



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 (checked)
(a2) Construction Authorization (checked)
(a2) Repair/Construction Authorization (unchecked)

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

- Accepted (checked)
Conventional (unchecked)
Innovative (checked)
Other (unchecked)
Any (unchecked)

- New Construction (checked)
Expansion (unchecked)
System Relocation (unchecked)
Change of Use (unchecked)
Repair (unchecked)
5-Year Expiration Requested (checked)
Non-Expiring Permit Requested (unchecked)
Requesting DHHS review? (checked) Yes No

Applicant: KFB Land, LLC
Mailing Address: 314 W Millbrook Rd. suite 121
City: Raleigh
State: NC Zip: 27609
Phone #: 919-906-2807
Email: keith@carolinaforestry.com

Owner: KFB Land, LLC
Mailing Address: 314 W Millbrook Rd. Suite 121
City: Raleigh
State: NC Zip: 27609
Phone #: 919-906-2807
Email: keith@carolinaforestry.com

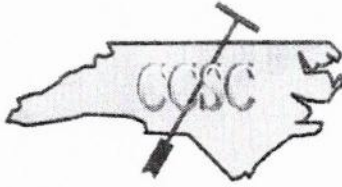
If the answer to any of the following questions is "yes", applicant must attach supporting documentation.

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

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: [Signature] Date: 2/1/24
Owner's Signature: [Signature] Date: 2/1/24

2/29



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 Red Mountain Estates, Lot 32 (Parcel Number: A75 131), 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 or Owner's Representative (print): Keith Brouillard

Owner or Owner's Representative (signature): *Keith Brouillard*

Date: 2/1/24

Permit/File #: A75-131



NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

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Division of Public Health

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

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

County: _____ Person _____

PIN/Lot Identifier: _____ A75 131

Issued To: _____ Carolina Forestry

Property Location: _____ Red Mountain Estates, Lot 32

Subdivision (if applicable) _____ Red Mountain Estates Lot #: 32 Block: _____ Section: _____

LSS Report Provided: Yes [x] No []

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

New [x] Expansion [] System Relocation [] Change of Use []

Facility Type: _____ Single-Family Dwelling, 4-Bedroom

Number of bedrooms: 4 Number of Occupants: <=8 Other: _____

Design Wastewater Strength: [x] Domestic [] High Strength [] Industrial Process Wastewater

Proposed Design Daily Flow: 480 GPD Proposed LTAR (Initial): 0.275 Proposed LTAR (Repair): 0.275

Proposed Wastewater System Type*: _____ lb, accepted (Initial) Pump Required: [] Yes [x] No [] May be required

Proposed Wastewater System Type*: _____ repair exempt (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: [x] DSE [] HSE [] NSF/ANSI 40 [] TS-I [] TS-II [] RCW

Saprolite System (Initial): [] Yes [x] No Saprolite System (Repair): [] Yes [x] No

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

Fill System (Repair): [] Yes [x] No If yes, specify: [] New [] Existing (when adding more than 6 inches of fill to system area provide a fill plan)

Usable Depth to LC (Initial)*: 44" Usable Depth to LC (Repair)*: 44" * Limiting Condition

Max. Trench Depth (Initial)†: 22" Max. Trench Depth (Repair)†: 22" † Measured on the downhill side of the trench

Artificial Drainage Required: [] Yes [x] No If yes, please specify details: _____

Type of Water Supply: [x] Private well [] Public well [] Shared well [] Municipal Supply [] Spring [] Other: _____

Drainfield location meets requirements of Rule .0508: Yes [x] No [] Drainfield location meets requirements of Rule .0601: Yes [x] No []

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

Permit conditions: _____

Licensed Soil Scientist Print Name: Jason Hall

Licensed Soil Scientist Signature: _____ Date: 02-13-2024

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

See attached site sketch





Permit/File #: 175-131 4/20

This Section for Local Health Department Use Only

Initial submittal received: 2-26-24 by LR
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: Ints Ur Date: 2-26-24

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: 2-26-29

See attached site sketch

5/20



Central Carolina Soil Consulting, PLLC

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

Office Number: 919-569-6704

February 13, 2024

Job #4419

Carolina Forestry
Attention: Keith Brouillard
314 W. Millbrook Road, Suite 121
Raleigh, NC 27609

RE: Preliminary soil/site evaluation for single family wastewater approval at Red Mountain Estates Subdivision, Lot 32 (4-bedroom) in Person County pursuant to and meets the requirements of G.S. 130A-335(a2)."

