



Agri-Waste Technology, Inc.
501 N Salem Street, Suite 203, Apex, NC 27502
agriwaste.com | 919.859.0669

IP/CA Acknowledgement Form

Acknowledgement of subsurface wastewater evaluation and design by **Agri-Waste Technology, Inc.** for **6917 Fiddleman Way, Raleigh, NC 27613** 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 with **G.S. 130A-335(a2), (a3), (a5), and (a6).**

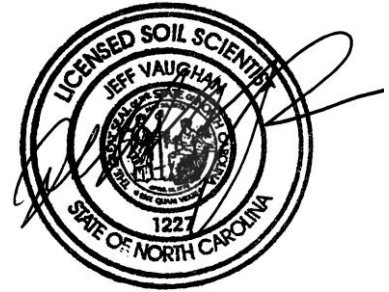
Owner: _____

Owner's Representative: _____

Date: _____



Agri-Waste Technology, Inc.
501 N Salem Street, Suite 203, Apex, NC 27502
agriwaste.com | 919.859.0669



Soil Suitability for Domestic Sewage Treatment and Disposal Systems
6917 Fiddleman Way, Raleigh, NC 27613
(Wake County)
May 16, 2023

Soil suitability for domestic sewage treatment and disposal systems was evaluated on January 10, 2023, for the property located at 6917 Fiddleman Way in Raleigh, NC (Wake County). Jeff Vaughan, Heath Clapp, and Brent Purdum 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 boring locations is included in Attachment 1. Profile descriptions for each soil boring are included in Attachment 2.

The total property area is approximately 2.04 acres. The house and septic area are partially cleared. The proposed septic system for the property is a gravity dosed accepted status system for initial and a pressure manifold horizontal panel block for repair.

Soil Suitability for Domestic Sewage Treatment and Disposal Systems

The drawing in Attachment 1 details the property boundaries, soil boring locations, and layout of drain field trenches. Multiple soil borings were advanced within the proposed septic system area on the property. Soil 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. These borings were advanced with hand auger borings. All soil borings were provisionally suitable for a conventional style trench. Soil 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 0.3GPD/ft². The soils on this property are group IV soils within the distribution and treatment zone as used to

define the LTAR. With an LTAR of 0.3GPD/ft², 667 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 14 inches for the initial, and 18 inches for the repair. 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, Wake County Department of Environmental Services 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.

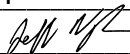
Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Vaughan", with a stylized flourish at the end.

Jeff Vaughan, NC LSS

IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)/SL2022-11

PIN/Lot Identifier: 0880697238Issued To: Jonathan ChunProperty Location: 6917 Fiddleman Way, Raleigh, NC 27613Subdivision: N/A Lot #: N/A Block: _____ Section: _____LSS Report Provided: Yes ☒ No ☐If yes, name and license number of LSS: Jeff Vaughan, 1227New ☒ Repair ☐ Expansion ☐ System Relocation ☐Proposed Structure: Single Family ResidenceProposed Wastewater System Type: Gravity - Acceptd (Initial) Pressure Manifold - H-PPBPS (Repair)Fill System: ☐ Yes ☒ No If yes, specify: ☐ New ☐ Existing (when adding more than 6 inches of fill to system area please provide a fill plan)Proposed Design Daily Flow: 480 GPD Proposed LTAR (Initial): 0.3 Proposed LTAR (Repair): 0.3Design Wastewater Strength: ☒ domestic ☐ high strength ☐ industrial processNumber of bedrooms: 4 Number of Occupants: 8 Other: _____Pump Required: ☐ Yes ☒ No ☐ May be required based upon final location and elevations of facilitiesArtificial Drainage Required: ☐ Yes ☒ No If yes, please specify details: _____Type of Water Supply: ☒ Private well ☐ Public well ☐ Municipal Supply ☐ Spring ☐ Other: _____Drainfield location meets requirements of Rule .1945: Yes ☒ No ☐Drainfield location meets requirements of Rule .1950: 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: Jeff VaughanLicensed Soil Scientist Signature:  Date: 05/16/2023

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 OnlyInitial submittal received: _____ by _____
Date Initials

Permit Number: _____

G.S. 130A-335(a4) states the following: 'If a local health department fails to act on an application for an improvement permit submitted pursuant to subsection (a3) of the section within 10 business days of receipt of a complete application, the local health department shall issue the improvement permit.'

