Permit/File #:	



**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 Authorizati	on Fee \$
	IMPROVEN	MENT PERMIT FOR G.S. 130A	-335(a2)
County:			
Property Location:			
Subdivision (if applicat	ole)	Lot #:	Block: Section:
LSS Report Provided: `	Yes No 🗌		
If yes, name and licens	se number of LSS:		
New 🗌	Expansion	System Relocation	Change of Use
Facility Type:			
Number of bedrooms:	Number of Occupants: _	Other:	
Design Wastewater St	rength: Domestic	☐ High Strength ☐ Inc	dustrial Process Wastewater
Proposed Design Daily	Flow: GPD	Proposed LTAR (Initial):	Proposed LTAR (Repair):
Proposed Wastewater	System Type*:	(Initial) Pum	p Required: Yes No May be required
			Required: Yes No May be required
*Please include systen	n classification for proposed waste	water system types in accordance with	Rule .1301 Table XXXII
Effluent Standard:	DSE HSE NSF/ANSI 4	0 ☐ TS-I ☐ TS-II ☐ RCW	
Saprolite System (Initia	al): 🗌 Yes 🔲 No Saproli	te System (Repair): 🗌 Yes 🔲 No	
Fill System (Initial):	Yes No If yes, specify: No	ew Existing (when adding more t	han 6 inches of fill to system area provide a fill plan
Fill System (Repair):	Yes No If yes, specify: N	lew Existing (when adding more	than 6 inches of fill to system area provide a fill pla
Usable Depth to LC (In	itial) <sup>x</sup> :	Usable Depth to LC (Repair)x:	× Limiting Condition
Max. Trench Depth (In	itial)‡: Max. Ti	rench Depth (Repair)‡:	<sup>‡</sup> Measured on the downhill side of the trench
Artificial Drainage Req	uired: Yes No If yes, plea	se specify details:	
Type of Water Supply:	Private well Public well	Shared well Municipal Sup	ply Spring Other:
Drainfield location me	ets requirements of Rule .0508: Yo	es No Drainfield location m	eets requirements of Rule .0601: Yes 🔲 No 🗌
Permit valid for: 🔲 Fi	ve years [site plan submitted pursu	uant to GS 130A-334(13a)] 🔲 No exp	iration [plat submitted pursuant to GS 130A-334(7a
Permit conditions:			
Licensed Soil Scientist	Print Name:		
Licensed Soil Scientist	V )	tamo	Date:

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



Permit/File #:	
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### This Section for Local Health Department Use Only

initiai submittai received:		Dy	
	Date	Initials	
G.S. 130A-335(a3) states the following:			
When an applicant for an Improvement Permit submits to a local health depart department, the common form developed by the Department, and a soil evalu within five business days of receiving the application, conduct a completeness Permit includes all of the required components. If the local health department shall notify the applicant of the components needed to complete the Improven department to cure the deficiencies in the Improvement Permit. The local heal is complete within five business days after the local health department receive act within any period set out in this subsection, the applicant may treat the fair common form for use as the Improvement Permit.	ation pursuant to su review of the submit determines that the ment Permit. The app th department shall i st the additional infor	osection (a2) of this section, the local health departital. A determination of completeness means that the Improvement Permit is incomplete, the local health licant may submit additional information to the local make a final determination as to whether the Impromation from the applicant. If the local health depar	ment shall, e Improvement department al health vement Permit tment fails to
The review for completeness of this Improvement Permit was Permit is determined to be:	conducted in acc	cordance with G.S. 130A-335(a3). This Im	provement
☐ Incomplete (If box is checked, information in this section i	s required.)		
The following items are missing:			
	ļ <u> </u>		
Copies of this were sent to the LSS and the Applicant on	Date		
State Authorized Agent:		Date:	
☐ Complete			
State Authorized Agent:	-1/55	Date:	
This Improvement Permit is issued pursuant to G.S. 130A-335 attached here. The issuance of this permit in no way guarant for checking with appropriate governing bodies in meeting th plat, or the intended use changes. The Improvement Permit permit is subject to compliance with the provisions of 15A NOT The Department, the Department's authorized agents, and the any liabilities, duties, and responsibilities imposed by statute evaluations, submittals, or actions from a licensed soil scient	tees the issuance neir requirement shall not be affe CAC 18E and to t ne local health d or in common l	e of other permits. The permit holder is rest. This permit is subject to revocation if the cted by a change in ownership of the sitch he conditions of this permit.  Experiments shall be discharged and release from any claim arising out of or attribute.	esponsible the site plan, e. This
Improvement Permit Expiration Date:			

