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:	(a2) Improvement Permit	(a2) Construction Auth	orization Fee \$	
	IMPROVEN	MENT PERMIT FOR G.S.	130A-335(a2)	
County:				
PIN/Lot Identifier:				
Issued To:				
Property Location:				
Subdivision (if applicat	ole)	Lot #:	Block:	Section:
LSS Report Provided: \	Yes No No			
If yes, name and licens	se number of LSS:			
New 🗌	Expansion	System Relocation	Change o	f Use 🗌
Proposed Structure:				
Number of bedrooms:	Number of Occupants: _	Other:		
Design Wastewater Sti	rength:  domestic	high strength	industrial process	
Proposed Design Daily	Flow:GPD	Proposed LTAR (Initial):	Proposed LTAR (Rep	oair):
Proposed Wastewater	System Type*:	(Initial)	Pump Required: Yes	No May be required
Proposed Wastewater	System Type*:	(Repair)	Pump Required: Yes	No May be required
*Please include system	n classification for proposed wastev	water system types in accordanc	ce with 15A NCAC 18A .1961 T	able V(a)
Saprolite System (initia	al): 🗌 Yes 🔲 No Saprolit	te System (repair): 🗌 Yes 🔲 🏾	No	
Fill System (Initial):	Yes No If yes, specify: Ne	ew Existing (when adding	more than 6 inches of fill to sy	vstem area provide a fill plan)
Fill System (repair):	Yes No If yes, specify: No	ew Existing (when adding	more than 6 inches of fill to sy	ystem area provide a fill plan)
Usable Soil Depth (Init	ial): Usable	Soil Depth (Repair):		
Max. Trench Depth (In	itial) <sup>‡</sup> : Max. Tr	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 Municip	al Supply Spring	Other:
Drainfield location me	ets requirements of Rule .1945: Ye	es 🔲 No 🔲 Drainfield loca	tion meets requirements of R	ule .1950: Yes No No
Permit valid for: Five	ve years [site plan submitted pursu	uant to GS 130A-334(13a)]	No expiration [plat submitted	pursuant to GS 130A-334(7a)
Permit conditions:				
Licensed Soil Scientist	$M \circ \Delta \Delta$			
Licensed Soil Scientist	Signature: X Lev No	amæ	Date:	

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 #:
-----------

## This Section for Local Health Department Use Only

Initial subn	nittal received:		by		
		Date	Initials	5	
G.S. 130A-335(a3) states the following:					
When an applicant for an Improvement Permit submits to department, the common form developed by the Departm within five business days of receiving the application, condepermit includes all of the required components. If the local shall notify the applicant of the components needed to condepartment to cure the deficiencies in the Improvement Pois complete within five business days after the local health act within any period set out in this subsection, the applications form for use as the Improvement Permit.	ent, and a soil evaluati duct a completeness rev I health department de mplete the Improvemer ermit. The local health o department receives ti	on pursuant to su view of the submit termines that the nt Permit. The app department shall he additional info	bsection (a2) of thi tal. A determinatic Improvement Pern Ilicant may submit make a final detern rmation from the a	is section, the local hea on of completeness me nit is incomplete, the lo additional information mination as to whether applicant. If the local he	Ith department shall, ans that the Improvement cal health department to the local health the Improvement Permit ealth department fails to
The review for completeness of this Improvem Permit is determined to be:	ient Permit was co	onducted in ac	cordance with (	G.S. 130A-335(a3)	. This Improvement
☐ Incomplete (If box is checked, information	ı in this section is r	equired.)			
The following items are missing:					
Copies of this were sent to the LSS and the Ap		Date			
State Authorized Agent:				Date:	
☐ Complete	3//0			121	
State Authorized Agent:				Date:	
This Improvement Permit is issued pursuant to attached here. The issuance of this permit by permit holder is responsible for checking with to revocation if the site plan, plat, or the interownership of the site. This permit is subject to Disposal and to the conditions of this permit.	y the Health Depar n appropriate gove nded use changes. to compliance witl	rtment in no we erning bodies . The Improve	ay guarantees in meeting the ement Permit s	the issuance of o ir requirements. T shall not be affecte	ther permits. The his permit is subject ed by a change in
The Department, the Department's authorize any liabilities, duties, and responsibilities imp evaluations, submittals, or actions from a lice	osed by statute o	r in common l	aw from any cl	laim arising out of	or attributed to
Improvement Permit Expiration Date:					

