



NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

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

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: 1602-44-8225.000
Issued To: Clayton Properties Group, 2521 Schieffelin Rd., Suite 116, Apex, NC 27502
Property Location: 139 Grove Township Way, Angier, NC 27501
Subdivision (if applicable) Langdon Preserve Lot #: 11 Block: Section:

LSS Report Provided: Yes [x] No [ ]
If yes, name and license number of LSS: Michael D. Eaker, #1030

New [x] Expansion [ ] System Relocation [ ] Change of Use [ ]
Proposed Structure: Single Family Dwelling

Number of bedrooms: 4 Number of Occupants: Other:

Design Wastewater Strength: [x] domestic [ ] high strength [ ] industrial process

Proposed Design Daily Flow: 480 GPD Proposed LTAR (Initial): 0.50 gpd/ft2 Proposed LTAR (Repair): 0.50 gpd/ft2

Proposed Wastewater System Type\*: Accepted (Initial) Pump Required: [ ] Yes [x] No [ ] May be required

Proposed Wastewater System Type\*: Accepted (Repair) Pump Required: [ ] Yes [x] 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): 40" Usable Soil Depth (Repair): 44"
Max. Trench Depth (Initial)\*: 24" Max. Trench Depth (Repair)\*: 24" \* 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:
Install as per detail sheet and map. Do not disturb, compact, rut or cut any soil within the septic drainfield area.

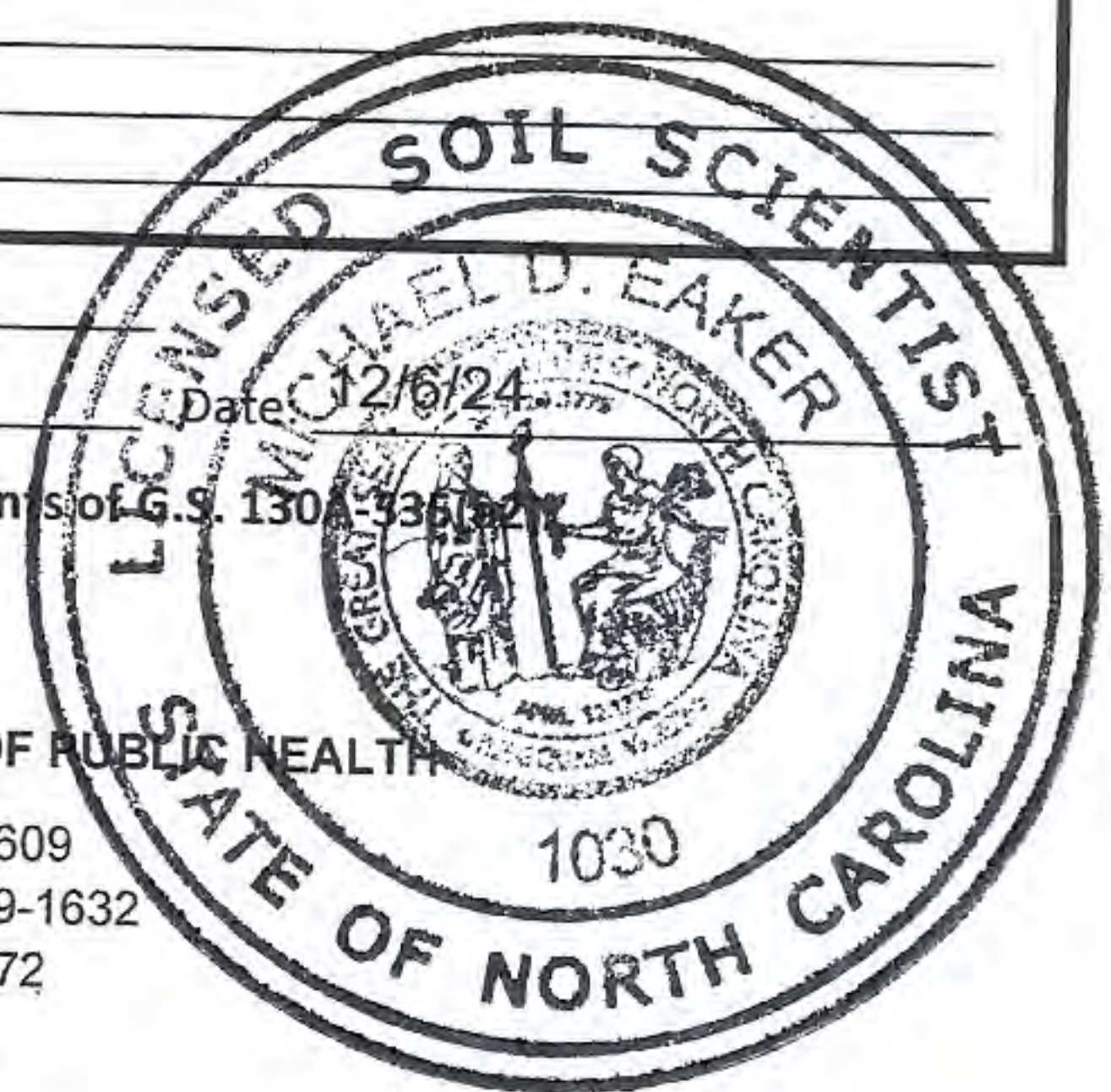
Licensed Soil Scientist Print Name: Michael D. Eaker
Licensed Soil Scientist Signature: [Signature]

