

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER PERMIT

NO PERMIT(S) FOR CONSTRUCTION, LOCATION OR RELOCATION ACTIVITY SHALL BE ISSUED UNTIL AN AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION AUTHORIZATION HAS BEEN ISSUED
PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/OR IF SITE IS ALTERED OR INTENDED USE CHANGED

OPERATIONS PERMIT

PERMIT # HWP-136451-2024 **APPLICATION DATE:** 11/20/2024 **BLDG. PERMIT#:** RBPR-136457-2024
PIN: 1823007064 **RECORDED:** Yes
TOWNSHIP: 14 - New Light **JURISDICTION:** Wake County **ZONING:** R-40W
APPLICANT: Alexander J Christmas
900 Ridgefield DR 50
BUSINESS PHONE: (984) 900-1950
HOME PHONE: (984) 900-1950
MOBILE PHONE: (984) 900-1950

HD USE: 101A CONVENTIONAL ONE-FAMILY HOUSE **EXISTING USE:**

SITE ADDRESS: 9105 OVERLOOK CREST DR

SUBDIVISION: GRAND HIGHLAND ESTATES PH 2 **LOT:** 31 **ACRES:**

DIRECTIONS: Turn onto Grand Highland Way from Garffe Sherron Road. Continue to the end of Grand Highland Way and turn right onto Legacy Ridge Lane. Continue .2 mile and turn right onto Overlook Crest Drive. The lot will be on your left in 300 ft.

Systems defined as either type III-b, III-g with a pump, IV, V or VI, in accordance with the North Carolina administrative code 15A NCAC 18a .1961, table V as adopted by reference in the "Regulations Governing Wastewater Treatment Dispersal Systems in Wake County", requires Wake County Environmental Services to conduct periodic inspections of the system type pursuant to 15A NCAC 18a. 1961 (j). Fees for these inspections will be charged as per the approved Fee Schedule. In addition, all systems are to be operated and maintained as specified in 15A NCAC 18A .1961. This permit is based in part on information provided by the homeowner and/or his/her representative in the application submitted for this permit. The Environmental Health Specialist is not responsible for false or misleading information contained in the application. The environmental health specialist is also not responsible for concealed conditions on the property or for statements in this report that may have resulted from false or misleading statements provided to him/her in the application. Neither Wake County nor the Environmental Health Specialist warrants that the septic tank system will continue to function satisfactorily in the future or that the water supply will remain potable.

OPERATION PERMIT VALID FOR: No Expiration

INSTALLED BY: BRANTLEY, CORY - 1036 - IV

PROPRIETARY SYSTEM: IQ4PS - Infiltrator Quick4 Plus **PRETREATMENT SYSTEM:**
Standard

SYSTEM TYPE INSTALLED: II B

OPERATION PERMIT: STATUS: Issued **ISSUED BY:** Hunter Gregg **ISSUED DATE:** 06/20/2025

SEPTIC TANK: David Brantley & Sons - STB-323 - 1250 gallons **DATE OF MANUFACTURE:** **FILTER:** GAG SIM/TECH - STF-110

GREASE TRAP: **DATE OF MANUFACTURE:** **FILTER:**

DOSING PUMP TANK: **DATE OF MANUFACTURE:** **FILTER:**

CC1: **ETM1:** **CC2:** **ETM2:**

RECIRCULATION TANK: **DATE OF MANUFACTURE:**

CC1: **ETM1:** **CC2:** **ETM2:**

SEPTIC TANK ELEVATION: 3.45

GREASE TRAP ELEVATION:

DOSING PUMP TANK ELEVATION:

RECIRCULATION TANK ELEVATION:

DISTRIBUTION DEVICE ELEVATION:

INSTALLED TRENCH DEPTH	INSTALLED AGGREGATE DEPTH	INSTALLED TRENCH LENGTH	INSTALLED TRENCH BOTTOM ELEVATION
24	12	50	5.25
24	12	70	6.5
24	12	90	7.75
24	12	110	9.5
24	12	142	11

ACTUAL PRESSURE HEAD:

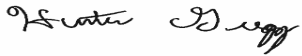
ACTUAL FLOW RATE:

ACTUAL DOSE VOLUME: 0

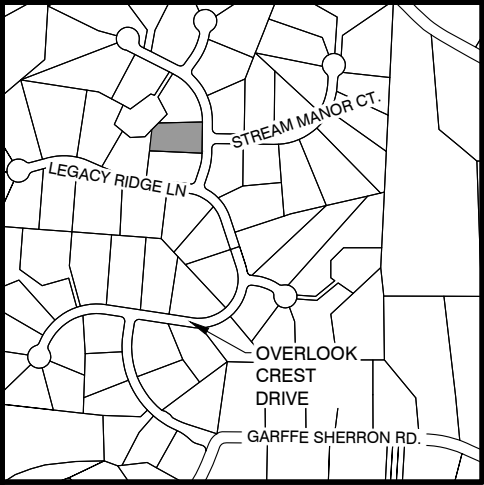
SPECIFIC OPERATION REQUIREMENTS:

- Permit issued pursuant to G.S. 130A-335(a2) and (a5).
- System designed by Jason Hall with Central Carolina Soil Consulting.
- System designed for 4-bedroom home with a design flow of 480 gallons per day.
- Future Repair System is Type II B using Accepted 25% Reduction drainfield product with gravity/serial distribution and a maximum trench depth of 24"; Repair LTAR is 0.3.
- Site serviced by Onsite Private Well.
- No cutting, grading, alterations, or utilities in septic area.
- Maintain all required setbacks.

