



IMPROVEMENT PERMIT

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

For Office Use Only

*CDP File Number 414341 - 1

County ID Number: _____

Evaluated For: NEW

PERMIT VALID UNTIL: 07/02/2029

***NOTE TO INSPECTIONS DIVISION:** Building Permits cannot be issued with this Improvement Permit.

Applicant: Lisa Ferguson

Address: 4909 Unicon Drive Suite 107

City: Wake Forest

State/Zip: NC 27587

Phone #: _____

Property Owner: Ken Harvey Homes LLC

Address: 4909 Unicon Drive Suite 107

City: Wake Forest

State/Zip: NC. 27587

Phone #: _____

Property Location & Site Information

Address: 235 Sequoia Dr Louisburg, NC 27549

Subdivision: Lake Royale

Block/Phase: NEW

Lot: 2127

Road #:

Directions

Structure: SINGLE FAMILY

235 Sequoia Dr Louisburg NC 27549

of Bedrooms: 3

of People: 4

*Water Supply: N/A

Initial System

Usable Soil Depth: 36

Design Flow: 360

Soil Application Rate: 0.3000

System Specifications

Minimum Trench Depth: _____ Inches

Maximum Trench Depth: 24 Inches

*System Classification/Description:

TYPE III B. SYSTEM W/SINGLE EFFLUENT PUMP

Septic Tank: 1000 Gallons

Pump Required ☒ Yes ☐ No ☐ May Be Required

*Proposed System:

25% REDUCTION

Pump Tank: 1000 Gallons

Repair System Required: ☐ Yes ☒ No ☐ No, but has Available Space

* 15A NCAC 18A. 1945 * Repair Area Exempt

No grading or construction activity is allowed in areas designated for system and repair without approval of Health Department.

*Site Modifications

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.

*Permit Conditions

INSTALL SYSTEM AS DESIGNED BY CCSC.

The Department and Local Health Department may impose conditions on the issuance and may revoke the permits for failure of the system to satisfy the conditions, the rules, or this article. This permit is subject to revocation if the site plan, plat, or intended use changes (NCGS 130A-335(f)). The person owning or controlling the system location, installing, operation, maintenance, monitoring, reporting, and repair (per rule .0301(f)).

Authorized State Agent: Ennis, Crystal

Date of Issue: 07/02/2024

☐ Hand Drawing

☐ Import Drawing

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

Total Time: (HH:MM)

____ : ____



Construction Authorization

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

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☐ Open Pump System Sheet

Applicant: Lisa Ferguson

Address: 4909 Unicon Drive Suite 107

City: Wake Forest

State/Zip: NC 27587

Phone #: _____

Property Owner: Ken Harvey Homes LLC

Address: 4909 Unicon Drive Suite 107

City: Wake Forest

State/Zip: NC. 27587

Phone #: _____

Property Location & Site Information

Address/Road #: 235 Sequoia Dr Louisburg, NC 27549

Subdivision: Lake Royale

Phase: NEW

Lot: 2127

Directions:

Structure: SINGLE FAMILY

235 Sequoia Dr Louisburg NC 27549

of Bedrooms: 3

of People: 4

*Water Supply: PUBLIC

System Specifications

Usable Soil Depth: 36

Design Flow: 360

Soil Application Rate: 0.3000

Minimum Trench Depth: _____ Inches

Maximum Trench Depth: 24 Inches

*System Classification/Description:

TYPE III B. SYSTEM W/SINGLE EFFLUENT PUMP

Minimum Soil Cover: _____ Inches

Maximum Soil Cover: _____ Inches

*Proposed System:

25% REDUCTION

*Distribution Type: PRESSURE MANIFOLD

Nitrification Field: _____ Sq. ft.

No. Drain Lines: 5

Total Trench Length: 300 ft.

Trench Spacing: _____ - 9

Trench Width: _____ - 3

Aggregate Depth: _____ inches

☐ Inches O.C.

☒ Feet O.C.

☐ Inches

☒ Feet

Septic Tank: 1,000 Gallons

Pump Required: ☒ Yes ☐ No ☐ May Be Required

Pump Tank: 1,000 Gallons

Grease Trap: _____ Gallons

Septic Tank Installer

Grade Level Required: ☐ I ☐ II ☐ III ☐ IV

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.

*Permit Conditions:

INSTALL SYSTEM AS DESIGNED BY CCSC.

The Authorization for Wastewater System Construction shall be valid for a period equal to the period of validity of the Improvement Permit and may be issued at the same time the Improvement Permit issued (NCGS 130A-336(b)). If the installation has not been completed during the period of validity of the Construction Permit, the information submitted in the application for a permit or Construction Authorization shall become invalid, and may be suspended or revoked (.0204(k)(1)). The person owning or controlling the system shall be responsible for assuring compliance with the laws, rules, and permit conditions regarding system location, installation, operation, maintenance, monitoring, reporting and repair (per rule .0301(a)).