The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-336.21
\*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 27699-1632
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\***

### CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)

County: Harnett  
PIN/Lot Identifier: 1602-44-8225.000 , Lot 11  
Issued To: Clayton Properties Group, 2521 Schieffelin Rd., Suite 116, Apex, NC 27502  
Property Location: 139 Grove Township Way, Angier, NC 27501

AOWE/PE Plans/Evaluations Provided: Yes  No  If yes, name and license number of AOWE/PE: Michael D. Eaker 10013E

Facility Type: Single Family Dwelling

New  Expansion  Repair  System Relocation  Change of Use

Basement?  Yes  No Basement Fixtures?  Yes  No

Type of Wastewater System\* Accepted (Initial) Accepted (Repair)

\*Please include system classification for proposed wastewater system types in accordance with 15A NCAC 18A .1961 Table V(a)

Design Daily Flow: 480 GPD Wastewater Strength:  domestic  high strength  industrial process

Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies?  Yes  No  
(if yes, please provide engineering documentation)

#### Installation Requirements/Conditions

Septic Tank Size: 1000 gallons Total Trench/Bed Length: 240 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.50 gpd/ft<sup>2</sup>

Soil Cover: 6 inches Slope Corrected Maximum Trench/Bed Depth<sup>†</sup>: 24 inches \* *Measured on the downhill side of the trench*

Aggregate Depth: NA inches above pipe NA inches below pipe NA inches total

Pump Tank Size (if applicable): NA gallons Requires more than 1 pump?  Yes  No

Pump Requirements: NA ft. TDH vs. NA GPM Grease Trap Size (if applicable): NA gallons

Distribution Method:  Serial  D-Box or Parallel  Pressure Manifold(s)  LPP  Other: \_\_\_\_\_

Artificial Drainage Required: Yes  No  If yes, please specify details: \_\_\_\_\_

**Legal Agreements** (If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)

Multi-party Agreement Required [.1937(h)]:  Yes  No

Easement, Right-of-Way, or Encroachment Agreement Required [.1938(j)]:  Yes  No

Declaration of Restrictive Covenants:  Yes  No

Pre-Construction Conference Required: Yes  No

Conditions: Install as per detail sheet and map. Do not disturb, compact, rut or cut any soil within the septic drainfield area.

The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.

AOWE/PE Print Name: Michael D. Eaker Expiration Date: 12/31/24

AOWE/PE Signature:  Date: 12/6/24

This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5).

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

### This Section for Local Health Department Use Only

Initial submittal received: \_\_\_\_\_ by \_\_\_\_\_  
Date Initials

G.S. 130A-335(a5) states the following:

*When an applicant for a Construction Authorization, or an Improvement Permit and Construction Authorization together, submits a Construction Authorization, or an Improvement Permit and Construction Authorization application together, the permit fee charged by the local health department, the common form developed by the Department, and any necessary signed and sealed plans or evaluations conducted by a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator, 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 Construction Authorization or Improvement Permit and Construction Authorization includes all of the required components. If the local health department determines that the Construction Authorization or Improvement Permit and Construction Authorization is incomplete, the local health department shall notify the applicant of the components needed to complete the Construction Authorization or Improvement Permit and Construction Authorization. The applicant may submit additional information to the local health department to cure the deficiencies in the Construction Authorization or Improvement Permit and Construction Authorization. The local health department shall make a final determination as to whether the Construction Authorization or Improvement Permit and Construction Authorization 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 applicant may apply for the building permit for the project upon the decision of completeness of the Construction Authorization or Improvement Permit and Construction Authorization by the local health department or if the local health department fails to act within five business days. The Authorized On-Site Wastewater Evaluator or licensed engineer submitting the evaluation pursuant to this subsection may request that the local health department revoke or suspend the Construction Authorization or Improvement Permit and Construction Authorization for cause. Upon written request of the Authorized On-Site Wastewater Evaluator or licensed engineer, the local health department shall suspend or revoke the Construction Authorization or Improvement Permit and Construction Authorization pursuant to G.S. 130A-23. The Department shall develop a common form for use as the Construction Authorization.*

The review for completeness of this Construction Authorization was conducted in accordance with G.S. 130A-335(a5). This Construction Authorization 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 AOWE/PE and the Applicant on \_\_\_\_\_  
Date

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

Complete

State Authorized Agent: \_\_\_\_\_ Date of Issuance: \_\_\_\_\_

**This Construction Authorization is issued pursuant to G.S. 130A-335(a2) and (a5) using the signed and sealed plans or evaluations attached here. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization 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 plans, evaluations, preconstruction conference findings, submittals, or actions from a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (a5), and (a7). The Department, the Department's authorized agents, and the local health departments shall be responsible and bear liability for their actions and evaluations and other obligations under State law or rule, including the issuance of the operations permit pursuant to GS 130A-337.**

Construction Authorization Expiration Date: \_\_\_\_\_

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

# Southeastern Soil & Environmental Associates, Inc.

P.O. Box 9321  
Fayetteville, NC 28311  
Phone/Fax (910) 822-4540  
Email mike@southeasternsoil.com

December 6, 2024

Clayton Properties Group  
2521 Schieffelin Rd.  
Apex, NC 27502

Re: Soil/site evaluation for subsurface waste disposal (GS 130A-335(a2)/SL 2022-11), PIN 1602-44-8225.000, 139 Grove Township Way, Langdon Preserve Subdivision, Lot 11, Angier, Harnett County, North Carolina

To whom it may concern,

A soil/site evaluation has been conducted on the aforementioned property at your request. The purpose of the investigation was to determine if soils were suitable for a subsurface waste disposal system (conventional, accepted and innovative) to serve a proposed single-family residence (4-bedroom home). All ratings and determinations were made in accordance with "On Site Wastewater Rules, 15A NCAC 18E". **This LSS evaluation is being submitted to meet the requirements of GS 130A-335(a2)/SL 2022-11.**

The soil evaluation was completed on October 3, 2024. Hand auger borings were advanced under moist soil conditions. The site essentially lies on a linear slope landscape (3-5% slope). Soil borings conducted in most of this area consisted of 30 or more inches of loamy sand underlain by sandy loam, sandy clay loam and/or sand to 48 or more inches below the soil surface. Soil wetness and/or parent material (greater than 50%) was not observed shallower than 40 inches below the soil surface (initial system) and 44 inches (repair system). All other soil characteristics were suitable to at least 40 inches.

Based on soil borings and site conditions, the site would be designated suitable for a shallow accepted subsurface waste disposal drainfield (0.50 gal/day/ft<sup>2</sup> LTAR; initial system). There is enough suitable soil area to allow for an accepted subsurface septic system repair (0.50 gal/day/ft<sup>2</sup>). A map showing the approximate location of the site and proposed septic layout accompanies this report. **[Note: No grading, rutting or other soil disturbance can occur in or near the proposed septic area. Any grading can alter the findings of this report and render the site unusable. As such, we recommend the builder protect the proposed septic areas with rope, flagging, fencing, etc.]**

### Design Summary

- Accepted product (240', see septic layout)
- 480 gal/day flow rate (4BR)
- 24" maximum trench depth (initial)
- 0.50 gpd/ft<sup>2</sup> LTAR (initial and repair)
- No grading, rutting or filling in septic areas
- No vertical cuts (greater than 2') within 15' of septic lines/areas
- Keep tanks and drainlines 10' from property lines
- Keep supply line 5 or more feet from property lines
- **Install in dry soil conditions**
- Maintain natural contours when clearing the lots
- Direct gutter water away from septic system

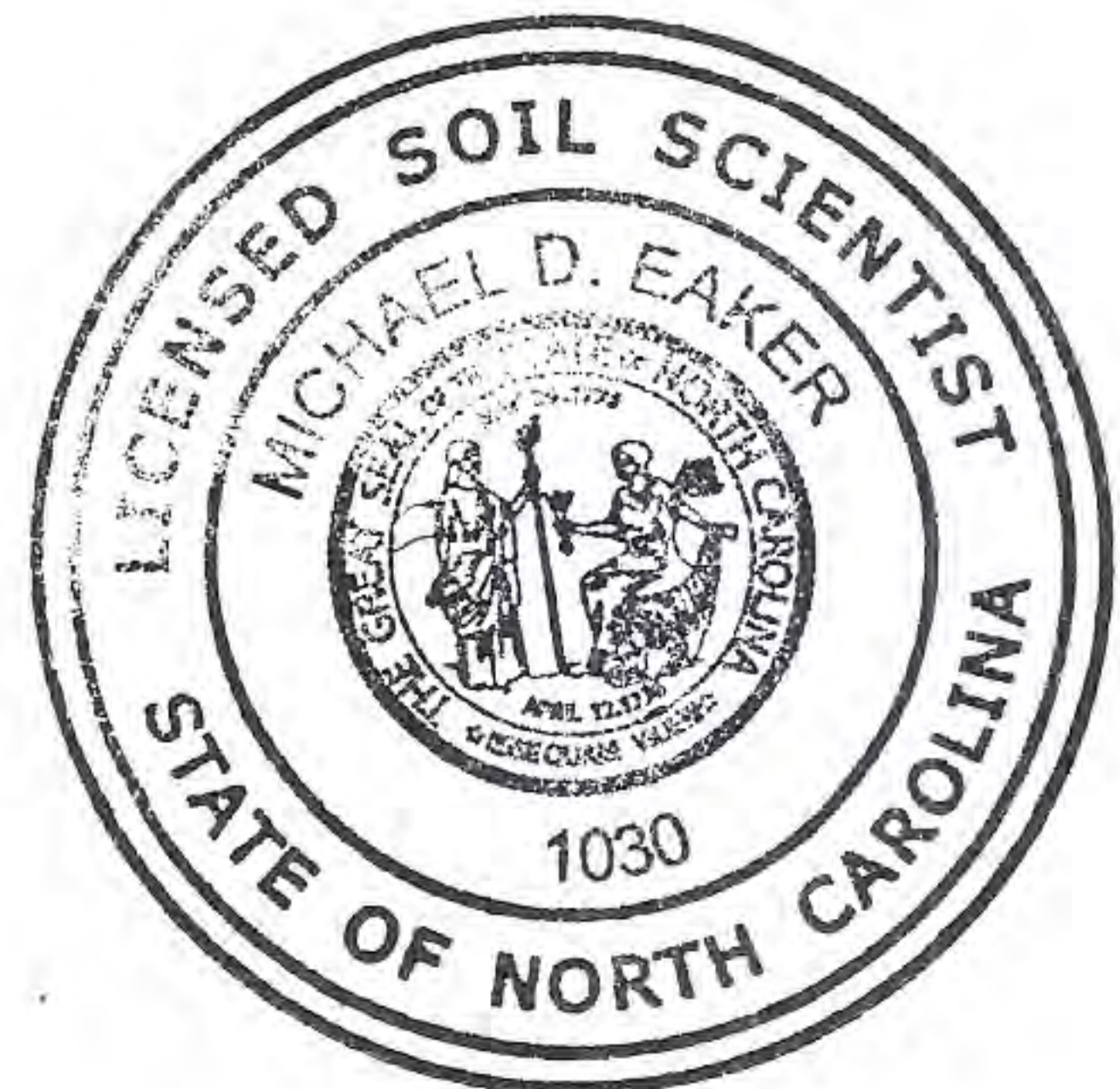
During site construction, it is important not to impact and suitable or provisionally suitable soil areas with activities such as excavation or filling. Only the vegetation should be removed in the areas of the proposed septic drainfields to prevent any disturbance of naturally occurring soil. We recommend all lot clearing activity be delayed until the local health department issues a permit.

To the extent possible, we have identified the soil types that will impact the flow of wastewater on this site and have provided a professional opinion as to the best septic system layout. This report does not guarantee that the proposed septic system will properly function for any specific length of time.

Sincerely,



Mike Eaker  
NC Licensed Soil Scientist # 1030  
NC Authorized Wastewater Evaluator 10013E



SOUTHEASTERN SOIL & ENVIRONMENTAL ASSOC., INC.

