



**Central Carolina Soil Consulting, PLLC**  
1900 South Main Street, Suite 110, Wake Forest, NC 27587  
Office Number: 919-569-6704

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Acknowledgment of Subsurface wastewater evaluation and septic design by Central Carolina Soil Consulting, PLLC. for 98 Pondhurst Lane, Lot 1 (PIN: 0634-81-6092), for issuance of an IP and CA.

For Improvement Permit (IP) issuance:

**“The LSS/LG evaluation(s) attached to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3).”**

For Construction Authorization (CA) issuance:

**“The plans or evaluations attached to this application are to be used to issue a Construction Authorization in accordance with G.S. 130A-335(a2), (a5) and (a6).”**

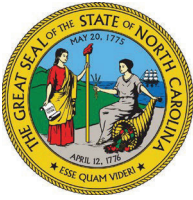
The LSS evaluation attached to this application was used to produce and design a subsurface wastewater septic system for permitting to obtain an IP and CA in accordance G.S. 130A-335(a2), (a3), (a5) and (a6).

Owner: Elm Street Builders, LLC

Owner’s representative: Christopher Weir

Date: 12/7/2023

Permit #: \_\_\_\_\_



NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Deputy Secretary for Health
SUSAN KANSAGRA • Assistant Secretary for Public Health
Division of Public Health

Submittal Includes: [x] (a2) Improvement Permit [x] (a2) Construction Authorization [ ] Fee \$ \_\_\_\_\_

IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)

County: Harnett
PIN/Lot Identifier: 0634-81-6092
Issued To: Elm Street Builders, LLC
Property Location: 98 Pondhurst Lane, Fuquay-Varina, NC 27526
Subdivision (if applicable) Pondhurst Lot #: 1 Block: Section:
LSS Report Provided: Yes [x] No [ ]
If yes, name and license number of LSS: Jason Hall, NC LSS #1248
New [x] Expansion [ ] System Relocation [ ] Change of Use [ ]
Proposed Structure: Single Family, 4-Bedroom
Number of bedrooms: 4 Number of Occupants: <=8 Other:
Design Wastewater Strength: [x] domestic [ ] high strength [ ] industrial process
Proposed Design Daily Flow: 480 GPD Proposed LTAR (Initial): 0.25 Proposed LTAR (Repair): 0.25
Proposed Wastewater System Type\*: IIIB, pressure manifold (LPC) (Initial) Pump Required: [x] Yes [ ] No [ ] May be required
Proposed Wastewater System Type\*: IIIB, pressure manifold (LPC) (Repair) Pump Required: [x] Yes [ ] No [ ] May be required
\*Please include system classification for proposed wastewater system types in accordance with 15A NCAC 18A .1961 Table V(a)
Saprolite System (initial): [ ] Yes [x] No Saprolite System (repair): [ ] Yes [x] No
Fill System (Initial): [ ] Yes [x] No If yes, specify: [ ] New [ ] Existing (when adding more than 6 inches of fill to system area provide a fill plan)
Fill System (repair): [ ] Yes [x] No If yes, specify: [ ] New [ ] Existing (when adding more than 6 inches of fill to system area provide a fill plan)
Usable Soil Depth (Initial): 24" Usable Soil Depth (Repair): 24"
Max. Trench Depth (Initial)\*: 8" Max. Trench Depth (Repair)\*: 8" \* Measured on the downhill side of the trench
Artificial Drainage Required: [ ] Yes [x] No If yes, please specify details:
Type of Water Supply: [ ] Private well [ ] Public well [ ] Shared well [x] Municipal Supply [ ] Spring [ ] Other:
Drainfield location meets requirements of Rule .1945: Yes [x] No [ ] Drainfield location meets requirements of Rule .1950: Yes [x] No [ ]
Permit valid for: [x] Five years [site plan submitted pursuant to GS 130A-334(13a)] [ ] No expiration [plat submitted pursuant to GS 130A-334(7a)]

