County: Harnett
IMPROVEMENT PERMIT FOR G.S. 130A-335(a2)/SL2022-11
PIN/Lot Identifier: 1529-88-6681 Issued To: Davidson Homes
Property Location: 48 Van Winkle St Lillingtion, NC
Subdivision: Wellers Knoll Lot #: 21 Block: Section:
LSS Report Provided: Yes No If yes, name and license number of LSS: Alex Adams - LSS #1247
New Repair Expansion System Relocation Proposed Structure: SFH
Proposed Wastewater System Type: Type III (b) Type III (b) (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): 0.35 Proposed LTAR (Repair): 0.35 Design Wastewater Strength: domestic high strength industrial process Number of bedrooms: 4 Number of Occupants: 8 Other:
Pump Required:
Licensed Soil Scientist Print Name: Licensed Soil Scientist Signature: Date: 3/29/23 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 ose only
Initial submittal received: 3130123 by Initials Permit Number: 5702303 (Vol. 20)
Permit Number: SFD 2303 (XX20
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
State Authorized Agent: Date:
☐ Denied (See attached report.) Copies of this were sent to the LSS and the Owner on
State Authorized Agent: Date:
Julie Mathematical Restriction of the Control of th
Complete State Authorized Agent: Date of Issuance: 4-3-23
This Improvement Permit is issued pursuant to G.S. 130A-335 (a2), (a3), and (a4) using the signed and sealed LSS/LG evaluation 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 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: 4-3-23

See attached site sketch

county: Harnott

County:	Harnett	

CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)/SL2022-11

PIN/Lot Identifier: 0529-88-6681
Issued To: Davidson Homes
Property Location: 48 Van Winkle St Lillingtion, NC
AOWE/PE Plans/Evaluations Provided: Yes 🗸 No 🗌 If yes, name and license number of AOWE/PE: Alex Adams - AOWE#10021E
Facility Type: SFH
✓ New
Basement? Yes No Basement Fixtures? Yes No
Type of Wastewater System** Type III (b) (Initial) Type III (b) (Repair)
Design Daily Flow: 480 GPD Wastewater Strength: domestic high strength industrial process
Session Law 2014-120 Section 53, Engineering Design Utilizing Low-flow Fixtures and Low-flow Technologies?
Installation Requirements/Conditions
Septic Tank Size: 1000 gallons Total Trench/Bed Length: 360 feet Trench/Bed Spacing: 9 feet on center
Drainfield square footage: 1080 Trench/Bed Width: 36 inches LTAR: 0.35 gpd/ft²
Soil Cover: 6 inches Slope Adjusted Maximum Trench/Bed Depth: 24 inches
Aggregate Depth: 6 inches above pipe 6 inches below pipe 12 inches total
Pump Tank Size (if applicable): 1000 gallons Requires more than 1 pump? Yes No
Pump Requirements: 8.6 ft. TDH vs. 21.3 GPM Grease Trap Size (if applicable): gallons
Distribution Method: Serial D-Box or Parallel Pressure Manifold(s) LPP Other:
Artificial Drainage Required: Yes No V If yes, please specify details:
<u>Legal Agreements</u> (If the answer is "Yes" to any type of legal agreements, please attach a copy of the agreement.)
Multi-party Agreement Required [.1937(h)]: Yes V No
Easement, Right-of-Way, or Encroachment Agreement Required [.1938(j)]: Yes 🔽 No
Declaration of Restrictive Covenants: Yes V No
**if applicable:
I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit.
Owner/Legal Representative Print Name: <u>Celinda Howell</u>
Owner/Legal Representative Signature: Columbor Howell Date: 03/29/23
Pre-Construction Conference Required: Yes V No
Conditions:
The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by reference
into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.
AOWE/PE Print Name: Alex Adams
AOWE/PE Signature: Date: 3/29/23
This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5).
Con attached site sketch

county: Harnett

G.S. 130A-335(a6) states the following: 'If a local health department fails to act on an application for a construction authorization submitted pursuant to subsection (a5) of the section within 10 business days of receipt of a complete application, the local health department shall issue the construction authorization.' In accordance with G.S. 130A-335(a5) the construction authorization 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 AOWE/PE and the Owner on State Authorized Agent: ___ Denied (See attached report.) Copies of this were sent to the AOWE/PE and the Owner on State Authorized Agent: _ Complete State Authorized Agent: This Construction Authorization is issued pursuant to G.S. 130A-335(a2), (a5), and (a6) 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, or if information submitted in the application was falsified, inaccurate or misleading. 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 location and identification of all property lines, easements, water lines, and other appropriate utilities shall be the responsibility of the owner. Final landscaping shall be constructed to divert water and establish vegetative cover. 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: 4-3-23 *See attached site sketch*