PROPOSED SUBSURFACE WASTE DISPOSAL SYSTEM DETAIL SHEET

SUBDIVISION: Langdon Preserve

LOT 11

INITIAL SYSTEM: GRAV APPROVED 25% REDUCTION

REPAIR GRAV Approved 25% Reduction

DISTRIBUTION: D-Box

DISTRIBUTION D-Box

BENCHMARK: 100.0

LOCATION Wm Lot 12

NO. BEDROOMS: 4

LTAR 0.5 gpd/ft<sup>2</sup>

INI INK  
System

LINE	FLAG COLOR	ELEVATION	LENGTH
1	W	95.67	90
2	O	95.33	90
3	W	94.58	90
			<u>240</u>
4	O	93.75	90
5	W	93.75	90
6	O	93.75	90
			<u>240</u>

TERRAZE  
Remove

BY B.C. RAYNOR

DATE 04/02/2024

TYPICAL PROFILE

0-33 LS VFR GR

33-48 LSCL Fi SBK

THERE SHALL BE NO GRADING,  
CUTTING, LOGGING OR OTHER SOIL  
DISTURBANCE IN SEPTIC AREA

HEALTH DEPARTMENT USE ONLY.

DESIGNS DO NOT GURANTEE FUNCTIONALITY





PRELIMINARY PLOT PLAN FOR

# MUNGO HOMES

LOT 11, LANGDON PRESERVE

GROVE TOWNSHIP WAY

REF: B.M. 2024, PG. 588

GROVE TOWNSHIP

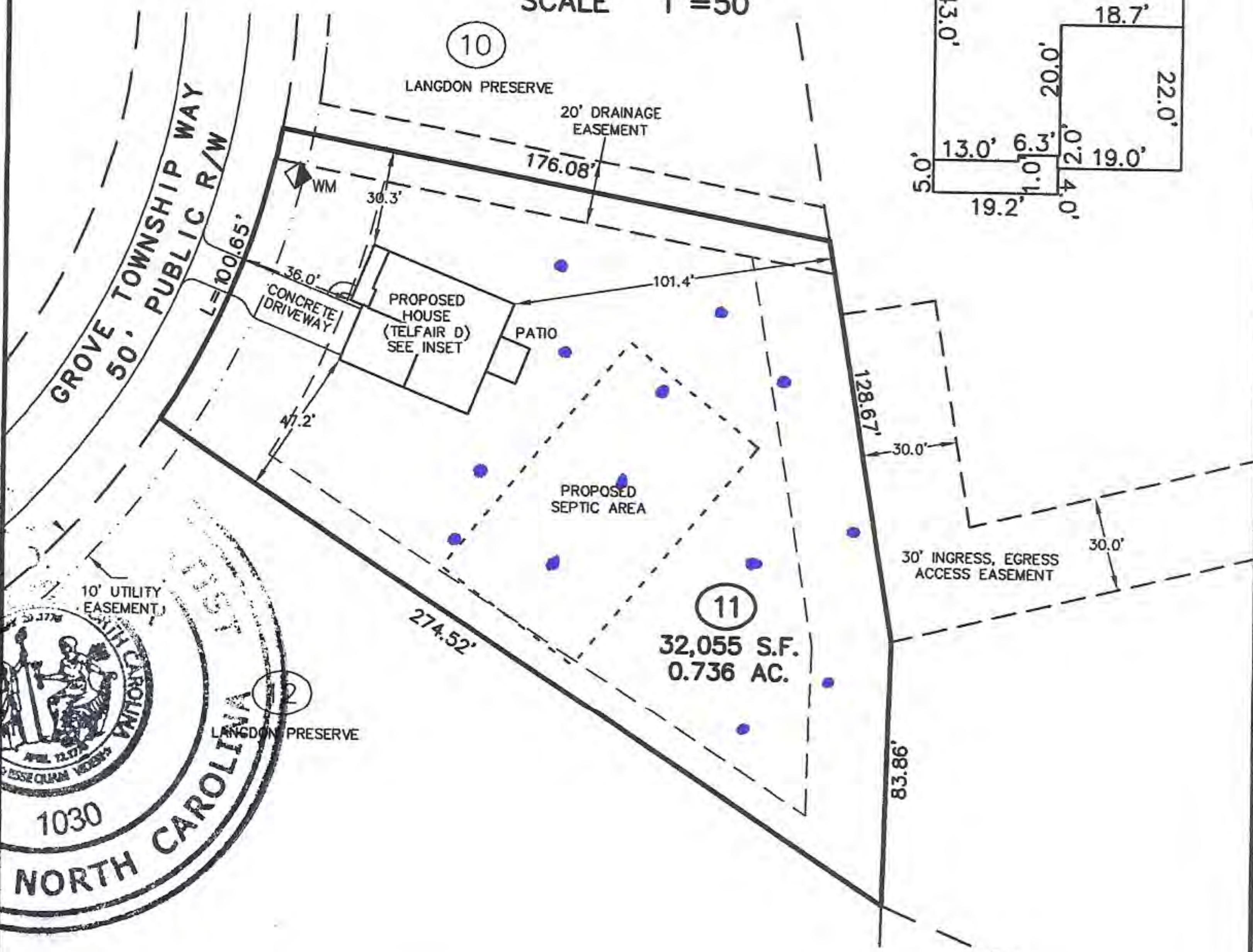
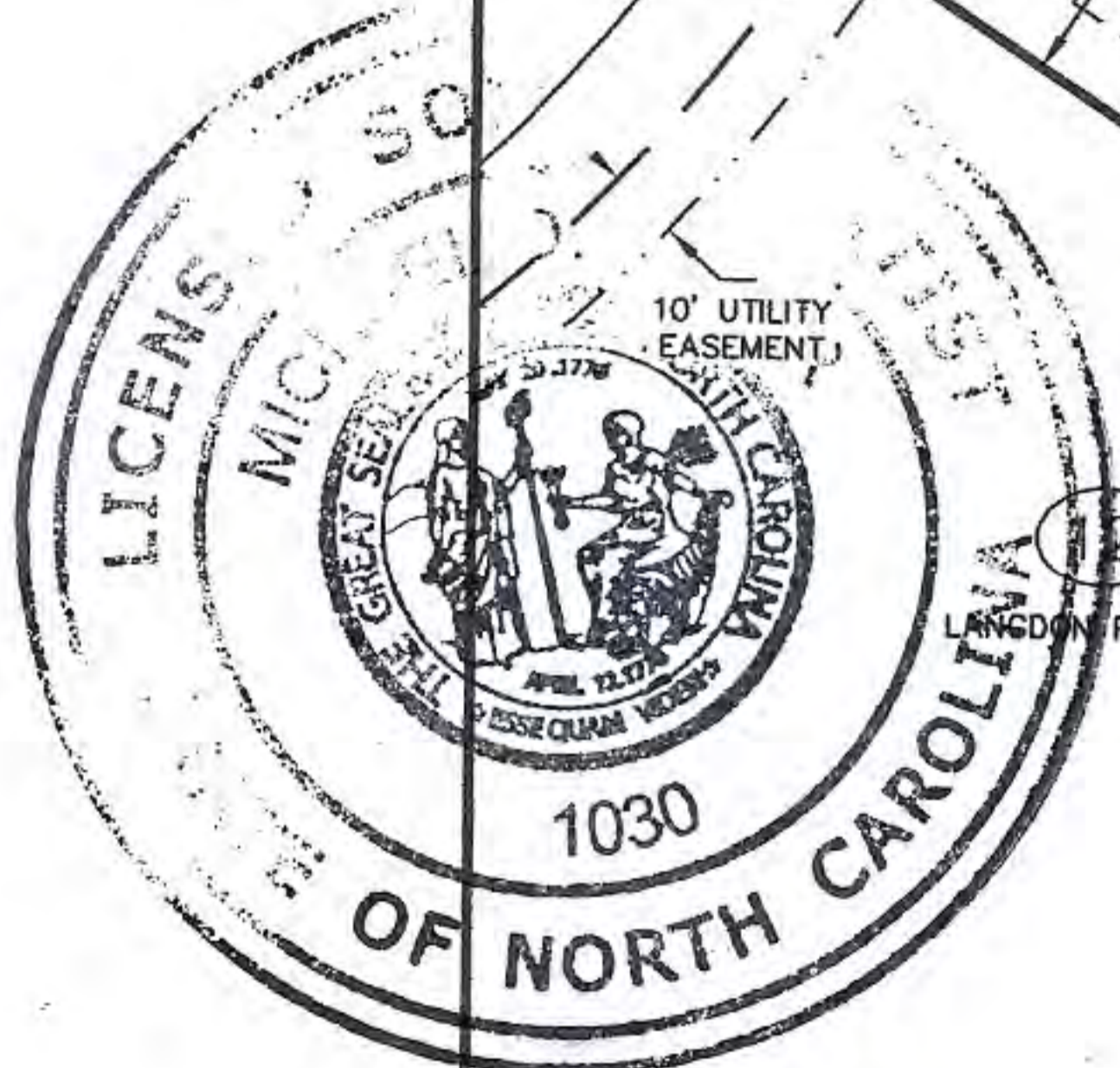
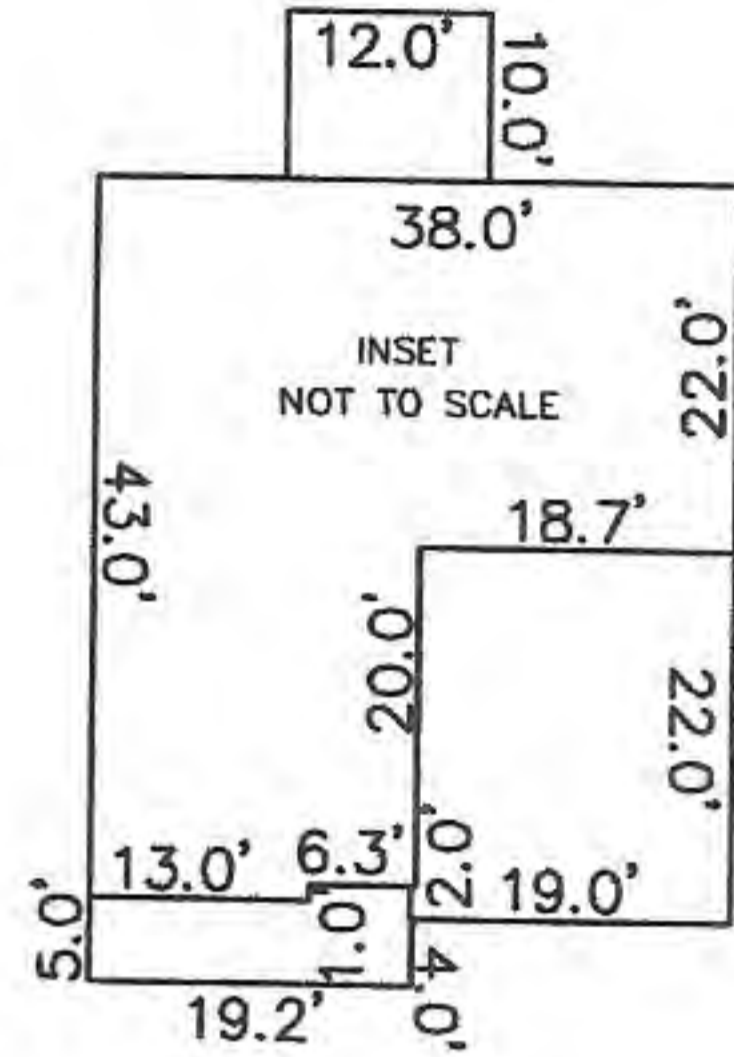
WAKE COUNTY, NORTH CAROLINA