\*See attached site sketch\*



Permit/File #:
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### **Re-submittal of Improvement Permit**

	LHD USE ONLY: This IP resubmittal received:	Date	by	
		Dute	Illiuuis	
The following i	items are being resubmitted pursuant to G.S. 130A-335(	(a3) for issuance of	f the Improvement Permit:	
		TOTAL STATE		
	THE SIA	MF ~	Dr.	
l,	hereby attest that t	the information re	quired to be included with	n this re-submittal
is accurate and	Scientist (Print Name) complete to the best of my knowledge and that the pr l laws, regulations, rules, and ordinances.	oposed Improvem	ent Permit meets all appli	cable federal,
Signatui	re of Licensed Soil Scientist		Date	
	The section below is for Local Health Department use a	ıfter submittal of ite	ms noted as missing above.	
LHD Follow-	up Completeness Review of Improvement Pe	rmit		
	completeness of this Improvement Permit re-submittal Permit is determined to be:	l was conducted in	accordance with G.S. 130	IA-335(a3). This
☐ Incomplete	e (If box is checked, information in this section is require	ed.)		
The following it	tems are missing:			
Copies of this w	vere sent to the LSS and the Applicant on			
State Authorize	ed Agent:		Date:	
☐ Complete				
State Authorize	ed Agent:		Date:	



Permit/File #:	
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### CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)

County:			Pre-Construction Conference Required: Yes [	☐ No ☐
PIN/Lot Identifie	er:			
Issued To:				
Property Locatio	on:			
AOWE/PE Plans/	/Evaluations Provide	d: Yes No	If yes, name and license number of AOWE/PE:	
Facility Type:				
Number of bedro	ooms: Num	nber of Occupants:	: 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 Wastew	ater System*		(Initial)	(Repair)
*Please include s	system classification	for proposed was	tewater system types in accordance with Rule .1301 Table X	XXII
Design Daily Flo	w:	_GPD W	astewater Strength: Domestic High Strength	☐ Industrial Process WW
	.4-120 Section 53, Er rovide engineering do		Utilizing Low-flow Fixtures and Low-flow Technologies?	Yes No
Effluent Standar	d: DSE H	SE NSF/ANSI	40 TS-I TS-II RCW	
Type of Water S	upply: Private we	ell Public we	II Shared well Municipal Supply Spring	Other:
Installation Req	uirements/Conditio	ns		
Septic Tank Size:	: gallon	s Total Trench/B	sed Length: feet Trench/Bed Spacing: fee	t on center
Trench/Bed Wid	lth: inches	LTAR:	gpd/ft <sup>2</sup> Usable Depth to LC (Initial) <sup>x</sup> :	<sup>x</sup> Limiting condition
Soil Cover:	_ inches Slope (	Corrected Maximu	m Trench/Bed Depth‡: inches * Measured on th	e downhill side of the trench
Pump Tank Size	(if applicable):	gallons	Requires more than 1 pump? Yes No	
Pump Requirem	ents: ft. TDF	I vs GPM	Grease Trap Size (if applicable): gallons	
Distribution Met	thod: Serial	D-Box or Paralle	I Pressure Manifold(s) LPP Other:	119
Artificial Drainag	ge Required: Yes	No 🔲 If yes, p	lease specify details:	18
			f legal agreements, please attach a copy of the agreement.)	9
Multi-party Agre	eement Required [.02	204(g)]:	☐ No Declaration of Restrictive Covenan	its: Yes No
			Required [.0301(b)]: Yes No	
_		11/11/11	num O&M Requirements:	
		AB	KAVIAI - 70	
Permit conditi	ions:			
with the attache Construction Au	ed site sketch. <u>This</u> uthorization shall no ons of 15A NCAC 18	Construction Auth t be affected by a	by reference into this permit and shall be met. Systems sh norization is subject to revocation if the site plan, plat, or the change in ownership of the site. This Construction Author AA .1900, as applicable, and to the conditions of this permit	<u>e intended use changes.</u> The ization is subject to compliance
AOWE/PE Signat	X\	Maamo	Date:	
, 5.6.1at	· · · · · · · · · · · · · · · · · · ·			