This Section for Local Health Department Use Only

Initial submittal received: 3130173 by Initials

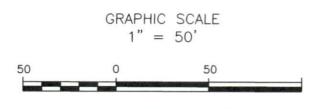
Wellers Knoll - Lot #21 4-Bedroom - Septic Design 48 Van Winkle St. - Lillingtion, NC **Davidson Homes**

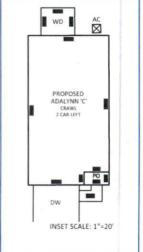
Harnett County PIN: 0529-88-6681

*Not a Survey Sketched from a plot plan supplied by owner

Pump to supply: N81°51'24"E 100.00 21.3gallons/minute at 8.6 feet of head *If plumbing is sufficient then gravity may be used to dose septic field. System: Pressure Manifold Lines: 1-3 (360') 0.35 LTAR 24" Max Trench Bottom Accepted Status System #4 Orange 120 Repair: Pressure Manifold #3 Pink 120' Lines: 4-6 (360') 0.35 LTAR 24" Max Trench Bottom Accepted Status System V20°17'56"W 264.10" **1000 Gallon Septic and Pump Tank Tank and trenches to be located minimum of 10' from any property line and minimum of 5' from any building foundation. WD *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. VAN WINKLE STREET

Adams Soil Consulting 919-414-6761 Job #1623

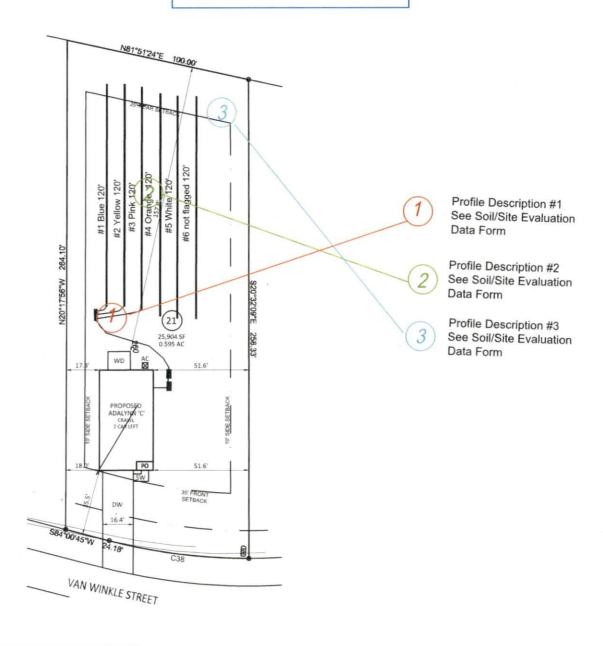




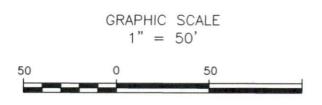
Wellers Knoll - Lot #21 Soil Boring Location Map 48 Van Winkle St. - Lillingtion, NC Davidson Homes

Harnett County PIN: 0529-88-6681

*Not a Survey Sketched from a plot plan supplied by owner



Adams
Soil Consulting
919-414-6761
Job #1623



PRESSURE MANIFOLD DESIGN

Name: Davidson Homes

P.I.N. #:

D#:

Address: 48 Van Winkle St

Subdiv:

Wellers Knoll

Lot#: 21

of BDR:

4 Daily Flow: 480 gal/day L.T.A.R.:

0.35 gal/day/sq.ft

Septic Tank: 1000 gals

Pump Tank:

1000

gals Sq. Foot:

1080

Stone Depth:

Number of Taps:

2

Length of Trenches:

360

ft(See Tap Chart for Details)

in

Depth of Trenches:

24

Manifold Length:

30

Manifold Diameter: 4in sch 80pvc

Tap Configuration: 6 in spacing

side(s) of manifold

Supply Line: length:

25

in

Diameter:

2

in sch 40pvc

Friction Loss + Fitting Loss:

1.06

ft(supply line length + 70' for fittings in pump tank)

Design Head:

ft

Elevation Head:

5.50

Total Head:

8.56 ft

Pump to Deliver:

21.33 gals/min at

8.56

ft head

Dosing Volume:

gals,

Drawdown: 176 gals divided by

176

20 gals/in = 8.8

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, or equal is required.