Permit conditions:
8" of Additional Approved Cover material required
Quick4 Plus Standard Low Profile Chambers to be used

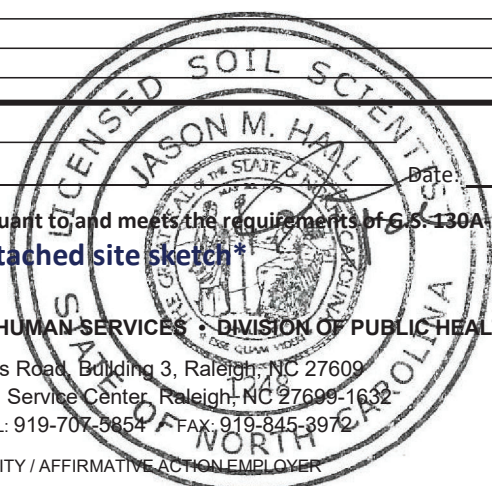
Licensed Soil Scientist Print Name: Jason Hall
Licensed Soil Scientist Signature: [Signature] Date: 12/06/2023

The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).
\*See attached site sketch\*

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH

LOCATION: 5605 Six Forks Road, Building 3, Raleigh, NC 27609
MAILING ADDRESS: 1632 Mail Service Center, Raleigh, NC 27609-1632
www.ncdhhs.gov • TEL: 919-707-5854 • FAX: 919-845-3972

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER



**This Section for Local Health Department Use Only**Initial submittal received: \_\_\_\_\_ by \_\_\_\_\_  
Date Initials

G.S. 130A-335(a3) states the following:

When an applicant for an Improvement Permit submits to a local health department an Improvement Permit application, the permit fee charged by the local health department, the common form developed by the Department, and a soil evaluation pursuant to subsection (a2) of this section, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Improvement Permit includes all of the required components. If the local health department determines that the Improvement Permit is incomplete, the local health department shall notify the applicant of the components needed to complete the Improvement Permit. The applicant may submit additional information to the local health department to cure the deficiencies in the Improvement Permit. The local health department shall make a final determination as to whether the Improvement Permit is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The Department shall develop a common form for use as the Improvement Permit.

The review for completeness of this Improvement Permit was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

 Incomplete (If box is checked, information in this section is required.)

The following items are missing:

\_\_\_\_\_  
\_\_\_\_\_Copies of this were sent to the LSS and the Applicant on \_\_\_\_\_  
Date

State Authorized Agent: \_\_\_\_\_ Date: \_\_\_\_\_

 Complete

State Authorized Agent: \_\_\_\_\_ Date: \_\_\_\_\_

**This Improvement Permit is issued pursuant to G.S. 130A-335 (a2) and (a3) using the signed and sealed LSS/LG evaluation(s) attached here. The issuance of this permit by the Health Department in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. This permit is subject to revocation if the site plan, plat, or the intended use changes. The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit.**

**The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to evaluations, submittals, or actions from a licensed soil scientist or licensed geologist pursuant to GS 130A-335(a2).**

Improvement Permit Expiration Date: \_\_\_\_\_

**\*See attached site sketch\***

**Re-submittal of Improvement Permit**

LHD USE ONLY: This IP resubmittal received: \_\_\_\_\_ by \_\_\_\_\_  
Date Initials

The following items are being resubmitted pursuant to G.S. 130A-335(a3) for issuance of the Improvement Permit:

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I, \_\_\_\_\_ hereby attest that the information required to be included with this re-submittal  
Licensed Soil Scientist (Print Name)  
 is accurate and complete to the best of my knowledge and that the proposed Improvement Permit meets all applicable federal, State, and local laws, regulations, rules, and ordinances.

\_\_\_\_\_  
Signature of Licensed Soil Scientist Date

*The section below is for Local Health Department use after submittal of items noted as missing above.*

**LHD Follow-up Completeness Review of Improvement Permit**

The review for completeness of this Improvement Permit re-submittal was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

Incomplete (If box is checked, information in this section is required.)