\*See attached site sketch\*



Permit #:	
-----------	--

## **Re-submittal of Improvement Permit**

Г				$\neg$
	LHD USE ONLY: This IP resubmittal received:		by	
		Date	Initials	
The following it	ems are being resubmitted pursuant to G.S. 130A-335(	(a3) for issuance	of the Improvement Permit:	
	STA	The	A.	
	A THE SH	THE OF		
is accurate and o	hereby attest that cientist (Print Name) complete to the best of my knowledge and that the prolams, regulations, rules, and ordinances.		required to be included with ement Permit meets all appli	
Signature	e of Licensed Soil Scientist		Date	
	The section below is for Local Health Department use o	after submittal of	items noted as missing above.	
LHD Follow-u	p Completeness Review of Improvement Pe	ermit		
	ompleteness of this Improvement Permit re-submitta ermit is determined to be:	l was conducted	in accordance with G.S. 130	A-335(a3). This
☐ Incomplete	(If box is checked, information in this section is requir	red.)		
The following ite	ems are missing:			
	The second	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
Copies of this we	ere sent to the LSS and the Applicant on			
State Authorized	d Agent:		Date:	
☐ Complete				
State Authorized	d Agent:		Date:	



Permit #:	
-----------	--

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

County:
PIN/Lot Identifier:
ssued To:
Property Location:
AOWE/PE Plans/Evaluations Provided: Yes 🔲 No 🔲 If yes, name and license number of AOWE/PE:
Facility Type:
New Expansion Repair System Relocation Change of Use
Basement? Yes No Basement Fixtures? Yes No
Type of Wastewater System*(Initial)(Repa
*Please include system classification for proposed wastewater system types in accordance with 15A NCAC 18A .1961 Table V(a)
Design Daily Flow: GPD Wastewater Strength: _ domestic _ high strength _ industrial process
Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies? Yes No (if yes, please provide engineering documentation)
Installation Requirements/Conditions
Septic Tank Size: gallons Total Trench/Bed Length: feet Trench/Bed Spacing: feet on center
Trench/Bed Width: inches LTAR: gpd/ft²
Soil Cover: inches Slope Corrected Maximum Trench/Bed Depth <sup>‡</sup> : inches * Measured on the downhill side of the trench
Aggregate Depth:inches above pipeinches below pipeinches total
Pump Tank Size (if applicable): gallons Requires more than 1 pump? 🔲 Yes 🔲 No
Pump Requirements: ft. TDH vs GPM Grease Trap Size (if applicable): gallons
Distribution Method: Serial D-Box or Parallel Pressure Manifold(s) LPP Other:
Artificial Drainage Required: Yes No If yes, please specify details:
Legal Agreements (If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)
Multi-party Agreement Required [.1937(h)]:
Easement, Right-of-Way, or Encroachment Agreement Required [.1938(j)]: 🔲 Yes 🔲 No
Declaration of Restrictive Covenants:
Pre-Construction Conference Required: Yes No No
Conditions:
All tarders
The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference
nto this permit and shall be met. Systems shall be installed in accordance with the attached system layout.
AOWE/PE Print Name: Expiration Date:
AOWE/PE Signature: Date:

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

\*See attached site sketch\*



Permit #:
-----------

## This Section for Local Health Department Use Only

	Initial submittal received:		у
		Date	Initials
G.S. 130A-335(a5) states the foll	_		
mprovement Permit and Construction A Department, and any necessary signed a singineer or a person certified pursuant to department shall, within five business do the Construction Authorization or Improved the English of the Components needed to conditional information to the local health Authorization. The local health department fails to act within five busing ply for the building permit for the project of the english of the building permit for the project of the englished engineer submitting the evaluation or Improvement Permit and engineer, the local health department shall he partment shall he p	uthorization application together, the per and sealed plans or evaluations conducted to Article 5 of Chapter 90A of the General tys of receiving the application, conduct a tyement Permit and Construction Authorization or Improvement Permit and Construction Authorization of the department to cure the deficiencies in the stall make a final determination as to the stall make a final determination as to stall make a final determination as to stall make a	rmit fee charged by the lot by a person licensed pur Statutes as an Authorized a completeness review of a truction Authorization is it or Improvement Permit as the Construction Authorization are treceives the additional may treat the failure to a fail to act within five busing lest that the local health of Joon written request of the uthorization or Improvem	ation together, submits a Construction Authorization, or an an acal health department, the common form developed by the suant 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 encomplete, the local health department shall notify the not Construction Authorization. The applicant may submit action or Improvement Permit and Construction and Information from the applicant. If the local health act as a determination of completeness. The applicant may reaction or Improvement Permit and Construction ess days. The Authorized On-Site Wastewater Evaluator or department revoke or suspend the Construction are Authorized On-Site Wastewater Evaluator or licensed then Permit and Construction Authorization pursuant to G.S.
The review for completeness of	this Construction Authorization v	was conducted in acc	cordance with G.S. 130A-335(a5). This
Construction Authorization is de	termined to be:		
☐ Incomplete (If box is checke	d, information in this section is re	equired.)	
The following items are missing:			
Copies of this were sent to the A	.OWE/PE and the Applicant on _	Date	4V 76 //
State Authorized Agent:			Date:
Complete	The factor of	S-2 7 67 67	
State Authorized Agent:	J. PRIL	12 1776	Date of Issuance:
attached here. This Construction Construction Authorization shall to compliance with the provision The Department, the Department in liabilities, duties, and respondans, evaluations, preconstructive General Statutes as a license Authorized On-Site Wastewater agents, and the local health department in the statement in the statem	n Authorization is subject to revil not be affected by a change in ns of the Laws and Rules for Sevent's authorized agents, and the insibilities imposed by statute or tion conference findings, submited engineer or a person certified Evaluator in GS 130A-335(a2), (	ocation if the site pl ownership of the si wage Treatment and local health departn r in common law fro ctals, or actions from d pursuant to Article (a5), and (a7). The D nd bear liability for	ing the signed and sealed plans or evaluations an, plat, or the intended use changes. The te. This Construction Authorization is subject I Disposal and to the conditions of this permit.  Inents shall be discharged and released from any claim arising out of or attributed to a a person licensed pursuant to Chapter 89C of 5 of Chapter 90A of the General Statutes as an epartment, the Department's authorized their actions and evaluations and other pursuant to GS 130A-337.
Construction Authorization Exp	ration Date:		
·			
	dia .		

\*See attached site sketch\*



Permit #:	
-----------	--

### **Re-submittal of Construction Authorization**

	LHD USE ONLY: This CA reculpmittal received:		by	
	LHD USE ONLY: This CA resubmittal received:	Date	by Initials	
The following in	tems are being resubmitted pursuant to G.S. 130A-33	35(a5) for issuance of	of the Construction Authoriza	ition:
		A TOTAL A		
l,		at the information re	equired to be included with	this re-submittal
is accurate and	nsite Wastewater Evaluator (Print Name) complete to the best of my knowledge and that the and local laws, regulations, rules, and ordinances.	proposed Construct	tion Authorization meets all	applicable
Signatur	re of Authorized On-Site Wastewater Evaluator		Date	
I HD Follow-ı	The section below is for Local Health Department us		ems noted as missing above.	
The review for o	completeness of this Construction Authorization re-son Authorization is determined to be:		ucted in accordance with G.S	. 130A-335(a5).
☐ Incomplete (	(If box is checked, information in this section is requi	ired.)		
The following it	ems are missing:			
	AUO 30° MI	M VIDER	19	
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:	

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

alexadams@bcsoil.com

February 28, 2024 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)"

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

RE: Wellers Knoll - Lot #36 (207 Van Winkle St.) 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 480 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 480 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.

