



File # 464140 PIN# _____

Property Address: 215 Broadleaf Ln

Applicant or Owner Name: Lise Ferguson

Environmental Health Septic/Well Permit Diagram

Building permits cannot be issued nor should construction begin without Construction Authorization Issuance.

☒ Septic Improvement Permit ☒ Septic Construction Authorization (CA) ☐ CA Reissue** ☐ As Built
☒ Well Construction Authorization ☒ Additional Diagram/Specifications Attached

Diagram Date**: 12-12-25 EHS: [Signature]

**Any previously dated CA diagram is revoked and/or invalid. Confirm this is the valid diagram for the site before beginning any construction.

Installation/grouting inspections may be scheduled the day before, or, the day of installation until 9am by contacting the Environmental Health office at 919 496 8100. A revisit fee may apply if installation is not ready for inspection at the time requested. Septic Operations Permits will be issued after installation is approved, all permits conditions are met, and any outstanding fees are paid. Well Certificate of Completion will be issued after well head approval, all permit conditions are met, and any outstanding fees are paid.

Septic Tank 1000 Pump Tank — Drainfield 3'x485' Type System Acc ^{sewer dist} Max Trench Depth 30''

Septic Contractor _____ Septic/Pump tank dates _____ Pump Fee Paid _____

Well Contractor _____ Well Head Date: _____ Pump Final: _____ N/A (circle)

- I.P. + C.A. issued under "a2" rules
- See attached packet from CCSC.
- Well location marked on septic diagram page in packet.



Well Construction Permit

Franklin County Health Department
107 Industrial Drive
Louisburg NC, 27549
Phone:

For Office Use Only

*CDP File Number 464140

PIN Number: _____

Tax Lot #: 46

Tax Block #: 050900

Evaluated For: SINGLE FAMILY \ WELL

PERMIT VALID UNTIL: 12/12/2030

Property Owner: Ken Harvey Homes LLC

Address: 4909 Unicon Drive Suite 107

City: Wake Forest

State/Zip: NC / 27587

Phone #: _____

Applicant: Lisa Ferguson

Address: 4909 Unicon Drive Suite 107

City: Wake Forest

State/Zip: NC / 27587

Phone #: _____

Property Location & Site Information

Address/Road #:

Subdivision: Grandiflora

Phase: _____

Lot: 46

215 Broadleaf Lane

Louisburg NC, 27549

*Proposed use of Well: SINGLE FAMILY

If Other: _____

Applicant Email: _____

Owner Email: _____

Directions: 215 Broadleaf Lane

Well Contractor Information

Drilling Contractor: _____

Driller Registration: _____

Permit Conditions

*Permit Conditions

well location marked on septic diagram page in packet.

Well location, construction and protection must meet all state and local regulations and must be inspected and approved by an authorized representative of the Local Health Department. The permit may be revoked at any time for failure to comply with existing regulations. The siting of approved well construction area(s) by the Health Department is to provide protection from the known possible sources of contamination. The approved well area(s) may not be changed without permission from an authorized representative of the Local Health Department. Issuance of this well permit does not guarantee water quality or adequate water production from the well once it is installed or repaired.

*Issued By: Leonard, Shad

Authorized State Agent: _____

Owner/Applicant: _____

*Date of Issue: 12/12/2025



Hand Drawing



Import Drawing

****Site Plan/Drawing attached.****



Well Construction Permit

Franklin County Health Department
107 Industrial Drive
Louisburg NC, 27549
Phone:

For Office Use Only

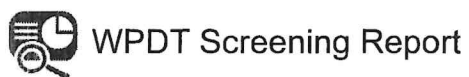
*CDP File Number 464140

PIN Number: _____

Tax Lot #: 46 Tax Block #: 050900

Evaluated For: SINGLE FAMILY \ WELL

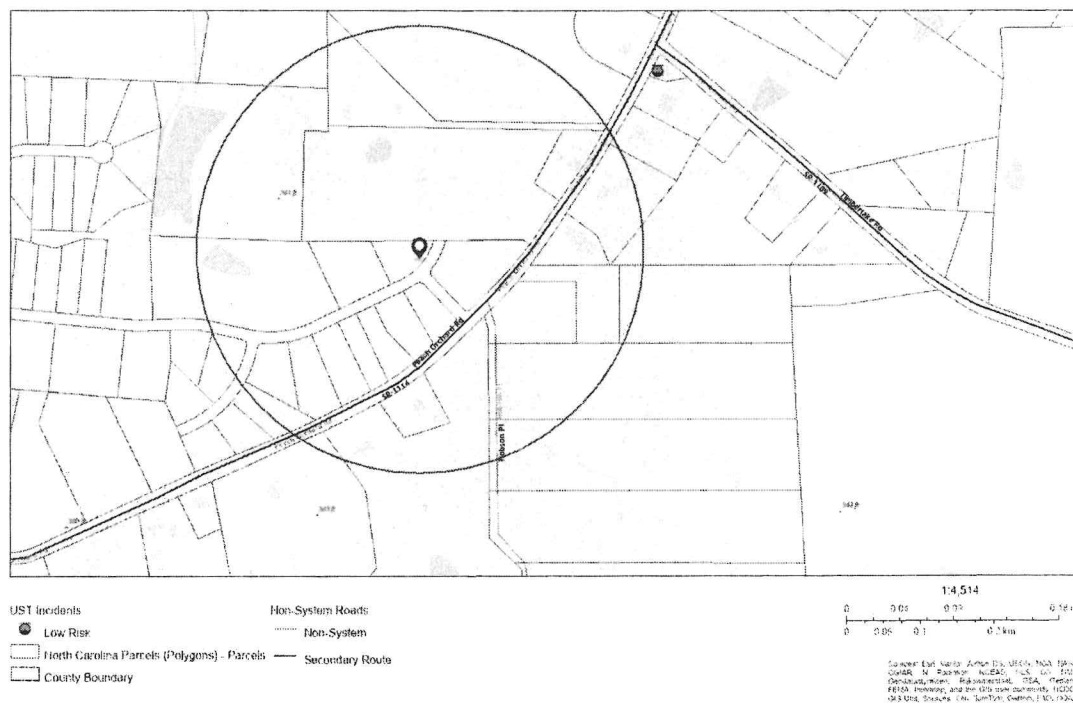
PERMIT VALID UNTIL: 12/12/2030



Area of Interest (AOI) Information

Area = 3,134,508.7 ft²

Dec 12 2025 14:51:56 Eastern Standard Time



All North Carolina Department of Environmental Quality
(NCDEQ) GIS data is expressly provided "AS IS" and "WITH ALL FAULTS". The NCDEQ makes no warranty of any kind, express or implied, concerning this information, including but not limited to any warranties of merchantability or fitness for any particular purpose. The NCDEQ assumes no responsibility or legal liability concerning the Data's accuracy, reliability, completeness, timeliness, or usefulness. The data is not intended to constitute advice nor is it to be used as a substitute for specific advice from a professional. Users should not act (or refrain from acting) based upon information in the Data without independently verifying the information and obtaining any necessary professional advice. Users are solely responsible for ensuring the accuracy, currency and other qualities of any products derived from or in connection with the NCDEQ's Data. The Data is collected from various sources and may be modified over time without notice to improve spatial and attribute accuracy. The NCDEQ disclaims responsibility for the spatial accuracy and attribution of GIS features and makes no warranty concerning same.

Permit/File #: 464140

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: FranklinPIN/Lot Identifier: 1873-78-0371Issued To: Ken Harvey HomesProperty Location: 215 Broadleaf LaneSubdivision (if applicable) Grandiflora Lot #: 46 Block: _____ Section: _____LSS Report Provided: Yes ☒ No ☐If yes, name and license number of LSS: Jason Hall, NC LSS #1248New ☒Expansion ☐System Relocation ☐Change of Use ☐Facility Type: Single-Family Dwelling, 4-BedroomNumber of bedrooms: 4 Number of Occupants: ≤8 Other: _____Design Wastewater Strength: ☒ Domestic☐ High Strength☐ Industrial Process WastewaterProposed Design Daily Flow: 480 GPDProposed LTAR (Initial): 0.275Proposed LTAR (Repair): 0.275Proposed Wastewater System Type*: IIb, accepted (25% reduction) (Initial) Pump Required: ☐ Yes ☒ No ☐ May be requiredProposed Wastewater System Type*: IIb, accepted (25% reduction) (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 ☐ RCWSaprolite System (Initial): ☐ Yes ☒ NoSaprolite System (Repair): ☒ Yes ☐ NoFill 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)*: 48" Usable Depth to LC (Repair)*: 48" * Limiting ConditionMax. Trench Depth (Initial)*: 30" Max. Trench Depth (Repair)*: 30" * Measured on the downhill side of the trenchArtificial 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 HallLicensed Soil Scientist Signature: [Signature]Date: 11/26/2025

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

See attached site sketch





This Section for Local Health Department Use Only

Initial submittal received: 12-12-25 by SES
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: [Signature] Date: 12-12-25

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: 12-12-30

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

Office Number: 919-569-6704

November 26, 2025

Job #5256

Ken Harvey Homes
Attention: Andy Beard
4909 Unicon Drive, Suite 107
Wake Forest, NC 27587

RE: Preliminary soil/site evaluation for a single-family dwelling wastewater approval at Grandiflora Subdivision, Lot 46 (4-bedroom) in Franklin County pursuant to and meets the requirements of G.S. 130A-335(a2)."

Dear Mr. Beard:

Central Carolina Soil Consulting, PLLC conducted a preliminary soil evaluation on the aforementioned lot to determine the areas of 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 in November 2025, under moist 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.**

Based on the findings during the field evaluation, the area on the attached map has at least 48 inches (initial) and 48 inches (repair) of suitable soils for a modified conventional septic system. The assigned LTAR for the initial site is 0.275 gpd/ft² with a maximum depth of 30 inches on the downhill side of the trench for the initial system installation of the drain lines due to slope correction. The assigned LTAR for the repair site is 0.275 gpd/ft² with a maximum depth of 30 inches on the downhill side of the trench for the repair system installation of the drain lines due to slope correction.

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 Gravity to Serial distribution using lines 1-6 totaling 485 feet of accepted product (25% reduction). The repair system for the house is a Gravity to Serial distribution using lines 7-11 totaling 465 feet of accepted product (25% reduction).

