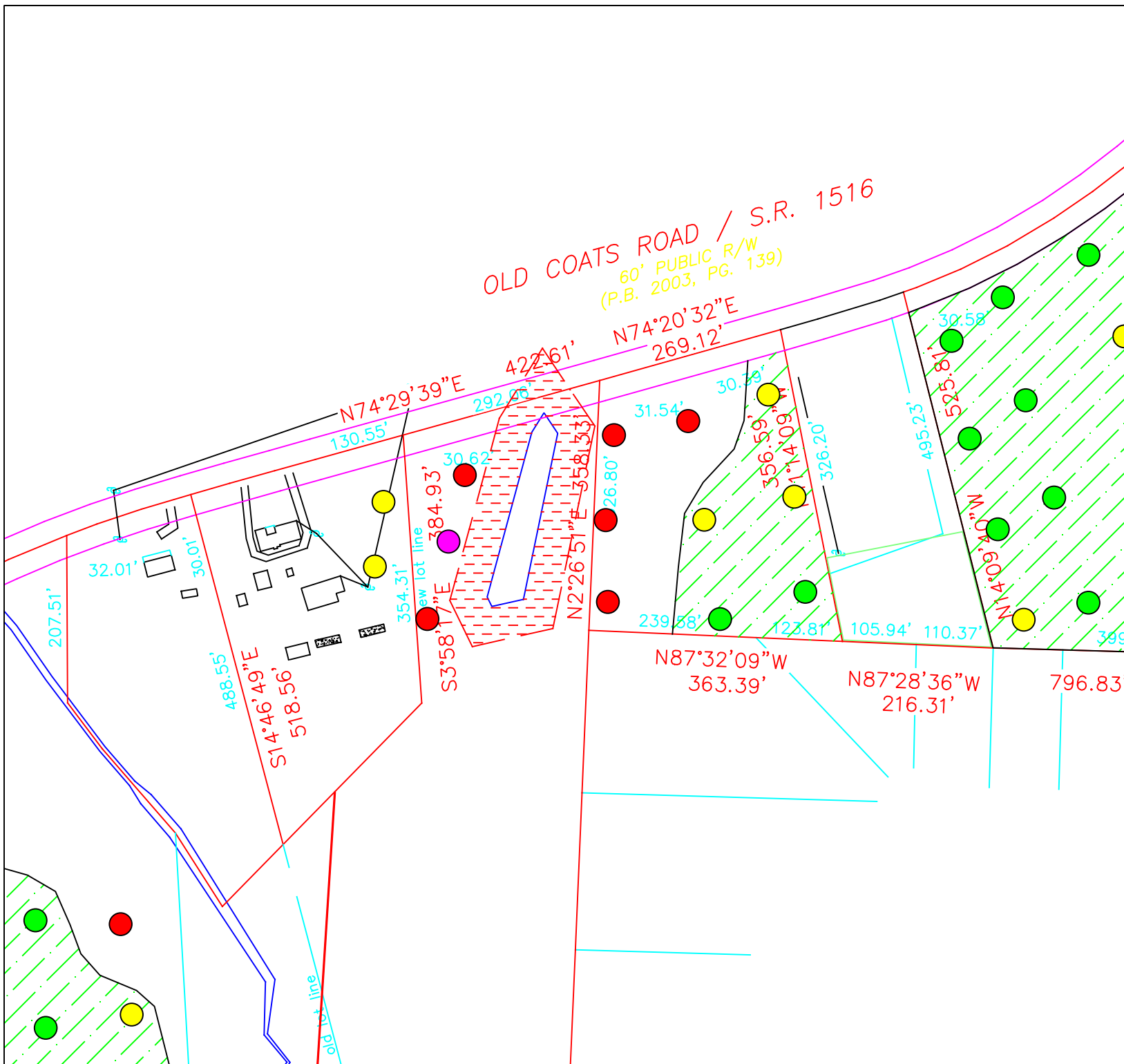
Usable Soil Area

1.33 acres



Drawn By:  
Sloan Griffin

1" = 200'