The following items are missing:

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Copies of this were sent to the LSS and the Applicant on \_\_\_\_\_  
Date

State Authorized Agent: \_\_\_\_\_ Date: \_\_\_\_\_

Complete

State Authorized Agent: \_\_\_\_\_ Date: \_\_\_\_\_



# Central Carolina Soil Consulting, PLLC

1900 South Main Street, Suite 110, Wake Forest, NC 27587

Office Number: 919-569-6704

December 6, 2023

Job #4760

Elm Street Builders, LLC  
Attention: Chris Weir  
3434 Kildaire Farm Road, Suite 240  
Cary, NC 27518

RE: Preliminary soil/site evaluation for single family wastewater approval at 98 Pondhurst Lane, Lot 1 (4-bedroom) in Harnett County pursuant to and meets the requirements of G.S. 130A-335(a2)."

Dear Mr. Weir:

Central Carolina Soil Consulting, PLLC conducted a preliminary soil evaluation on the aforementioned lot to determine the areas of provisionally suitable soils that are suitable for subsurface wastewater disposal systems (conventional, Accepted & Innovative). **"The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2)."** The soil/site evaluation was performed using auger borings and pits in August 2023, under moist soil conditions, based on the criteria found in the State Subsurface Rules, 15ANCAC 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems". From this evaluation, CCSC laid out and located the septic layout and gps'd for site plan drawing purposes. **Please note that the lot lines must be clearly marked by your surveyor prior to system installation by your installer to verify all setbacks before digging.**

The lot is proposed to have a 4-bedroom system for the house. A septic system field layout was completed based on the house location and property lines surveyed in the field.

The proposed Initial system for the house is a Pressure Manifold distribution using lines 2-6 totaling 662 feet of Quick4 Plus Standard Low Profile Chambers product. The repair system for the house is a Pressure Manifold distribution using lines 1 & 7-10 totaling 659 feet of Quick4 Plus Standard Low Profile Chambers product. The septic and pump tanks for the house should be minimum 1,500 gallons with risers. The septic and pump tanks should also have pressed in rubber boots on both the inlets and the outlets of the tank.

Based on the findings during the field evaluation, the area on the attached map has at least 24 inches (initial) and 24 inches (repair) of provisionally suitable soils for a modified conventional septic system. The assigned LTAR for the site is 0.25 gal/day/ft<sup>2</sup> with a maximum depth of 8 inches with 8" of additional cover material for the initial system installation of the drain lines due to slope correction. The assigned LTAR for the site is 0.25 gal/day/ft<sup>2</sup> with a maximum depth of 8 inches with 8" of additional cover material for the repair system installation of the drain lines due to slope correction.

#### **Septic Installation:**

The septic system for the lot should be installed during dry soil conditions (no rain events within 72 hours). The septic system should be installed on contour while maintaining all required setbacks. **Lot lines must be clearly marked by your surveyor prior to system installation so your installer can verify all setbacks before digging.**

**Setbacks:** (see septic design page for locations)

- **Septic and Pump Tanks** (see septic design)
  - 10' minimum from property lines
  - 5' minimum from house
- **Septic Lines** (see septic design)
  - 10' minimum from property lines
  - 5' minimum from house
- **Manifold's and D-Box's** (see septic design)
  - 10' minimum from property lines
- **Supply Lines** (see septic design)
  - 5' minimum from property lines

#### **Grading:**

No grading should be completed within the initial and repair septic areas that change the natural grade of the area. There should be no cutting or filling within the septic areas as well. When grading the lot, no cuts of 2' or greater should be within 15' of the septic areas. If a cut is required near the septic area, keep the cut around 6-8 inches in depth.

