Permit/File #: _____

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: Harnett
PIN/Lot Identifier: 0642-74-5525 (Birchwood Trails, Lot 4)
Issued To: KB Homes
Property Location: 138 Rockhaven Drive, Fuquay Varina, NC 27526
Subdivision (if applicable) Birchwood Trails Lot #: 4 Block: _____ Section: _____
LSS Report Provided: Yes ☒ No ☐
If yes, name and license number of LSS: Heath Clapp #1354

New ☒ Expansion ☐ System Relocation ☐ Change of Use ☐
Facility Type: SFR (4-bedroom)
Number of bedrooms: 4 Number of Occupants: 8 Other: _____
Design Wastewater Strength: ☒ Domestic ☐ High Strength ☐ Industrial Process Wastewater
Proposed Design Daily Flow: 480 GPD Proposed LTAR (Initial): 0.4 Proposed LTAR (Repair): 0.4
Proposed Wastewater System Type*: Accepted Gravity (Initial) Pump Required: ☐ Yes ☒ No ☐ May be required
Proposed Wastewater System Type*: Accepted Gravity (Repair) Pump Required: ☐ Yes ☒ No ☐ May be required
**Please include system classification for proposed wastewater system types in accordance with Rule .1301 Table XXXII*
Effluent Standard: ☒ DSE ☐ HSE ☐ NSF/ANSI 40 ☐ TS-I ☐ TS-II ☐ RCW
Saprolite System (Initial): ☐ Yes ☒ No Saprolite System (Repair): ☐ Yes ☒ No
Fill System (Initial): ☐ Yes ☒ No If yes, specify: ☐ New ☐ Existing (when adding more than 6 inches of fill to system area provide a fill plan)
Fill System (Repair): ☐ Yes ☒ No If yes, specify: ☐ New ☐ Existing (when adding more than 6 inches of fill to system area provide a fill plan)
Usable Depth to LC (Initial)[x]: 36" Usable Depth to LC (Repair)[x]: 36" ***[x] Limiting Condition***
Max. Trench Depth (Initial)[‡]: 24" Max. Trench Depth (Repair)[‡]: 24" ***[‡] Measured on the downhill side of the trench***
Artificial Drainage Required: ☐ Yes ☒ No If yes, please specify details: _____
Type of Water Supply: ☐ Private well ☐ Public well ☐ Shared well ☒ Municipal Supply ☐ Spring ☐ Other: _____
Drainfield location meets requirements of Rule .0508: Yes ☒ No ☐ Drainfield location meets requirements of Rule .0601: Yes ☒ No ☐
Permit valid for: ☒ Five years [site plan submitted pursuant to GS 130A-334(13a)] ☐ No expiration [plat submitted pursuant to GS 130A-334(7a)]

Permit conditions:
_____
_____
_____
_____
_____

Licensed Soil Scientist Print Name: Heath Clapp
Licensed Soil Scientist Signature: Heath Clapp Date: 10/3/2025

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

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: _____

This Section for Local Health Department Use Only

Initial submittal received: _____ by _____
Date *Initials*

G.S. 130A-335(a3) states the following:

When an applicant for an Improvement Permit submits to a local health department an Improvement Permit application, the permit fee charged by the local health department, the common form developed by the Department, and a soil evaluation pursuant to subsection (a2) of this section, the local health department shall, within five business days of receiving the application, conduct a completeness review of the submittal. A determination of completeness means that the Improvement Permit includes all of the required components. If the local health department determines that the Improvement Permit is incomplete, the local health department shall notify the applicant of the components needed to complete the Improvement Permit. The applicant may submit additional information to the local health department to cure the deficiencies in the Improvement Permit. The local health department shall make a final determination as to whether the Improvement Permit is complete within five business days after the local health department receives the additional information from the applicant. If the local health department fails to act within any period set out in this subsection, the applicant may treat the failure to act as a determination of completeness. The Department shall develop a common form for use as the Improvement Permit.

The review for completeness of this Improvement Permit was conducted in accordance with G.S. 130A-335(a3). This Improvement Permit is determined to be:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing:

_____

_____

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

State Authorized Agent: _____ Date: _____

☐ Complete

State Authorized Agent: _____ Date: _____

This Improvement Permit is issued pursuant to G.S. 130A-335 (a2) and (a3) using the signed and sealed LSS/LG evaluation(s) attached here. The issuance of this permit 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: _____

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: _____

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: _____

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: _____

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

County: Harnett **Pre-Construction Conference Required:** Yes ☐ No ☒

PIN/Lot Identifier: 0642-74-5525 (Birchwood Trails, Lot 4)

Issued To: KB Homes

Property Location: 138 Rockhaven Drive, Fuquay Varina, NC 27526

AOWE/PE Plans/Evaluations Provided: Yes ☒ No ☐ If yes, name and license number of AOWE/PE: Heath Clapp, 10057E

Facility Type: SFR (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* Accepted Gravity (Initial) Accepted Gravity (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: 1,250 gallons Total Trench/Bed Length: 300 feet Trench/Bed Spacing: 9 feet on center

Trench/Bed Width: 36 inches LTAR: 0.4 gpd/ft² Usable Depth to LC (Initial)ˣ: 36" ˣ***Limiting condition***

Soil Cover: 0 inches Slope Corrected Maximum Trench/Bed Depth‡: 24" inches ‡ ***Measured on the downhill side of the trench***

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

Pump Requirements: N/A ft. TDH vs. N/A GPM Grease Trap Size (if applicable): N/A 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: Heath Clapp

AOWE/PE Signature: Heath Clapp Date: 10/3/2025

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

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: _____

This Section for Local Health Department Use Only

Initial submittal received: _____ by _____
Date *Initials*

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

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

The review for completeness of this Construction Authorization was conducted in accordance with G.S. 130A-335(a5). This Construction Authorization is determined to be:

☐ Incomplete (If box is checked, information in this section is required.)