Dear Mr. Brouillard:

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 in January 2024, 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.**

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 D-Box distribution using lines 1-4 totaling 440 feet of accepted status product (EZ-Flow or Chambers). The repair area shown is approximately 5,810ft² of suitable soil area. The septic tank for the house should be minimum 1,000 gallons with risers. The septic 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.

Based on the findings during the field evaluation, the area on the attached map has at least 44 inches (initial) and 44 inches (repair) of provisionally suitable soils for a modified conventional septic system. The assigned LTAR for the site is 0.275 gpd/ft² with a maximum depth of 22 inches, on the low side of the trench, for the initial system installation of the drain lines due to slope correction. The assigned LTAR for the site is 0.275 gpd/ft² for the repair system installation of the drain lines due to slope correction.

Septic Installation:

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

Setbacks: (see septic design page for locations)

- **Septic and Pump Tanks** (see septic design)
 - 10' minimum from property lines
 - 5' minimum from house
- **Septic Lines** (see septic design)
 - 10' minimum from property lines
 - 5' minimum from house
- **Manifold's and D-Box's** (see septic design)
 - 5' minimum from property lines
- **Supply Lines** (see septic design)
 - 5' minimum from property lines
- **Utilities**
 - Water (10' minimum for all septic components)
 - Power, cable, internet, etc. (5' minimum setback)

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 D-Box Distribution, lines 1-4 totaling 440' (see layout)
- Repair System: Area shown is approximately 5,810ft² (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
- 22" max trench depth on the low side for the Initial 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 (No rain events within 72 hours)
- Maintain natural contours when clearing the lot

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

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

Sincerely,



Jason Hall
 NC Licensed Soil Scientist #1248
 AOWE certification number 10004E



Encl: Soil Map & septic layout

LEGEND

LANDSCAPE POSITION	SOIL GROUP	SOIL TEXTURE	CONVENTIONAL LTAR (gpd/ft ²)	SAPROLITE LTAR (gpd/ft ²)	LPP LTAR (gpd/ft ²)	MINERALOGY/ CONSISTENCE		STRUCTURE	
						MOIST	WET		
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		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)	IV	SC (Sandy clay)	0.1 - 0.4	0.05 - 0.2	SEXP (Slightly expansive)				
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 CLASSIFICATION 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

S (Suitable) or U (Unsuitable)

- *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

● B-1 = profile description locations

System and Repair Area:

- ~11,890ft²
- 0.275 soil LTAR
- 4-bedroom: Accepted Product Primary



GRAPHIC SCALE
1" = 100'

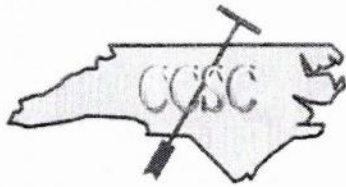


Central Carolina Soil Consulting, PLLC
 1900 South Main Street, Suite 110
 Wake Forest, North Carolina 27587
 Phone (919)569-6704 Fax (919)569-6703

Soils Map
 Lot 32, Red Mountain Estates Subdivision
 Person County, North Carolina

Job#: 4419
 Drawn By: JR
 Date: 02/13/2024
 Revision:

11/20



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 Red Mountain Estates, Lot 32 (Parcel Number: A75 131), 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 or Owner's Representative (print): Keith Brouillard

Owner or Owner's Representative (signature): *Keith Brouillard*

Date: 2/1/24



Permit/File #: A75-131 12/20

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

County: _____ Person _____ Pre-Construction Conference Required: Yes No

PIN/Lot Identifier: _____ A75 131 _____

Issued To: _____ Carolina Forestry _____

Property Location: _____ Red Mountain Estates, Lot 32 _____

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 (Initial) _____ repair exempt _____ (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: 440 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.275 gpd/ft² Usable Depth to LC (Initial)*: 44" **Limiting condition*

Additional Soil Cover: 0 inches Slope Corrected Maximum Trench/Bed Depth†: 22 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: 02-13-2024

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

See attached site sketch



13/20



Permit/File #: 1475-131

This Section for Local Health Department Use Only

Initial submittal received: 2-26-24 by KFE
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

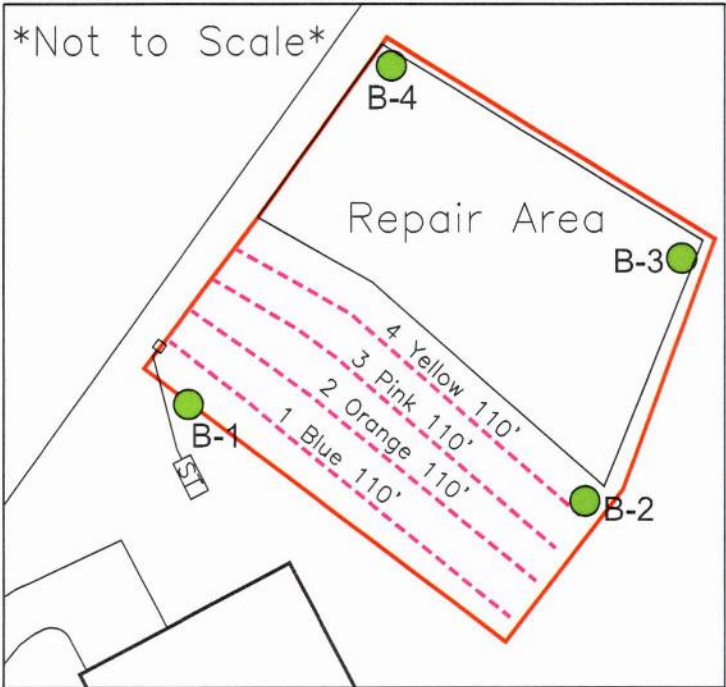
State Authorized Agent: [Signature] Date of Issuance: 2-26-24

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: 2-26-29

See attached site sketch



System: ---

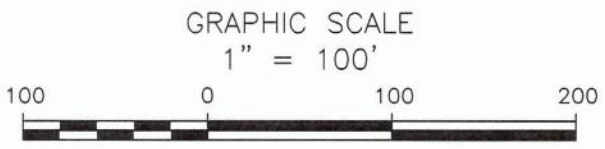
Repair Area: ——

ST = 1000 gallon septic tank

● B-1 = 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

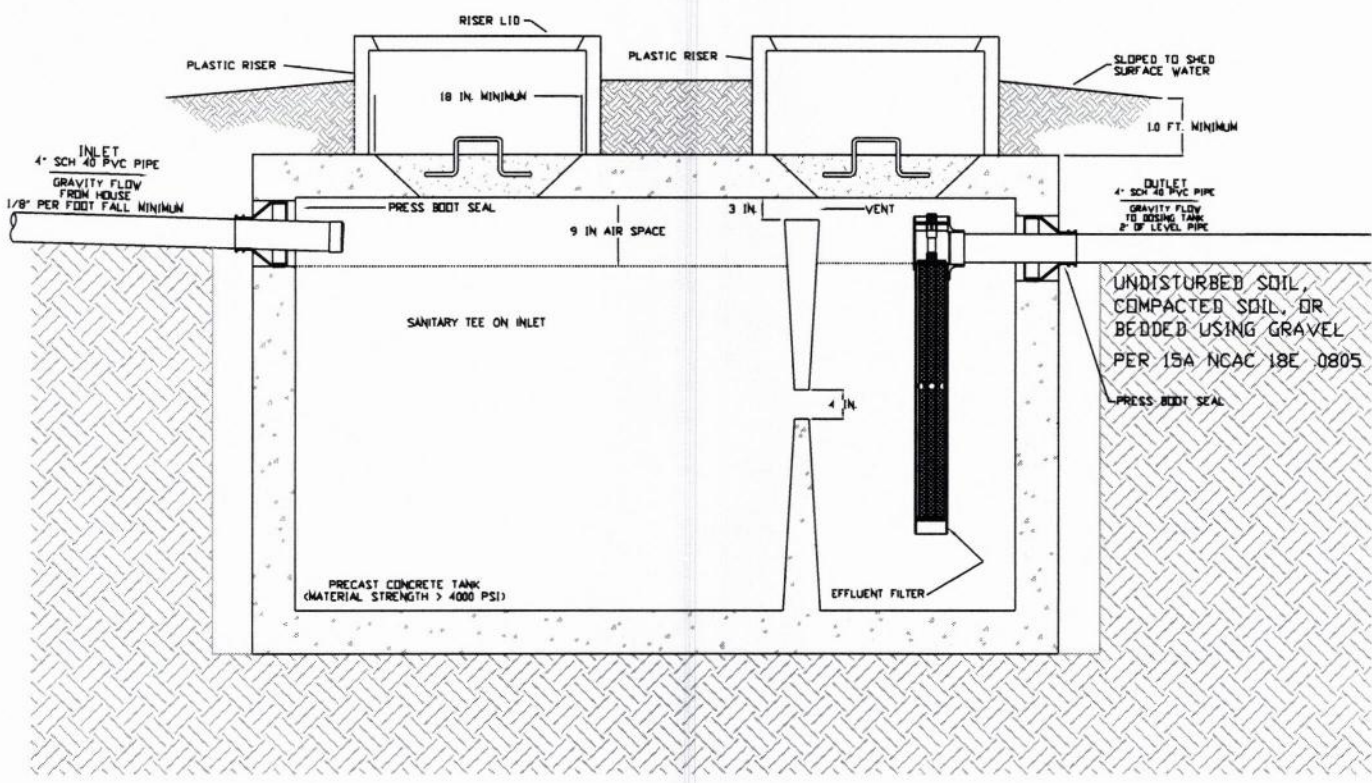
System: Gravity to D-Box
 Lines: 1-4, (440')
 Accepted Status System
 0.275 Soil LTAR
 22" Trench Bottom