## HOUSE:

- Initial System: Pressure Manifold Distribution, lines 2-6 totaling 662' (see layout)
- Repair System: Pressure Manifold Distribution, lines 1 & 7-10 totaling 659' (see layout)
- 480 gal/day flow rate (4-bedroom)
- 1,500 gallon septic and pump tanks with risers and pressed in rubber boots on both the inlet and outlet ends
- 8" max trench depth with 8" of additional cover material for Initial System
- 8" max trench depth with 8" of additional cover material for Repair System
- 0.25 LTAR for Initial
- 0.25 LTAR for Repair
- No grading/filling septic areas
- No cuts >2' within 15' of septic areas
- Keep tanks and drain lines 10' from property lines
- Keep supply line >5' property lines
- Install in dry soil conditions (No rain events within 72 hours)
- Maintain natural contours when clearing the lot

This letter discusses the location of provisionally suitable soils for subsurface wastewater disposal systems and does not guarantee the future function of any wastewater system on sites. Central Carolina Soil Consulting, PLLC is a professional consulting firm specializing in soil delineations and designs for on-site wastewater disposal systems.

If you have any questions regarding the findings on the attached map or in this report, please feel free to contact me at any time. Thank you for allowing Central Carolina Soil Consulting to perform this site evaluation for you.

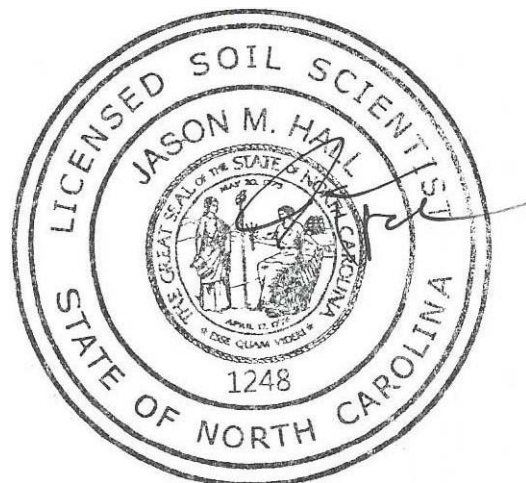
Sincerely,



Jason Hall

NC Licensed Soil Scientist #1248  
AOWE certification number 10004E

Encl: Soil Map & septic layout



Sheet:  
 Property ID: 0634-81-6092  
 Lot #: 1  
 File #:  
 AppID:

**CCSC SOIL/SITE EVALUATION  
 for ON-SITE WASTEWATER SYSTEM**

Owner: \_\_\_\_\_ Applicant: \_\_\_\_\_  
 Address: \_\_\_\_\_ Date Evaluated: November 2023  
 Proposed Facility: 4-Bedroom Design Flow (.1949) 480 gal/day Property Size: \_\_\_\_\_  
 Location of Site: 98 Pondhurst Lane, Fuquay-Varina, NC 27526 (Lot 1) Property Recorded: \_\_\_\_\_  
 Water Supply:  Public  Individual  Well  Spring  Other  
 Evaluation Method:  Auger Boring  Pit  Cut  
 Type of Wastewater:  Sewage  Industrial Process  Mixed

P R O F I L E #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941		b PROFILE FACTORS				Profile Class & LTAR	
			.1941 Texture/ Structure	.1941 Consistence Mineralogy	.1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz		
1	LS, ~9%	A, 0-3	SL, GR	VFR, NS, NP	10YR 7/2	UN			PS, 0.4	
		B, 3-32	SL, GR	VFR, NS, NP						PS
		Bt1, 32-40	CL, SBK	FR, SS, SP, SEXP						PS
		Bt2, 40-48	CL, SBK	FR, SS, SP, SEXP						UN
2	LS, ~10%	A, 0-3	SL, GR	VFR, NS, NP	10YR 7/2	UN			PS, 0.3	
		B, 3-13	SL, GR	VFR, NS, NP						
		Bt1, 13-20	CL, SBK	FR, SS, SP, SEXP						PS
		Bt2, 20-31	C, SBK	FI, SS, SP, SEXP						PS
		Bt3, 31-48	C, SBK	FI, SS, SP, SEXP						UN
3	LS, ~9%	A, 0-3	SL, GR	VFR, NS, NP	10YR 7/2	UN			PS, 0.25	
		B, 3-13	SL, GR	VFR, NS, NP						
		Bt1, 13-24	C, SBK	FI, SS, SP, SEXP						PS
		Bt2, 24-42	C, SBK	VFI, SS, SP, SEXP						UN