**ATTACHMENT 4: Typical Profile Descriptions of  
Provisionally Suitable Soil**



name	Horizon 1	Horizon 2	Horizon 3	Horizon 4	Horizon 5
WPT 85	0-10 l gr fr nsnp sepx	10-16 sl gr fr nsnp sepx	16-27 scl wsbk fi sssp sepx	27+ scl wsbk fi sssp sepx 10yr 7/2	
WPT 84	0-15 l gr fr nsnp sepx	15-26 sl gr fr nsnp sepx	26+ sl gr fr nsnp sepx 10yr 7/1		
WPT 83	0-11 l gr fr nsnp sepx	11-23 sl gr fr nsnp sepx	23-33 scl wsbk fi sssp sepx	33+ scl wsbk fi sssp sepx 10yr 7/2	
WPT 82	0-16 l gr fr nsnp sepx	16+ l gr fr nsnp sepx 10yr 8/2			
WPT 81	0-7 l gr fr nsnp sepx	7-16 sl gr fr nsnp sepx	16-37 scl wsbk fi sssp sepx	37+ scl wsbk fi sssp sepx 10yr 8/1	
WPT 80	0-9 l gr fr nsnp sepx	9-27 sl gr fr nsnp sepx	27-38 scl wsbk fi sssp sepx	38+ scl wsbk fi sssp sepx 10yr 7/1	
WPT 79	0-15 l gr fr nsnp sepx	15-24 sl gr fr nsnp sepx	24-28 scl wsbk fi sssp sepx	28+ scl wsbk fi sssp sepx 10yr 8/1	
WPT 78	0-10 l gr fr nsnp sepx	10-22 sl gr fr nsnp sepx	22-37 scl wsbk fi sssp sepx	37-39 sc wsbk fi sssp sepx	39+ sc wsbk fi sssp sepx 10yr 7/2
WPT 77	0-11 l gr fr nsnp sepx	11-35 sl gr fr nsnp sepx	35-48 scl wsbk fr sssp sepx		
WPT 76	0-14 l gr fr nsnp sepx	14-36 c wsbk fi sssp sepx	36+ parent material		
WPT 75	0-17 cl gr fr nsnp sepx	17-31 sl gr fr nsnp sepx	31-35 c wsbk fi sssp sepx	35+ c wsbk fi sssp sepx 10yr 7/2	
WPT 74	0-13 l gr fr nsnp sepx	13-17 sl gr fr nsnp sepx	17-34 c wsbk fi sssp sepx	34+ auger refusal	
WPT 73	0-12 l gr fr nsnp sepx	12-23 sl gr fr nsnp sepx	23-34 c wsbk fi sssp sepx	34+ auger refusal	
WPT 72	0-9 l gr fr nsnp sepx gravel	9-14 scl wsbk fr sssp sepx gravel	14-19 c wsbk fi sssp sepx gravel	19+ auger refusal	
WPT 71	0-10 l gr fr nsnp sepx	10-23 l gr fr nsnp sepx gravelly	23-28 scl wsbk fr sssp sepx gravel	28-37 c wsbk fi sssp sepx	37+ parent material
WPT 70	0-11 l gr fr nsnp sepx	11-22 sl gr fr nsnp sepx	22-34 scl wsbk fr sssp sepx	34-40 c wsbk fi sssp sepx	40+ parent material
WPT 69	0-13 l gr fr nsnp sepx gravel	13-28+ scl wsbk fi sssp sepx gravel			
WPT 68	0-9 l gr fr nsnp sepx	9-26 cl wsbk fi sssp sepx	26+ c m vfi s p exp 10yr 7/2		
WPT 67	0-10 l gr fr nsnp sepx	10-29 cl wsbk fr sssp sepx	29+ cl wsbk fr sssp sepx 10yr 7/2		
WPT 66	0-4 l gr fr nsnp sepx	4-8 sc wsbk fi sssp sepx	8+ c m vfi s p exp 10yr 8/2		
WPT 65	0-9 l gr fr nsnp sepx	9-21 sc wsbk fi sssp sepx	21+ sc wsbk fi sssp sepx 10yr 8/2		
WPT 64	0-6l gr fr nsnp sepx	6-16 sc wsbk fi sssp sepx	16+ c m vfi s p exp 10yr 8/1		
WPT 63	0-15 l gr fr nsnp sepx	15+ c wsbk fi sssp sepx 10yr 8/2			
WPT 62	0-9 l gr fr nsnp sepx	9+ scl wsbk fr sssp sepx 10yr 8/1			
WPT 61	0-9 l gr fr nsnp sepx	9+ scl wsbk fi sssp sepx 10yr 7/2			
WPT 60	0-10 l gr fr nsnp sepx	10+ c wsbk fi sssp sepx 10yr 7/2			
WPT 59	0-17 l gr fr nsnp sepx	17-26 scl wsbk fr sssp sepx	26+ scl wsbk fi sssp sepx 10yr 7/2		
WPT 58	0-25 l gr fr nsnp sepx	25-43 sc wsbk fi sssp sepx	43-48 sc wsbk fi sssp sepx 10yr 7/2		
WPT 57	0-15 l gr fr nsnp sepx	15-26 scl wsbk fi sssp sepx	26-37 sc wsbk fi sssp sepx	37+ sc wsbk fi sssp sepx 10yr 7/2	
WPT 56	0-16 l gr fr nsnp sepx	16-35 scl wsbk fi sssp sepx	35+ sc wsbk fi sssp sepx 10yr 7/2		
WPT 55	0-13 l gr fr nsnp sepx	13-26 cl wsbk fr sssp sepx	26+ c m vfi s p exp 10yr 8/1		
WPT 54	0-30 l gr fr nsnp sepx	30-37 sc wsbk fi sssp sepx	37-48 c wsbk fi sssp sepx		
WPT 53	0-22 l gr fr nsnp sepx	22-38 sc wsbk fi sssp sepx	38+ auger refusal		
WPT 52	0-35 l gr fr nsnp sepx	35-38 sc wsbk fi sssp sepx	38+ sc wsbk fi sssp sepx 10yr 7/2		
WPT 51	0-10 l gr fr nsnp sepx	10-24 sicl wsbk fr sssp sepx	24-28 sic wsbk fi sssp sepx	28+ sic wsbk fi sssp sepx 10yr 7/2	
WPT 50	0-14 l gr fr nsnp sepx	14-37 scl wsbk fr sssp sepx	37-42 sc wsbk fi sssp sepx	42-48 c sbk fi s sp sepx	
WPT 49	0-17 l gr fr nsnp sepx	17-33 scl wsbk fr sssp sepx	33-44 sc wsbk fi sssp sepx	44+ sc wsbk fi sssp sepx 10yr 7/2	
WPT 48	0-10 l gr fr nsnp sepx	10-48 scl wsbk fr sssp sepx			
WPT 47	0-24 l gr fr nsnp sepx	24-34 scl wsbk fr sssp sepx	34-48 sc wsbk fi sssp sepx		
WPT 46	0-16 l gr fr nsnp sepx	16-41 cl wsbk fr sssp sepx	41-48 c wsbk fi sssp sepx		
WPT 45	0-10 l gr fr nsnp sepx	10-34 cl wsbk fr sssp sepx	34+ c wsbk fi sssp sepx 10yr 7/2		
WPT 44	0-9 l gr fr nsnp sepx	9-25 c wsbk fi sssp sepx	25-48 sc wsbk fi sssp sepx		