The following items are missing: _____

_____

Copies of this were sent to the AOWE/PE and the Applicant on _____
Date

State Authorized Agent: _____ Date: _____

☐ Complete

State Authorized Agent: _____ Date of Issuance: _____

This Construction Authorization is issued pursuant to G.S. 130A-335(a2) and (a5) using the signed and sealed plans or evaluations attached here. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit.

The Department, the Department's authorized agents, and the local health departments shall be discharged and released from any liabilities, duties, and responsibilities imposed by statute or in common law from any claim arising out of or attributed to plans, evaluations, preconstruction conference findings, submittals, or actions from a person licensed pursuant to Chapter 89C of the General Statutes as a licensed engineer or a person certified pursuant to Article 5 of Chapter 90A of the General Statutes as an Authorized On-Site Wastewater Evaluator in GS 130A-335(a2), (a5), and (a7). The Department, the Department's authorized agents, and the local health departments shall be responsible and bear liability for their actions and evaluations and other obligations under State law or rule, including the issuance of the operations permit pursuant to GS 130A-337.

Construction Authorization Expiration Date: _____

See attached site sketch

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: _____

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: _____

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Public Health

Permit/File #: _____

ADDENDUM TO G.S. 130A-335(a2) SUBMITTAL

County: _____

PIN/Lot Identifier: _____

Issued To: _____

Additional Improvement Permit Conditions:

_____

_____

_____

_____

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Additional Construction Authorization Conditions:

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_____

_____

Engineers and Soil Scientists

Agri-Waste Technology, Inc.
1225 Crescent Green, Suite 250, Cary NC 27518
agriwaste.com | 919.859.0669

Soil Suitability for Domestic Sewage Treatment and Disposal Systems
Birchwood Trails – Lot 4
138 Rockhaven Drive, Fuquay Varina, NC 27526
(Harnett County)
October 3, 2025

Soil suitability for domestic sewage treatment and disposal systems was evaluated on October 1, 2025, for the property located at 138 Rockhaven Drive in Fuquay Varina, NC (Harnett County). Heath Clapp of Agri-Waste Technology, Inc. (AWT) conducted the soil evaluation. This evaluation was done to facilitate permitting for a septic system for a 4-bedroom home. This report and attached documents were prepared *to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3). The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).*

A drawing of the site plan, septic layout, septic system design, and soil pit locations is included in Attachment 1. Profile descriptions for each soil boring are included in Attachment 2.

The total property area is approximately 0.67 acres. The house and septic area are an open field. The proposed septic system for the property is a gravity fed, accepted status system for initial and for repair.

Soil Suitability for Domestic Sewage Treatment and Disposal Systems
The drawing in Attachment 1 details the property boundaries, soil pit locations, and layout of drain field trenches. Multiple soil pits and borings were advanced within the proposed septic system area on the property. Soil pits/borings were examined to determine soil suitability for on-site sewage disposal systems in accordance with 15A 18A .1900 Rules for Sewage Treatment and Disposal Systems. All soil pits/borings are suitable for a conventional style trench. Soil pits/borings are within the proposed drainfield area.

The layout shown in Attachment 1 indicates there is available space for a four-bedroom accepted system. The initial system can be installed with the use of an accepted status drainfield based on the layout in the field.

The proposed LTAR (Long Term Acceptance Rate) by AWT is 0.4GPD/ft^2. The soils on this property are group III soils within the distribution and treatment zone as used to define the LTAR. With an LTAR of 0.4GPD/ft^2, 600 linear feet of trench is necessary to support a 4-bedroom home for the initial and repair system with the use of an accepted trench product. The maximum slope corrected trench depth is 24 inches. The attached drawings substantiate that the necessary linear footage of trench can be installed on the property for the initial and repair system.

Any logging, disturbances, or grading done in the usable area or within the proposed setbacks will change the potential of using the area designated for a drainfield. Prior to moving forward with the development on the property, the Harnett County Health Department should be contacted to complete the necessary Construction Oversight and to issue an OP (Operations Permit) for the property once the septic system has been installed.

Conclusions

An IP (Improvement Permit) and CA (Construction Authorization) for this property can be issued with the site plan that is in Attachment 1. A CA permit will be required to secure a building permit for the property. The county issues an Operation Permit after the system has been installed to meet the specifications of the Authorization to Construct. Additional septic layouts have been or will be performed as needed. It will be critical to not disturb any of the proposed septic area or there is a risk that the IP and CA will be revoked. The LSS/AOWE Evaluation and attached documents were prepared *to this application is to be used to issue an Improvement Permit in accordance with G.S. 130A-335(a2) and (a3). The LSS/AOWE evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5).*

We appreciate the opportunity to assist you in this matter. Please contact us with any questions, concerns, or comments.

Sincerely,

Heath Clapp, NC LSS

Engineers and Soil Scientists

Agri-Waste Technology, Inc.
1225 Crescent Green, Suite 250, Cary NC 27518
agriwaste.com | 919.859.0669

SOIL & SITE EVALUATION for ON-SITE WASTEWATER SYSTEMS

Evaluation Date	10/1/2025	Site Location	138 Rockhaven Drive, Fuquay Varina, NC 27526	County	Harnett
PIN/Parcel	0642-74-5525	Property Size	0.67 acres	Property Recorded	Yes
Proposed Facility	SFR	Bedrooms	4	Wastewater Strength	Domestic
Water Supply	Municipal	Design Flow (.0400)	480	Evaluation Method	Auger