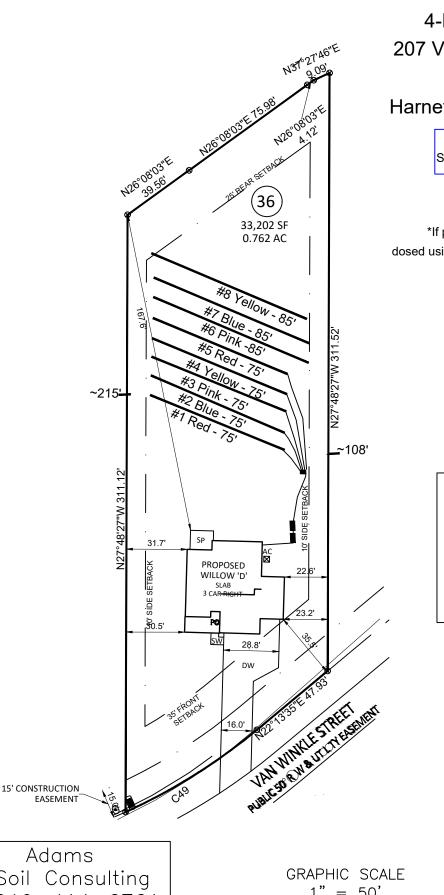
Sincerely,

Alex Adams

NC Licensed Soil Scientist #1247 AOWE Certification: 10021E







Wellers Knoll - Lot #36
4-Bedroom - Septic Design
207 Van Winkle St. - Lillington, NC
Davidson Homes
Harnett County PIN: 0529-87-1937

\*Not a Survey

Sketched from a plot plan supplied by owner

\*If plumbing is sufficient then septic field may be dosed using gravity dispersal either serial or gravity to D-Box

System: Pressure Manifold

Lines: 1-5 (375') 0.35 LTAR

18" Max Trench Bottom Accepted Status System Repair: Pressure Manifold

Lines: 6-8 (255') 0.35 LTAR

18" Max Trench Bottom

PPBPS- 50% reduction system

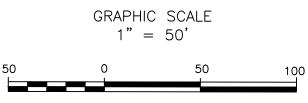
\*\*1000 Gallon Septic and Pump Tanks
Tank and trenches to be located minimum of 10'
from any property line and minimum of 5'
from any building foundation.

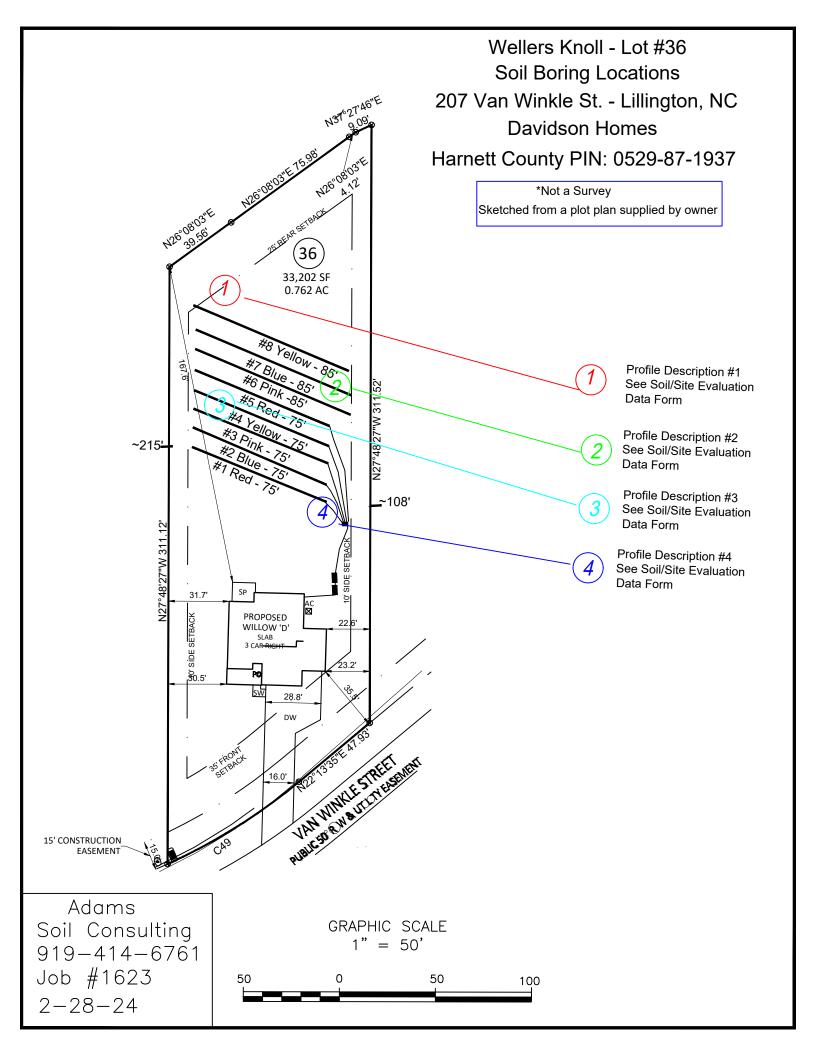
\*Do Not Cut, Fill, or Alter Drainfield or Repair Area

