

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

Permit #: _____

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK BENTON • Deputy Secretary for Health
SUSAN KANSAGRA • Assistant Secretary for Public Health
Division of Public Health

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

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

County: Columbus
PIN/Lot Identifier: 105392
Issued To: Bud Cook
Property Location: White's Crossing Lane, 1.49 Parcel B Plat Map 56 Page 7
Subdivision (if applicable) _____ Lot #: _____ Block: _____ Section: _____
LSS Report Provided: Yes [x] No []
If yes, name and license number of LSS: Danny Thornton, #1322
New [x] Expansion [] System Relocation [] Change of Use []
Proposed Structure: single family residence
Number of bedrooms: 4 Number of Occupants: 8 Other: _____
Design Wastewater Strength: [x] domestic [] high strength [] industrial process
Proposed Design Daily Flow: 480 GPD Proposed LTAR (Initial): 0.4 Proposed LTAR (Repair): 0.3
Proposed Wastewater System Type*: Illb Pump to Conventional (Initial) Pump Required: [x] Yes [] No [] May be required
Proposed Wastewater System Type*: Illb Pump to Conventional w fill (Repair) Pump Required: [x] Yes [] No [] May be required
*Please include system classification for proposed wastewater system types in accordance with 15A NCAC 18A .1961 Table V(a)
Saprolite System (initial): [] Yes [x] No Saprolite System (repair): [] Yes [x] No
Fill System (Initial): [] Yes [] No If yes, specify: [x] 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: [x] New [] Existing (when adding more than 6 inches of fill to system area provide a fill plan)
Usable Soil Depth (Initial): 34" - 48" Usable Soil Depth (Repair): 20" - 48"
Max. Trench Depth (Initial)*: 18" Max. Trench Depth (Repair)*: 18" * Measured on the downhill side of the trench
Artificial Drainage Required: [] Yes [x] No If yes, please specify details: _____
Type of Water Supply: [] Private well [] Public well [] Shared well [x] Municipal Supply [] Spring [] Other: _____
Drainfield location meets requirements of Rule .1945: Yes [x] No [] Drainfield location meets requirements of Rule .1950: 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:
Identified unsuitable fill material that varied 0-19" from the soil surface. Remove unsuitable material that is below trench bottom and replace with uncoated, fine - coarse sand.
Septic System Setback requirements: 5' from any foundation/structure, 10' from any property line and water line, 50' (min) from any water well (drinking water or irrigation well),
5' min to property line from supply line. No vehicular traffic over any part of the septic system. Septic system includes the initial and repair area. Install trenches on contour.

Licensed Soil Scientist Print Name: Danny Thornton, LSS #1322
Licensed Soil Scientist Signature: _____ Date: May 27, 2025

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



Permit #: _____

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

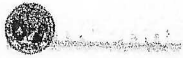
State Authorized Agent: _____ Date: _____

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 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 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 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 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



Permit #: _____

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

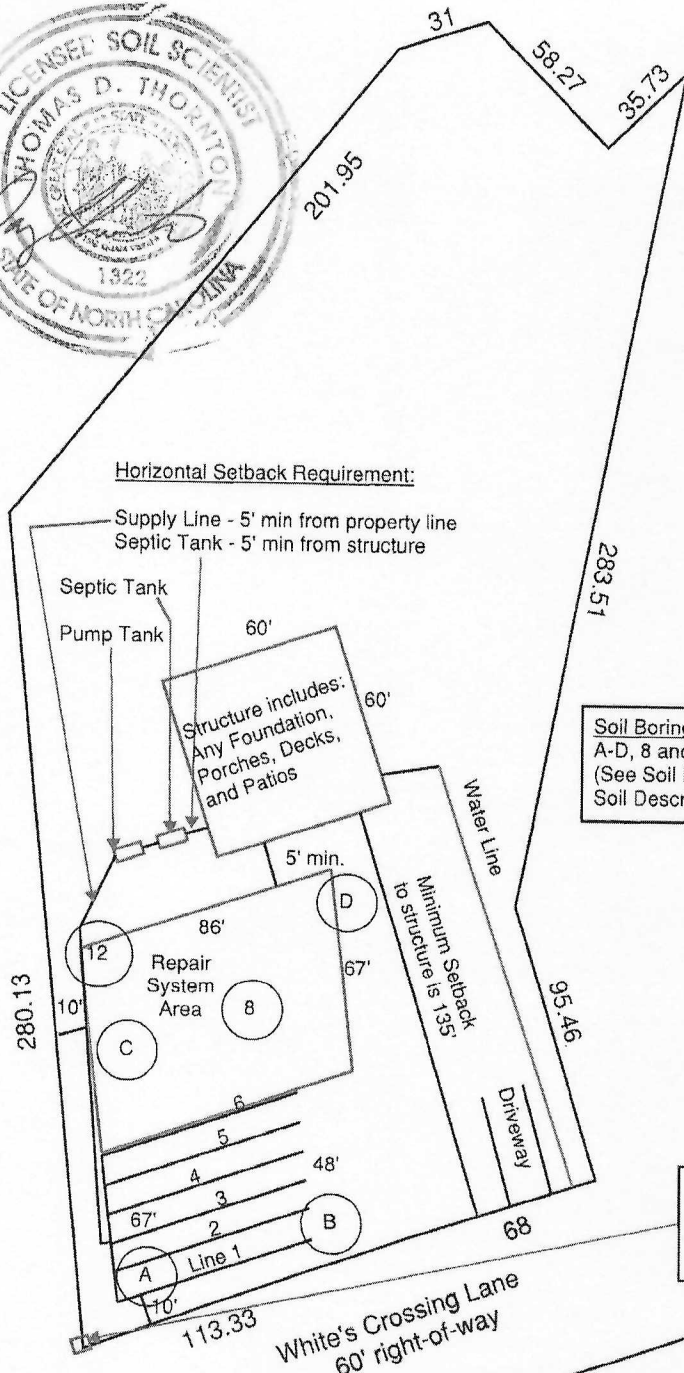
State Authorized Agent: _____

Date: _____

Proposed Wastewater System Placement Site Plan

James R and Catherine S Cook Property

TPN: 105392, 1.49 AC, Parcel B, Map Plat Book 56 page 7



Wastewater System Design Criteria

Structure: 4 bedroom single family residence
 System Type: IIIb pump to conventional
 Daily Design Flow: 480 gallons per day
 LTAR: 0.4 gpd/sqft
 Square Foot: 1200 sqft
 Linear Feet: 400'
 Drain Lines: 6 lines 3' x 67'
 System Dimension: 48' x 67'
 Place drain lines on 9 foot centers
 Install lines on contour (each lines/trench according to elevation table)

Permit Conditions

No vehicular traffic over any part of wastewater system area
 Wastewater System Horizontal Setback Requirements:
 Min. 10' from water lines and property lines
 Min. 5' from any structure, deck, porch, and/or foundation
 Min. 50' from any water supply well

Soil Boring Location:
 A-D, 8 and 12
 (See Soil Notes for Soil Description)

Reference Point (RP): Top Right-Rear Corner of Green Utility Box

Repair Area:

System Type: IIIb w/ fill
 Daily Design Flow: 480 gpd
 LTAR: 0.3 gpd/sqft
 Square Feet: 1600 sqft
 System Dimension: 57' x 86'
 7 lines - 3' x 100 feet long
 Line Spacing 9 foot on center
 Trench Bottom Depth no deeper than 60" below Reference Point (RP)
 5 foot buffer: 67' x 86'
 Remove unsuitable fill material that is greater than 18 inches from soil surface and backfill with uncoated, coarse, medium, fine sand to required TBD elevation. Six inches of soil cover may be required.