ISSUED BY:



DATE: 06/20/2025



LOCATION MAP
1" = 1,000'

SITE DATA	
CLIENT	EXETER BUILDING COMPANY
SITE ADDRESS	9105 OVERLOOK CREST DRIVE
PIN	1823-00-7064
DEED REFERENCE	D.B. 18713, PG. 1748
SUBDIVISION	THE GRAND HIGHLANDS
PLAT REFERENCE	B.M. 2023, PG. 1418-1420
LOT SIZE	0.92 ACRES
ZONING	R-40W

IMPERVIOUS AREA (S.F.)	
HOUSE	3853
DRIVE/WALK	2124
TOTAL	5977
MAX (PER PLAT)	12000



Jeremy Taylor

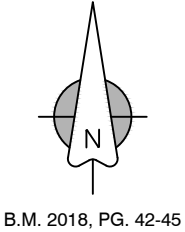
Required Setbacks	
Front	30
Side	15
Rear	30
Corner	



THE PURPOSE OF THIS PLAN IS FOR PERMITTING PURPOSES ONLY AND SHOULD NOT BE CONSIDERED A CERTIFIED BOUNDARY SURVEY.

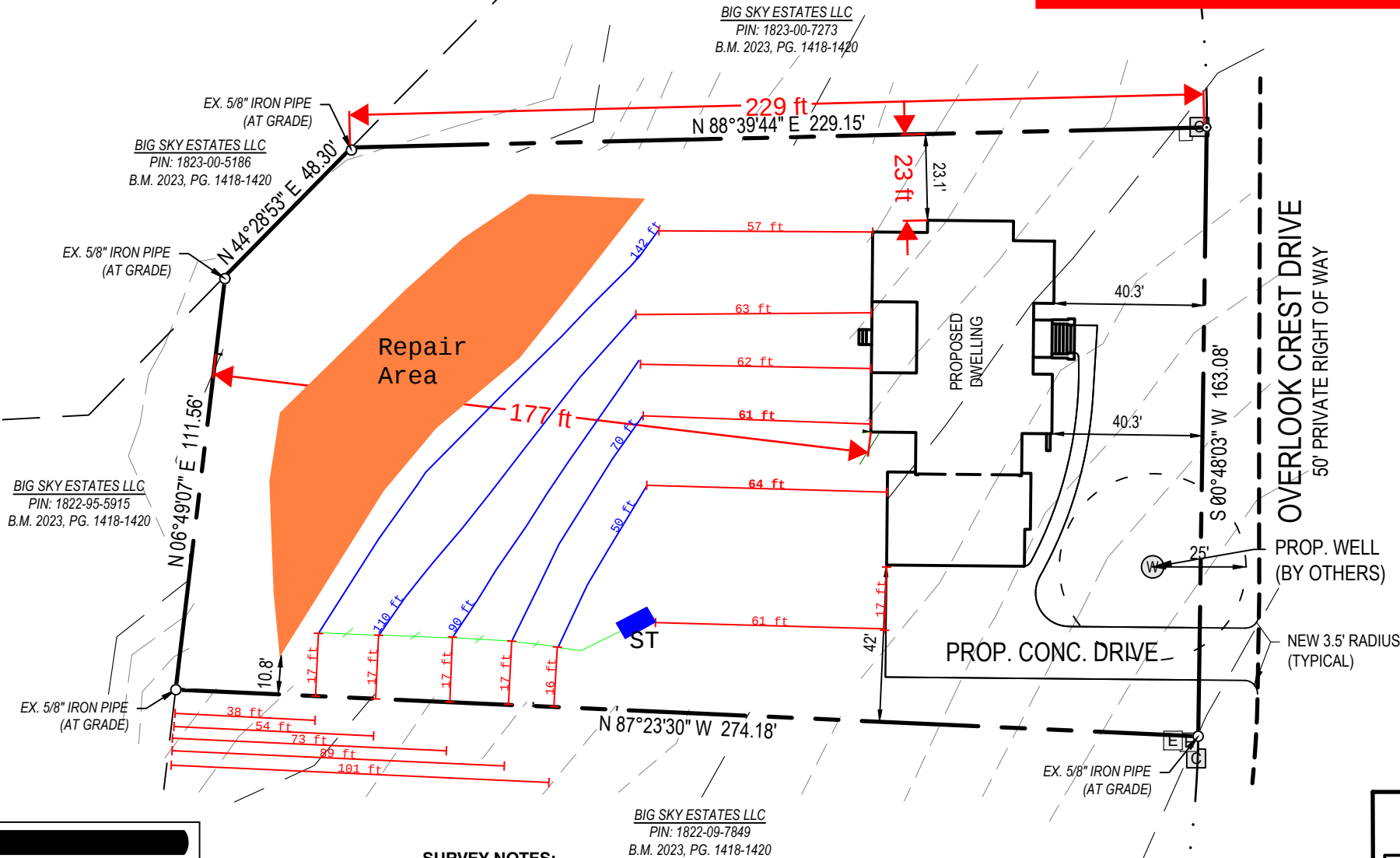
EROSION CONTROL COMMON PLAN

LOTS 31 - THE GRAND HIGHLANDS SUBDIVISION
NEW LIGHT TOWNSHIP, WAKE COUNTY, NC



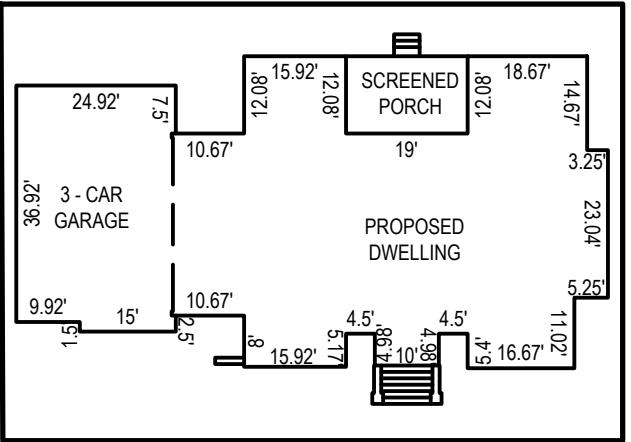
LEGEND:

B.M.	Book of Maps	O	Ex. Property Corner
D.B.	Deed Book	●	New 3/4" Iron Pipe
PG.	Page	○	Calculated point
S.F.	Square Feet	⊗	Water Meter
AC.	Acres	Ⓜ	Fence
—X—	Fence	Ⓢ	Sanitary Sewer Cleanout
—W—	Water pipe	Ⓢ	Sanitary Sewer Manhole
—SS—	Sanitary sewer pipe	Ⓢ	Power Pedestal
—SD—	Storm drain pipe	Ⓢ	Telephone Pedestal
—OU—	Overhead utility	Ⓢ	Cable Pedestal
		Ⓢ	Gas Meter
		Ⓢ	AC Condenser



SURVEY NOTES:

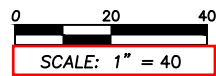
- ALL EASEMENTS, RIGHT-OF-WAYS, BUFFERS, SETBACKS AND ADJOINERS, ETC., REFERENCED FROM BOOK OF MAPS 2018, PAGE 42-45, UNLESS OTHERWISE NOTED.
- SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
- LAND DISTURBANCE PERMIT: SEC-111608-2023.
- CONTOURS REFERENCED FROM WAKE COUNTY GIS.



REVISIONS

NO.	DATE	DESCRIPTION

DATE: 11/11/2024
DRAWN BY: CM



SITE PLAN
SHEET C-01

This Section for Local Health Department Use Only

Initial submittal received: 11/20/2024 by KLH
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: Kristi Hiles Date of Issuance: 11/25/2024

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: 11/24/2029

See attached site sketch

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

County: Wake

Pre-Construction Conference Required: Yes ☐ No ☒

PIN/Lot Identifier: 1823007064, Grand Highland Estates lot 31

Issued To: Exeter Homes

Property Location: 9105 Overlook Crest Drive, Wake Forest

AOWE/PE Plans/Evaluations Provided: Yes ☒ No ☐ If yes, name and license number of AOWE/PE: Jason Hall, AOWE #10004E

Facility Type: Single Family, 4-Bedroom

Number of bedrooms: 4 Number of Occupants: ≤8 Other: _____

☒ New ☐ Expansion ☐ Repair ☐ System Relocation ☐ Change of Use

Basement? ☐ Yes ☒ No Basement Fixtures? ☐ Yes ☒ No

Crawl Space? ☒ Yes ☐ No Slab Foundation? ☐ Yes ☒ No

Type of Wastewater System* Ilb, Gravity to serial (Initial) Ilb, Gravity to serial (Repair)

**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*

Design Daily Flow: 480 GPD Wastewater Strength: ☒ Domestic ☐ High Strength ☐ Industrial Process WW

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

Effluent Standard: ☒ DSE ☐ HSE ☐ NSF/ANSI 40 ☐ TS-I ☐ TS-II ☐ RCW

Type of Water Supply: ☒ Private well ☐ Public well ☐ Shared well ☐ Municipal Supply ☐ Spring ☐ Other: _____

Installation Requirements/Conditions

Septic Tank Size: 1200 gallons Total Trench/Bed Length: 460 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: .3 gpd/ft² Usable Depth to LC (Initial)*: 45 **Limiting condition*

Additional Soil Cover: _____ inches Slope Corrected Maximum Trench/Bed Depth*: _____ inches ** Measured on the downhill side of the trench*

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

Pump Requirements: _____ ft. TDH vs. _____ GPM Grease Trap Size (if applicable): _____ 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 [.0204(g)]: ☐ Yes ☒ No Declaration of Restrictive Covenants: ☐ Yes ☒ No

Easement, Right-of-Way, or Encroachment Agreement Required [.0301(b)]: ☐ Yes ☒ No

Management Entity Required: ☐ Yes ☒ No Minimum O&M Requirements: _____

Permit conditions:

The requirements of 15A NCAC 18E are incorporated by reference into this permit and shall be met. Systems shall be installed in accordance with the attached site sketch. ***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 15A NCAC 18E, or 15A NCAC 18A .1900, as applicable, and to the conditions of this permit.

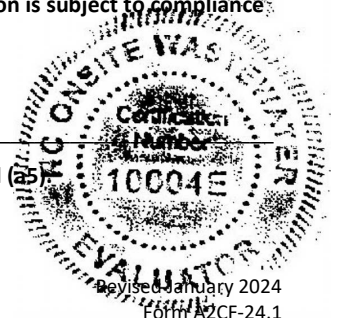
AOWE/PE Print Name: Jason Hall

AOWE/PE Signature: [Signature]

Date: 11/13/24

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

See attached site sketch



Re-submittal of Construction Authorization

LHD USE ONLY: This CA resubmittal received: _____ by _____
Date Initials

The following items are being resubmitted pursuant to G.S. 130A-335(a5) for issuance of the Construction Authorization:

I, _____ hereby attest that the information required to be included with this re-submittal
Authorized Onsite Wastewater Evaluator (Print Name)
is accurate and complete to the best of my knowledge and that the proposed Construction Authorization meets all applicable federal, State, and local laws, regulations, rules, and ordinances.