\*Comply with all setbacks

\*Contact local health dept. and/or Alex Adams prior to or during installation with any questions or concerns.

Adams
Soil Consulting
919-414-6761
Job #1623
2-28-24





#### RESIDENTIAL PRESSURE MANIFOLD DESIGN

Davidson Homes

Lot 36 Wellers Knoll

# of BDR: 4 Daily Flow: 480 gal/day L.T.A.R.: 0.3500 gal/day/sq.ft

Septic Tank: 1000 gals Pump Tank: 1000 gals Sq. Foot: 1125 System Type: Accepted

Number of Taps: 5 Length of Trenches: 375 ft(See Tap Chart for Details)

Depth of Trenches: 18 in Manifold Length: 48 in

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

Supply Line: length: 50 ft Diameter: 2 in sch 40pvc

Friction Loss + Fitting Loss: 3.43 ft(supply line length + 70' for fittings in pump tank)

Design Head:  $\underline{2}$  ft Elevation Head:  $\underline{8.00}$  ft

Total Head: 13.43 ft Pump to Deliver: 35.55 gals/min at 13.43 ft head

Dosing Volume: <u>171</u> gals,

Drawdown: 171 gals divided by  $\underline{21.4}$  gals/in =  $\underline{8.0}$  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 = 100.00set at Design Head: 2 Pump tank elev. 10 90.00 Pump elev. 85.00 Manifold elev. 93.00 # of Panels Spacing of LINE LTAR line color rod read Elevation length hole size flow/tap gal/day trench area (PPBPS) Panels (in) 1 8.00 92.00 75 1/2in SCH 40 7.11 96.00 225 0.4267 2 8.30 91.70 75 1/2in SCH 40 7.11 96.00 225 0.4267 8.60 91.40 75 1/2in SCH 40 7.11 96.00 225 0.4267 3 8.90 91.10 75 1/2in SCH 40 7.11 96.00 225 0.4267 9.20 90.80 75 1/2in SCH 40 7.11 96.00 225 0.4267 Total Feet = 375 gal/min = 35.55 LTAR = 0.3500 Feet Required = 113 Velocity = 3.40 (Itar + 5%) 0.3675 Total # of Panels (PPBPS) Des. Flow 480 (Itar w/25% red) 0.4667 % of Dose Vol. 70 Pump Run= 13.50 (Itar + 5%) 0.4900 **Dose Volume** Tank Gal/IN 171 21.4 **Dose Pump Time** 4.80 Elev. Head 8.00 Drawdown in Inches 8.0 Comments:

# SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

(Complete all fields in full)