Initial System Elevation when Reference Point equals 0"		
Line Location/Boring Location	Final Grade Elevation (inches)	Trench Bottom Depth (inches)
1 (Highest)/A	29	47
2	30	48
3	31	49
4	32	50
5	33	51
6	34	52

Repair Area Elevation when Reference Point equals 0"		
Line Location/Boring Location	Final Grade Elevation (Inches)	Trench Bottom Depth (inches)
1(Highest)	35	53
2/C	36.5	54.5
3	38	56
4	39.5	57.5
5	41	59
6/D	42.5	60.5
7/7	44	62

Existing Elevation at Soil Boring Location when Reference Point equals 0"

Soil Boring Location	Elevation (inches)	Unsuitable Fill Material (in)	Soil Wetness Condition (in)	Natural Occurring Soil Depth to SWC	Elevation to SWC	Max TBD from SWC (12")	Final Grade Elevation (18")
A	29.04	0	34	34	63.04	51.04	33.04
B	27.36	3	48	45	75.36	63.36	45.36
C	36.72	7	37	30	73.72	55.72	37.72
D	39.36	19	40	21	79.36	61.36	43.36
7	47.04	17	47	30	94.04	76.04	58.04
12	38.88	7	48	41	86.88	68.88	50.88

Since soil boring location "D" SWC is less than 24", the system is designed as a fill system with 18" separation from TBD to SWC

Initial System Elevation when Reference Point equals 0"	
Line Location/Boring Location	Final Grade Elevation (in)
1 (Highest)/A	29
2	30
3	31
4	32
5	33
6	34

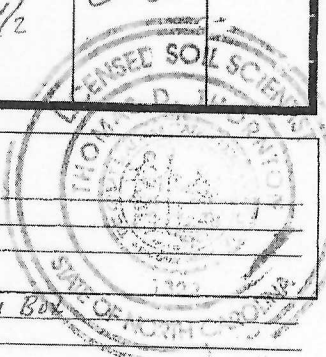
Repair Area Elevation when Reference Point equals 0"	
Line Location/Boring Location	Final Grade Elevation (in)
1 (Highest)	35
2/C	36.5
3	38
4	39.5
5	41
6/D	42.5
7/7	44



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

OWNER: Bus Cook DATE EVALUATED: May 10, 2025
 ADDRESS: WHITE CROSSING LN. PARCEL B, MAP PLAT BOOK 56 PG 7
 PROPOSED FACILITY: 4 BR SFR PROPOSED DESIGN FLOW (.0400): 480 gpd PROPERTY SIZE: 1.49 AC
 LOCATION OF SITE: WHITE CROSSING LANE PROPERTY RECORDED: MO 56 PG 7
 WATER SUPPLY: Public Single Family Well Shared Well Spring Other _____ WATER SUPPLY SETBACK: 50' min
 EVALUATION METHOD: Auger Boring Pit Cut TYPE OF WASTEWATER: Domestic High Strength IPWW

P R O F I L E #	.0502 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY		OTHER PROFILE FACTORS				.0509 PROFILE CLASS & LTAR*	.0502(d) SLOPE CORRE CTION
			.0503 STRUCTURE/ TEXTURE	.0503 CONSISTENCE/ MINERALOGY	.0504 SOIL WETNESS/ COLOR	.0505 SOIL DEPTH	.0506 SAPRO CLASS	.0507 RESTR HORIZ		
A X	20 L	0-16	SL ⁻ W, SBK	SS SCL ^R SP Fr	10YR 5/3				0.6	
	12 F	16-26	SL W, SBK	SS SCL ^R SP Fr	20YR 5/3 5/4 w/ MANGANESE					
		26-34	SCL ⁻ W, SBK	S SP SCL ^R F _i	10YR 5/6 4/3 w/ 2.5Y 7/3					
	3.0	34-48	SCL ⁻ W, SBK	S SP SCL ^R F _i	10YR 5/4 4/3 5/2					
B Z	80 L	0-3	UNSATURABLE	Fill					0.4	
	13 F	3-14	SL W, SBK	SS SP SCL ^R VFr	10YR 5/4					
		14-25	SL W, SBK	SS SP SCL ^R VFr	10YR 4/2 5/6 PAINT 2.5Y 4/4					
	2.86	25-30	SL W, SBK	SS SP SCL ^R Fr	10YR 2.5Y 4/4 w/ 10YR 5/4					
C 3	0-7 US Fill	7-16	SL W, SBK	SS SP SCL ^R Fr	10YR 4/2				0.3	
	80 F	16-30	SL W, SBK	SS SP SCL ^R Fr	2.5Y 5/3 6/4					
	100 F	30-37	SCL ⁺ W, SBK	VS P SCL ^R VFr	10YR 5/4					
	20	37-48	SCL ⁺ W, SBK	VS P SCL ^R VFr	10YR 5/4 5/6 2.5Y 4/2 4/3 5/3					
D A	0-19 US Fill	19-26	SL W, SBK	SS SP SCL ^R	10YR 4/2				0.3	
	80 L	26-30	SL ⁻ g ^r SAND	SS SP SCL ^R VFr	2.5Y 4/4 7/10					
	110 F	30-40	SCL W, SBK	S P SCL ^R F _i	10YR 5/6					
	3.86	40-50	SCL W, SBK	VS P SCL ^R VFr	10YR 5/6 5/4 7.5YR 5/8 2.5Y 7/2 4/2					



DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.0508)	5	5
System Type(s)	IIIb	IIIb w/ Fill
Site LTAR	0.4	0.3
Maximum Trench Depth	18"	18"

SITE CLASSIFICATION (.0509): _____
 EVALUATED BY: DANNY THORNTON
 OTHER(S) PRESENT: N/A

Comments: BRINK 8+12 RPE: 0.58 RIGHT REAR CORNER OF UTILITY BOX
Remove US Fill MATERIAL THAT IS BELOW
18" TBD AND REPLACE UNSATURATED, FINE-GRAINED
SAND TO REQUIRE TBD EVALUATION
FRONT OF BOX

LEGEND

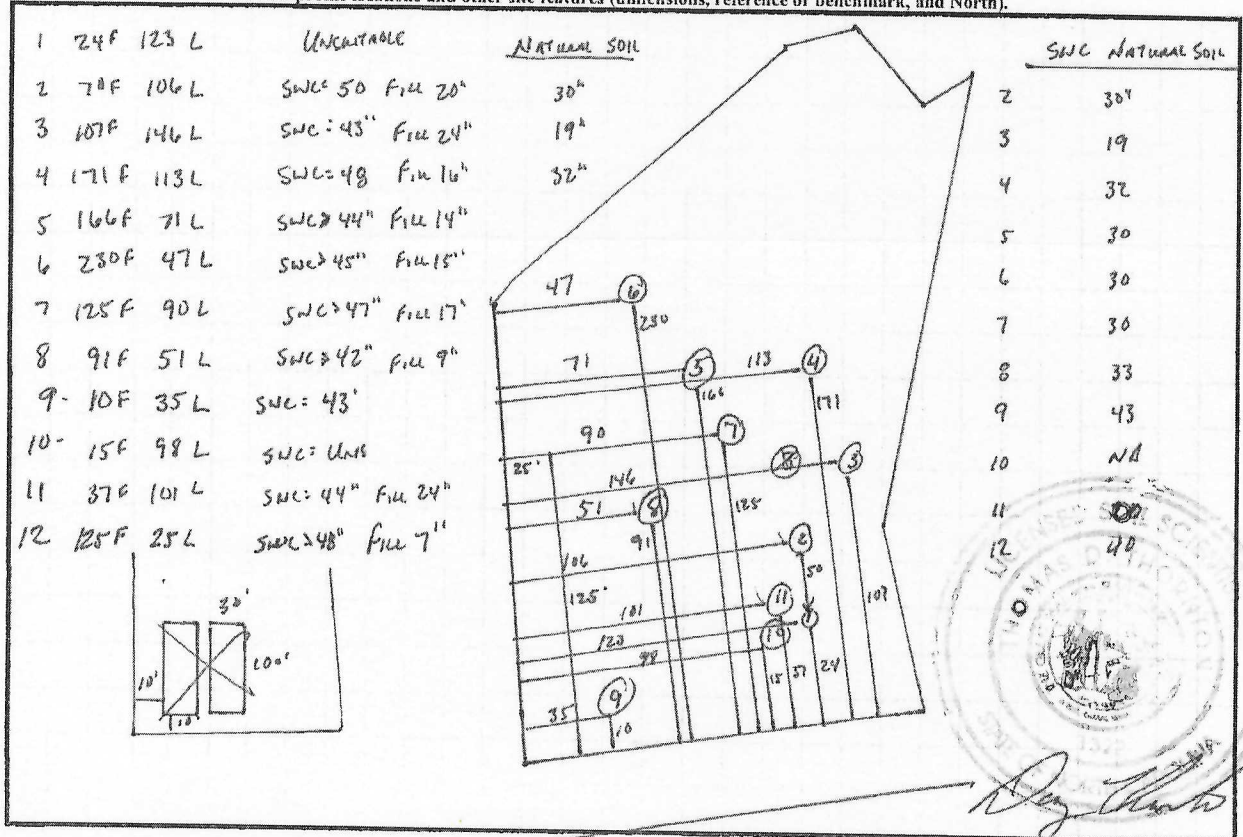
LANDSCAPE POSITION	SOIL GROUP	SOIL TEXTURE	CONVENTIONAL LTAR (gpd/ft ²)	SAPROLITE LTAR (gpd/ft ²)	LPP LTAR (gpd/ft ²)	MINERALOGY/ CONSISTENCE		STRUCTURE		
						MOIST	WET			
CC (Concave slope)	I	S (Sand)	0.8 - 1.2	0.6 - 0.8	0.4 - 0.6	MOIST	WET	SG (Single grain)		
CV (Convex Slope)		LS (Loamy sand)		0.5 - 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		0.05 - 0.2	SEXP (Slightly expansive)	EFI (Extremely firm)	SP (Slightly plastic)	PL (Platy)
N (Nose slope)		SiCL (Silty clay loam)						P (Plastic)		
R (Ridge/summit)		Si (Silt)							VP (Very plastic)	
S (Shoulder slope)		SC (Sandy clay)						EXP (Expansive)		
T (Terrace)	SiC (Silty clay)									
TS (Toe Slope)	C (Clay)									
	IV	O (Organic)	None							

New location 5/24
RP = 1.84
12 = 5.10
7 = 5.78

* 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.
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)

PARCEL B
WHITES CROSSING LN
SOIL BORING LOCATIONS

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



Survey For Current Owners

James R Cook AND WIFE
Catherine S Cook

Millville Township Columbus County N.C.
March 18 2025 Scale 1" = 50'
30 0 30 100 200
Dead Reference - Dead Mt. 2522 pg. 205 Per parcel no. 1053382

Certificate of Approval for Recording: I hereby certify that the subdivision plat shown herein has been found to comply with the Subdivision Regulations of the County of Columbus, North Carolina, and that this plat has been approved by the Columbus County Planning Director for recording in the office of the Register of Deeds of the County of Columbus, North Carolina.

[Signature]
Planning Director or Designee
3-31-2025
Date

I, Thomas R. Gorman, Register of Deeds for Columbus County hereby certify that the map or plat to which this certification is affixed meets all statutory requirements for recording in the office of the Register of Deeds of the County of Columbus, North Carolina.

[Signature]
Register of Deeds
3-31-2025
Date

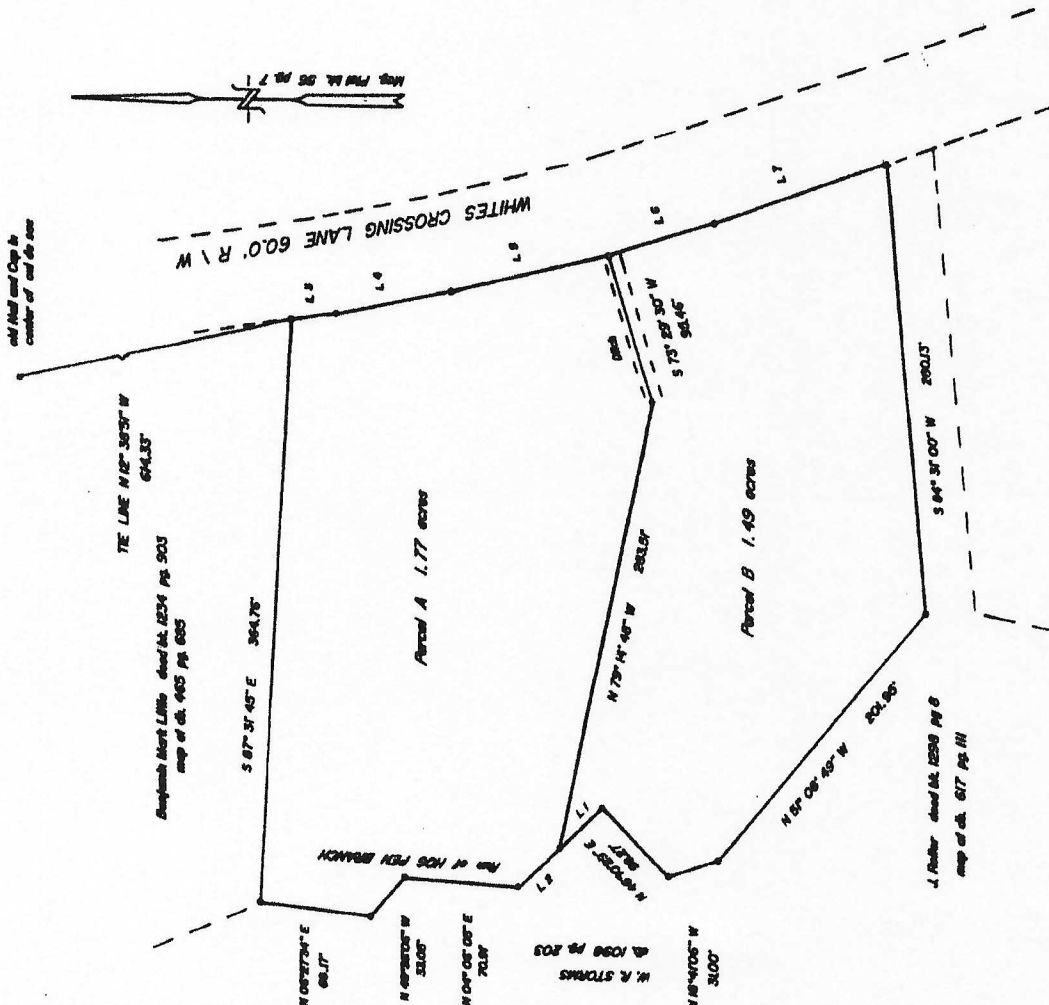
I, JIMMY DALE ETHERIDGE, PROFESSIONAL LAND SURVEYOR certify that this plat was drawn under my supervision from an actual survey made under my supervision, and describes an actual survey. That the ratio of precision as calculated is 1/100,000, and that the lines not surveyed are shown by broken lines plotted from information furnished and that this plat was prepared in accordance with G.S. 47-30 as amended. I further certify that this survey creates a subdivision of land within the area of a county or municipality, that the survey complies with the provisions of the laws of the State of North Carolina, and that License number 115 25 is in full force and effect as of March 27, 2025.

[Signature]
JIMMY DALE ETHERIDGE PLS No. L 5443



BK: PB 123
PG: 47-47

JIMMY DALE ETHERIDGE PROFESSIONAL LAND SURVEYOR
498 CRUISE ISLAND ROAD
WHITEVILLE N.C. 28472
PH 910 642 8635



Line Table (1: all lines follow based on all corners of this survey.)

L1	N 44° 27' 30" W	33.73
L2	N 44° 28' 58" W	36.77
L3	S 69° 07' 28" E	27.54
L4	S 17° 07' 57" E	73.27
L5	S 14° 44' 57" E	100.31