WPT 43	0-17 l gr fr nsnp sexp	17-39 scl wsbk fi sssp sexp	39+ c wsbk fi sssp sexp 10yr 7/2		
WPT 42	0-17 l gr fr nsnp sexp	17-35 scl wsbk fi sssp sexp	35+ c wsbk fi sssp sexp 10yr 7/2		
WPT 41	0-15 sl gr fr nsnp sexp				
WPT 40	0-7 l gr fr nsnp sexp	7-18 c wsbk fi sssp sexp	18+ c abk vfi s p exp 10yr 7/1		
WPT 39	0-12 sl gr fr nsnp sexp	12-26 c wsbk fi sssp sexp	26+ c abk vfi s p exp 10yr 8/1		
WPT 38	0-20 scl gr fr nsnp sexp	20-25 c wsbk fi sssp sexp	25+ c wsbk fi sssp sexp 10yr 7/2		
WPT 37	0-16 l gr fr nsnp sexp	16-48 scl wsbk fi sssp sexp			
WPT 36	0-19 l gr fr nsnp sexp	19-48 scl wsbk fi sssp sexp			
WPT 35	0-16 sl gr fr nsnp sexp	16-45 scl wsbk fr sssp sexp	45-48 scl wsbk fi sssp sexp 10yr 7/2		
WPT 34	0-11 sl gr fr nsnp sexp	11-23 scl wsbk fi sssp sexp	23-41 sc wsbk fi sssp sexp	41-48 c abk vfi s p exp 10yr 7/2	
WPT 33	0-21 sl gr fr nsnp sexp	21-23 scl wsbk fi sssp sexp	23+ c abk vfi s p exp 10yr 8/1		
WPT 32	0-16 sl gr fr nsnp sexp	16-27 scl wsbk fi sssp sexp	27-34 sc wsbk fi sssp sexp	34+ c abk vfi s p exp 10yr 7/2	
WPT 31	0-14 sl gr fr nsnp sexp	14-25 scl wsbk fr sssp sexp	25-39 scl wsbk fi sssp sexp	39-44 c abk vfi s p exp	44+ scl wsbk fr sssp sexp
WPT 30	0-15 sl gr fr nsnp sexp	15-31 scl wsbk fr sssp sexp	31-48 scl wsbk fi sssp sexp		
WPT 29	0-14 sl gr fr nsnp sexp	14-22 scl wsbk fr sssp sexp	22-48 scl wsbk fi sssp sexp		
WPT 28	0-18 sl gr fr nsnp sexp	18-31 scl wsbk fi sssp sexp	31-48 l wsbk fr sssp sexp		
WPT 27	0-18 sl gr fr nsnp sexp	18-35 scl wsbk fi sssp sexp	35+ sc wsbk fi sssp sexp 10yr 7/2		
WPT 26	0-31 sl gr fr nsnp sexp	31-48 scl wsbk fi sssp sexp			
WPT 25	0-25 sl gr fr nsnp sexp	25-48 scl wsbk fr sssp sexp			
WPT 24	0-25 sl gr fr nsnp sexp	25-41 scl wsbk fi sssp sexp	41+ sc wsbk fi sssp sexp 10yr 7/2		
WPT 23	0-11 sl gr fr nsnp sexp	11-21 scl wsbk fi sssp sexp	21-25 sc wsbk fi sssp sexp	25+ c abk vfi s p exp	
WPT 22	0-12 sl gr fr nsnp sexp	12-29 scl wsbk fi sssp sexp	29-47 l wsbk fr sssp sexp	47-48 sl gr fr nsnp sexp 10yr 7/2	
WPT 21	0-15 sl gr fr nsnp sexp	15-27 scl wsbk fi sssp sexp	27-34 sc wsbk fi sssp sexp	34 c abk vfi s p exp 10yr 7/2	
WPT 20	0-12 sl gr fr nsnp sexp	12-32 scl wsbk fi sssp sexp	32+ c abk vfi s p exp 10yr 7/2		
WPT 19	0-8 sl gr fr nsnp sexp	8-18 scl wsbk fi sssp sexp	18-34 scl wsbk fr sssp sexp	34-37 sl gr fr sssp sexp	37+ scl wsbk fi sssp sexp 10yr 7/2
WPT 18	0-10 sl gr fr nsnp sexp	10-17 scl wsbk fi sssp sexp	17-33 c wsbk fi sssp sexp	33+ c abk vfi s p exp	
WPT 17	0-10 sl gr fr nsnp sexp	10-22 scl wsbk fr sssp sexp	22-34 c wsbk fi sssp sexp		
WPT 16	0-31 l gr fr nsnp sexp				
WPT 15	0-7 sl gr fr nsnp sexp	7-21 scl wsbk fi sssp sexp	21-33 sc wsbk fi sssp sexp	33+ c abk vfi s p exp 10yr 7/2	
WPT 14	0-9 sl gr fr nsnp sexp	9-14 scl wsbk sssp sexp	14-33 sc wsbk fi sssp sexp	33+ c abk vfi s p exp 10yr 8/1	
WPT 13	0-11 sl gr fr nsnp sexp	11-23 scl wsbk fi sssp sexp	23-35 sc wsbk fi sssp sexp	35+ c wsbk fi sssp sexp 10yr 7/2	
WPT 12	0-15 sl gr fr nsnp sexp	15-22 scl wsbk fi sssp sexp	22-38 sc wsbk fi sssp sexp	38+ c wsbk fi sssp sexp 10yr 7/2	
WPT 11	0-13 sl gr fr nsnp sexp	13-27 scl wsbk fi sssp sexp	27-35 sc wsbk fi sssp sexp	35+ c wsbk fi sssp sexp 10yr 7/2	
WPT 10	0-15 sl gr fr nsnp sexp	15-23 scl wsbk fi sssp sexp	23-33 sc wsbk fi sssp sexp	33+ c wsbk fi sssp sexp 10yr 7/2	
WPT 9	0-15 sl gr fr nsnp sexp	15-26 c wsbk fi sssp sexp	26+ c wsbk vfi s p exp		
WPT 8	0-7 sl gr fr nsnp sexp	7-28 c wsbk fi sssp sexp	28+ c wsbk fi sssp sexp 10yr 7/2		
WPT 7	0-10 sl gr fr nsnp sexp	10-14 scl wsbk fr sssp sexp	14-26 sc wsbk fi sssp sexp	26+ sc/c wsbk vfi s sp exp 10yr 7/2	
WPT 6	0-13 sl gr fr nsnp sexp	13-19 scl wsbk fi sssp sexp	19-31 sc wsbk fi sssp sexp	31+ sc wsbk fi sssp sexp 10yr 7/2	
WPT 5	0-24 sl gr fr nsnp sexp	24-41 scl wsbk fi sssp sexp	41-48 sc wsbk fi sssp sexp 10yr 7/2		
WPT 4	0-18 sl gr fr nsnp sexp	18-32 scl wsbk fi sssp sexp	32-48 sc wsbk fi sssp sexp		
WPT 3	0-17 sl gr fr nsnp sexp	17-31 scl wsbk fi sssp sexp	31-48 scl wsbk fr sssp sexp		
WPT 2	0-22 sl gr fr nsnp sexp	22-48 scl fr sssp sexp			
WPT 1	0-15 sl gr fr nsnp sexp	15-22 scl wsbk fr sssp sexp	22-48 scl wsbk fi sssp sexp		