			Soil Morphology		Other Factors					
Profile #	.0502 Landscape Position Slope %	Horizon Depth (in)	.0503 Structure Texture	.0503 Consistence Mineralogy	.0504 Soil Wetness Color	.0505 Soil Depth (in)	.0506 Saprolite	.0507 Restrictive Horizon	.0509 Profile Class LTAR	.0502(d) Slope Correction
1	1%	Ap 0-10"	LS	NS, NP, VFr	10YR 3/3	36	S	S	0.4	0.4
		E 10-18"	LS	NS; NP; VFr	10YR 7/6					
		Bt1 18-36"+	SCL	S; SP; Fi-Fr	2.5YR 5/8					
						System Type			Conventional	
2	1%	Ap 0-10"	LS	NS, NP, VFr	10YR 3/3	36	S	S	0.4	0.4
		E 10-18"	LS	NS; NP; VFr	10YR 7/6					
		Bt1 18-36"+	SCL	S; SP; Fi-Fr	2.5YR 5/8					
						System Type			Conventional	
3	1%	Ap 0-10"	LS	NS, NP, VFr	10YR 3/3	36	S	S	0.4	0.4
		E 10-18"	LS	NS; NP; VFr	10YR 7/6					
		Bt1 18-36"+	SCL	S; SP; Fi-Fr	2.5YR 5/8					
						System Type			Conventional	
4	1%	Ap 0-10"	LS	NS, NP, VFr	10YR 3/3	36	S	S	0.4	0.4
		E 10-18"	LS	NS; NP; VFr	10YR 7/6					
		Bt1 18-36"+	SCL	S; SP; Fi-Fr	2.5YR 5/8					
						System Type			Conventional	

Evaluated By:

Heath Clapp, LSS

Site Classification	Suitable	**Site Classification**	Suitable
Primary LTAR	0.4	**Repair LTAR**	0.4
Primary Trench Depth	24"	**Repair Trench Depth**	24"

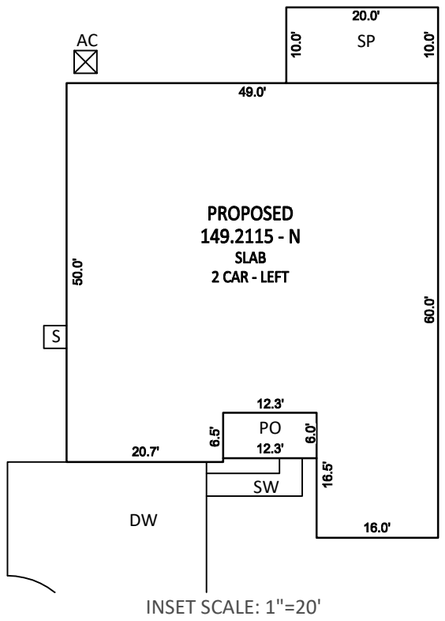
Engineers and Soil Scientists

Agri-Waste Technology, Inc.
1225 Crescent Green, Suite 250, Cary NC 27518
agriwaste.com I 919.859.0669

SOIL & SITE EVALUATION for ON-SITE WASTEWATER SYSTEMS

LEGEND

Soil Group	Soil Texture	Conventional LTAR	Anaerobic Dip LTAR	Aerobic Drip LTAR (TS-II)	Mineralogy & Moist	Mineralogy & Wet	Structure
	S (Sand)						SG (Single grain)
I	LS (Loamy Sand)	0.8-1.2	0.4-0.6	0.8-1.5	Lo (Loose)	NS (Non Sticky)	M (Massive)
	SL (Sandy Loam)				VFR (Very Friable)	SS (Slightly Sticky)	GR (Granular)
II		0.6-0.8	0.3-0.4	0.6-0.8			
	L (Loam)				FR (Friable)	S (Sticky)	SBK (Subangular Blocky)
	SiL (Silt Loam)				FI (Firm)	VS (Very Sticky)	ABK (Angular Blocky)
	SCL (Sandy Clay Loam)				VFI (Very Firm)	NP (Non Plastic)	
III	CL (Clay Loam)	0.3-0.6	0.15-0.3	0.2-0.6	EFI (Extremely Firm)	SP (Slightly Plastic)	PR (Prismatic)
	SiCL (Silty Clay Loam)					P (Plastic)	PL (Platy)
	SC (Sandy Clay)			0.05-0.2		VP (Very Plastic)	
IV	SiC (Silty Clay)	0.1-0.4	0.05-1.5		SEXP (Slighty Expansive)		
	C (Clay)				EXP (Expansive)		



INSET SCALE: 1"=20'

LOT INFORMATION:

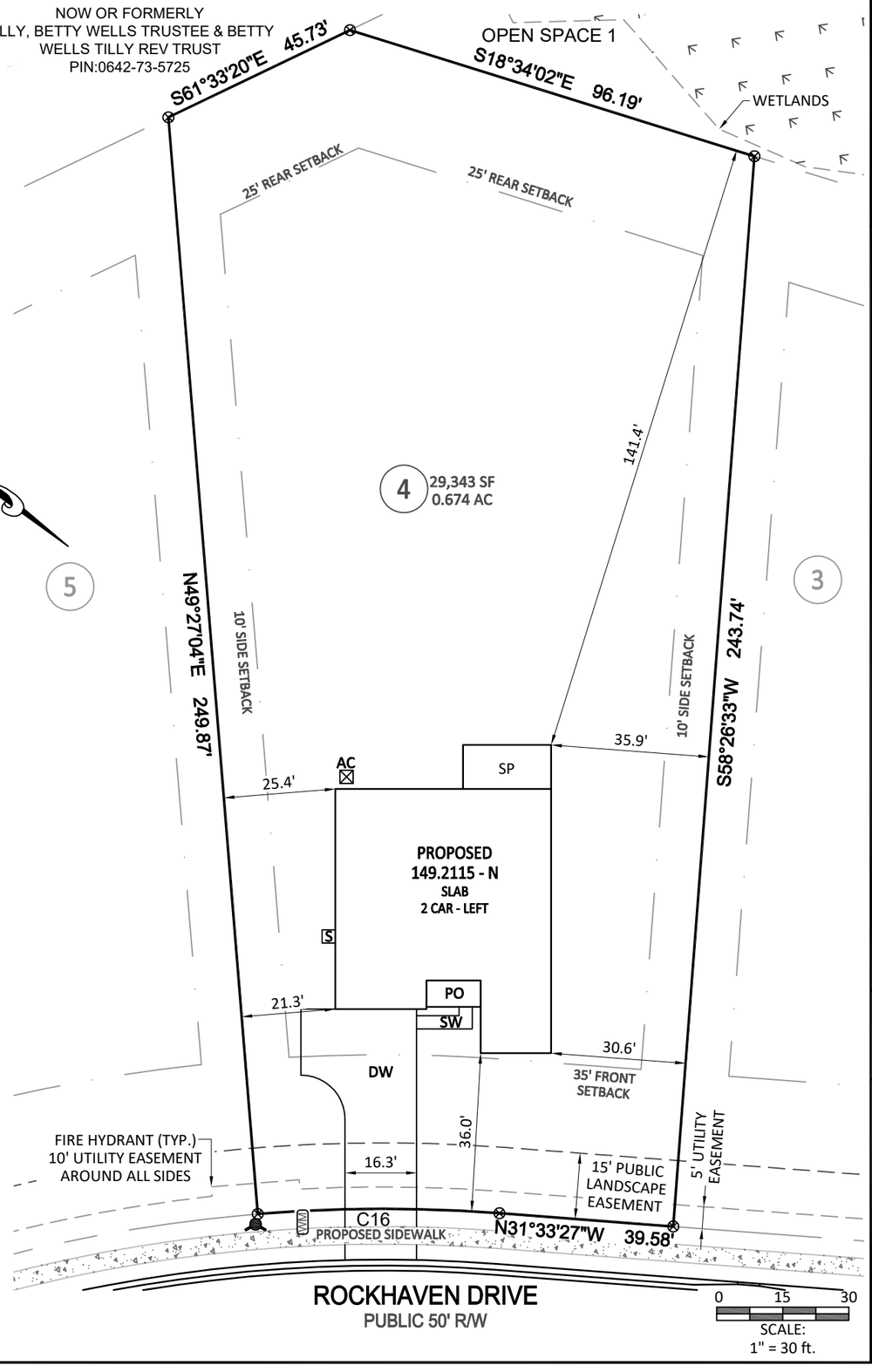
PIN: 0642-74-5525.000
REFERENCE: DB 4184 PG 2546 (PARENT
TOTAL LOT AREA = 0.674 AC = 29,343 SF
HOUSE = 2,530 SF
PORCH = 74 SF
SIDEWALK /STEPS = 44 SF
DRIVEWAY (TO P/L) = 909 SF
SCREENED PATIO = 200 SF
STOOP = 9 SF
AC PAD = 9 SF
PROPOSED IMPERVIOUS = 3,775 SF
PERCENT IMPERVIOUS = 12.87%
MAX IMPERVIOUS = 5,000 SF

BUILDING SETBACKS
FRONT - 35'
REAR - 25'
SIDE - 10'

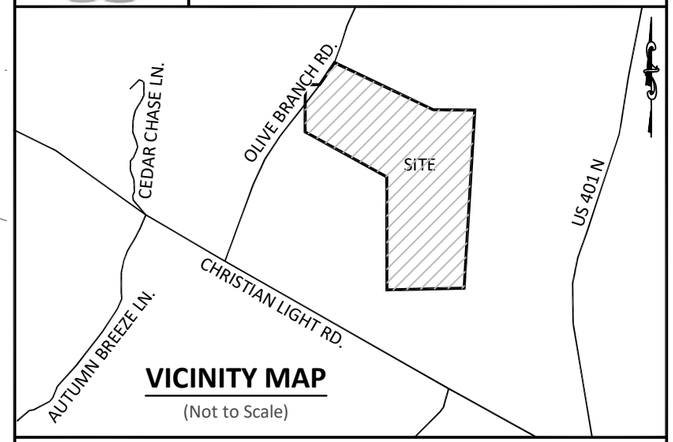
NOTES:

1. THIS SURVEY WAS PREPARED BY BATEMAN CIVIL SURVEY CO., UNDER THE SUPERVISION OF SONYA A. WARD, PLS.
2. THIS PLAN HAS BEEN PREPARED FOR LAYOUT AND PERMITTING PURPOSES ONLY.
3. PROPERTY LINES SHOWN WERE TAKEN FROM EXISTING FIELD EVIDENCE, EXISTING DEEDS AND PLATS OF PUBLIC RECORD, AND INFORMATION SUPPLIED TO THE SURVEYOR BY THE CLIENT.
4. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ALL BEARINGS ARE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM UNLESS OTHERWISE SHOWN.
5. THIS MAP IS NOT FOR RECORDATION AND SHOULD BE REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.
6. THE BASIS OF NORTH AND ALL EASEMENTS, RIGHTS-OF-WAYS, BUFFERS, SETBACKS AND ADJOINERS, ETC. REFERENCED IN TITLE BLOCK.
7. NO INVESTIGATION INTO THE EXISTENCE OF JURISDICTIONAL WETLANDS, FLOOD ZONES OR RIPARIAN BUFFERS PERFORMED BY THIS FIRM. ALL LINES SHOWN, IF ANY, ARE SCALED FROM THE RECORDED PLAT.
8. SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
9. A 5' PUBLIC UTILITY EASEMENT LIES PARALLEL TO THE ROADWAY RIGHT OF WAY ALONG EACH SIDE AND AROUND WATER METERS.
10. ZONING: RA-40 (HARNETT COUNTY GIS)
11. BUILDER/DEVELOPER: KB HOME RALEIGH-DURHAM
1800 PERIMETER PARK DRIVE SUITE 140
MORRISVILLE, NC 27560

CURVE TABLE				
CURVE	RADIUS	LENGTH	CHD BEARING	CHORD
C16	350.00'	54.93'	N36°03'12"W	54.87'



Bateman Civil Survey Company
Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, NC 27539 Ph: 919.577.1080 Fax: 919.577.1081
www.batemancivilsurvey.com info@batemancivilsurvey.com
NCBELS Firm No. C-2378



VICINITY MAP
(Not to Scale)

LEGEND

PO = COV. FRONT PORCH/PATIO
CP = COV. REAR PORCH/PATIO
WD = WOOD DECK
SW = SIDEWALK
DW = CONCRETE DRIVEWAY
SP = SCREENED PORCH/PATIO
P = CONCRETE PATIO
⊗ = COMPUTED POINT
○ = IRON PIPE FOUND (IPF)
◉ = IRON PIPE SET (IPS)
● = SCRIBE FOUND/SET (SS)
WM = WATER METER
CO = CLEAN OUT
AC = AIR CONDITIONER
C = CABLE PEDESTAL
S = SEWER MANHOLE
T = TELEPHONE PEDESTAL
CB = CATCH BASIN/CURB INLET
= LIGHT POLE
HH = HAND HOLE/UTILITY VAULT
EB = ELECTRIC BOX/TRNSFRMR
= FIRE HYDRANT
DI = DRAIN INLET/YARD INLET
G = GAS METER
E = ELECTRIC METER
S = STOOP
R/W = RIGHT OF WAY P/L = PROPERTY LINE

I, SONYA A. WARD, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY DIRECT SUPERVISION FROM A SURVEY MADE UNDER MY SUPERVISION (PLAT BOOK REFERENCED IN TITLE BLOCK); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION LISTED UNDER REFERENCES; THAT THE RATIO OF PRECISION AS CALCULATED IS 1:10,000+; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARD OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA. L-4017
DATED:

PRELIMINARY

This map is of an existing parcel of land and is only intended for the parties and purposes shown. This map not for recordation. No title report provided.

BUILDER TO VERIFY HOUSE LOCATION
DIMENSIONS AND REVIEW TOTAL
IMPERVIOUS NOTED ON THIS PLOT PLAN

PRELIMINARY PLOT PLAN

FOR

kb HOME

BIRCHWOOD TRAILS - PHASE 1 - LOT 4
138 ROCKHAVEN DRIVE, FUQUAY-VARINA, NC
HECTORS CREEK TOWNSHIP, HARNETT COUNTY

DATE:9/12/25 DRAWN BY: AHB CHECKED BY: SAW

REFERENCE: BK 2025 PG 437-439 BCSC# 250642 SCALE: 1" = 30'

BIRCHWOOD TRAILS - LOT 4

Project Location	138 Rockhaven Drive,
	Fuquay Varina, NC 27526
	Harnett County
	PIN: 0642-74-5525
Project Owner	KB Home
	1800 Perimeter Park Drive, STE 140,
	Morrisville, NC 27560
	919-768-7960
	enpollock@kbhome.com
Project Consultant	Heath Clapp, LSS, AOWE
	(919) 629-6404
	Jeff Vaughan, LSS, AOWE
	(919) 367-6313
	Agri-Waste Technology, Inc.
	1225 Crescent Green, Suite 250
	Cary, NC 27518
	(919) 859-0669
	(919) 233-1970 Fax
System Overview	Single Family Residence
	Four (4) Bedroom, 480 gpd
	Conventional Gravity
	Accepted/Innovative Trench Product

VICINITY MAP

Sheet Index

AWT
Engineers and Soil Scientists
Agri-Waste Technology, Inc.
1225 Crescent Green, Suite 250
Cary, North Carolina 27518
919-859-0669
www.agriwaste.com

KB Home
Birchwood Trails - Lot 4

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NC ONSITE WASTEWATER EVALUATOR SEAL

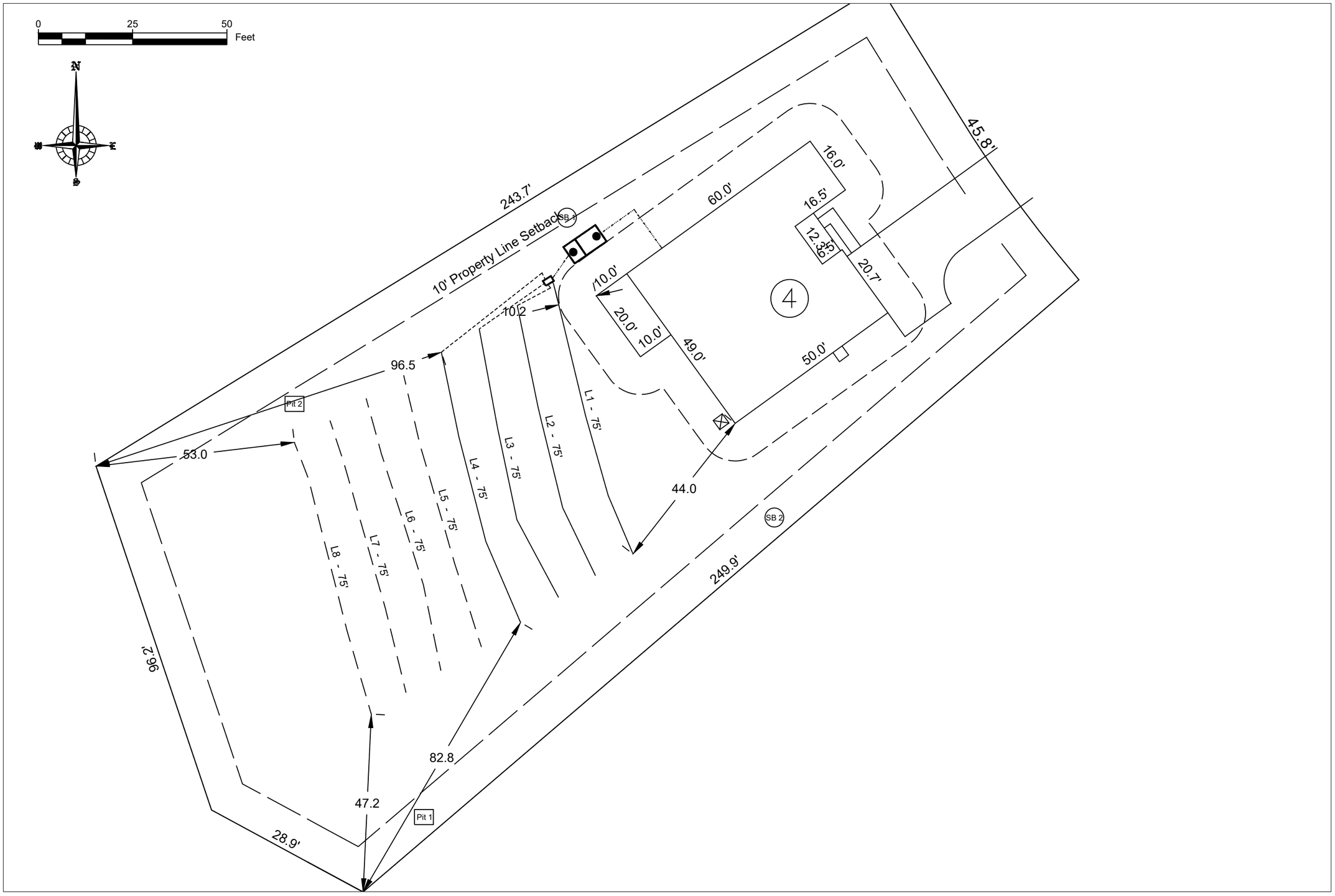
NC ONSITE WASTEWATER EVALUATOR
Certification Number
10057E
Heath Clapp

REV.	ISSUED DATE	DESCRIPTION

SHEET TITLE
Cover Sheet

DRAWN BY: H. Clapp	CREATED ON: 10/3/2025
REVISED BY: ####	REVISED ON: ####
RELEASED BY: ####	RELEASED ON: ####

DRAWING NUMBER
WW-1



1 WW-2 PROPERTY LAYOUT

SOURCE: AWT, Inc.

AWT
Engineers and Soil Scientists
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NC ONSITE WASTEWATER EVALUATOR SEAL

NC ONSITE WASTEWATER EVALUATOR
Certification Number
10057E

REV.	ISSUED DATE	DESCRIPTION

SHEET TITLE

Property Layout

DRAWN BY:	CREATED ON:
H. Clapp	10/3/2025
REVISED BY:	REVISED ON:
####	####
RELEASED BY:	RELEASED ON:
####	####

DRAWING NUMBER

WW-2

General Drainfield Notes:

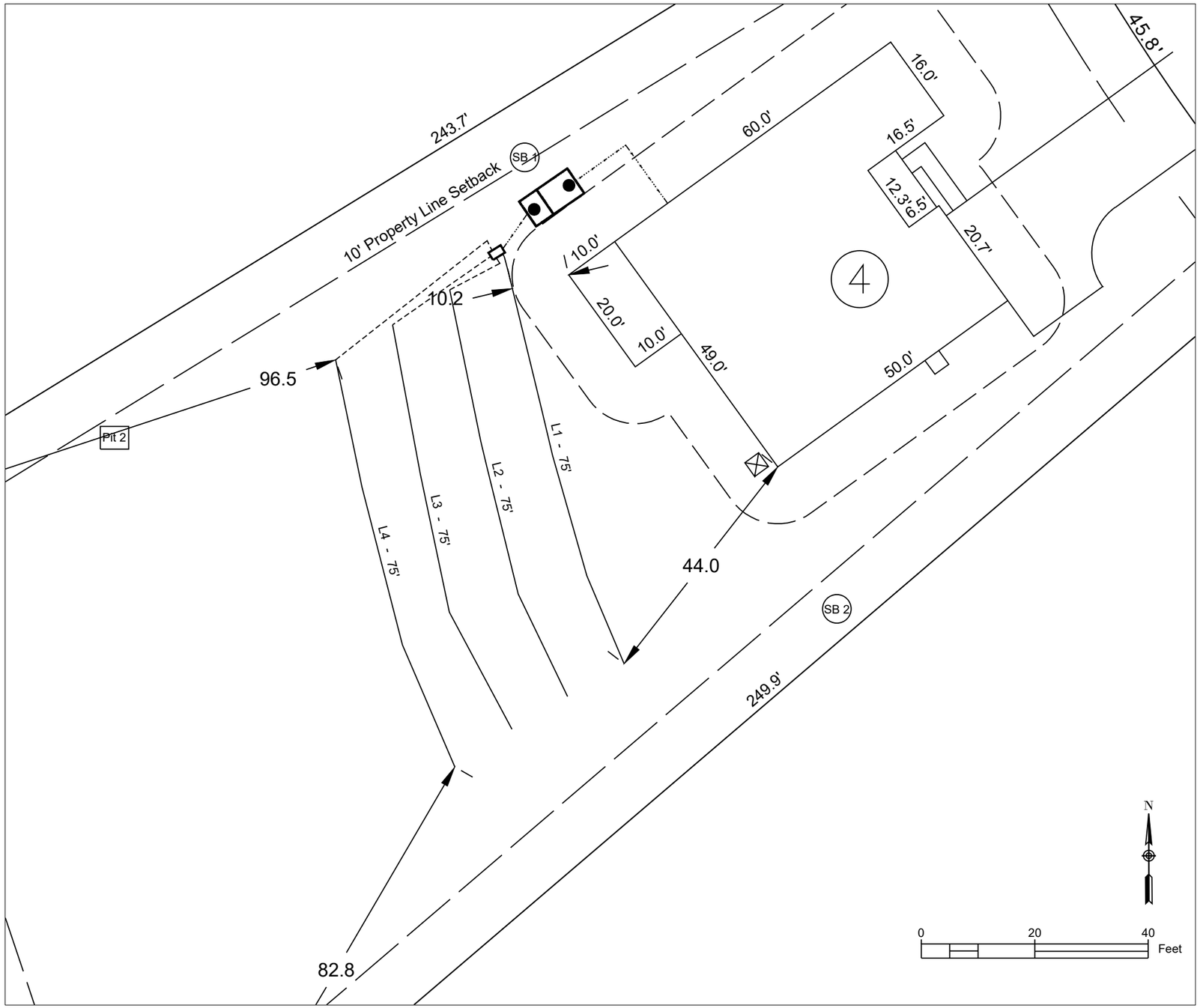
1. Clear all trees less than 8" in diameter (measured at a height 3' from soil surface) from the drainfield.
2. Vegetation that will re-grow from a cut stump shall be stumped or pulled from the ground. Stumps shall not be pushed over.
3. Drainfield area shall be cleared of all leaves, pine straw, debris, etc. The accumulated material shall be removed from the drainfield.
4. In clayey soils, sides of trenches shall be raked and limed per manufacturer's instructions.
5. Supply lines shall be installed with a minimum of 18" cover.
6. The trenches shall be backfilled appropriately so that no low areas are present.
7. Apply lime over the drainfield area as needed. Seed fine fescue over the drainfield at the rate
8. recommended by the seed manufacturer. Hand rake the seed into the soil surface. Straw the seeded area at the rate of 1.5-2 bales per 1000 sq. ft.

Installation Notes:

Contractor to adjust tank placements as necessary to maintain:

1. 10' downslope NO foundation drain
2. Min. 12" cover over Septic Tank (Not to exceed 36")
3. Min. 18" cover over pipes
4. Min. 2% grade on gravity pipe from house to Septic Tank

Note:
Primary distribution is parallel w/ D-box. Primary is Infiltrator EZ Flow.



1 WW-3G System Layout

SOURCE: Agri-Waste Technology, Inc.

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NC ONSITE WASTEWATER EVALUATOR SEAL

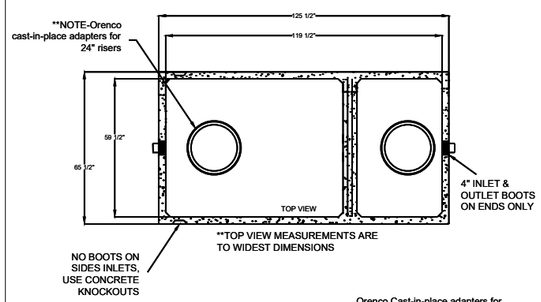
NC ONSITE WASTEWATER EVALUATOR
Certification Number
10057E

REV.	ISSUED DATE	DESCRIPTION

SHEET TITLE
Primary Layout

DRAWN BY:	CREATED ON:
H. Clapp	10/3/2025
REVISED BY:	REVISED ON:
####	####
RELEASED BY:	RELEASED ON:
####	####

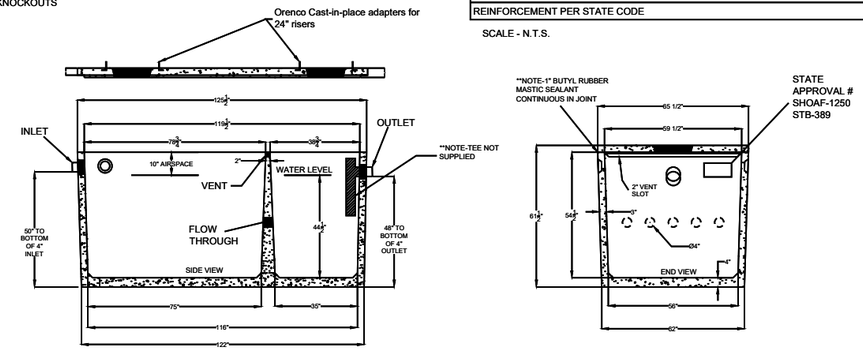
DRAWING NUMBER
WW-3G



SHOAF PRECAST SEPTIC INC.
4130 WEST US HWY 64
LEXINGTON, NC 27295
PHONE (336) 787-5826
FAX (336) 787-2826
WWW.SHOAFPRECAST.COM
SHOAF-1,250 SEPTIC TANK
STB-389
LIQUID CAPACITY-1,252 GALLONS/10" AIRSPACE
TANK HEIGHT-61 3/4"
BOTTOM OF TANK TO CENTER OF INLET-52"
BOTTOM OF TANK TO CENTER OF OUTLET-50"
LENGTH TO WIDTH RATIO-2 TO 1
SIZE OF INLET & OUTLET-3" OR 4" PIPE
TYPE OF INLET & OUTLET-POLYLOCK OR EQUAL (MEETS ASTM C-923)
CONCRETE PSI-4000; TANK WEIGHT- 11,000 LBS.
REINFORCEMENT PER STATE CODE

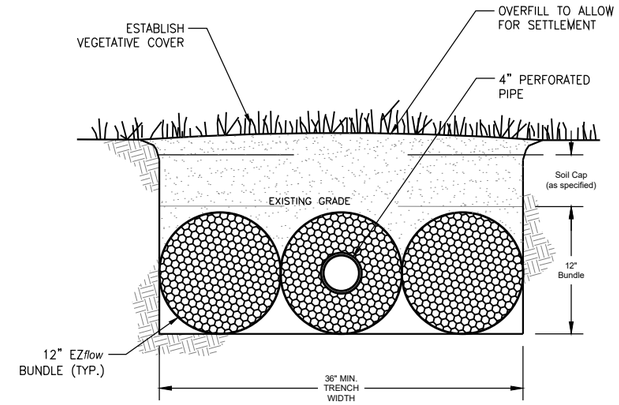
MODEL: TS 1250 STB
NON TRAFFIC
1250 Gallon Septic Tank

SCALE - N.T.S.