Possible pumps:

Hydromatic:

Goulds:

Myers:

Zoeller: Model 151

Other:

TAP CHART

Bench Mark	0	is = 100.00	set at EIP				Design Head:	2	
Pump tank elev.		5.5	94.50	Pump elev.	89.50		Manifold elev.	95.00	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
1	Blue	6.0	94.00	120	1/2in SCH 40	7.11	160.00	360	0.444
2	Yellow	6.3	93.70	120	1/2in SCH 40	7.11	160.00	360	0.444
3	Pink	6.5	93.50	120	1/2in SCH 40	7.11	160.00	360	0.444
		pl	feet =	360	gal/min =	21.33		LTAR =	0.35
% of Dose Vol.		75		Des. Flow	480			(Itar + 5%)	0.37
Dose Volume		176		Pump Run=	22.50			(Itar W/ INOV)	0.47
Dose Pump Time	Э	8.23		Tank Gal/IN	20			(Itar + 5%)	0.49
Drawdown in Inc	hes	8.8		Elev. Head	5.50				
Supply Line Leng Comments:	gth	25							

Hydraulic Profile

Manifold Elevation	95.00	25
Pump tank elev.	94.50	2
Pump elev.	89.50	0

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

(Complete all fields in full)

OWNER: Davidson Homes ADDRESS: 48 Van Winkle St.

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

APPLICATION DATE:

DATE EVALUATED: 3-28-23

PROPERTY SIZE: ~.595 acres

LOCATION OF SITE: 48 Van Winkle St.

WATER SUPPLY: Public Water **EVALUATION METHOD:** Auger Boring

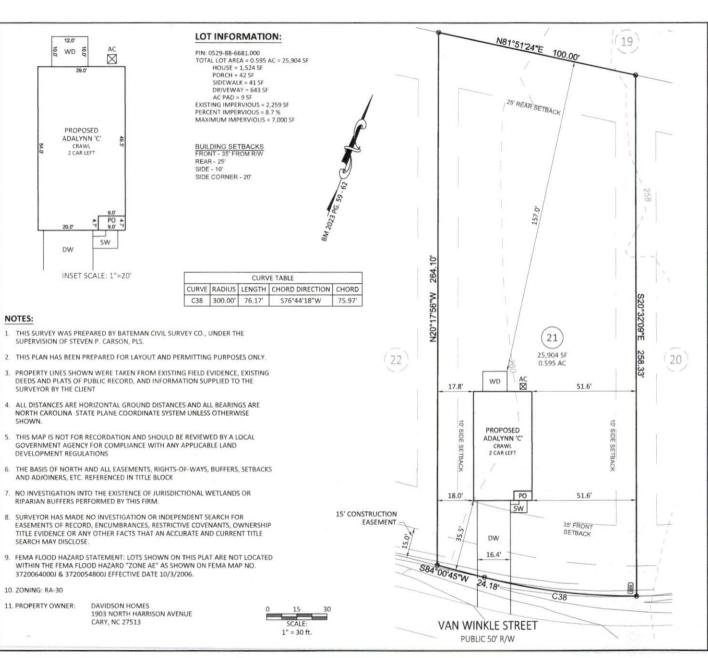
TYPE OF WASTEWATER: Sewage

PROFILE	.1940 LANDSCAPE	HORIZON	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS					
	POSITION/ SLOPE %	DEPTH (IN.)	.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR	
	Linear	0-16	GR/SL	FR/SEXP/NS	N/A	N/A	N/A	N/A	PS/0.35-0.4	
1	Slope/3%	15-40	SBK/SCL	FI/SEXP/SS						
								a. 1		
	Linear Slope/3%	0-14	GR/SL	FR/SEXP/NS	N/A	N/A	N/A	N/A	PS/0.35-0.4	
2		14-40	SBK/SCL	FI/SEXP/SS						
_	Linear	0-21	GR/SL	FR/SEXP/NS	N/A	N/A	N/A	N/A	PS/0.35-0.4	
3	Slope/3%	21-40	SBK/SCL	FI/SEXP/SS						
4										

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	OTHER FACTORS (.1946):	
Available Space (.1945)	>5,000 ft ²	>5,000 ft ²	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.batemancivilsurvey.com info@batemancivilsurvey.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
S = COMPUTED POINT

X = MAG NAIL FOUND O = IRON PIPE FOUND

● IRON PIPE SOUND

■ IRON PIPE SET

■ DRILL HOLE FOUND

WI = WATER METER

CO = CLEAN OUT

AC = AIR CONDITIONER

S= SEWER MANHOLE EB = ELECTRIC BOX O = CARLE BOX

= TELEPHONE PEDESTAL
CB = CATCH BASIN IC = IRRIGATION CONTROLLER ₩ = LIGHT POLE

= UTILITY POLE

= FIRE HYDRANT DI = DRAIN INLET = WATER VALVE

= STREET SIGN G = GAS METER

STEVEN P. CARSON, CERTIFY THAT THIS PLAT WAS DRAWN LINDER 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-4752 DATED:



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

DAVIDSON HOMES

WELLERS KNOLL - LOT 21

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

DRAWN BY: MJA CHECKED BY: SPC

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

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

alexadams@bcsoil.com

March 29, 2023 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: 48 Van Winkle St. 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 18A .1900 "Laws and Rules for Sewage Treatment and Disposal Systems". From this evaluation, ASC is providing the attached 4-bedroom 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 Johnston 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