name	LTAR	Restrictive Layer	Slope	Soil Depth
WPT 85	0.4	swc	4	27
WPT 84	0.6	swc	4	26
WPT 83	0.35	swc	4	33
WPT 82	0.6	swc	3	16
WPT 81	0.4	swc	4	37
WPT 80	0.35	swc	4	38
WPT 79	0.35	swc	4	28
WPT 78	0.25	swc	3	39
WPT 77	0.4		3	48
WPT 76	0.25	parent	4	36
WPT 75	0.25	swc	3	35
WPT 74	0.25	auger refusal	5	34
WPT 73	0.3	auger refusal	5	34
WPT 72	0.3	gravelly	4	0
WPT 71	0.3	parent material	4	37
WPT 70	0.3	parent material	4	40
WPT 69	0	gravel	4	0
WPT 68	0.3	swc expansive	2	26
WPT 67	0.3	swc	2	29
WPT 66	0	swc expansive	1	8
WPT 65	0.25	swc	1	21
WPT 64	0	swc expansive	1	16
WPT 63	0.25	swc	1	15
WPT 62	0	swc	3	9
WPT 61	0	swc	1	9
WPT 60	0	swc	2	10
WPT 59	0.4	swc	4	26
WPT 58	0.25	swc	3	43
WPT 57	0.3	swc	4	37
WPT 56	0.3	swc	4	35
WPT 55	0.3	expansive swc	4	26
WPT 54	0.3		3	48
WPT 53	0.3	auger refusal	3	38
WPT 52	0.3	swc	3	38
WPT 51	0.25	swc	3	28
WPT 50	0.25		3	48
WPT 49	0.3	swc	3	44
WPT 48	0.4		4	48
WPT 47	0.3		4	48
WPT 46	0.3		3	48
WPT 45	0.35	swc	3	34
WPT 44	0.3		3	48

WPT 43	0.3	swc	2	39
WPT 42	0.3	swc	2	35
WPT 41	0	auger refusal	4	15
WPT 40	0.2	swc exp	2	18
WPT 39	0.2	swc expansive	2	26
WPT 38	0.25	swc some expansive	3	25
WPT 37	0.3		3	48
WPT 36	0.3		3	48
WPT 35	0.4	swc	2	45
WPT 34	0.25	swc expansive	2	41
WPT 33	0.25	expansive swc	3	23
WPT 32	0.25	expansive swc	4	34
WPT 31	0.25	expansive	4	39
WPT 30	0.3		4	48
WPT 29	0.3		4	48
WPT 28	0.3		4	48
WPT 27	0.3	swc	4	35
WPT 26	0.4		5	48
WPT 25	0.4		5	48
WPT 24	0.25	swc	4	41
WPT 23	0.25	expansive	3	25
WPT 22	0.6	swc	3	47
WPT 21	0.25	swc expansive	2	34
WPT 20	0.25	swc expansive	2	32
WPT 19	0.3	swc	3	34
WPT 18	0.25	expansive	3	33
WPT 17	0.3	swc	4	34
WPT 16	0.6	gravitational water	4	31
WPT 15	0.25	swc expansive	3	33
WPT 14	0.2	swc expansive	2	33
WPT 13	0.25	swc	2	35
WPT 12	0.25	swc	2	38
WPT 11	0.275	swc	2	35
WPT 10	0.25	swc	2	33
WPT 9	0.25	expansive	2	26
WPT 8	0.25	swc	4	28
WPT 7	0.25	swc expansive	4	26
WPT 6	0.25	swc	3	31
WPT 5	0.275	swc	3	41
WPT 4	0.275		3	48
WPT 3	0.3		3	48
WPT 2	0.3		3	48
WPT 1	0.35		2	48

**ATTACHMENT 5: Soil Survey Information**

TABLE 10.--SANITARY FACILITIES

(Some terms that describe restrictive soil features are defined in the "Glossary." See text for definitions of "slight," "good," and other terms. Absence of an entry indicates that the soil was not rated. The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation)

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
AnB----- Alpin	Slight-----	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
AtA----- Altavista	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Fair: wetness, too clayey.
Au----- Augusta	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: wetness.
AyA----- Aycock	Severe: percs slowly.	Moderate: seepage, wetness.	Moderate: too clayey.	Slight-----	Fair: too clayey.
AyB----- Aycock	Severe: percs slowly.	Moderate: seepage, slope, wetness.	Moderate: too clayey.	Slight-----	Fair: too clayey.
Eb----- Bibb	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Poor: wetness.
BnB----- Blaney	Severe: percs slowly, poor filter.	Severe: seepage.	Slight-----	Severe: seepage.	Good.
BnD----- Blaney	Severe: percs slowly, poor filter.	Severe: seepage, slope.	Moderate: slope.	Severe: seepage.	Fair: slope.
CaB----- Candor	Slight-----	Severe: seepage.	Severe: too sandy.	Severe: seepage.	Poor: seepage, too sandy.
CaD----- Candor	Moderate: slope.	Severe: seepage, slope.	Severe: too sandy.	Severe: seepage.	Poor: seepage, too sandy.
CeB----- Cecil	Moderate: percs slowly.	Moderate: seepage, slope.	Moderate: too clayey.	Slight-----	Fair: too clayey, hard to pack.
CeD----- Cecil	Moderate: percs slowly, slope.	Severe: slope.	Moderate: slope, too clayey.	Moderate: slope.	Fair: too clayey, slope, hard to pack.
Ch*: Chewacla-----	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Poor: hard to pack, wetness.

See footnote at end of table.

TABLE 10.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
Ch*: Congaree-----	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Poor: thin layer.
Co----- Coxville	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: wetness.
DoA----- Dothan	Severe: wetness, percs slowly.	Moderate: seepage.	Moderate: wetness.	Slight-----	Good.
DoB----- Dothan	Severe: wetness, percs slowly.	Moderate: seepage, slope.	Moderate: wetness.	Slight-----	Good.
DtB----- Dothan	Severe: wetness, percs slowly.	Severe: seepage, wetness.	Moderate: wetness, too clayey.	Severe: seepage.	Fair: too clayey, wetness.
DyF. Dystrochrepts					
EnB----- Enon	Severe: percs slowly.	Moderate: slope.	Severe: too clayey.	Slight-----	Poor: too clayey, hard to pack.
EnD----- Enon	Severe: percs slowly.	Severe: slope.	Severe: too clayey.	Moderate: slope.	Poor: too clayey, hard to pack.
ExA----- Exum	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Fair: too clayey, wetness.
FaB----- Fuquay	Severe: percs slowly, poor filter.	Severe: seepage.	Moderate: too sandy.	Severe: seepage.	Poor: seepage.
FuB----- Fuquay	Severe: percs slowly, poor filter.	Severe: seepage.	Moderate: too sandy.	Severe: seepage.	Poor: small stones.
GaA, GaB----- Gilead	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Moderate: wetness.	Fair: too clayey, hard to pack.
GaD----- Gilead	Severe: wetness, percs slowly.	Severe: slope, wetness.	Severe: wetness.	Moderate: wetness, slope.	Fair: too clayey, hard to pack, slope.
GoA----- Goldsboro	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Fair: wetness.
Gr----- Grantham	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: wetness.