OWNER: Davidson Homes

ADDRESS: 207 Van Winkle St. - Lot 36 Wellers Knoll

PROPOSED FACILITY: Single Family, 3-bedroom PROPOSED DESIGN FLOW (.1949): 480gpd

LOCATION OF SITE: 207 Van Winkle St. – Lot 36 Wellers Knoll

WATER SUPPLY: Public Water

EVALUATION METHOD: Auger Boring

APPLICATION DATE:

DATE EVALUATED: 2-28-24

PROPERTY SIZE: ∼.6 acres

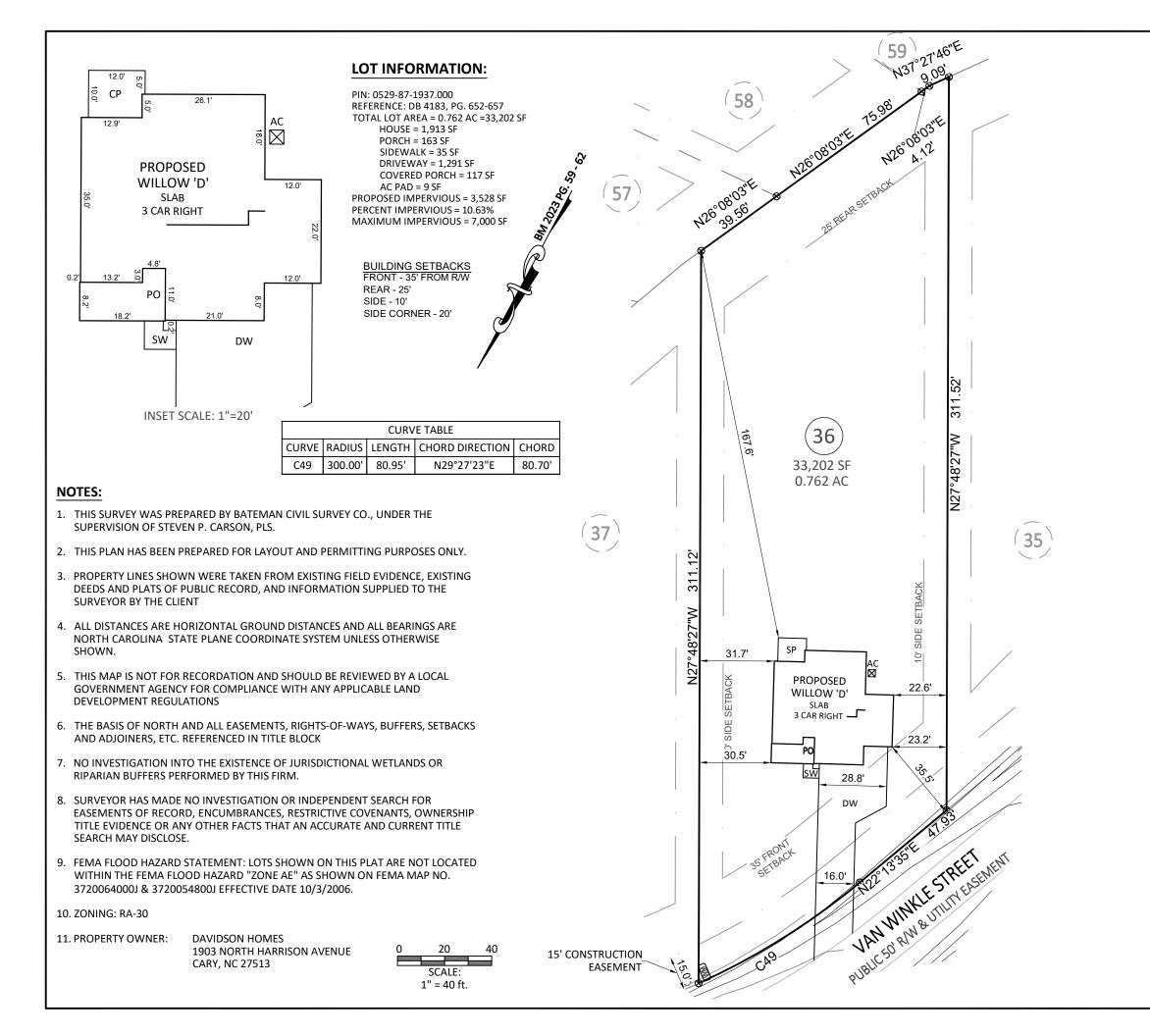
TYPE OF WASTEWATER: Sewage

P R O F I L E	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	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
	$C1_{-} = -/20/$	0-8	GR/SL	FR/SEXP/NS	32"	N/A	N/A	N/A	PS/0.35
		8-32	SBK/SCL	FI/SEXP/SS					
	Linear Slope/3%	0-14	GR/SL	FR/SEXP/NS	34"	N/A	N/A	N/A	PS/0.35
		14-36	SBK/SCL	FI/SEXP/SS					
	Linear Slope/3%	0-15	GR/SL	FR/SEXP/NS	33"	N/A	N/A	N/A	PS/0.35
		15-36	SBK/SCL	FI/SEXP/SS					
	Linear Slope/3%	0-12	GR/SL	FR/SEXP/NS	34"	N/A	N/A	N/A	PS/0.35
		12-36		FI/SEXP/SS					1 5/ 0.33

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	OTHER FACTORS (.1946):				
Available Space (.1945)	>5,000 ft <sup>2</sup>	>5,000 ft <sup>2</sup>	SITE CLASSIFICATION (.1948): PS				
System Type(s)	Type III (b) Type III (b)		EVALUATED BY:A. Adams OTHER(S) PRESENT:				
Site LTAR	0.35	0.35					

COMMENTS:

Updated February 2014

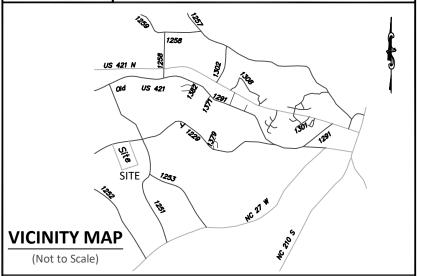