In accordance with G.S. 130A-335(a3) the improvement permit application is:

☐ 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 Owner on _____
Date

State Authorized Agent: _____ Date: _____

☐ Denied (See attached report.)Copies of this were sent to the LSS and the Owner on _____
Date

State Authorized Agent: _____ Date: _____

☐ Complete

State Authorized Agent: _____ Date of Issuance: _____

This Improvement Permit is issued pursuant to G.S. 130A-335 (a2), (a3), and (a4) using the signed and sealed LSS/LG evaluation(s) attached here. 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. This site is subject to revocation if the site plan, plat, or the intended use changes, or if information submitted in the application was falsified, inaccurate or misleading. 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 the Laws and Rules for Sewage Treatment and Disposal and to conditions of this permit. The location and identification of all property lines, easements, water lines, and other appropriate utilities shall be the responsibility of the owner.

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

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

CLIENT: Jonathan Chun APPLICATION DATE 5/16/2023
ADDRESS: 4109 Cardinal Grove Blvd, Raleigh, NC 27616 DATES EVALUATED: 1/10/2023
PROPOSED FACILITY: Single Family Residence PROPOSED DESIGN FLOW (.1949): 480GPD PROPERTY SIZE: 2.04ac
LOCATION OF SITE: 6917 Fiddleman Way, Raleigh, NC 27613 PROPERTY RECORDED: YES

WATER SUPPLY: ☒ Private ☐ Public ☐ Well ☐ Spring ☐ Other _____
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

P R O F I L E #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
1, 2 3	2-4%	A 0-6"	SL; Gr	NS; NP; VFr	10YR 5/3	32"			Provisionally Suitable 0.3GPD/ft2
		Bt1 6-24"	C; SBK	SS; SP; Fi	7.5YR 5/6				
		Bt2 24-30"	C; SBK	SS; SP; Fi	7.5YR 5/6				
4, 5 6	4-6%	A 0-4"	SL; Gr	NS; NP; VFr	10YR 4/2	28"			Provisionally Suitable 0.3GPD/ft2
		Bt1 4-16"	C; SBK	NS; NP; Fi	7.5YR 6/6				
		Bt1 16-28"	C; SBK	SS; SP; Fr	10YR 5/6				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	OTHER FACTORS (.1946): ____ SITE CLASSIFICATION (.1948): <u>Provisionally Suitable</u> EVALUATED BY: <u>Jeff Vaughan, Brent Purdum, Heath Clapp</u>
Available Space (.1945)	Provisionally Suitable	Provisionally Suitable	
System Type(s)	Accepted	PPBPS	
Site LTAR	0.3GPD/Ft ²	0.3GPD/Ft ²	

COMMENTS

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL .1955 LTAR*	LPP .1957 LTAR*	MINERALOGY/ CONSISTENCE	STRUCTURE
CC (Concave Slope)	I	S (Sand)	1.2 - 0.8	0.6 - 0.4	SEXP (Slightly Expansive) EXP (Expansive)	G (Single Grain)
CV (Convex Slope)		LS (Loamy Sand)				M (Massive)
D (Drainage Way)	II	SL (Sandy Loam)	0.8 - 0.6	0.4 - 0.3		CR (Crumb)
DS (Debris Slump)		L (Loam)				GR (Granular)
FP (Flood Plain)	III	Si (Silt)	0.6 - 0.3	0.3 - 0.15		SBK (Subangular Blocky)
FS (Foot Slope)		SiCL (Silty Clay Loam)				ABK (Angular Blocky)
H (Head Slope)		CL (Clay Loam)				PL (Platy)
L (Linear Slope)		SCL (Sandy Clay Loam)				PR (Prismatic)
N (Nose Slope)		SiL (Silt Loam)				
R (Ridge)						
S (Shoulder Slope)	IV	SC (Sandy Clay)	0.4 - 0.1	0.2 - 0.05		
T (Terrace)		SiC (Silty Clay)				
		C (Clay)	None	None		
		O (Organic)				

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

NOTES	
--------------	--

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)
------------------	------------------------------