Signature of Authorized On-Site Wastewater Evaluator

Date

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

LHD Follow-up Completeness Review of Construction Authorization

The review for completeness of this Construction Authorization re-submittal 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: _____



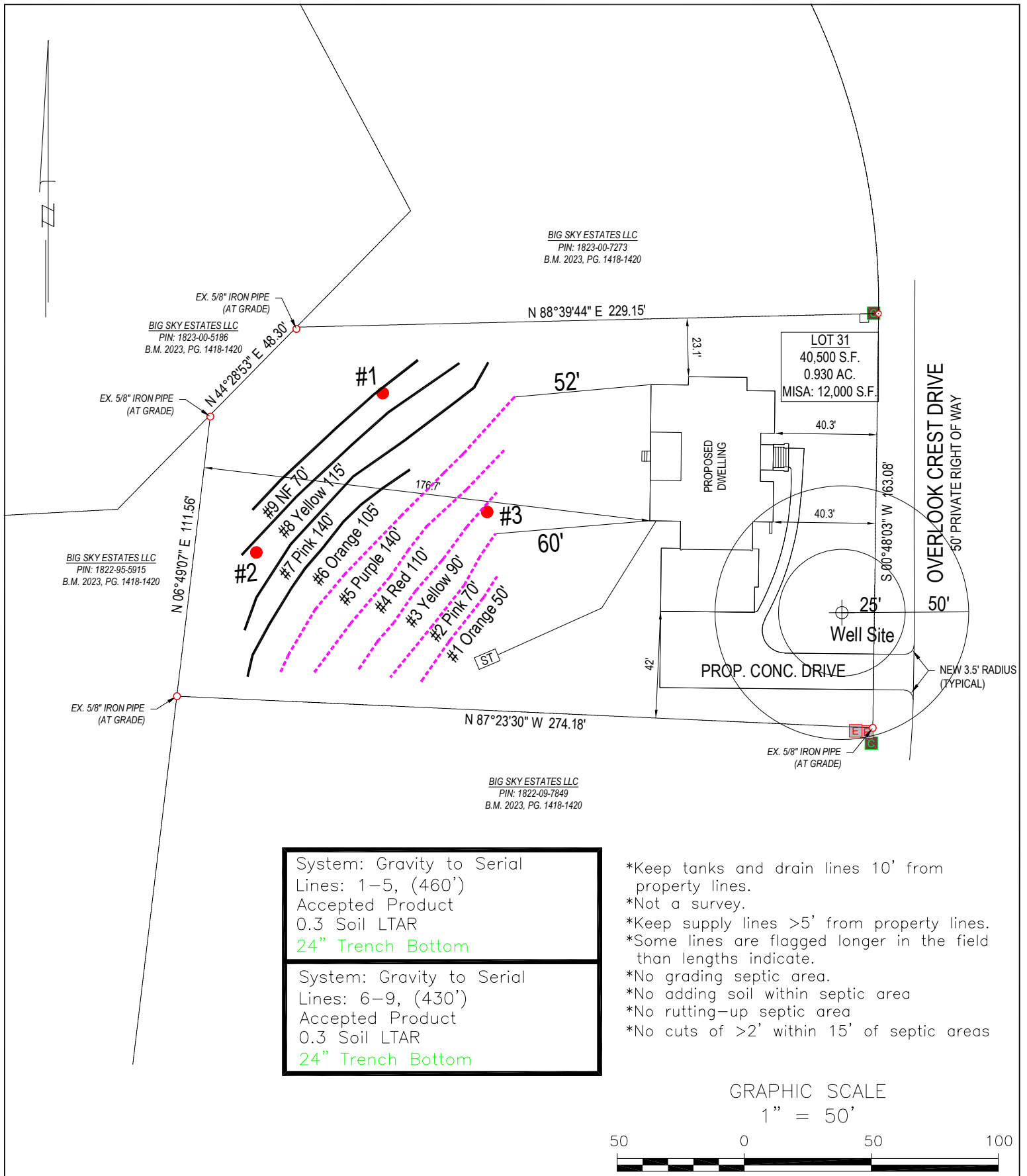
County: _____

PIN/Lot Identifier: _____

Issued To: _____

Blank lined paper with a faint watermark of the Great Seal of the State of North Carolina in the background.

[illegible]



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

4-Bedroom Septic Layout
 Lot 31, Grand Highland Estates
 Wake County, North Carolina

Job#: 5004
 Drawn By: JH
 Date: 11/12/24
 Revision:

PL-68 Filter and Tee

PL-68 is much more than just an effluent filter. The housing can also be used as an inlet baffle (tee) or an outlet baffle. The housing is designed to accept Polylok's snap in gas deflector to deflect gas bubbles away from the tee and to keep the solids in the tank.

Features:

- Offers 68 linear feet of 1/16" filter slots, which significantly extends time between cleaning.
- Accepts 3/4" PVC handle.
- Locks in any 360° position when used with PL-68 Tee.
- PL-68 Housing can be used as an inlet or outlet tee.
- Gasket prevents bypass.

PL-68 Installation:

Ideal for residential waste flows up to 800 gallons per day (GPD). Easily installs in any new or existing 4" outlet tee.

1. Locate the outlet of the septic tank.
2. Remove the tank cover and pump tank if necessary.
3. Glue the filter housing to the outlet pipe, or use a Polylok Extend & Lok if not enough pipe exists.
4. Insert the PL-68 filter into tee.
5. Replace and secure the septic tank cover.