## **Bateman Civil Survey Company**

Engineers • Surveyors • Planners

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



#### **LEGEND**

PO = PORCH
SP = SCREENED PORCH/PATIO
CP = COVERED PORCH/PATIO
WD = WOOD DECK

SW = SIDEWALK

DW = CONC DRIVEWAY
P = CONC PATIO

**⊗= COMPUTED POINT** X = MAG NAIL FOUND

O = IRON PIPE FOUND (IPF) • = IRON PIPE SET (IPS) = DRILL HOLE FOUND

WM = WATER METER CO = CLEAN OUT AC = AIR CONDITIONER

S = SEWER MANHOLE EB = ELECTRIC BOX

© = CABLE BOX = TELEPHONE PEDESTAL

CB = CATCH BASIN IC = IRRIGATION CONTROLLER

₩ = LIGHT POLE S= UTILITY POLE

= FIRE HYDRANT

DI = DRAIN INLET

₩V = WATER VALVE = STREET SIGN

YI = YARD INLET G = GAS METER E = ELECTRIC 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.

SCALE: 1" = 40'

I, STEVEN P. CARSON, CERTIFY THAT THIS PLAT WAS

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

REQUIREMENTS OF THE STANDARD OF PRACTICE FOR

1:10,000+; AND THAT THIS MAP MEETS THE

LAND SURVEYING IN NORTH CAROLINA. L-4752

DRAWN UNDER MY DIRECT SUPERVISION FROM A

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

### PRELIMINARY PLOT PLAN **FOR**

### **DAVIDSON HOMES**

#### **WELLERS KNOLL - LOT 36**

207 VAN WINKLE STREET, LILLINGTON, NC LITTLE RIVER TOWNSHIP, HARNETT COUNTY

DATE: 2/9/24 DRAWN BY: MJA CHECKED BY: SPC

REFERENCE: BM 2023 PG. 59-62 BCS# 230051