Tanks: (All tanks must meet requirements set forth in 15A NCAC 18E .0801)

Minimum tank capacities: 1,000 for septic tank with risers. The tank should also have pressed in rubber boots on both the inlets and the outlets of the tank, along with having secondary safety lids or devices on all the openings.

Septic Installation:

The septic system for the lot should be installed during dry soil conditions. 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)
 - 5' minimum from property lines
- **Supply Lines** (see septic design)
 - 5' minimum from property lines
- **Utilities**
 - Water (10' minimum for all septic components)

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: Gravity to Serial Distribution, lines 1-6 totaling 485' (see layout)
- Repair System: Gravity to Serial Distribution, lines 7-11 totaling 465' (see layout)
- 480 gal/day flow rate (4-bedroom)
- 1,000 gallon septic tank
 - with risers and pressed in rubber boots on both the inlet and outlet ends and a secondary lid in each tank opening
- 30" max trench depth on the downhill side for the Initial System
- 30" max trench depth on the downhill side for the Repair System
- 0.275 LTAR for Initial
- 0.275 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
- 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

Central Carolina Soil Consulting, PLLC

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

Page 1 of 1

PROPERTY ID #: 1873-78-0371

COUNTY: Franklin

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

(Complete all fields in full)

OWNER: KEN HARVEY HOMES LLC DATE EVALUATED: 11/25/2025

ADDRESS: 4909 UNICON DR STE 107, WAKE FOREST, NC, 27587

PROPOSED FACILITY: single-family dwelling PROPOSED DESIGN FLOW (.0400): 480 gal/day PROPERTY SIZE: 0.77 Ac.

LOCATION OF SITE: 215 BROADLEAF LN (Grandiflora Subdivision Lot 46) PROPERTY RECORDED: Yes

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, ~3-5%	A, 0-3	SL, GR	VFR, NS, NP						1.8"
		Bt, 3-22	C, SBK	FI, SS, SP, SEXP		S			S, 0.275	
		BC, 22-48	CL, SBK	FR, SS, SP, SEXP		S			S, 0.275	
2	L, ~3-5%	A, 0-8	SL, GR	VFR, NS, NP						1.8"
		Bt, 8-24	C, SBK	FI, SS, SP, SEXP		S			S, 0.275	
		BC, 24-48	CL, SBK	FR, SS, SP, SEXP		S			S, 0.275	
3	L, ~3-5%	A, 0-22	SL, GR	VFR, NS, NP						1.8"
		Bt, 22-46	C, SBK	FI, SS, SP, SEXP		S			S, 0.275	
		BC, 46-48	CL, SBK	FR, SS, SP, SEXP		S			S, 0.275	

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	SITE CLASSIFICATION (.0509): Suitable EVALUATED BY: Jason Hall OTHER(S) PRESENT: James Rice, Parker Coats
Available Space (.0508)	Yes	Yes	
System Type(s)	Iib, accepted	Iib, accepted	
Site LTAR	0.275	0.275	
Maximum Trench Depth	30" on downhill side	30" on downhill side	

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)	VP (Very plastic)
R (Ridge/summit)		Si (Silt)							
S (Shoulder slope)		SC (Sandy clay)							
T (Terrace)	SiC (Silty clay)	EXP (Expansive)							
TS (Toe Slope)	C (Clay)								
		O (Organic)	None						
Adjust LTAR due to depth, consistence, structure, soil texture, etc.									

* 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

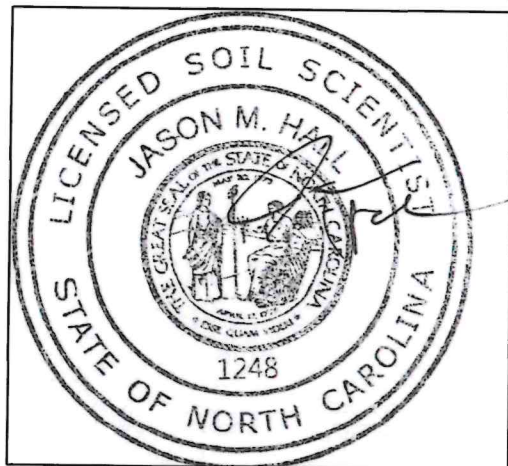
S (Suitable) or U (Unsuitable)

● #2 = profile description 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

System and Repair Area:

- ~9,273ft²
- 0.275 soil LTAR
- 4-bedroom: Accepted Product
- Primary and Repair
- 25% Reduction