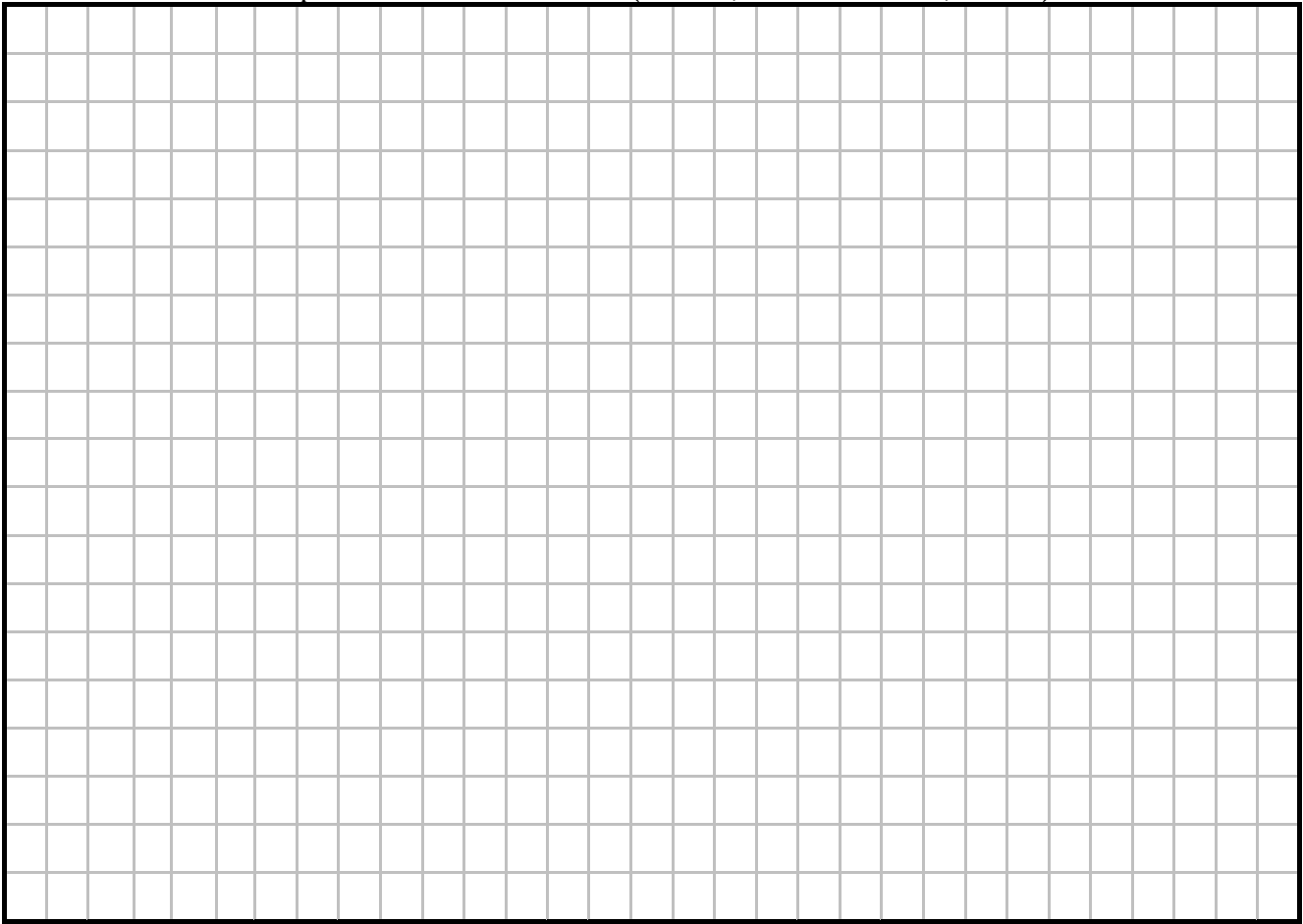
SOIL WETNESS	Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation
---------------------	---