1 WW-4G Septic Tank

SOURCE: Shoaf Precast Septic, Inc.

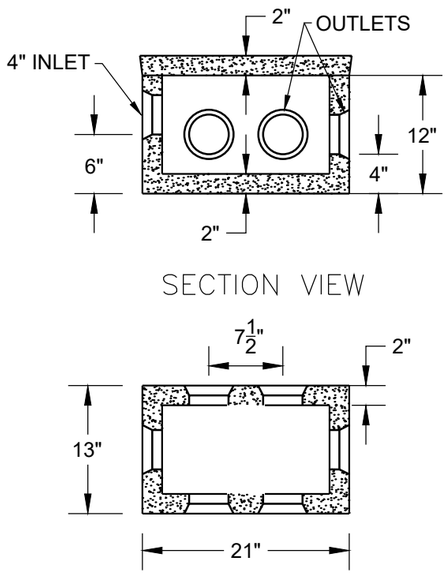


EZflow 1203H - GEO

NOTES:
1. If specified by L.S.S., drainfield to be covered with a minimum of 6" of imported soil, approved by L.S.S.
2. Soil cap to be mounded above imported soil to allow for settlement.
3. Perforated corrugated plastic pipe shall meet requirements of ASTM D 2729.
4. Pipe shall be level, 0.00% slope.
5. End cap shall be provided at end of all corrugated plastic lines.
6. Trench bottom shall be level.

2 WW-4G Chambers - Trench Cross-Section (Typical)

INFILTRATOR Water Technologies, LLC



3 WW-4G Distribution Box

NOTES

1. Installation to follow all NC DHHS and Harnett County applicable rules and regulations.
2. Harnett County Health Department to perform construction inspections and final system certification.
3. Septic Tank to have approved effluent filter.
4. Contractor to abide by all safety regulations during system installation.
5. Contractor shall backfill around all access areas such that storm water is shed away from potential entry points.
6. Invert elevations of all components to be verified in field by contractor to insure proper operation.
7. All system piping to be SCH40 PVC (except where noted).
8. All gravity elbows to be long radius or long sweeping type elbows.
9. Actual installation and placement of treatment system to be overseen by Contractor.
10. Tanks to be set on 6" minimum gravel base. Use #5 or #57 stone for base.
11. Contractor to seed and/or mulch disturbed areas to coincide with existing landscape. Area shall not be left with uncovered soil.
12. All risers to have cast-in-place tank adapters and be single-piece riser. Risers to extend 6" above soil surface and be designed to prevent surface water inflow.
13. Backfill around tank(s) shall be gravel or tank hole shall be over-excavated a minimum of 2' in all directions to allow for mechanical tamping of backfill.
14. All penetrations to be sealed.
15. Contractor to adjust tank placement to meet site constraints.

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NC ONSITE WASTEWATER EVALUATOR SEAL

NC ONSITE WASTEWATER EVALUATOR
Certification Number 10057E
Heath Clapp

REV.	ISSUED DATE	DESCRIPTION

SHEET TITLE
Detail Sheet

DRAWN BY: H. Clapp	CREATED ON: 10/3/2025
REVISED BY: ####	REVISED ON: ####
RELEASED BY: ####	RELEASED ON: ####

DRAWING NUMBER
WW-4G

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 1/20/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Hartsfield & Nash Agency, Inc.
10405 Ligon Mill Rd., Ste H
Wake Forest NC 27587

License#: 1000009111 AGRITEC-01

CONTACT NAME: Connie Garkalns
PHONE (A/C, No, Ext): 984-235-4273 **FAX (A/C, No):** 919-556-8758
E-MAIL ADDRESS: connie@hartsfield-nash.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Selective Insurance Company of	39926
INSURER B : Accident Fund	10166
INSURER C : Evanston Insurance Company	35378
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Agri-Waste Technology Inc
501 N. Salem St Ste 203
Apex NC 27502

COVERAGES **CERTIFICATE NUMBER:** 1304989694 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X **COMMERCIAL GENERAL LIABILITY** CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC OTHER:			S 2253659	1/18/2025	1/18/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG 	$ 2,000,000 $ 300,000 $ 10,000 $ 2,000,000 $ 4,000,000 $ 4,000,000 $
A	**AUTOMOBILE LIABILITY** X ANY AUTO OWNED AUTOS ONLY SCHEDULED AUTOS X HIRED AUTOS ONLY X NON-OWNED AUTOS ONLY			S 2253659	1/18/2025	1/18/2026	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) 	$ 1,000,000 $ $ $ $
A	X **UMBRELLA LIAB** X OCCUR **EXCESS LIAB** CLAIMS-MADE DED RETENTION $			S 2253659	1/18/2025	1/18/2026	EACH OCCURRENCE AGGREGATE 	$ 2,000,000 $ 2,000,000 $
B	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N: N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		100003072	1/18/2025	1/18/2026	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
C A	Prof & Pollution Liability Leased & Rented			MKLV3ENV104794 S 2253659	8/22/2024 1/18/2025	8/22/2025 1/18/2026	Each Claim Equipment	5,000,000 25,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

Artisan Custom Homes
21016 Catawba Avenue
Cornelius NC 28031
USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Connie Garkalns