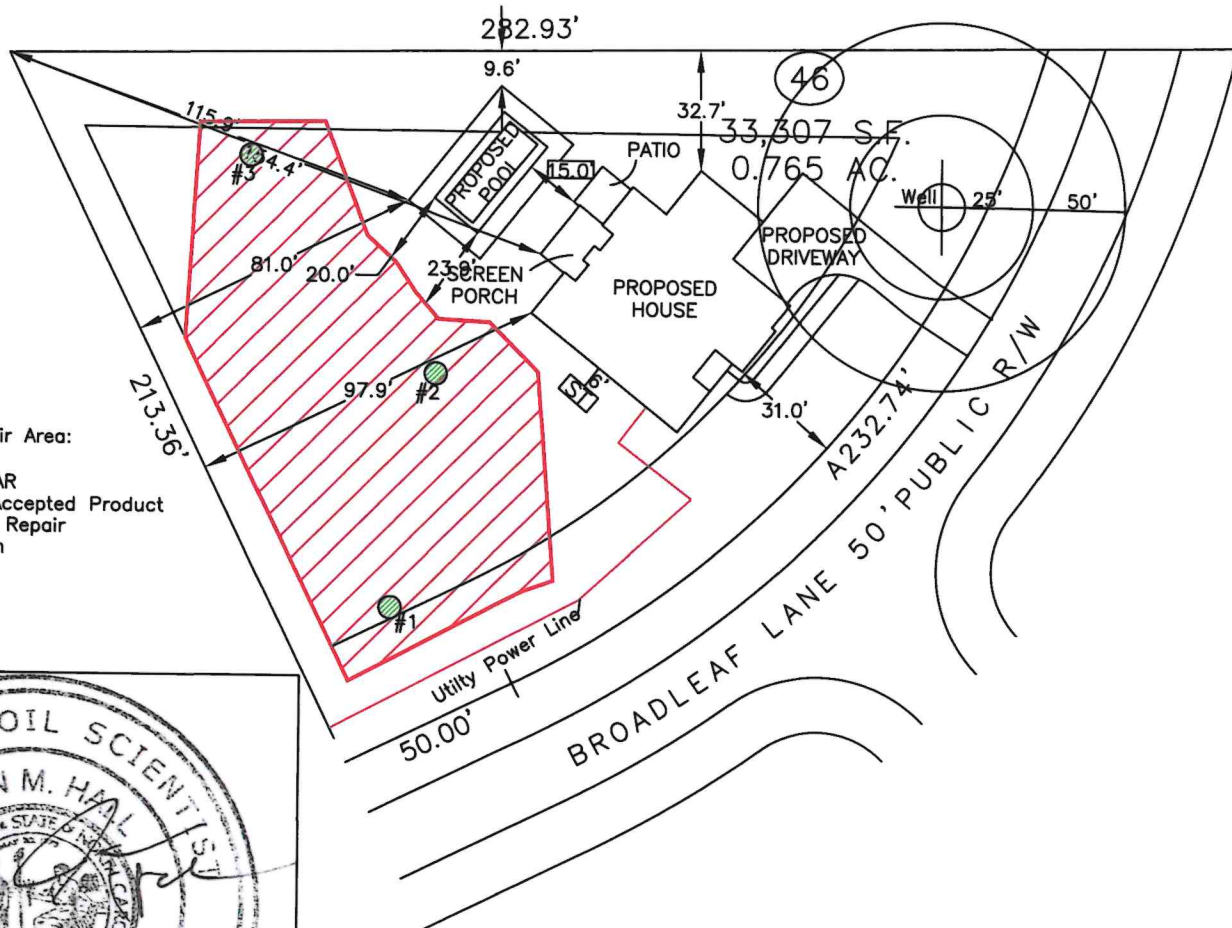
GRAPHIC SCALE
1" = 50'



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 46, Grandiflora Subdivision
Franklin County, North Carolina

Job#: 5256
Drawn By: PC
Date: 11/26/2025
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 Grandiflora - Lot 46,
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:



Owner's representative:

Jacob Bagaasen

Date:

12/09/2025

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

County: Franklin
PIN/Lot Identifier: 1873-78-0371
Issued To: Ken Harvey Homes
Property Location: 215 Broadleaf Lane (Grandiflora, Lot 46)
AOWE/PE Plans/Evaluations Provided: Yes ☒ No ☐ If yes, name and license number of AOWE/PE: Jason Hall, AOWE #10004E
Facility Type: Single-Family Dwelling, 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, accepted (25% reduction) (Initial) ☐ Ilb, accepted (25% reduction) (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: 1000 gallons Total Trench/Bed Length: 485 feet Trench/Bed Spacing: 9 feet on center
Trench/Bed Width: 36 inches LTAR: 0.275 gpd/ft² Usable Depth to LC (Initial)*: 48" *Limiting condition
Additional Soil Cover: 0 inches Slope Corrected Maximum Trench/Bed Depth*: 30 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

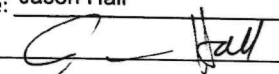
Easement, Right-of-Way, or Encroachment Agreement Required [.0301(b)]: ☐ Yes ☒ No

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

Permit conditions:
Fence off the entire septic area from construction traffic

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: 

Date: 11/26/2025

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: 12-12-25 by SSS
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: [Signature] Date of Issuance: 12-12-25