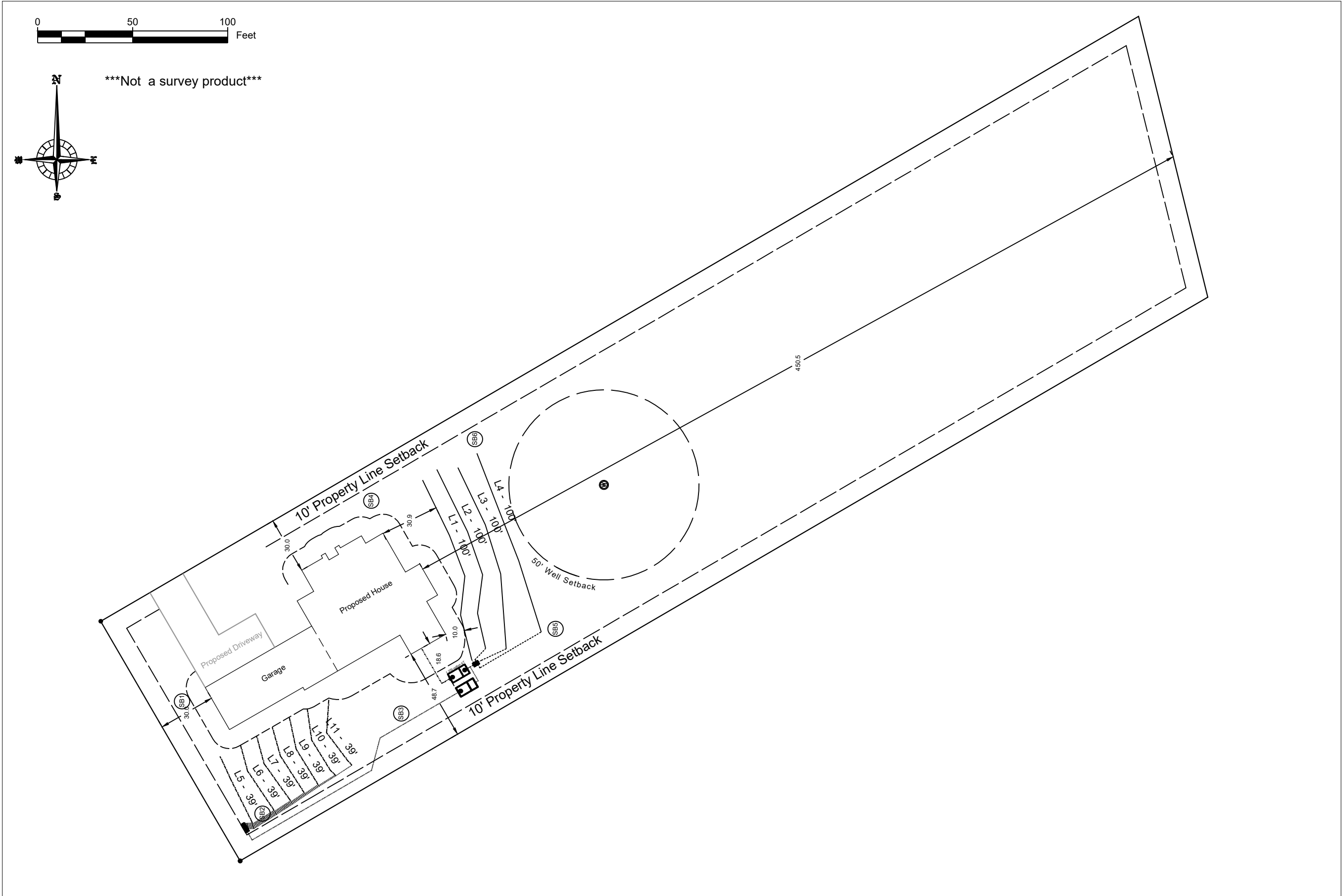
CLASSIFICATION	S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)
-----------------------	--

Evaluation of saprolite shall be by pits.

Long-term Acceptance Rate (LTAR): gal/day/ft²

Show profile locations and other site features (dimensions, reference or benchmark, and North).





For
Review
Only

REV.	ISSUED DATE	DESCRIPTION

SHEET TITLE

Property Layout

DRAWN BY: T. Bostic	CREATED ON: 05/16/2023
REVISED BY: ####	REVISED ON: ####
RELEASED BY: ####	RELEASED ON: ####

DRAWING NUMBER

WW-2



AGRITEC-01

GKROHL

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/23/2023

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	CONTACT NAME: Connie Garkalns	
	PHONE (A/C, No, Ext): (919) 556-3698 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 the Southeast	39926
INSURED Agri-Waste Technology Inc 501 N. Salem St Ste 203 Apex, NC 27502	INSURER B : ACCIDENT FUND INSURANCE COMPANY OF AMERICA	10166
	INSURER C : Evanston Insurance Company	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES

CERTIFICATE NUMBER:

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	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☒ PROJECT ☐ LOC OTHER:			S 2253659	1/18/2023	1/18/2024	EACH OCCURRENCE \$ 2,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000
							MED EXP (Any one person) \$ 10,000
							PERSONAL & ADV INJURY \$ 2,000,000
							GENERAL AGGREGATE \$ 4,000,000
							PRODUCTS - COMP/OP AGG \$ 4,000,000
							\$
A	☒ AUTOMOBILE LIABILITY ☒ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY			S 2253659	1/18/2023	1/18/2024	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
							BODILY INJURY (Per person) \$
							BODILY INJURY (Per accident) \$
							PROPERTY DAMAGE (Per accident) \$
							\$
A	☒ UMBRELLA LIAB ☒ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE DED ☐ RETENTION \$			S 2253659	1/18/2023	1/18/2024	EACH OCCURRENCE \$ 2,000,000
							AGGREGATE \$ 2,000,000
							\$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y / N ☒ N	N / A	100003072	1/18/2023	1/18/2024	☒ PER STATUTE ☐ OTH-ER
							E.L. EACH ACCIDENT \$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C	Prof & Pollution			MKLV3ENV103400	8/22/2022	8/22/2023	Each Claim \$ 5,000,000
A	Leased / Rented			S 2253659	1/18/2023	1/18/2024	Equipment \$ 25,000

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

CERTIFICATE HOLDER

CANCELLATION

***This is ONLY For Informational Purposes
Contact Agency for Specific Holder info to be added

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