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

\*See attached site sketch\*



Permit/File #:

### This Section for Local Health Department Use Only

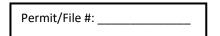
	Initial submittal received:	b	DY
		Date	Initials
G.S. 130A-335(a5) states the follow	ving:		
Improvement Permit and Construction Authoperatment, and any necessary signed and sengineer or a person certified pursuant to Audiengineer or a person certified pursuant to Audiengartment shall, within five business days of the Construction Authorization or Improvement of the Construction Authorization and the Construction Authorization and the Local health department of the Information to the local health department of the Information to the Information to the Information of the Information is complete within five busines department fails to act within any period seapply for the building permit for the project Authorization by the local health department licensed engineer submitting the evaluation Authorization or Improvement Permit and Continuation Improvement Permit and Continuation	orization application together, the per sealed plans or evaluations conducted rticle 5 of Chapter 90A of the General of receiving the application, conduct a nent Permit and Construction Authorization or Improvement Permit and Construction or Improvement Permit and Construction Authorization or Improvement Permit and construction Authorization of splete the Construction Authorization of shall make a final determination as to ss days after the local health department out in this subsection, the applicant of upon the decision of completeness of the or if the local health department fair pursuant to this subsection may requirement to this subsection for cause. Ususpend or revoke the Construction Authorization for cause.	rmit fee charged by the lot by a person licensed pur Statutes as an Authorized completeness review of ation includes all of the retruction Authorization is it or Improvement Permit a the Construction Authorized whether the Construction and the Construction authorized to act within five business that the local health of Joon written request of the fluthorization or Improvement	ation together, submits a Construction Authorization, or an ocal health department, the common form developed by the resuant to Chapter 89C of the General Statutes as a licensed of On-Site Wastewater Evaluator, the local health the submittal. A determination of completeness means that required components. If the local health department sincomplete, the local health department shall notify the reduced construction Authorization. The applicant may submit action or Improvement Permit and Construction and Information from the applicant. If the local health rect as a determination of completeness. The applicant may reaction or Improvement Permit and Construction ress days. The Authorized On-Site Wastewater Evaluator or department revoke or suspend the Construction he Authorized On-Site Wastewater or licensed then Permit and Construction pursuant to G.S.
The review for completeness of thi	s Construction Authorization v	vas conducted in ac	cordance with G.S. 130A-335(a5). This
Construction Authorization is deter	mined to be:		
☐ Incomplete (If box is checked,	information in this section is re	equired.)	
The following items are missing:		1	
41 04			
Copies of this were sent to the AOV	WE/PE and the Applicant on	J. Francisco	
		Date	
State Authorized Agent:			Date:
	C / The same		
Complete			
State Authorized Agent:	VALUE OF THE SECOND SEC		Date of Issuance:
attached here. This Construction A Construction Authorization shall n to compliance with the provisions The Department, the Department' any liabilities, duties, and responsiplans, evaluations, preconstruction the General Statutes as a licensed Authorized On-Site Wastewater Ev	Authorization is subject to revo ot be affected by a change in of the Laws and Rules for Sew 's authorized agents, and the libilities imposed by statute or n conference findings, submit engineer or a person certified valuator in GS 130A-335(a2), ( tments shall be responsible and	ocation if the site plownership of the sivage Treatment and local health department in common law frostals, or actions from Jays and (a7). The Dand bear liability for e operations permit	sing the signed and sealed plans or evaluations lan, plat, or the intended use changes. The te. This Construction Authorization is subject d Disposal and to the conditions of this permit.  ments shall be discharged and released from om any claim arising out of or attributed to a person licensed pursuant to Chapter 89C of a 5 of Chapter 90A of the General Statutes as an department, the Department's authorized their actions and evaluations and other a pursuant to GS 130A-337.



Permit/File #:
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### **Re-submittal of Construction Authorization**

	LHD USE ONLY: This CA resubmittal received:	Date	by	
The following is	Lems are being resubmitted pursuant to G.S. 130A-3	335(a5) for issuance o	f the Construction Authoriza	l tion:
	JUE ST	ATE	D	
is accurate and	hereby attest the state of the state of the state of the best of my knowledge and that the state of the best of my knowledge and that the state of t		equired to be included with tion Authorization meets all a	
Signatur	re of Authorized On-Site Wastewater Evaluator	4	Date	
LHD Follow-ւ	The section below is for Local Health Department of Completeness Review of Construction		ems noted as missing above.	
	completeness of this Construction Authorization re on Authorization is determined to be:	-submittal was condu	cted in accordance with G.S.	130A-335(a5).
☐ Incomplete (	(If box is checked, information in this section is req	uired.)		
The following it	ems are missing:			
	JAMES OUA	W AIDER		
Copies of this w	vere sent to the AOWE/PE and the Applicant on	Date		
State Authorize	d Agent:		Date:	
☐ Complete				
State Authorize	d Agent:		Date:	





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

County:	
PIN/Lot Identifier:	
Issued To:	
Additional Improvement Permit Conditions:	
STATE	
MAY 20.175	
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	18
Additional Construction Authorization Conditions:	7
1PRIL 12 1776	
1830 W X X V V V V V V V V V V V V V V V V V	
ACMINI 4.	

7

### Adams Soil Consulting, PLLC 1676 Mitchell Road Angier, NC 27501 919-414-6761

alexadams@bcsoil.com

September 25, 2025 Project #1623

"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)."

"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)"

RE: Wellers Knoll - Lot #15 (67 Single Barrel Ct.) Subdivision NC (Harnett County) for Davidson Homes

To whom it may concern:

Adams Soil Consulting (ASC) conducted a preliminary soil evaluation on the above referenced parcel to determine the areas of soils which are suitable for subsurface wastewater disposal systems (conventional & LPP). The soil/site evaluation was performed using hand auger borings during moist soil conditions based on the criteria found in the State Subsurface Rules, 15ANCAC 18E. From this evaluation, ASC is providing the attached 360 gallon/day septic design.

The suitable soils found on the subject property were relatively consistent in the initial and repair areas. The area designated for the initial/primary septic system (see attached septic plan) was found to contain soils with greater than 24 inches in depth before a restrictive horizon was encountered.

Please find the attached wastewater soil/site evaluation forms for specific soil properties found in the initial and repair areas as well as assigned soil long term acceptance rate (LTAR). Numerous soil borings were made throughout the property and representative soil profile descriptions for the primary septic field and repair area are provided. A location sketch for profile descriptions is also attached. The initial and primary septic fields were sized based on a flow rate of 360 gallons/day and utilizing Accepted Status. Any unauthorized site disturbance, filling, soil removal, or layout changes may result in the permit being revoked.

The septic installer contractor shall install the primary and repair (if needed) system on contour, see attached site plan for the primary system and repair locations. No underground utilities, water lines, or sprinkler systems shall be

placed into the initial or repair septic areas. Installation must meet all state and Harnett County regulations for septic system installation. The trenches must be installed in the same location as the site plan. If the installation is in question at the time of installation call me (Alex Adams) at 919-414-6761.

This report discusses the location of provisionally suitable soils identified on the property and does not guarantee the future function of any waste water disposal system installed.

If you have any questions regarding the findings on the attached map or in this report, please feel free to contact me anytime.

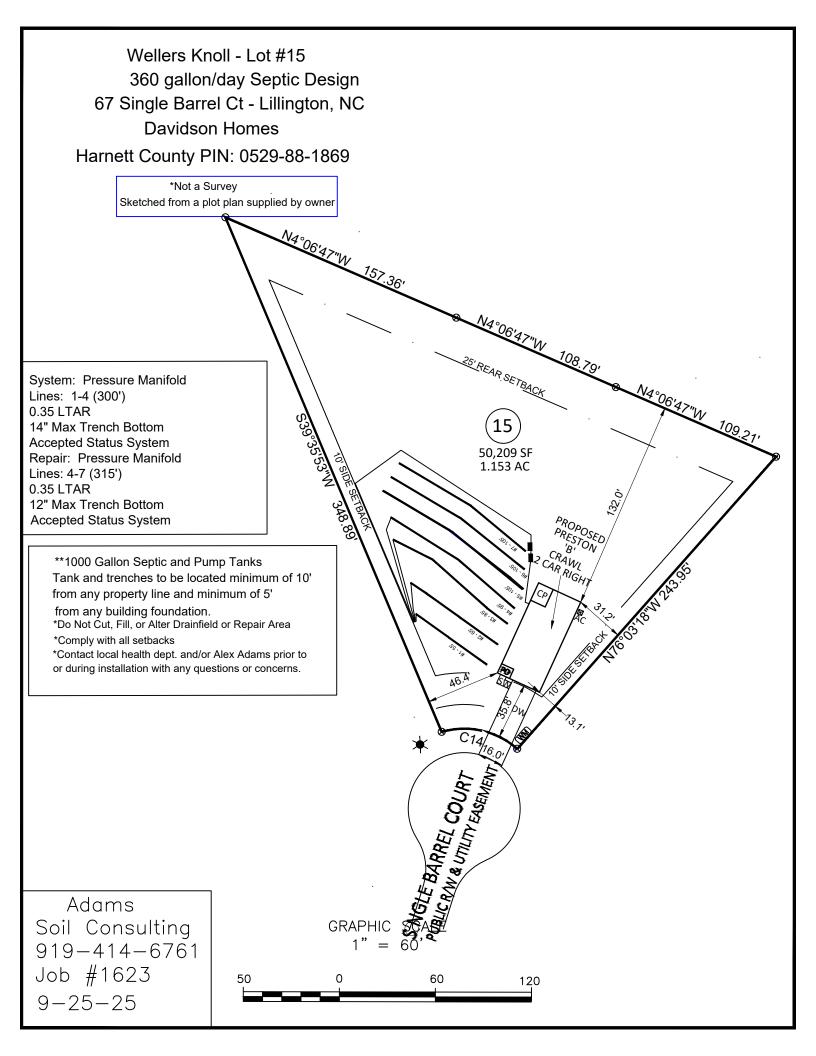
Sincerely,

Alex Adams

NC Licensed Soil Scientist #1247 AOWE Certification: 10021E







### **RESIDENTIAL PRESSURE MANIFOLD DESIGN**

Permit # Wellers Knoll Lot#15

# of BDR: 4 Daily Flow: 360 gal/day L.T.A.R.: 0.3500 gal/day/sq.ft

Septic Tank: 1000 gals Pump Tank: 1000 gals Sq. Foot: 900 System Type: Accepted

Number of Taps: 4 Length of Trenches: 300 ft(See Tap Chart for Details)

Depth of Trenches: 18 in Manifold Length: 42 in

Manifold Diameter: 4in sch 80pvc Tap Configuration: 6 in spacing 1 side(s) of manifold

Supply Line: length: <u>250</u> ft Diameter: <u>2</u> in sch 40pvc

Friction Loss + Fitting Loss: 7.88 ft(supply line length + 70' for fittings in pump tank)

Design Head:  $\underline{2}$  ft Elevation Head:  $\underline{20.00}$  ft

Total Head: 29.88 ft Pump to Deliver: 32.79 gals/min at 29.88 ft head

Dosing Volume: 146 gals,

Drawdown: 146 gals divided by  $\underline{20}$  gals/in =  $\underline{7.3}$  inches

Simplex Control Panel required; elapsed time meter and cycle counter required; Floats to be determined by type of pump tank used. A septic tank filter is required.

**TAP CHART** Benchmark is = 100.00Design Head: 2 Pump tank elev. 100.00 Pump elev. 95.00 Manifold elev. 115.00 # of Panels line color rod read Elevation length hole size flow/tap gal/day trench area LINE LTAR (PPBPS) 5.48 60.16 0.3646 100.00 1/2in SCH 80 1-Jan Orange 55 165 2 Red 100.00 65 1/2in SCH 40 7.11 78.06 195 0.4003 3 100.00 85 3/4in SCH 80 10.1 110.89 255 0.4349 Yellow 100.00 95 3/4in SCH 80 10.1 110.89 285 0.3891 100.00 n 0.00 0 #DIV/0! 100.00 0 0.00 0 #DIV/0! 100.00 0 0.00 0 #DIV/0! 100.00 0 0.00 #DIV/0! 0 100.00 0 0.00 0 #DIV/0! 100.00 Λ 0.00 0 #DIV/0! LTAR = Total Feet = gal/min = 32.79 0.3500 300 Feet Required = 257 Velocity = 3.14 (Itar + 5%) 0.3675 Total # of Panels (PPBPS) 360 (Itar w/25% red) 0.4667 Des. Flow % of Dose Vol. 75 Pump Run= 10.98 (Itar + 5%) 0.4900 Tank Gal/IN **Dose Volume** 146 20 **Dose Pump Time** 4.46 Elev. Head 20.00 **Drawdown in Inches** 7.3 Comments:

### SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

(Complete all fields in full)

OWNER: Davidson Homes

ADDRESS:

APPLICATION DATE: DATE EVALUATED: 9-19-25

PROPOSED FACILITY: Single Family, 4-bedroom PROPOSED DESIGN FLOW (.1949): 360 gpd

LOCATION OF SITE: 45 Charred Oak Ct. Lillington NC 27546

WATER SUPPLY: Public Water

EVALUATION METHOD: Auger Boring

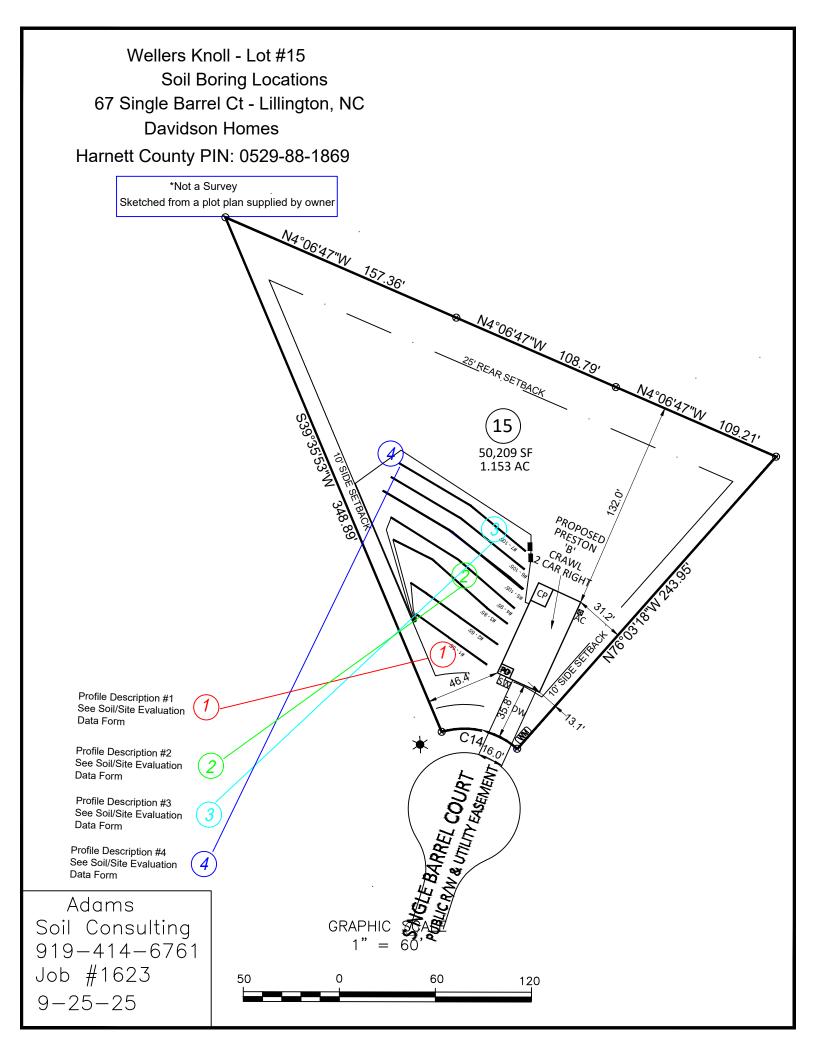
PROPERTY SIZE: .1.15 Acres

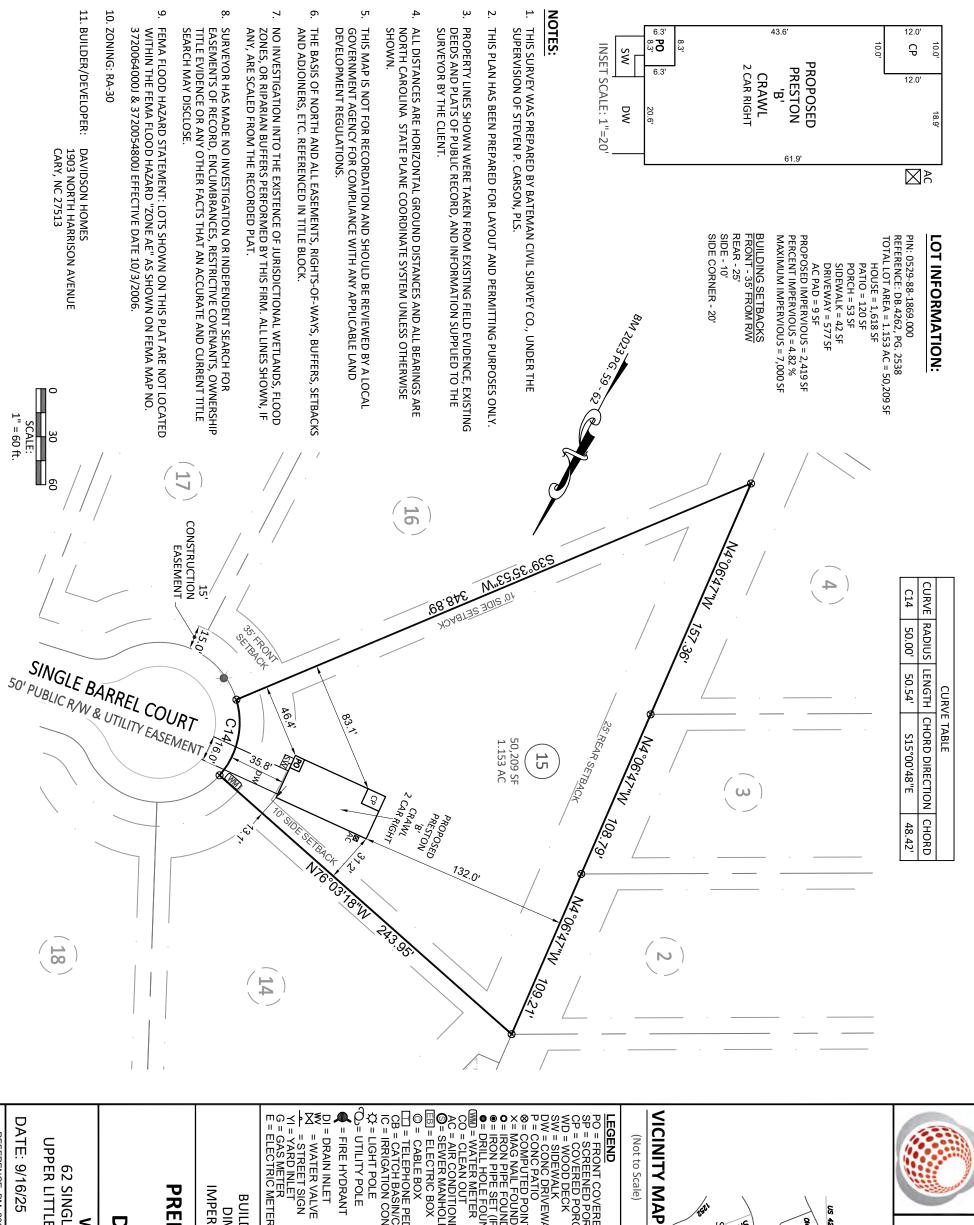
TYPE OF WASTEWATER: Sewage

P R O F I L E	.1940 LANDSCAPE POSITION/ SLOPE %	.1940 ANDSCAPE HORIZON POSITION/ DEPTH	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
	Linear Slope/5%	0-8	GR/LS	VFR/SEXP/NS	34" 34"	34"	34" N.O N.O	N.O	PS/.4
		8-34	SBK/SCL	FR/SEXP/NS					
	Lingar	0.0	СРИС	VED /CEVD/NC	202	DT/A	NO	N.O.	DG / 2.5
	Linear Slope/5%	0-8	GR/LS	VFR/SEXP/NS	28"	N/A	N.O	N.O	PS/.35
	2.10 p. 0.70	8-28	SBK/SCL	FR/SEXP/NS					
	Linear	0-8	GR/LS	VFR/SEXP/NS	26"	N/A	N.O	N.O	PS/.35
3	Slope/5%	8-26	SBK/SCL	FR/SEXP/NS	_,				
	Linear Slope/5%	0-8	GR/LS	VFR/SEXP/NS	31"	N/A	N.O	N.O	PS/.35
		8-31	SBK/SCL	FR/SEXP/NS					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	OTHER FACTORS (.1946):
Available Space (.1945)	s	s	SITE CLASSIFICATION (.1948): PS
System Type(s) Type III B Type I		Type III B	EVALUATED BY:A. Adams OTHER(S) PRESENT:
Site LTAR	0.35	0.35	

COMMENTS:\_







US 421 N

US 421

6Gb)

1521

1258

97!S

SITE

16 EJ #

NC 210 S