Authorized State Agent: Ennis, Crystal

Date of Issue: 07/02/2024

☐ Hand Drawing

☐ Import Drawing

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

Total Time : (HH:MM) _____



File# 414341 PIN# _____

Property Address: 235 Sequoia Drive

Applicant Or Owner Name: Lisa 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**: 7-2-24 EHS: Cynthia E.

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

Installation inspections may be scheduled the day before or the day of installation by 9am. Contact 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 permit 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 1000 Drain field 3'x300' Type System PtoAcc Max trench depth 24"

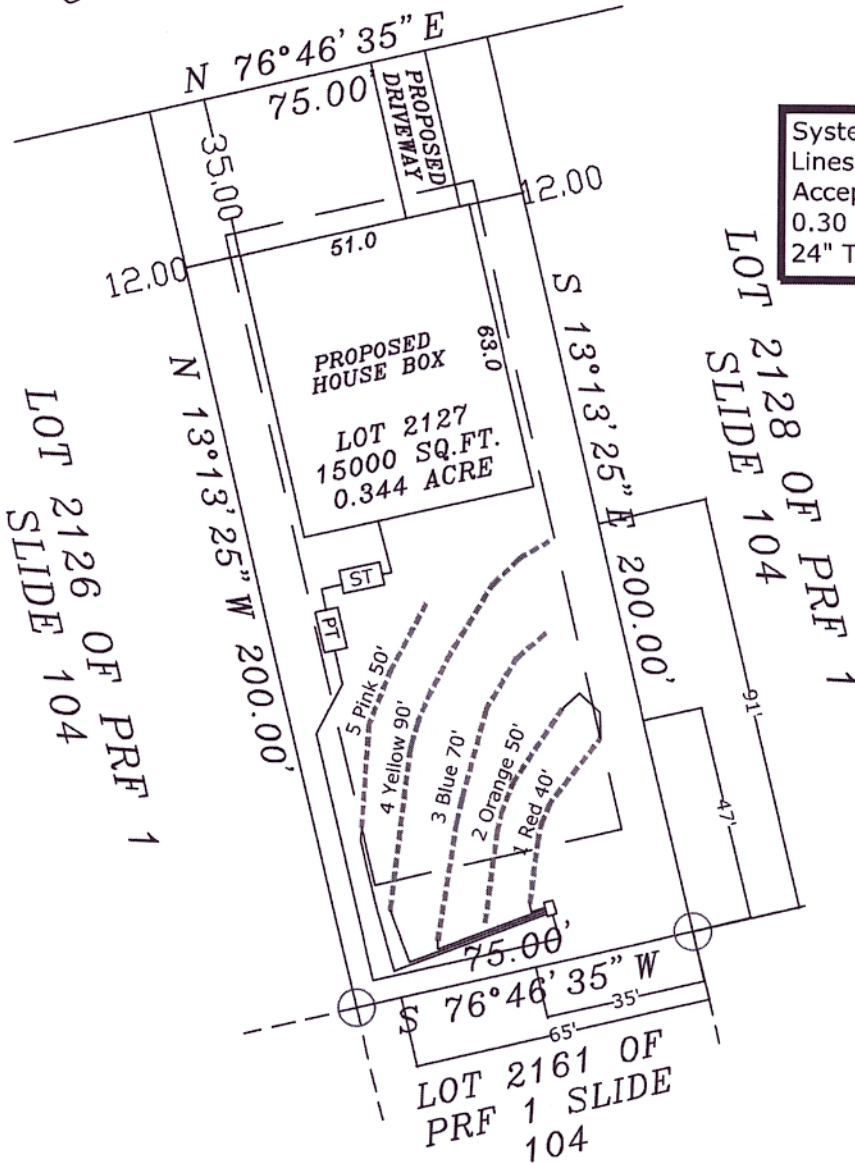
Septic Contractor _____ Septic/Pump tank dates _____ PUMP FEE PAID _____

Well Contractor _____ Well Head Date: _____ PUMP FINAL: _____ N/A (CIRCLE)

** See attached layout and top chart designed by CCSC **

SEQUOIA DRIVE
60' PRIVATE R/W

- *Keep tanks and drain lines 5' 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.



System: Pressure Manifold
Lines: 1-5, (300')
Accepted Status System
0.30 Soil LTAR
24" Trench Bottom

System: -----
[ST] [PT] : 1000 Gallon

○ MEASUREMENT CAPTURED FROM THIS LOCATION

0 20 40
SCALE:
1" = 40 ft.