See footnote at end of table.

TABLE 10.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
HaB----- Helena	Severe: wetness, percs slowly.	Slight-----	Severe: wetness, too clayey.	Moderate: wetness.	Poor: too clayey, hard to pack.
LaB----- Lakeland	Slight-----	Severe: seepage.	Severe: seepage, too sandy.	Severe: seepage.	Poor: seepage, too sandy.
LnB----- Lillington	Moderate: percs slowly.	Severe: seepage.	Severe: seepage.	Severe: seepage.	Poor: small stones.
LnD----- Lillington	Moderate: percs slowly, slope.	Severe: seepage, slope.	Severe: seepage.	Severe: seepage.	Poor: small stones.
LnE----- Lillington	Severe: slope.	Severe: seepage, slope.	Severe: seepage, slope.	Severe: seepage, slope.	Poor: small stones, slope.
LoF----- Louisa	Severe: depth to rock, slope.	Severe: seepage, depth to rock, slope.	Severe: seepage, depth to rock, slope.	Severe: seepage, depth to rock, slope.	Poor: slope, depth to rock, thin layer.
Ly----- Lynchburg	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: wetness.
MaA----- Marlboro	Moderate: percs slowly.	Moderate: seepage.	Moderate: too clayey.	Slight-----	Fair: too clayey.
MaB----- Marlboro	Moderate: percs slowly.	Moderate: seepage, slope.	Moderate: too clayey.	Slight-----	Fair: too clayey.
Na----- Nahunta	Severe: wetness, percs slowly.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: wetness.
NeD----- Nason	Moderate: slope, depth to rock, percs slowly.	Severe: slope.	Severe: too clayey, depth to rock.	Moderate: slope, depth to rock.	Poor: too clayey, hard to pack.
NeE----- Nason	Severe: slope.	Severe: slope.	Severe: depth to rock, slope, too clayey.	Severe: slope.	Poor: slope, too clayey, hard to pack.
NoA, NoB----- Norfolk	Moderate: wetness, percs slowly.	Moderate: seepage, wetness.	Severe: wetness.	Moderate: wetness.	Fair: too clayey.
NoC----- Norfolk	Moderate: wetness, percs slowly, slope.	Severe: slope.	Severe: wetness.	Moderate: wetness, slope.	Fair: too clayey, slope.
NuB*: Norfolk-----	Moderate: wetness, percs slowly.	Moderate: seepage, wetness.	Severe: wetness.	Moderate: wetness.	Fair: too clayey.

See footnote at end of table.



TABLE 10.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
NuB*: Urban land.					
OrB----- Orangeburg	Slight-----	Moderate: seepage, slope.	Slight-----	Slight-----	Good.
PaE----- Pacolet	Severe: slope.	Severe: slope.	Severe: slope.	Severe: slope.	Poor: slope.
Pc----- Pactolus	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness.	Severe: seepage, wetness.	Poor: seepage.
Pd*: Pits.  Dumps.					
Pf----- Pocalla	Moderate: wetness.	Severe: seepage.	Slight-----	Severe: seepage.	Good.
Pn----- Polawana	Severe: flooding, ponding, poor filter.	Severe: seepage, flooding, ponding.	Severe: flooding, seepage, ponding.	Severe: flooding, seepage, ponding.	Poor: seepage, too sandy, ponding.
Ps----- Portsmouth	Severe: wetness, poor filter.	Severe: seepage, wetness.	Severe: seepage, wetness, too sandy.	Severe: seepage, wetness.	Poor: seepage, too sandy, wetness.
Ra----- Rains	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: wetness.
Rb*: Rains-----  Urban land.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Severe: wetness.	Poor: wetness.
Ro----- Roanoke	Severe: flooding, wetness, percs slowly.	Severe: seepage, flooding.	Severe: flooding, seepage, wetness.	Severe: flooding, wetness.	Poor: too clayey, hard to pack, wetness.
StA----- State	Moderate: flooding, wetness, percs slowly.	Severe: seepage.	Severe: seepage, wetness.	Moderate: flooding, wetness.	Fair: too clayey, thin layer.
To----- Toisnot	Severe: cemented pan, ponding, percs slowly.	Severe: seepage, cemented pan, ponding.	Severe: ponding.	Severe: ponding, cemented pan.	Poor: cemented pan, ponding.
VaB----- Vaucluse	Severe: percs slowly.	Severe: seepage.	Severe: seepage.	Severe: seepage.	Fair: too clayey.

See footnote at end of table.