# **Bateman Civil Survey Company**

Engineers • Surveyors • Planners

2524 Reliance Avenue, Apex, NC 27539 Ph. 919.577.1080 Fax. 919.577.1081 www.batemancivilsurvey.com NCBELS Firm No. C-2378 info@batemancivilsurvey.com

DEGEND

PO = FRONT COVERED PORCH/PATIO
SP = SCREENED PORCH/PATIO
CP = COVERED PORCH/PATIO
WD = WOOD DECK
SW = SIDEWALK
DW = CONC DRIVEWAY
P = CONC DRIVEWAY
P = CONC DRIVEWAY
P = CONC PATIO

SW = SIDEWALK
DW = CONC PATIO
O = RON PIPE SET (IPS)
O = IRON PIPE SET (IPS)
O = CABLE BOX
CO = CLEAN OUT
AC = AIR CONDITIONER
O = CABLE BOX
C = CATCH BASIN/CURB INLET
IC = IRRIGATION CONTROLLER
C = UTILITY POLE

SW = LIGHT POLE
W = WATTER VALVE
SW = LIGHT NALVE
SW = LIGHT POLE
G = GAS METER
C = GAS METER
E = ELECTRIC METER

C = GAS METER

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. REFERENCED IN TITLE BLOCK ); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN

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

## PRELIMINARY PLOT PLAN FOR

DAVIDSON HOMES

UPPER LITTLE RIVER TOWNSHIP, HARNETT COUNTY 62 SINGLE BARREL COURT, LILLINGTON, NC **WELLERS KNOLL - LOT 15** 

ATE: 9/16/25 DRAWN BY: MJA CHECKED BY: SPC

REFERENCE: BM. 2023, PG. 59-62 BCS# 230051 SCALE: 1" = 60'