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 32, Red Mountain Estates Subdivision
 Person County, North Carolina

Job#: 4419
Drawn By: JR
Date: 02/13/2024
Revision:

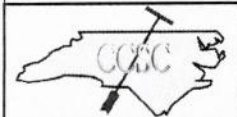


1000 GAL SEPTIC TANK SCHEMATIC
NOT TO SCALE

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.

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
Red Mountain Estates, Lot 32
Person County, North Carolina

Job#: 4419
Drawn By: JR
Date: 02/13/2024

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

17/20

CAST-A-SEAL 402/402F

PIPE TO MANHOLE & TANK CONNECTOR

What It Is

The Cast-A-Seal 402/402F is a simple cast-in pipe-to-manhole connector that offers a watertight flexible connector that is cast into the structure when the concrete is poured.

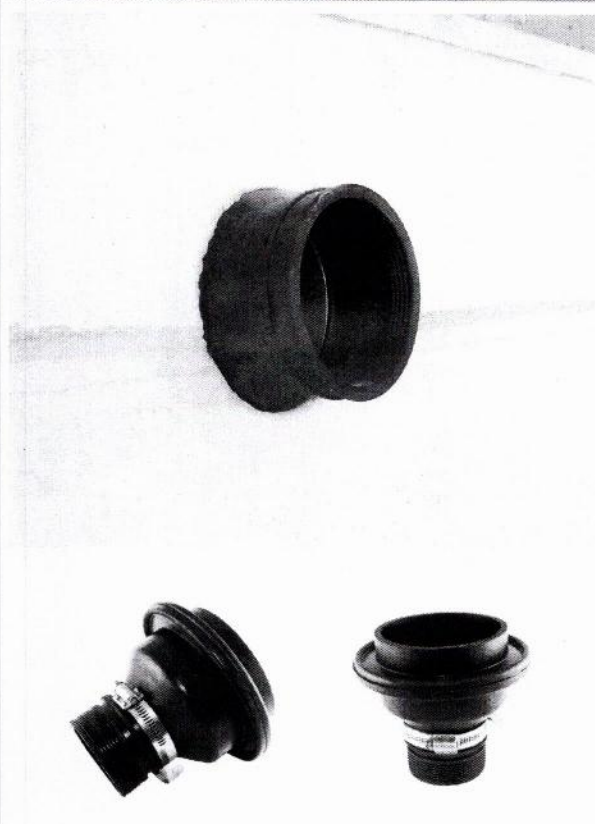
The key lock is integrally cast-in during the production process providing a secure seal for storm water and sanitary collection systems.

How It Works

- The connector is folded into the casting position.
- It is placed on the reusable mandrel and then placed on the form.
- After curing, the mandrel is removed.
- The connector is then simply unfolded at the jobsite.
- Take-up clamps made from series 304 stainless steel with quick adjusting screws secure the connector to the pipe.

Why It's Better

- Durable and reusable mandrel forms.
- Integrally cast into the structure at time of casting.
- Contractor can backfill immediately after pipe insertion.
- The 4" connector is available in either open or closed end face.
- Contractor can save time and money by backfilling immediately.