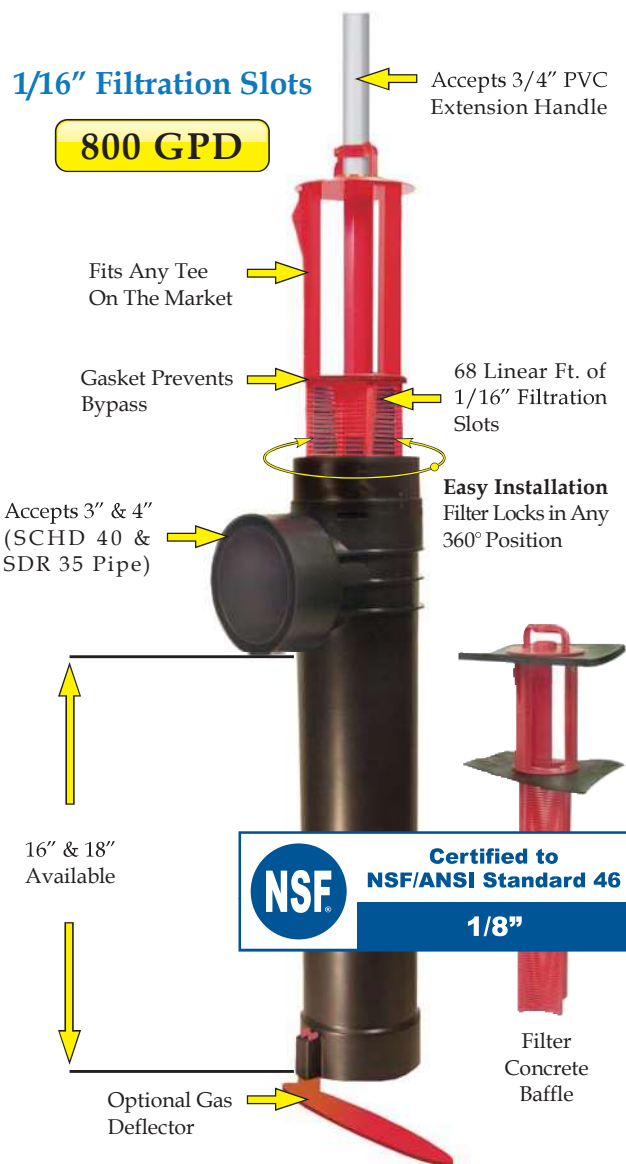
PL-68 Maintenance:

The PL-68 Effluent Filter will operate efficiently for several years under normal conditions before requiring cleaning. It is recommended that the filter be cleaned every time the tank is pumped, or at least every three years.

1. Do not use plumbing when filter is removed.
2. Pull PL-68 out of the tee.
3. Hose off filter over the septic tank. Make sure all solids fall back into septic tank.
4. Insert filter back into tee/housing.

Related Products:

PL-68 Filter Concrete Baffle
Extend & Lok™



Extend & Lok™
Easily installs
into existing tanks.



Spacer Bushing
4" SCHD 40
to SDR 35

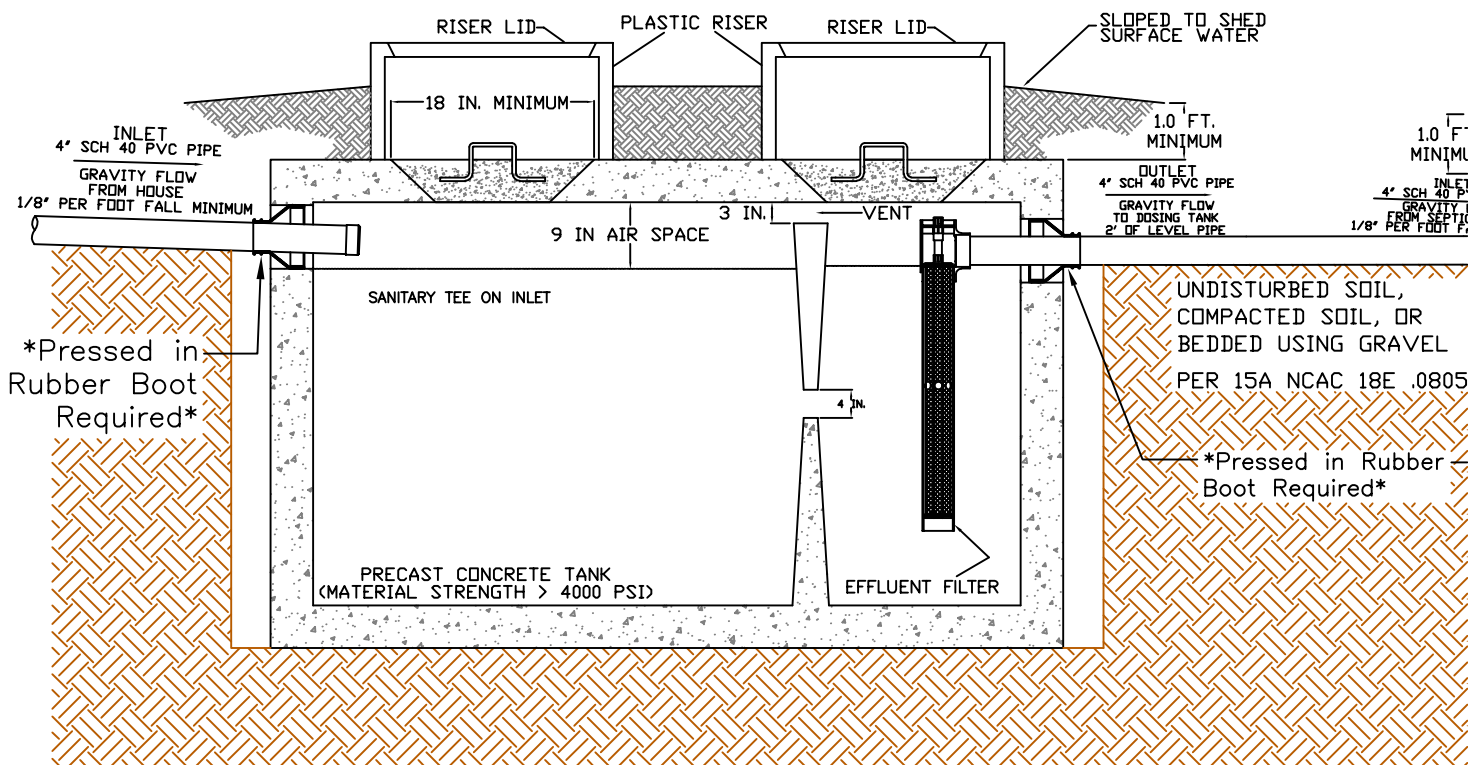


Spacer Bushing
4" SCHD 40
to 110mm Pipe



2" Extender

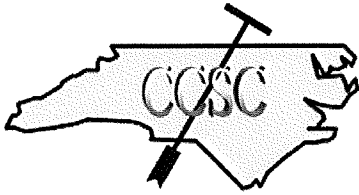
*Cont
• bo
mi
gr



1200 GAL SEPTIC TANK SCHEMATIC
NOT TO SCALE

NOTES:

1. ALL TANKS SHALL BE LEAK TESTED (IN OCCURANCE TO RULE 15A NCAC 18E .0805) WHEN INSTALLED UNDER THE FOLLOWING CONDITIONS
 - (A) when a Soil Wetness Condition (SWC) is present within four feet of the elevation of the top of a mid-seam pump tank;
 - (B) with advanced pretreatment when required in the RWTS or PIA Approval;
 - (C) when required in the approved plans and specifications for a wastewater system designed by a PE;
 - (D) when the tank is constructed in place; or
 - (E) as required by the authorized agent based upon site or system specific conditions, such as misaligned seams, exposed reinforcement, or damage observed that may have occurred during transport or installation.
2. ALL TANKS MUST BE APPROVED FOR USE BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL HEALTH (DEH).
3. INVERTS SHOWN ARE APPROXIMATE. THE INSTALLER SHALL FIELD CONFIRM PRIOR TO CONSTRUCTION.
4. ALL HARDWARE INSTALLED INSIDE OF TANKS SHALL BE OF STAINLESS STEEL.
5. TANK DIMENSIONS VARY BY MANUFACTURER.
6. DRAWDOWN WILL VARY WITH TANK DIMENSIONS.
7. NO ELECTRICAL SPLICES SHALL BE MADE INSIDE THE PUMP TANK.



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

Acknowledgment of Subsurface wastewater evaluation and septic design by Central Carolina Soil Consulting, PLLC. for _____ Grand Highland Estates lot 31 _____, 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:

Exeter Building Company LLC

Owner's representative:

[Signature]

Date:

14 NOV 2024

This Section for Local Health Department Use Only

Initial submittal received: 11/20/2024 by KLH
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: Kristi Hiles Date: 11/25/2024

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 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 15A NCAC 18E 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: 11/24/2029

See attached site sketch



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

ROY COOPER • Governor

KODY H. KINSLEY • Secretary

MARK BENTON • Chief Deputy Secretary for Health

SUSAN KANSAGRA • Assistant Secretary for Public Health

Division of Public Health

Submittal Includes: ☒ (a2) Improvement Permit ☒ (a2) Construction Authorization ☐ Fee \$ _____

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

County: _____ Wake

PIN/Lot Identifier: _____ 1823007064

Issued To: _____ Exeter Homes

Property Location: _____ 9105 Overlook Crest Drive, Wake Forest

Subdivision (if applicable) _____ Grand Highland Estates Lot #: _____ 31 Block: _____ Section: _____

LSS Report Provided: Yes ☒ No ☐

If yes, name and license number of LSS: _____ Jason Hall, NC LSS #1248

New ☒

Expansion ☐

System Relocation ☐

Change of Use ☐

Facility Type: _____ Single Family, 4-Bedroom

Number of bedrooms: _____ 4 Number of Occupants: _____ ≤8 Other: _____

Design Wastewater Strength: ☒ Domestic ☐ High Strength ☐ Industrial Process Wastewater

Proposed Design Daily Flow: _____ 480 GPD Proposed LTAR (Initial): _____ .3 Proposed LTAR (Repair): _____ .3

Proposed Wastewater System Type*: _____ llb, gravity to serial (Initial) Pump Required: ☐ Yes ☒ No ☐ May be required

Proposed Wastewater System Type*: _____ llb, gravity to serial (Repair) Pump Required: ☐ Yes ☒ No ☐ May be required

**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*

Effluent Standard: ☒ DSE ☐ HSE ☐ NSF/ANSI 40 ☐ TS-I ☐ TS-II ☐ RCW

Saprolite System (Initial): ☐ Yes ☒ No Saprolite System (Repair): ☐ Yes ☒ No

Fill System (Initial): ☐ Yes ☒ 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 ☒ No If yes, specify: ☐ New ☐ Existing (when adding more than 6 inches of fill to system area provide a fill plan)

Usable Depth to LC (Initial)*: _____ 45 Usable Depth to LC (Repair)*: _____ 41 ** Limiting Condition*

Max. Trench Depth (Initial)*: _____ 24 Max. Trench Depth (Repair)*: _____ 24 ** Measured on the downhill side of the trench*

Artificial Drainage Required: ☐ Yes ☒ No If yes, please specify details: _____

Type of Water Supply: ☒ Private well ☐ Public well ☐ Shared well ☐ Municipal Supply ☐ Spring ☐ Other: _____

Drainfield location meets requirements of Rule .0508: Yes ☒ No ☐ Drainfield location meets requirements of Rule .0601: Yes ☒ No ☐

Permit valid for: ☒ Five years [site plan submitted pursuant to GS 130A-334(13a)] ☐ No expiration [plat submitted pursuant to GS 130A-334(7a)]

Permit conditions:

Licensed Soil Scientist Print Name: _____ Jason Hall

Licensed Soil Scientist Signature: _____ Date: _____ 11/13/24

The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).

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:

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:

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

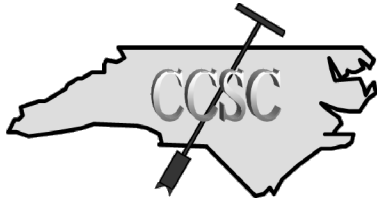
State Authorized Agent: _____

Date: _____

☐ Complete

State Authorized Agent: _____

Date: _____



Central Carolina Soil Consulting, PLLC

1900 South Main Street, Suite 110

Wake Forest, NC 27587

919-569-6704

November 13, 2024

Job # 5074

Exeter Homes
Benjamin Areno
900 Ridgefield Drive
Suite 50
Raleigh, NC 27609

RE: Preliminary soil/site evaluation for single family wastewater approval in Grand Highland Estates, Lot 31 (4-bedroom) in Wake County pursuant to and meets the requirements of G.S. 130A-335(a2)."