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

3-Bedroom Septic Layout
235 Sequoia Drive
Lot 2127, Lake Royale Subdivision
Franklin County, North Carolina

Job# : 4381
Drawn By : MS
Date : 11/06/2023
Revision:

235 Sequioa Drive Initial System TAP CHART

Bench Mark;		is = 100.00		Location of BM:		Elevation Head:		11.80	
Pump tank elev.		9.00	91.00	Pump elev.		85.60		Manifold elevation: 97.40	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
1&2	Yellow	3.60	96.40	90	3/4in SCH 80	10.1	110.89	270	0.4107
3	Pink	5.00	95.00	70	1/2in SCH 40	7.11	78.06	210	0.3717
4	Blue	5.70	94.30	90	3/4in SCH 80	10.1	110.89	270	0.4107
4	Red	6.60	93.40	50	1/2in SCH 80	5.48	60.16	150	0.4011

	total	feet =	300	gal/min =	32.79	<u>LTAR =</u>	0.3000
% of Dose Vol.	75		<u>Des. Flow</u>	360		<u>LTAR + %5</u>	0.3150
Dose Volume	146.25		Pump Run=	10.98		(ltar W/ INOV)	0.4000
Dose Pump Time	4.46		Tank Gal/IN	19.65		(ltar W/ INOV + 5%)	0.4200
Drawdown in Inches	7.44						



Health Department
107 Industrial Drive, Suite C
Louisburg, NC 27549
Phone: 919-496-2533
Fax: 919-496-8127
www.franklincountync.us

FRANKLIN COUNTY ENVIRONMENTAL HEALTH SEPTIC SYSTEM PUMP REQUIREMENTS

PUMP SYSTEM FEE

An additional fee of fifty dollars (\$50.00) is assessed when a pump and related components are required for a new septic system. This fee must be paid prior to the Operations Permit being issued. Franklin County Environmental Health request the fee is paid before beginning the septic installation to insure the final inspection goes smoothly. The septic permit will not be signed off and a CO cannot be obtained until the fee is paid. This fee may be paid in person or by mail at:

Franklin County Health Department
Environmental Health Section
107 Industrial Dr., Suite C
Louisburg, NC 27549

When making payment, please provide the permit number and the applicant name to ensure the payment is applied to the correct permit.

PUMP TO GRAVITY DISTRIBUTION

Unless otherwise noted on your septic permit or related attachment, the minimum type distribution method for your septic system is by means of a distribution box (D-box). This is achieved by pumping the wastewater to a D-box and allowing gravity to naturally disperse the wastewater equally to each drain line. This type distribution may be used for up to four (4) drain line laterals. The D-box should be watertight. The supply line is to be terminated in the D-box with a 90 degree elbow directed downwards to prevent a "siphoning" action of the wastewater. The D-box location should be marked on-site to make it easily identifiable and prevent damage.

REQUIREMENTS FOR PUMP SYSTEMS (Pump to conventional, pressure manifold, or LPP)

The following requirements must be met, in addition to the requirements on the permit itself:

Tanks and Risers:

All tanks shall be constructed according to plans which have been approved by the Division of Environmental Health. Pump tanks shall have a riser which extends to at least 6" above the finished grade (riser is recommended on septic tank). Pump tanks should be of "one piece" construction; if not, it shall be tested for water tightness by the approved method (if a soil watertest condition exists within 5' of the tank top) - risers must be properly sealed to the top of the tank. Pipes shall be properly sealed into the tank. Pipes and conduit must exit riser through "rock-outs" provided vent shall be installed on pump tank if over 30' from facility.

Supply Line:

Supply line shall be Schedule 40 PVC or stronger. Supply line shall have a check-valve, gate valve, and a threaded union (in order to allow easy removal of pump) - corrosion resistant rope or chain shall also be connected to pump. Supply line into box shall be allowed with a 60 and extended down to within 2" of the bottom of the distribution box. Supply line shall be properly sealed at pump tank and box.

Electrical:

All connections, pump controllers, and alarm components shall be enclosed in a NEMA 4X (weatherlight) enclosure. Enclosure shall be securely mounted on a treated 4x4 post, adjacent to the pump tank, and at least 12" above grade. Wires from pumps and control floats shall be conveyed from the riser to the control panel through sealed electrical conduit (shall be sealed to be watertight and gaslight) - original plugs shall be used, with no splices in the wire cables. Control floats shall be sealed mercury type. Control floats shall be suspended from a PVC arm or "Christmas Tree" (not from the supply line) for unrestricted movement.

Alarm System:

Power to high-water alarm shall be on a separate circuit from power to the pump. Alarm shall be audible and visible to system user. Alarm system shall be NEMA 4X or equivalent if mounted outside. NEMA 4X junction box, containing a means of disconnection for the alarm float, shall be provided adjacent to the pump tank. If the alarm panel is located inside the facility

***electrical service, or a generator, must be available for final inspection in order to check pump and alarm system