Where To Use

- Manholes
- Wet wells
- Square pump and lift stations
- Stormwater structures
- On-site treatment structures
- Junction chambers
- Grease interceptors



PIPE TO MANHOLE & TANK CONNECTORS



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Phone: 800-348-7325
Fax: (260) 436-1908

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Protecting Our Planet's Clean Water Supply
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Email: sales @press-seal.com
Web: www.press-seal.com

CAST-A-SEAL 402/402F SUBMITTAL SPECIFICATIONS

A flexible pipe-to-structure connector shall be employed in the connection of the sanitary sewer pipe to precast structures. The connector shall be Cast-A-Seal® 402/402F as manufactured by Press-Seal Corporation, Fort Wayne, Indiana, or approved equal. The connector shall be the sole element relied on to assure a flexible, watertight seal of the pipe to the precast structure. The connector shall consist of a rubber gasket and an external take-up clamp.

The rubber gasket element shall be constructed solely of synthetic or natural rubber, and shall meet or exceed the physical property requirements of ASTM C 923.

The external take-up clamp shall be constructed of Series 300 non-magnetic stainless steel and shall utilize no welds in its construction. The clamp shall be installed by torquing the adjusting screw using a torque-setting wrench available from the connector manufacturer.

Selection of the proper size connector for the structure and pipe requirement, and installation thereof, shall be in strict conformance with the recommendations of the connector manufacturer. Any dead end pipe stubs installed in connectors shall be restrained from movement per ASTM C 923.

The finished connection shall provide sealing to 13 psi (minimum) and shall accommodate deflection of the pipe to 7 degrees (minimum) without loss of seal.

Vacuum testing shall be conducted in strict conformance with ASTM C 1244 prior to backfill. Other testing shall be conducted in strict conformance with the requirements of the connector manufacturer.

Product Performance

Cast-A-Seal 402/402F meets and/or exceeds all requirements of ASTM C 923, including physical properties of materials and performance testing, including:

- 13 PSI minimum in straight alignment
- 10 PSI at minimum 7° angle
- 10 PSI minimum under shear load of 150 lbs/in. pipe diameter

Cast-A-Seal 402/402F meets and/or exceeds the requirements of the following Standards, Specifications, Codes, and Test Methods:

- IAPMO/ANSI Z1000 Standard for Prefabricated Septic Tanks
- IAPMO/ANSI Z1001 Standard for Prefabricated Gravity Grease Interceptors
- NPCA Best Practices Manual for Precast Concrete On-Site Wastewater Tanks
- NOWRA Model Code Framework
- ASTM C 1227 Standard Specification for Precast Concrete Septic Tanks
- ASTM C 1644 Standard Specification for Resilient Connectors Between Reinforced Concrete On-Site Wastewater Tanks and Pipes (CAS 402)
- ASTM C 1613 Standard Specification for Precast Concrete Grease Interceptor Tanks
- ASTM C 923 - Standard Specification for Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes, and Laterals
- ASTM C 1244 Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test
- ASTM C 1478 - Standard Specification for Storm Drain Resilient Connectors Between Reinforced Concrete Storm Sewer Structures, Pipes, and Laterals

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CAST-A-SEAL 402/402F

SELECTION GUIDE

PIPE SIZE	CAST-A-SEAL 402	PIPE O.D. RANGE	WALL THICKNESS*	APPLICATION
1.25" - 2" 31 - 51 mm	452.0250	1.5" - 2.75" 38 - 70 mm	2.5" - 6" 64 - 150 mm	STANDARD
4" 100 mm	452.0450	4.2" - 4.7" 107 - 119 mm	2.5" - 6" 64 - 150 mm	STANDARD
4" 100 mm	452.0402F1	4.2" - 4.7" 107 - 119 mm	2.5" - 4.0" 64 - 102 mm	Closed Face
6" 150 mm	452.0650	6.2" - 6.7" 157 - 170 mm	2.5" - 6" 64 - 150 mm	STANDARD
3" 75 mm	CAS ADAPTER	3.2" - 3.6" 81 - 91 mm	---	Use with 4" CAST-A-SEAL