NOVEMBER 22, 2024

ZONED RA-30



SCALE 1"=50'



**IMPERVIOUS SURFACE TABLE**

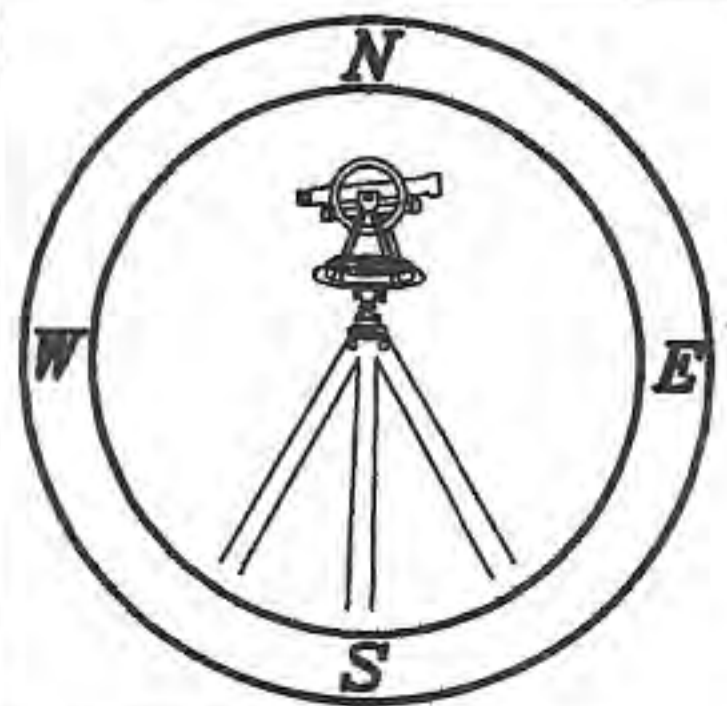
HOUSE	1,749 S.F.
PATIO	120 S.F.
DRIVEWAY	610 S.F.
SIDEWALKS	32 S.F.
MISC/UTILITIES	9 S.F.
<b>TOTAL IMPERVIOUS AREA</b>	<b>2,520 S.F.</b>
<b>TOTAL LOT AREA</b>	<b>32,055 S.F.</b>
<b>PERCENTAGE OF IMPERVIOUS AREA</b>	<b>7.86 %</b>