TABLE 10.--SANITARY FACILITIES--Continued

Soil name and map symbol	Septic tank absorption fields	Sewage lagoon areas	Trench sanitary landfill	Area sanitary landfill	Daily cover for landfill
VaD----- Vaucluse	Severe: percs slowly.	Severe: seepage, slope.	Severe: seepage.	Severe: seepage.	Fair: too clayey, slope.
VeB----- Vaucluse	Severe: percs slowly.	Severe: seepage.	Severe: seepage.	Severe: seepage.	Fair: too clayey.
VeD----- Vaucluse	Severe: percs slowly.	Severe: seepage, slope.	Severe: seepage.	Severe: seepage.	Fair: too clayey, slope.
VeE----- Vaucluse	Severe: percs slowly, slope.	Severe: seepage, slope.	Severe: seepage, slope.	Severe: seepage, slope.	Poor: slope.
WaB----- Wagram	Moderate: percs slowly.	Severe: seepage.	Slight-----	Severe: seepage.	Good.
WaC----- Wagram	Moderate: percs slowly, slope.	Severe: seepage, slope.	Moderate: slope.	Severe: seepage.	Fair: slope.
We----- Wahee	Severe: flooding, wetness, percs slowly.	Severe: flooding.	Severe: flooding, wetness, too clayey.	Severe: flooding, wetness.	Poor: too clayey, hard to pack, wetness.
WfB----- Wakulla	Severe: poor filter.	Severe: seepage.	Severe: seepage.	Severe: seepage.	Poor: seepage.
Wh----- Wehadkee	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Severe: flooding, wetness.	Poor: wetness, thin layer.
WkB----- Wickham	Moderate: flooding, percs slowly.	Moderate: seepage, slope.	Moderate: flooding, too clayey.	Moderate: flooding.	Fair: too clayey.
WkD----- Wickham	Moderate: flooding, percs slowly.	Severe: slope.	Moderate: flooding, slope,	Moderate: flooding, slope.	Fair: slope, too clayey.

\* See description of the map unit for composition and behavior characteristics of the map unit.

**ATTACHMENT 6: Septic System Area Computation  
Spreadsheets**

**Conventional Septic System Area Computation**

Created by: SG  
Created on: 6/20/2001  
Updated on: 5/13/2021

Client Name: *Pollock*  
Number Bedrooms: 3  
Design Flow (gal/day): 360 (120 gal/day/bedroom, minimum 240 gal/day/dwelling)  
LTAR (gal/day/ft<sup>2</sup>): 0.1  
Trench Bottom Area (ft<sup>2</sup>): 3600 (Design flow/LTAR)  
Trench Width (ft): 3  
On-center distance between trenches (ft): 9  
Trench Bottom Length (ft): 1200

Minimum Field Area Required (ft<sup>2</sup>): 10800 (Trench Bottom Length\*Trench on-center distance)  
Minimum Field Area Required (Innovative) (ft<sup>2</sup>): 8100 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 27000 (Minimum field area\*2.5)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 20250 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 32400 (Minimum field area\*3)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 24300 (25% reduction from above)

(1) Provides for reserve area and soil irregularity, 2.5 to 3 is multiplier.

Client Name: *Pollock*  
Number Bedrooms: 3  
Design Flow (gal/day): 360 (120 gal/day/bedroom, minimum 240 gal/day/dwelling)  
LTAR (gal/day/ft<sup>2</sup>): 0.4  
Trench Bottom Area (ft<sup>2</sup>): 900 (Design flow/LTAR)  
Trench Width (ft): 3  
On-center distance between trenches (ft): 9  
Trench Bottom Length (ft): 300

Minimum Field Area Required (ft<sup>2</sup>): 2700 (Trench Bottom Length\*Trench on-center distance)  
Minimum Field Area Required (Innovative) (ft<sup>2</sup>): 2025 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 6750 (Minimum field area\*2.5)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 5062.5 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 8100 (Minimum field area\*3)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 6075 (25% reduction from above)

(1) Provides for reserve area and soil irregularity, 2.5 to 3 is multiplier.

Client Name: *Pollock*  
Number Bedrooms: 3  
Design Flow (gal/day): 360 (120 gal/day/bedroom, minimum 240 gal/day/dwelling)  
LTAR (gal/day/ft<sup>2</sup>): 0.25  
Trench Bottom Area (ft<sup>2</sup>): 1440 (Design flow/LTAR)  
Trench Width (ft): 3  
On-center distance between trenches (ft): 9  
Trench Bottom Length (ft): 480

Minimum Field Area Required (ft<sup>2</sup>): 4320 (Trench Bottom Length\*Trench on-center distance)  
Minimum Field Area Required (Innovative) (ft<sup>2</sup>): 3240 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 10800 (Minimum field area\*2.5)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 8100 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 12960 (Minimum field area\*3)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 9720 (25% reduction from above)

(1) Provides for reserve area and soil irregularity, 2.5 to 3 is multiplier.

### Conventional Septic System Area Computation

Created by: SG  
Created on: 6/20/2001  
Updated on: 5/13/2021

Client Name: *Pollock*  
Number Bedrooms: 4  
Design Flow (gal/day): 480 (120 gal/day/bedroom, minimum 240 gal/day/dwelling)  
LTAR (gal/day/ft<sup>2</sup>): 0.1  
Trench Bottom Area (ft<sup>2</sup>): 4800 (Design flow/LTAR)  
Trench Width (ft): 3  
On-center distance between trenches (ft): 9  
Trench Bottom Length (ft): 1600

Minimum Field Area Required (ft<sup>2</sup>): 14400 (Trench Bottom Length\*Trench on-center distance)  
Minimum Field Area Required (Innovative) (ft<sup>2</sup>): 10800 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 36000 (Minimum field area\*2.5)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 27000 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 43200 (Minimum field area\*3)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 32400 (25% reduction from above)

(1) Provides for reserve area and soil irregularity, 2.5 to 3 is multiplier.