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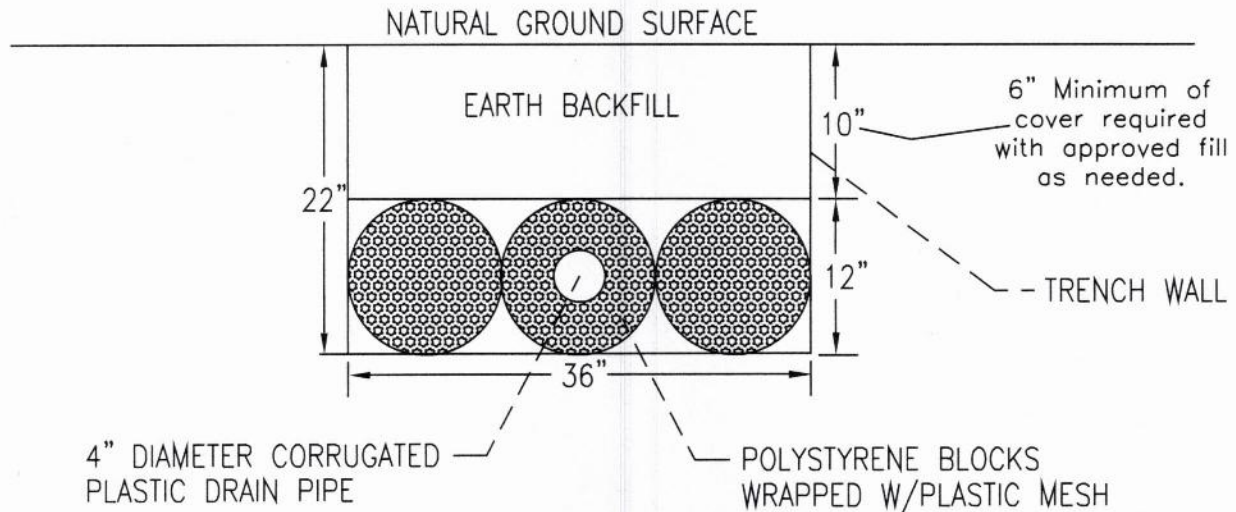
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Email: sales@press-seal.com
Web: www.press-seal.com

04/20

EZ-FLOW DETAILS

Example only: Installed trench bottom should match design.



NOTE :

1. EZ-FLOW INSTALLATION SHALL MEET THE REQUIREMENTS INCLUDED IN ITS INNOVATIVE APPROVAL
2. TRENCH BOTTOM SHALL BE AT LEAST 12" FROM ANY RESTRICTIVE SOIL LAYER
3. END CAP SHALL BE PROVIDED AT END OF ALL CORRUGATED PLASTIC PIPE LINES AND TRENCH BOTTOMS SHALL BE LEVEL
4. THIS IS A GENERIC TRENCH PROFILE SEE COUNTY PERMIT FOR TRENCH DEPTH.



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Trench Details
 Red Mountain Estates, Lot 32
 Person County, North Carolina

Job#: 4419
Drawn By: JR
Date: 02/13/2024



Date: 2/26/2024
Tax Map/Parcel #: A75-131
Permit #: OSWP-000182-2024

WELL PERMIT

New Repair

Applicant's Name: KFB Land LLC
Location of Property: Fire Tower Dr

Any known sources of contamination within 1000 ft. of property as indicated by NC Well Permit Decision Tool?
N/A ___ No ___ Yes ___ (If yes, see attached map)

Permit Conditions:

- 1.) See attached site plan for proposed well location.
- 2.) All applicable State and County regulations governing construction and setbacks apply.
- 3.) Permits expire 5 years from the date of issue.
- 4.) Issuance of a permit does not guarantee a potable water supply or yield.

Other Conditions/Comments: See LSS Site Plan

Permit issued by: Kenneth Elliott Date: 2/26/2024

Certificate of Completion

New Well: or
 Well Head Upgrade

Liner

Location: _____
Grout
Annual Space: _____
Material: _____
Witnessed by: _____
GW-1: _____
Well Tag: _____
Pump Tag: _____
Air Vent: _____
Hose Bib: _____
Casing Height: _____

Grout
Liner Depth: _____
Material: _____
GW-1: _____
Witnessed by: _____

Abandonment:
Well Depth: _____
Material: _____
GW-30: _____
Witnessed by: _____

Well Contractor: _____ License #: _____
Pump Installer: _____ License #: _____
Approved by: _____ Date: _____

Additional Comments: _____