= SUITABLE SOIL

TOTAL CONCRETE	
PATIO	120 S.F.
DRIVEWAY	797 S.F.
SIDEWALKS	32 S.F.
<b>TOTAL</b>	<b>949 S.F.</b>

N/F  
ROY LANE GREGORY & WIFE,  
TERESA WEBB GREGORY  
DB 1233, PG 976

THIS SURVEYOR DOES NOT WARRANTY THE ACCURACY OF ARCHITECTURAL DIMENSIONS. THEY ARE TO BE VERIFIED BY THE CONTRACTOR.



## CMP

Professional Land Surveyors  
C-1525  
333 S. White Street  
Post Office Box 1253  
Wake Forest, N.C. 27588  
(919)556-3148

**NOTES:**  
-THIS PLAN DOES NOT REFLECT AN ACTUAL SURVEY. IT IS A PRELIMINARY PLAN AND SHOULD BE USED FOR ITS INTENDED PURPOSE ONLY.  
-NOT FOR RECORDATION, CONVEYANCES, OR SALES.

**SOIL/SITE EVALUATION**  
**for ON-SITE WASTEWATER SYSTEM**  
 (Complete all fields in full)

OWNER: Triangle Land Partners/ Clayton Properties Group Mateo Burbano

ADDRESS: 2521 Schieffelin Rd Suite 116 Apex NC 27502

PROPOSED FACILITY: SFD PROPOSED DESIGN FLOW (.1949): 480 GPD

LOCATION OF SITE: Langdon Preserve Lot 11

WATER SUPPLY:  Private  Public  Well  Spring  Other

EVALUATION METHOD:  Auger Boring  Pit  Cut

APPLICATION DATE: \_\_\_\_\_

DATE EVALUATED: 10/03/2024

PROPERTY SIZE: .736 Ac

PROPERTY RECORDED: \_\_\_\_\_

TYPE OF WASTEWATER:  Sewage  Industrial Process  Mixed

P R O F I L E #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPR O CLASS	.1944 RESTR HORIZ	
1	L 5%	0-8	GR/LS	VFR/NEXP	CR2>48"  2.5Y 6/4 10YR 5/6 5YR 5/8(20%) 2.5YR 5/8 7.5YR 5/8 MIX	40"	N/A	N/A	S 0.5
		8-33	GR/LS	VFR/NEXP					
		33-40	SBK/SCL	FI/EXP					
		40-48	SBK/SCLAY(COARSE)	FI/EXP					
2	L 5%	0-10	GR/LS	VFR/NEXP	CR>48"  2.5Y 6/4 10YR 5/6	N/A	N/A	N/A	S 0.8
		10-40	GR/LS	FR/NEXP					
		40-48	GR/SA	FR/NEXP					
3	L 5%	0-6	GR/LS	VFR/NEXP	CR2>48"  2.5Y 6/4 10YR 5/6 10YR 6/8	N/A	N/A	N/A	S 0.5
		6-31	GR/LS	FR/NEXP					
		31-45	GR/SL	FR/SEXP					
		45-48	SBK/SCL	FI/EXP					
4	L 5%	0-8	GR/LS	VFR/SEXP	CR2>48"  2.5Y 6/4 10YR 5/6 10YR 5/8	44"	N/A	N/A	S 0.8
		8-30	GR/LS	VFR/NEXP					
		30-41	GR/SA	VFR/NEXP					
		41-48	G/SA	VFR/NEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	OTHER FACTORS (.1946): <u>N/A</u> SITE CLASSIFICATION (.1948): <u>SUITABLE</u>  EVALUATED BY: <u>M. EAKER</u> OTHER(S) PRESENT: <u>B.C. RAYNOR</u>
Available Space (.1945)	YES	YES	
System Type(s)	ACCEPTED	ACCEPTED	
Site LTAR	0.5	0.5	

COMMENTS: \_\_\_\_\_