Description	Initial System	Repair System
Available Space (.1945)	Yes	Yes
System Type(s)	IIIB	IIIB
Site LTAR	0.25	0.25

Other Factors (.1946):  
 Soil Evaluation By: Jason Hall  
 Others Present: James Rice  
 Site Classification (.1948): Provisionally Suitable  
 Site Evaluation By: Jason Hall, James Rice  
 Others Present:



<u>Landscape Position</u>	<u>Group</u>	<u>Texture</u>	<u>.1955 LTAR</u>	<u>Structure</u>
R-Ridge	I	S-Sand	1.2 - 0.8	SG-Single Grain
SS-Shoulder Slope		LS-Loamy Sand		M-Massive
LS-Linear Slope				CR-Crumb
FS-Foot Slope	II	SL-Sandy Loam	0.8 - 0.6	GR-Granular
NS-Nose Slope		L-Loam		SBK-Subangular Blocky
HS-Head Slope				ABK-Angular Blocky
CC-Concave Slope	III	SI-Silt	0.6 - 0.3	PL-Platy
CV-Convex Slope		SICL-Silty Clay		PR-Prismatic
T-Terrace		Loam		
FP-Flood Plain		CL-Clay Loam		
	IV	SCL-Sandy Clay	0.4 - 0.1	
		Loam		
		SC-Sandy Clay		
		SIC-Silty Clay		
		C-Clay		

**Consistence**

**Moist**

VFR-Very Friable  
 FR-Friable  
 FI-Firm  
 VFI-Very Firm  
 EFI-Extremely Firm

**Consistence**

**Wet**

NS-Non-Sticky  
 SS-Slightly Sticky  
 S-Sticky  
 VS-Very Sticky  
 NP-Non-Plastic  
 SP-Slightly Plastic  
 P-Plastic  
 VP-Very Plastic