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: 12-12-30

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

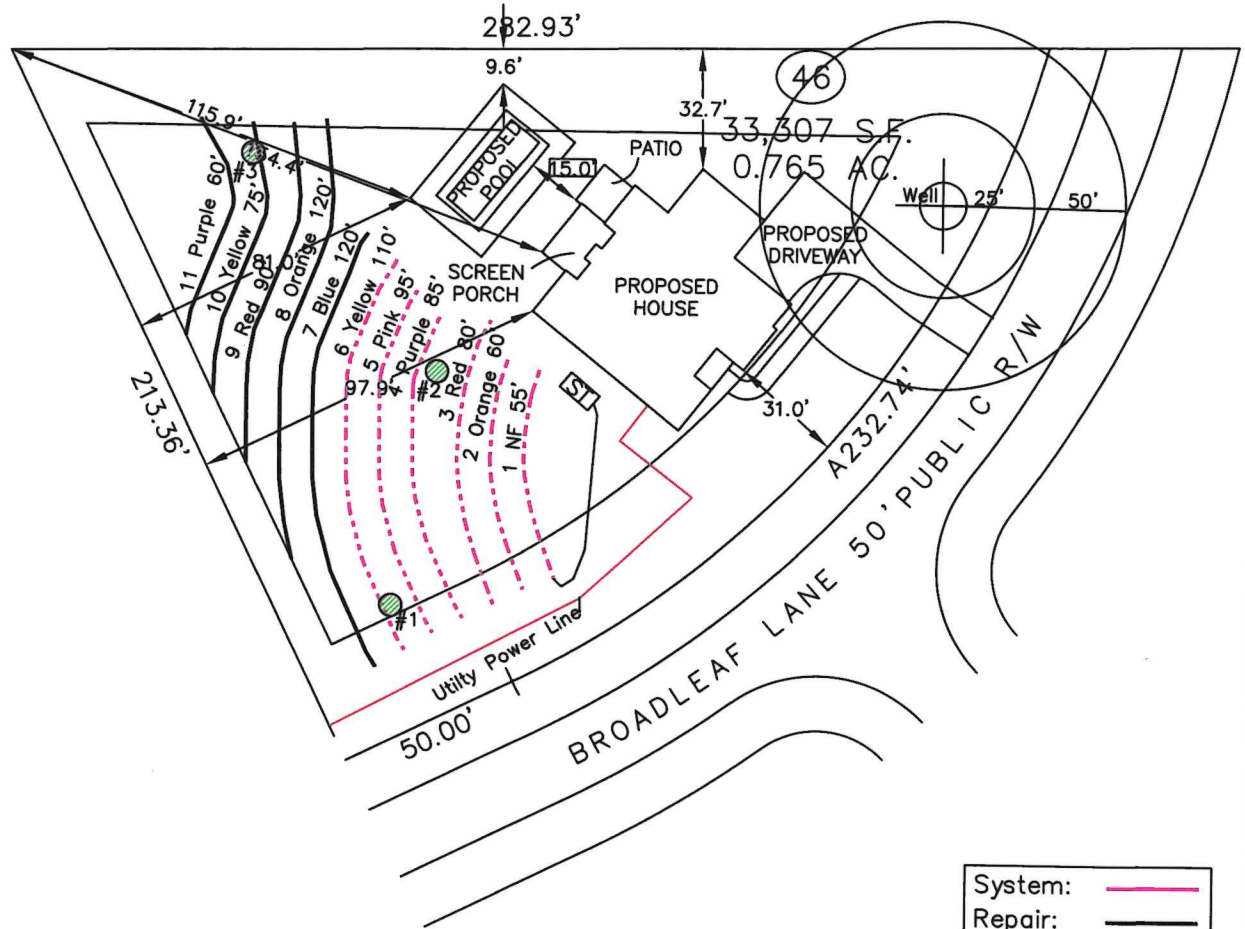
State Authorized Agent: _____

Date: _____

Initial System: Gravity to Serial
 Lines: 1-6, (485')
 Accepted Status System (25% reduction)
 0.275 Soil LTAR
 30" Trench Bottom on the downhill side

Repair System: Gravity to Serial
 Lines: 7-11, (465')
 Accepted Status System (25% Reduction)
 0.275 Soil LTAR
 30" Trench Bottom on the downhill side

- *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



System:	—
Repair:	—
ST	= 1000 gallon tanks with risers
● #2	= profile description locations

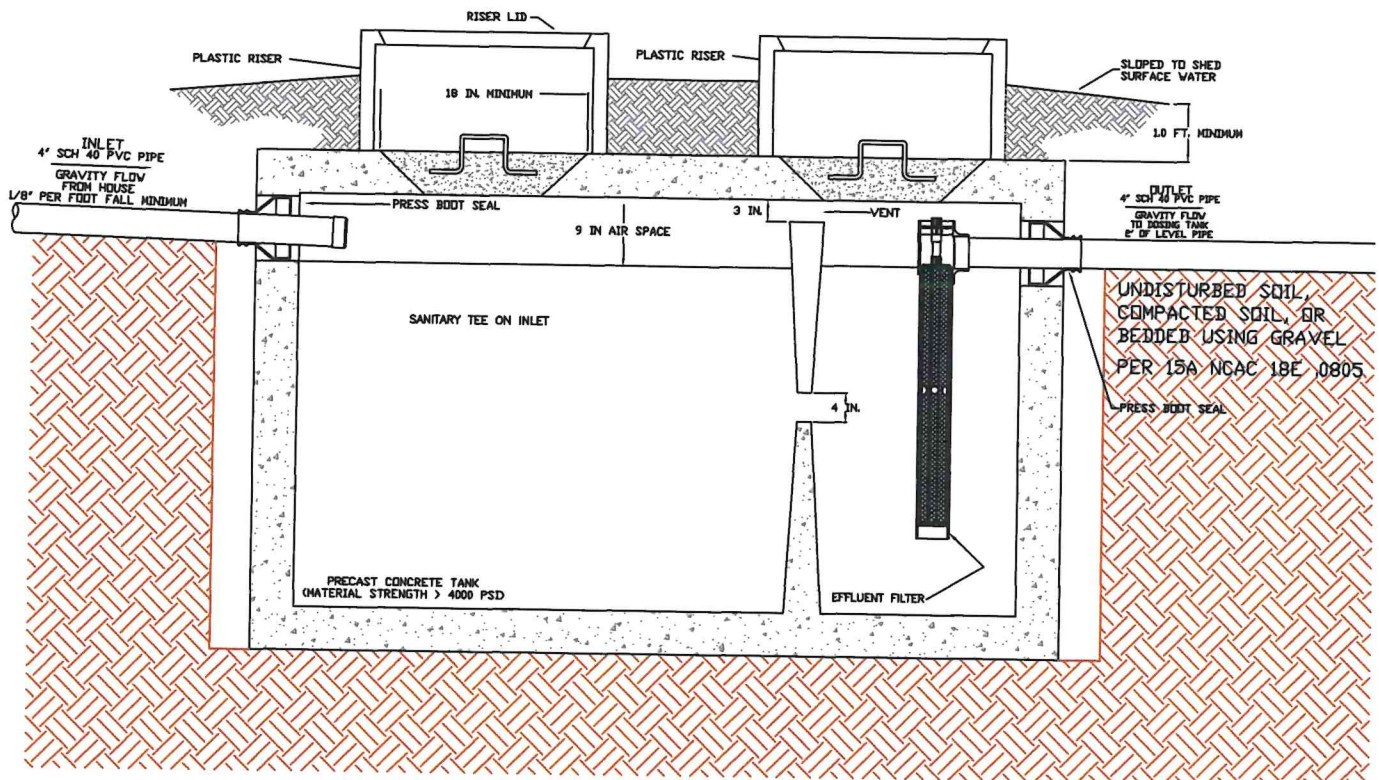
GRAPHIC SCALE
 1" = 50'



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 46, Grandiflora Subdivision
 Franklin County, North Carolina

Job#: 5256
Drawn By: PC
Date: 11/26/2025
Revision:



1000 GAL SEPTIC TANK SCHEMATIC
NOT TO SCALE

NOTES:

- ALL TANKS SHALL BE LEAK TESTED (IN OCCURRENCE TO RULE 15A NCAC 18E .0805) WHEN INSTALLED UNDER THE FOLLOWING CONDITIONS:
 - when a Soil Wetness Condition (SWC) is present within four feet of the elevation of the top of a mid-seam pump tank;
 - with advanced pretreatment when required in the RWTS or PIA Approval;
 - when required in the approved plans and specifications for a wastewater system designed by a PE;
 - when the tank is constructed in place; or
 - 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.
- ALL TANKS MUST BE APPROVED FOR USE BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL HEALTH (DEH).
- INVERTS SHOWN ARE APPROXIMATE. THE INSTALLER SHALL FIELD CONFIRM PRIOR TO CONSTRUCTION.
- ALL HARDWARE INSTALLED INSIDE OF TANKS SHALL BE OF STAINLESS STEEL.
- TANK DIMENSIONS VARY BY MANUFACTURER.
- DRAWDOWN WILL VARY WITH TANK DIMENSIONS.
- NO ELECTRICAL SPLICES SHALL BE MADE INSIDE THE PUMP TANK.

ALL tank openings (2 for septic tank) shall have a secondary lid or safety net installed



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

Septic Tank Details

Job#:
Drawn By: MS
Date:



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.

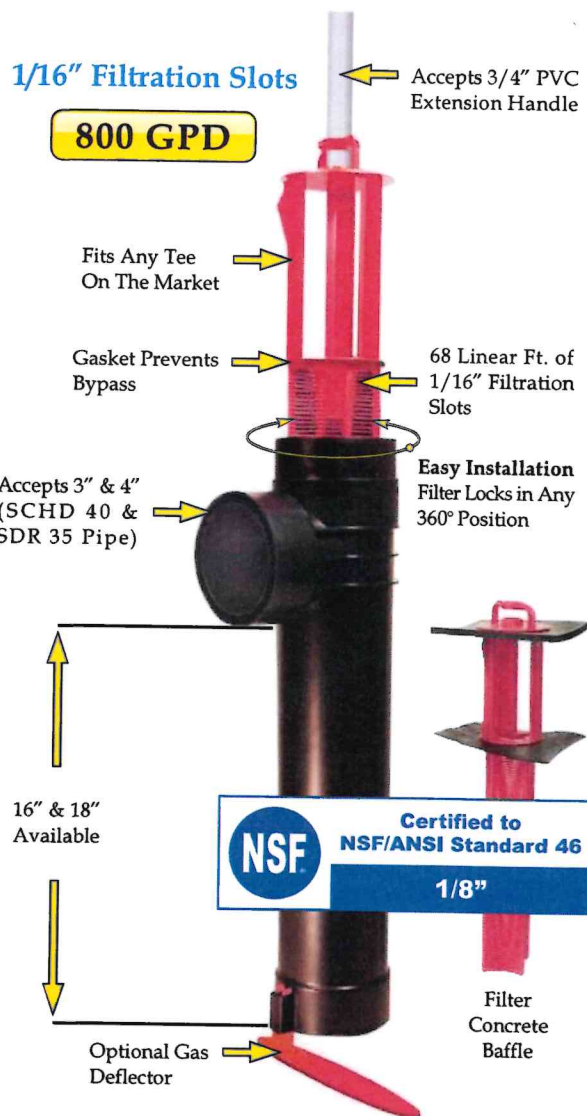
PL-68 Maintenance:

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 & LokTM



Extend & LokTM
Easily installs
into existing tanks.



Spacer Bushing
4" SCHD 40
to SDR 35



Spacer Bushing
4" SCHD 40
to 110mm Pipe



2" Extender



Franklin County Environmental Health
127 S Bickett Blvd.
Louisburg, NC 27549
Phone (919) 496-8100

www.franklincountync.gov

Issued to: Lisa Ferguson

Location: 215 BROADLEAF Lane LOUISBURG , NC 27549

**NEW WELL APPLICATION
LICENSED SOIL SCIENTIST A2 PERMIT**

Application Type: NEW WELL LICENSED SOIL SCIENTIST A2 PERMIT

Application Number: E-25-705

Date: December 11, 2025

Building Type:

Acreage: 0.77

Project Type: Single Family Dwelling

Zoning: R-30

of Bedrooms: 4

of Occupants: 5

Residential Project Type: Single Family Dwelling

Commercial Project Type:

Building Foundation: Crawlspace

Square Footage of Facility:

Water Source: New Well

Number of Employees:

Number of Seats:

Preferred Type of Septic System: (1) Conventional
(rock)

Notes:

Parcel ID #: 050900

Subdivision: GRANDIFLORA LOT #410

Applicant Information

Applicant Name: Lisa Ferguson

Address: 4909 Unicon Drive, Suite 107 Wake Forest , NC 27587

Phone: 919-999-4150

Email: lisa.ferguson@kenharveyhomes.com

Property Owner Information

Owner Name: Ken Harvey Homes, LLC

Address: 4909 Unicon Drive WAKE FOREST , NC 27587

Phone: 919-999-4150

Email: lisa.ferguson@kenharveyhomes.com

General Contractor Information

Contractor Name: David Brantley & Sons, Inc.

Address: 37 Pine Ridge Rd Zebulon, NC 27597 ,

Phone: 2524783721

Email: brantleyoffice@gmail.com

Zoning

Zoning Permit #: Z-25-1531

County Water: No

Front Setback: 30

Right Setback: 10

Left Setback: 10

Rear Setback: 25

The applicant shall notify the Environmental Health Department upon submittal of this application if any of the following apply to the property/site in question. If this answer is "Yes" the applicant must attach supporting documentation and/or show their location on the plot/site plan.

Does the site contain any jurisdictional wetlands? No

Does the site contain, or have within 100 feet, any existing wells and/or septic systems? No

Is any wastewater going to be generate other than domestic sewage? No

Is the site subject to approval by an other public agency? No

Are there any easements or right-of-ways on this site? No

Are there any underground utilities on the site? Yes

IF THE INFORMATION IN THE APPLICATION FOR A SEPTIC PERMIT IS FALSIFIED, CHANGED, OR THE STIE IS ALETERED, THEN ANY RELATED PERMITS AND CONSTRUCTION AUTHORIZATIONS SHALL BECOME INVALID. This application is valid for one year from the date of application payment. The septic system approval (permit) is valid for five years from the date of Improvement Permit issuance, or without expiration by

request with proper documentation. The applicant is responsible for the proper identification and labeling of all property lines, and existing utilities (including septic), and the desired features on site, as well as making the site accessible for evaluation. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. Permit issuance shall in no way be taken as a guarantee a septic system will function in a satisfactory manner for any given period of time. By signing below, the applicant attest he/she is the property owner or has been granted permission to be the property owner's legal representative, for the purposes of obtaining a septic permit for the referenced property.

Lisa K Ferguson

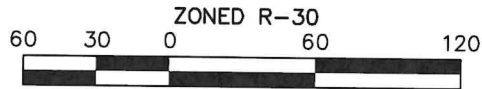
December 11, 2025

Signature of Owner or Owner's Legal Representative

Expires: December 11, 2026



PRELIMINARY PLOT PLAN FOR
KEN HARVEY HOMES
LOT 46, GRANDIFLORA SUBDIVISION
215 BROADLEAF LANE
REF: P.B. 2024, PAGES 155-157
YOUNGSVILLE TOWNSHIP
FRANKLIN COUNTY, NORTH CAROLINA
NOVEMBER 12, 2025

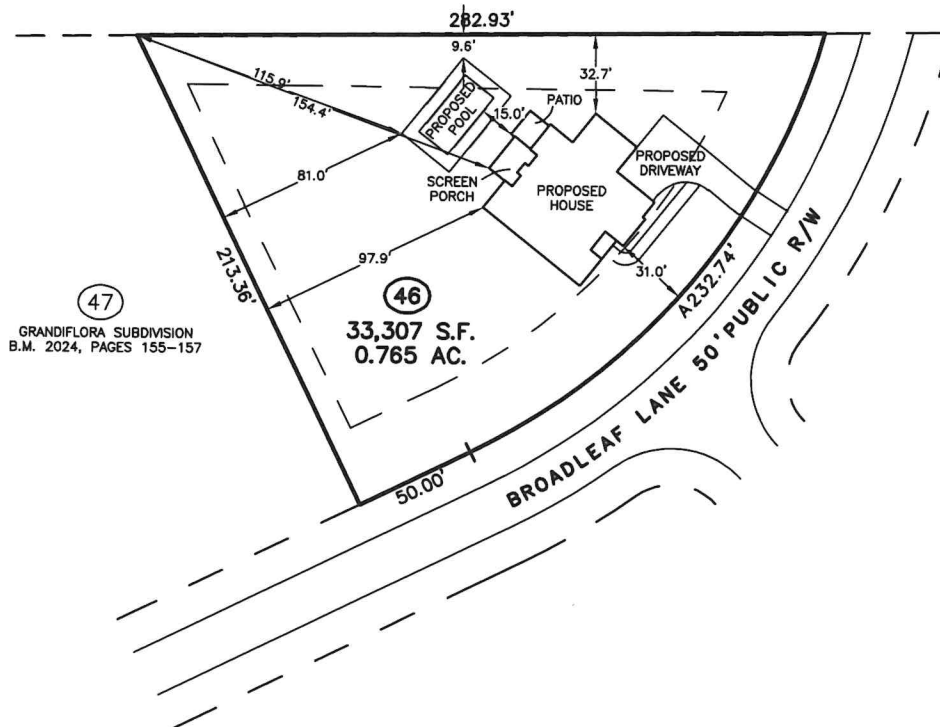


SCALE 1"=60'

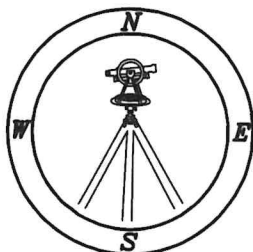
N/F
DAVID A. WILLIAMS JR.
D.B. 2294, PG. 601
M.B. 2022, PG. 70
PIN# 1873-78-2644

IMPERVIOUS SURFACE TABLE

HOUSE	2,643 S.F.
SCREEN PORCH	191 S.F.
DRIVEWAY	997 S.F.
PATIO	121 S.F.
SIDEWALK	254 S.F.
POOL APRON	550 S.F.
MISC/UTILITIES	18 S.F.
TOTAL IMPERVIOUS AREA	4,774 S.F.
MAXIMUM IMPERVIOUS ALLOWED	6,000 S.F.



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.



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

Application for Services

This application, in conjunction with the common form established in G.S. 130A-335(a3) and (a5), is optional for local health departments to be used for applications submitted in accordance with G.S. 130A-335(a2), (a3), and (a5).

(hereinafter, G.S. 130A-335(a3) and (a5) permits referred to as (a2) Improvement Permit and (a2) Construction Authorization)

Applying for:

☒ (a2) Improvement Permit ☒ (a2) Construction Authorization ☐ (a2) Repair/Construction Authorization

If applying for a Construction Authorization, please indicate desired system type(s):

☐ Accepted ☐ Conventional ☐ Innovative ☐ Other _____ ☒ Any

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

☒ 5-Year Expiration Requested (site plan provided) ☐ Non-Expiring Permit Requested (plat provided, defined in G.S.130A-334(7a))

Requesting DHHS review? (systems >3000 GPD or IPWW) ☐ Yes ☒ No

Applicant: Ken Harvey Building, LLC
Mailing Address: 4909 Unicon Drive, Suite 107

City: Wake Forest
State: NC Zip: 27587
Phone #: 919-554-9401
Email: lisa.ferguson@kenharveyhomes.com

Owner: same
Mailing Address: _____

City: _____
State: _____ Zip: _____
Phone #: _____
Email: _____

If the answer to any of the following questions is "yes", applicant must attach supporting documentation.

☐ Yes ☒ No Does the site contain any jurisdictional wetlands?
☐ Yes ☒ No Is any wastewater going to be generated on the site other than domestic sewage?
☐ Yes ☒ No Is the site subject to approval by any other public agency?
☐ Yes ☒ No Are there any easements or right of ways on this property?

I understand that the documentation and fees, as required in G.S. 130A-335(a2), (a3), (a5), and (a6), attached to this application are to be used to issue an Improvement Permit and/or Construction Authorization pursuant to G.S. 130A-335(a2),(a3), and (a5). I understand that authorized county and state officials are granted right of entry to the property indicated on this application to conduct necessary inspections to determine compliance with applicable laws and rules. ***I understand that if the information in the application for an Improvements Permit and/or Construction Authorization is falsified, changed, or the site is altered, then the Improvement Permit and Construction Authorization shall become invalid.***

Applicant Signature: _____ Date: 12/09/2025

Owner's Signature: _____ Date: 12/09/2025



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 Grandiflora - Lot 46,
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:



Owner's representative:

Jacob Bagaasen

Date:

12/09/2025