Dear Mr. Areno:

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 on November 6, 2024, under dry soil conditions, based on the criteria found in the State Subsurface Rules, 15A NCAC 18E "Wastewater Treatment and Dispersal 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 480 Gal/day 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 Gravity to Serial using lines 1-5 totaling 460 feet of Accepted System Status. The repair field is a Gravity to serial requiring lines 6-9 using 430feet of accepted product. The septic tank for the house shall be a minimum 1200 gallons with risers.

Based on the findings during the field evaluation, the area on the attached map has at least 45 inches (Initial) and 41 inches (repair) of suitable soils for a modified conventional septic system for the initial system & repair systems. The assigned LTAR for the site is 0.30 gal/day/ft² with a maximum depth of 24 inches for the Initial & 24 inches for Repair system 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.

Setbacks:

- Septic and Pump Tanks
 - 10' minimum from property lines
 - 5' minimum from house (see septic design)
- Septic Lines
 - 10' minimum from property lines
 - 5' minimum from house (see septic design)
- Manifold's and D-Box's
 - 10' from property lines
- Supply Lines
 - 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, not 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: Gravity to Serial, lines 1-5 totaling 460' (see layout)
- Repair System: Gravity to Serial, lines, 6-9, 430,
- 1200 gallon septic tank with risers
- 24" maximum trench depth for initial & repair system
- 0.30 LTAR
- No grading/filling septic areas
- 5' setback for all utility lines and 10' for water lines.
- 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 design 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 contact me at anytime. Thank you for allowing Central Carolina Soil Consulting to perform this site evaluation for you.

Sincerely,



Jason Hall

NC Licensed Soil Scientist #1248



Encl: Soil Map & septic layout

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

OWNER: _____ Exeter _____ DATE EVALUATED: 11-6-24
ADDRESS: _____
PROPOSED FACILITY: 4-Bedroom PROPOSED DESIGN FLOW (.0400): 480 PROPERTY SIZE: .93-acres
LOCATION OF SITE: 9105 Overlook Court Drive, Wake Forest PROPERTY RECORDED: _____
WATER SUPPLY: ☐ Public ☒ Single Family Well ☐ Shared Well ☐ Spring ☐ Other _____ WATER SUPPLY SETBACK: _____
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Domestic ☐ High Strength ☐ IPWW

P R O F I L E #	.0502 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY		OTHER PROFILE FACTORS				.0509 PROFILE CLASS & LTAR*	.0502(d) SLOPE CORRECTION
			.0503 TEXTURE/ STRUCTURE	.0503 CONSISTENCE/ MINERALOGY	.0504 SOIL WETNESS/ COLOR	.0505 SOIL DEPTH	.0506 SAPRO CLASS	.0507 RESTR HORIZON		
1	L-12%	A, 0-6	Sl, Gr	VFR, NS, NP						4.32"
		Bt, 6-20	Clay, SBK	FI, SS, SP,SEXP						
		BC, 20-41	SiCL, Wk SBK	FI, SS, SP, SEXP		S-41			S.3	
		Cr			UN					
2	L-12	A, 0-6	SL, Gr	VFR, NS, NP						4.32"
		Bt, 6-12	CL, SBK	FR, SS, SP, SEXP						
		Bt2, 12-37	Clay, ,SBK	FI, SS, SP, SEXP		S			S.3	
		BC, 37-48	CL,, wk SBK	FR, SS, SP, SEXP		S-48			S.3	
3	L-12	A, 0-4	SL, Gr	VFR, NS, NP						4.32"
		Bt, 4-30	Clay, SBK	FI, SS, SP, SEXP		S			S.3	
		BC, 30-45	CL, Wk SBK	FR, SS, SP, SEXP		S-45			S.3	
		C, 45-48	SL, SG	VFR, NS, NP			S-48		S.35	

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	SITE CLASSIFICATION (.0509): Suitable EVALUATED BY: Jason Hall OTHER(S) PRESENT: _____
Available Space (.0508)	Yes	Yes	
System Type(s)	accpeted	Accepted	
Site LTAR	.3	.3	
Maximum Trench Depth	24"	24"	

Comments: _____

LEGEND

LANDSCAPE POSITION	SOIL GROUP	SOIL TEXTURE	CONVENTIONAL LTAR (gpd/ft²)	SAPROLITE LTAR (gpd/ft²)	LPP LTAR (gpd/ft²)	MINERALOGY/ CONSISTENCE		STRUCTURE
CC (Concave slope)	I	S (Sand)	0.8 - 1.2	0.6 - 0.8	0.4 -0.6	MOIST	WET	SG (Single grain)
CV (Convex Slope)		LS (Loamy sand)		0.5 -0.7		Lo (Loose)	NS (Non-sticky)	M (Massive)
D (Drainage way)	II	SL (Sandy loam)	0.6 - 0.8	0.4 -0.6	0.3 - 0.4	VFR (Very friable)	SS (Slightly sticky)	GR (Granular)
FP (Flood plain)		L (Loam)		0.2 - 0.4		FR (Friable)	S (Sticky)	SBK (Subangular blocky)
FS (Foot slope)	III	SiL (Silt loam)	0.3 - 0.6	0.1 - 0.3	0.15 - 0.3	FI (Firm)	VS (Very sticky)	ABK (Angular blocky)
H (Head slope)		SCL (Sandy clay loam)		0.05 - 0.15**		VFI (Very firm)	NP (Non-plastic)	PR (Prismatic)
L (Linear Slope)		CL (Clay loam)		None		EFI (Extremely firm)	SP (Slightly plastic)	PL (Platy)
N (Nose slope)		SiCL (Silty clay loam)					P (Plastic)	
R (Ridge/summit)		Si (Silt)					VP (Very plastic)	
S (Shoulder slope)		IV				SC (Sandy clay)	0.1 - 0.4	0.05 - 0.2
T (Terrace)	SiC (Silty clay)		EXP (Expansive)					
TS (Toe Slope)	C (Clay)							
		O (Organic)	None					

* Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

**Sandy clay loam saprolite can only be used with advanced pretreatment in accordance with 15A NCAC 18E .1200.

HORIZON DEPTH In inches below natural soil surface

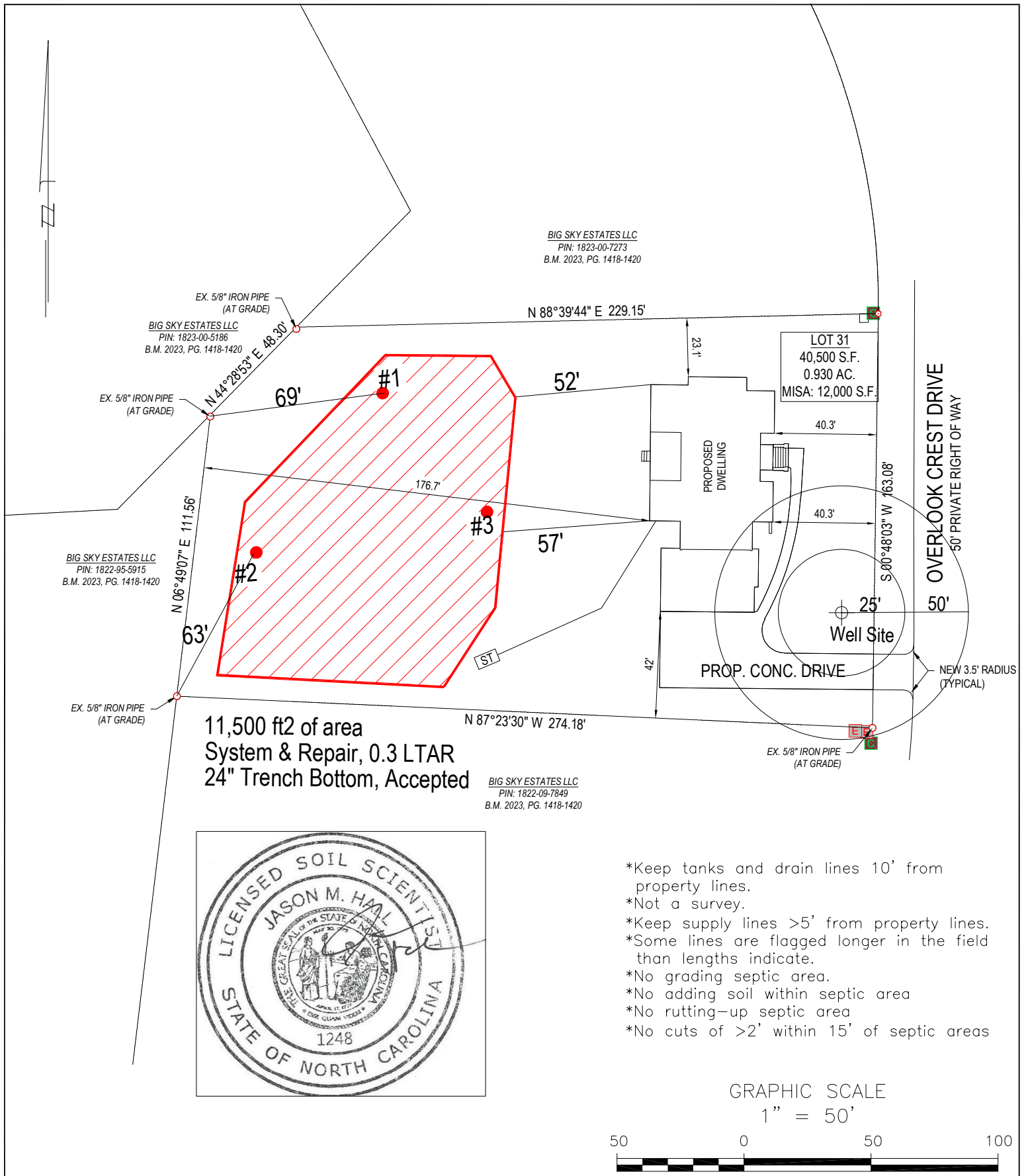
DEPTH OF FILL In inches from land surface

RESTRICTIVE HORIZON Thickness and depth from land surface

SAPROLITE S(suitable) or U(unsuitable); Evaluation of saprolite shall be by pits or auger borings.

SOIL WETNESS Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation

CLASSIFICATION S (Suitable) or U (Unsuitable)

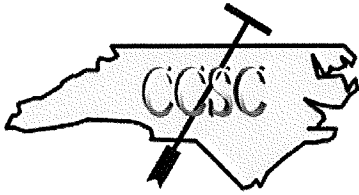


- *Keep tanks and drain lines 10' from property lines.
- *Not a survey.
- *Keep supply lines >5' from property lines.
- *Some lines are flagged longer in the field than lengths indicate.
- *No grading septic area.
- *No adding soil within septic area
- *No rutting-up septic area
- *No cuts of >2' within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

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

4-Bedroom Soils Map
Lot 31, Grand Highland Estates
Wake County, North Carolina

Job#: 5004
Drawn By: JH
Date: 11/12/24
Revision:



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

Acknowledgment of Subsurface wastewater evaluation and septic design by Central Carolina Soil Consulting, PLLC. for Grand Highland Estates lot 31,
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:

Exeter Building Company LLC

Owner's representative:

[Signature]

Date:

14 NOV 2024