Client Name: *Pollock*  
Number Bedrooms: 4  
Design Flow (gal/day): 480 (120 gal/day/bedroom, minimum 240 gal/day/dwelling)  
LTAR (gal/day/ft<sup>2</sup>): 0.4  
Trench Bottom Area (ft<sup>2</sup>): 1200 (Design flow/LTAR)  
Trench Width (ft): 3  
On-center distance between trenches (ft): 9  
Trench Bottom Length (ft): 400

Minimum Field Area Required (ft<sup>2</sup>): 3600 (Trench Bottom Length\*Trench on-center distance)  
Minimum Field Area Required (Innovative) (ft<sup>2</sup>): 2700 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 9000 (Minimum field area\*2.5)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 6750 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 10800 (Minimum field area\*3)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 8100 (25% reduction from above)

(1) Provides for reserve area and soil irregularity, 2.5 to 3 is multiplier.

Client Name: *Pollock*  
Number Bedrooms: 4  
Design Flow (gal/day): 480 (120 gal/day/bedroom, minimum 240 gal/day/dwelling)  
LTAR (gal/day/ft<sup>2</sup>): 0.25  
Trench Bottom Area (ft<sup>2</sup>): 1920 (Design flow/LTAR)  
Trench Width (ft): 3  
On-center distance between trenches (ft): 9  
Trench Bottom Length (ft): 640

Minimum Field Area Required (ft<sup>2</sup>): 5760 (Trench Bottom Length\*Trench on-center distance)  
Minimum Field Area Required (Innovative) (ft<sup>2</sup>): 4320 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 14400 (Minimum field area\*2.5)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 10800 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 17280 (Minimum field area\*3)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 12960 (25% reduction from above)

(1) Provides for reserve area and soil irregularity, 2.5 to 3 is multiplier.

**Conventional Septic System Area Computation**

Created by: SG  
Created on: 6/20/2001  
Updated on: 5/13/2021

Client Name: *Pollock*  
Number Bedrooms: 5  
Design Flow (gal/day): 600 (120 gal/day/bedroom, minimum 240 gal/day/dwelling)  
LTAR (gal/day/ft<sup>2</sup>): 0.1  
Trench Bottom Area (ft<sup>2</sup>): 6000 (Design flow/LTAR)  
Trench Width (ft): 3  
On-center distance between trenches (ft): 9  
Trench Bottom Length (ft): 2000

Minimum Field Area Required (ft<sup>2</sup>): 18000 (Trench Bottom Length\*Trench on-center distance)  
Minimum Field Area Required (Innovative) (ft<sup>2</sup>): 13500 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 45000 (Minimum field area\*2.5)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 33750 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 54000 (Minimum field area\*3)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 40500 (25% reduction from above)

(1) Provides for reserve area and soil irregularity, 2.5 to 3 is multiplier.

Client Name: *Pollock*  
Number Bedrooms: 5  
Design Flow (gal/day): 600 (120 gal/day/bedroom, minimum 240 gal/day/dwelling)  
LTAR (gal/day/ft<sup>2</sup>): 0.4  
Trench Bottom Area (ft<sup>2</sup>): 1500 (Design flow/LTAR)  
Trench Width (ft): 3  
On-center distance between trenches (ft): 9  
Trench Bottom Length (ft): 500

Minimum Field Area Required (ft<sup>2</sup>): 4500 (Trench Bottom Length\*Trench on-center distance)  
Minimum Field Area Required (Innovative) (ft<sup>2</sup>): 3375 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 11250 (Minimum field area\*2.5)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 8437.5 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 13500 (Minimum field area\*3)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 10125 (25% reduction from above)

(1) Provides for reserve area and soil irregularity, 2.5 to 3 is multiplier.

Client Name: *Pollock*  
Number Bedrooms: 5  
Design Flow (gal/day): 600 (120 gal/day/bedroom, minimum 240 gal/day/dwelling)  
LTAR (gal/day/ft<sup>2</sup>): 0.25  
Trench Bottom Area (ft<sup>2</sup>): 2400 (Design flow/LTAR)  
Trench Width (ft): 3  
On-center distance between trenches (ft): 9  
Trench Bottom Length (ft): 800

Minimum Field Area Required (ft<sup>2</sup>): 7200 (Trench Bottom Length\*Trench on-center distance)  
Minimum Field Area Required (Innovative) (ft<sup>2</sup>): 5400 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 18000 (Minimum field area\*2.5)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 13500 (25% reduction from above)  
Total Field Area Required (ft<sup>2</sup>)<sup>(1)</sup>: 21600 (Minimum field area\*3)  
Total Field Area Required (Innovative) (ft<sup>2</sup>)<sup>(1)</sup>: 16200 (25% reduction from above)

(1) Provides for reserve area and soil irregularity, 2.5 to 3 is multiplier.