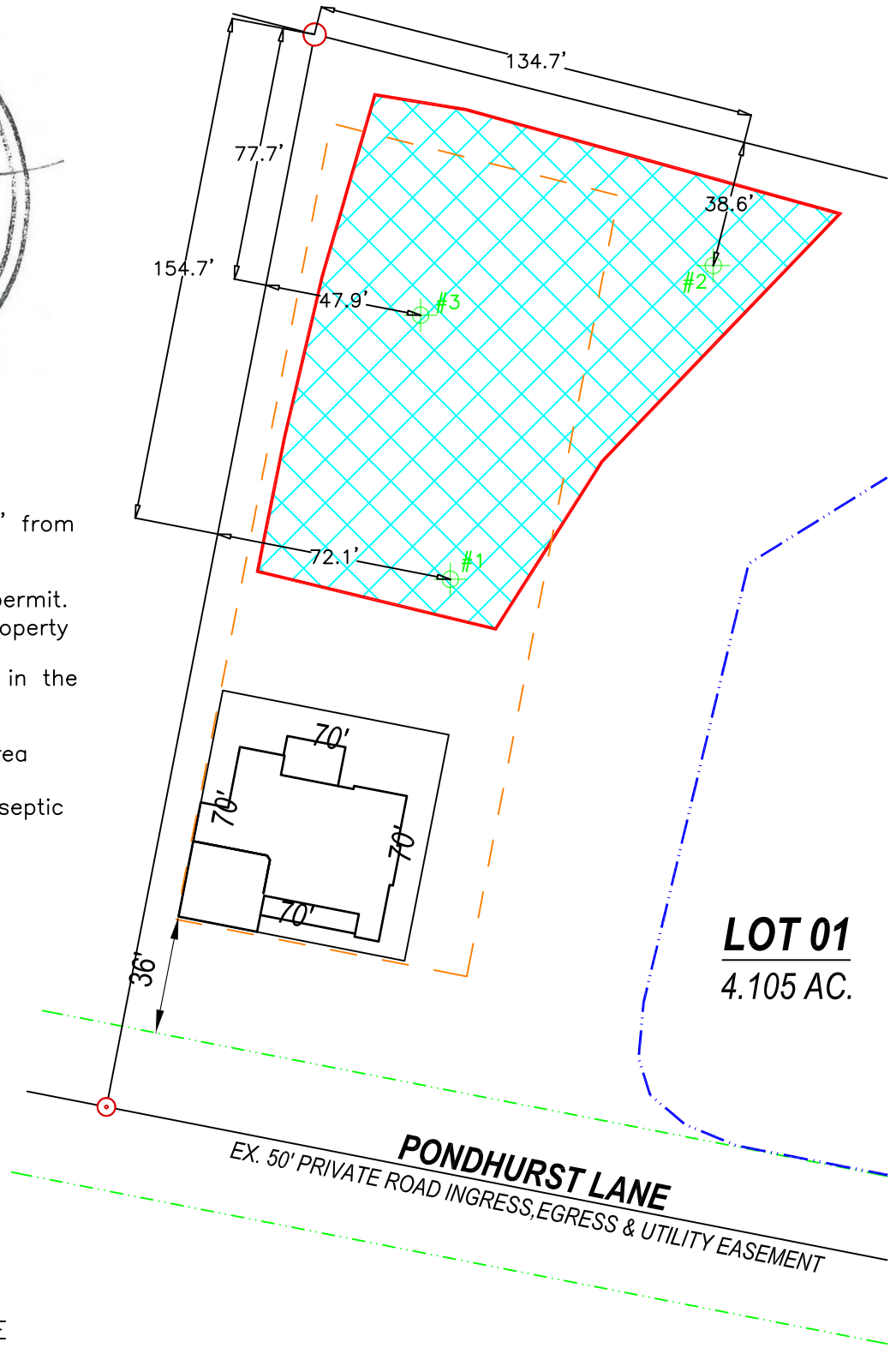
**Mineralogy**

SEXP-Slightly Expansive  
 EXP-Expansive

**Sketch of Soil Evaluation Locations**



- \*Keep tanks and drain lines 10' from property lines.
- \*Not a survey.
- \*Not a guarantee of a septic permit.
- \*Keep supply lines >5' from property lines.
- \*Some lines are flagged longer in the field than lengths indicate.
- \*No grading septic area.
- \*No adding soil within septic area
- \*No rutting-up septic area
- \*No cuts of >2' within 15' of septic areas



**LOT 01**  
4.105 AC.

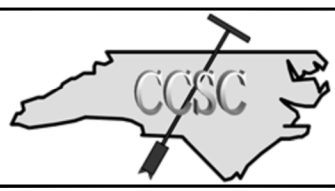
- System and Repair Area:
- ~16,100ft<sup>2</sup>
  - 0.25 soil LTAR
  - 4-bedroom: Low Profile Chambers Product Primary and Repair



GRAPHIC SCALE  
1" = 50'



⊕ #1 = profile description locations



Central Carolina Soil Consulting, PLLC  
1900 South Main Street, Suite 110  
Wake Forest, North Carolina 27587  
Phone (919)569-6704 Fax (919)569-6703

Soils Map  
Lot 1, 98 Pondhurst Lane  
Harnett County, North Carolina

Job#: 4760
Drawn By: JR
Date: 12/05/2023
Revision: