



North Carolina Onsite Wastewater Contractor Inspector Certification Board
Authorized Onsite Wastewater Evaluator Permit Option for Non-Engineered Systems
Notice of Intent (NOI) to Construct

☒ New ☐ Expansion ☐ Repair ☐ Relocation ☐ Relocation of Repair Area

Owner or Legal Representative Information: James Rumley

Name: Caruso Homes

Mailing address: 110 Horizon Drive - Suite 320 City: Raleigh State: NC Zip: 27615

Phone: 240-886-3229

Email: jrumley@carusohomes.com

Authorized Onsite Wastewater Evaluator Information:

Name: Alex Adams

Certification #: AOWE# 10021E

Mailing address: 1676 Mitchell Road City: Angier State: NC Zip: 27501

Phone: 919-414-6761

Email: alexadams@bcsoil.com

Site Location Information:

Site address: Lot #25 (Magnolia Acres) 196 Little Gem Ln - Fuquay-Varina NC 27501

Tax parcel identification number or subdivision lot, block number of property: PIN# 0633-02-7529

County: Harnett

System Information: Accepted Status

Wastewater System Type: PPBPS

Daily Design Flow: 480 gallons/day

Saprolite System: ☐ Yes ☒ No Subsurface Operator Required: ☐ Yes ☒ No

Water Supply Type: ☐ Private Well ☒ Public Water Supply ☐ Spring ☐ Other:

Facility Type:

☒ Residential ☐ 4 # Bedrooms ☐ 8 Maximum # of Occupants

☐ Business Type of Business and Basis for Flow: _____

☐ Public Assembly Type of Public Assembly and Basis for Flow: _____

Required Attachments:

☒ Plat or Siteplan

☒ Evaluation of Soil and Site Features by Licensed Soil Scientist

Attest: On this the 3rd day of November by signature below I hereby attest that the information required to be included with this NOI to Construct is accurate and complete to the best of my knowledge. Furthermore, I hereby attest that I have adhered to the laws and rules governing onsite wastewater systems in the state of North Carolina. This NOI shall expire on 3rd day of November 2030.

Signature of Authorized Onsite Wastewater Evaluator: Alex Adams

Signature of Owner or Legal Representative: James Rumley

Disclosure: The owner may apply for a building permit for the project upon submitting a complete NOI to Construct and the fee required (if any) to the local health department. An onsite wastewater system authorized by an authorized onsite wastewater evaluator shall be transferable to a new owner with the consent of the authorized onsite wastewater evaluator.

Local Health Department Receipt Acknowledgement:

Signature of Local Health Department Representative: _____ Date: _____

Adams Soil Consulting, PLLC
1676 Mitchell Road
Angier, NC 27501
919-414-6761
alexadams@bcsoil.com

November 3, 2025
Project #2110

"This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-336.2

RE: Magnolia Acres -Lot #25 – 196 Little Gem Ln. – Fuquay-Varina, NC - 4-bedroom
Single Family Residence (PIN# 0633-02-7529)

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 septic system design for a new single-family home sized for a 480 gallon/day septic system.

The suitable soils found on the subject property were somewhat variable 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.

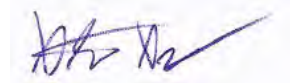
The initial and primary septic fields for the new home were sized based on a flow rate of 480 gallons/day and utilizing PPBPS for the initial and a PPBPS repair system. Any unauthorized site disturbance, filling, soil removal, or layout changes may result in the permit being revoked.

The septic installer contractor shall install the repair (if needed) system on contour, see attached site plan for the primary system and repair. No underground utilities, water lines, or sprinkler systems shall be placed into the initial or repair septic areas. Installation must meet all state and local county regulations for septic system installation. The trenches must be installed in the same location as the site plan. If flags trench flags are missing at the time of installation, they must be remarked by Adams Soil Consulting staff. Contact Alex Adams at 919-414-6761. A preconstruction conference is required with the septic installer prior to construction activities at least 14 days in advance of construction activities.

This report does not guarantee the future function of any waste water disposal system installed.

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

Sincerely,



Alex Adams
NC Licensed Soil Scientist #1247
AOWE Certification: 10021E



196 Little Gem Ln
Lot #25 Magnolia Acres
Caruso Builders
Harnett County PIN: 0630-02-7529
480 gallon/day Septic Design

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

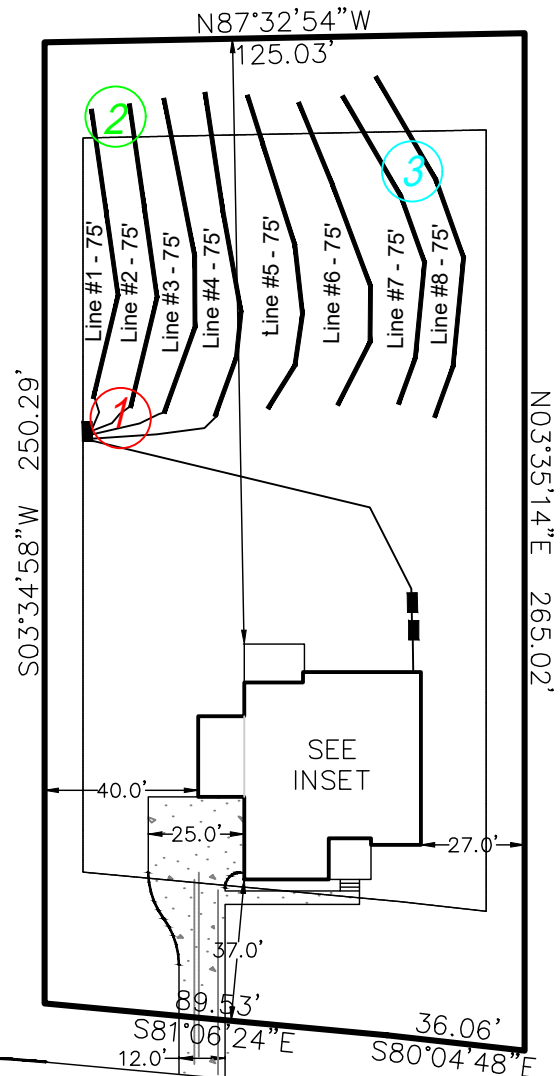
System: Pressure Manifold
Lines: 1-4 (300')
0.3 LTAR
18" Max Trench Bottom
PPBPS
Repair: Pressure Manifold
Lines: 5-8 (300')
0.30 LTAR
18" Max Trench Bottom
PPBPS

25

32,177 S.F.
0.74 AC

**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.

- ① Profile Description #1
See Soil/Site Evaluation
Data Form
- ② Profile Description #2
See Soil/Site Evaluation
Data Form
- ③ Profile Description #3
See Soil/Site Evaluation
Data Form



LITTLE GEM LANE
50' PUBLIC R/W

GRAPHIC SCALE
1" = 50'



Adams
Soil Consulting
919-414-6761
Job #2110
11-3-25

Lot 40 Magnolia Acres **PRESSURE MANIFOLD DESIGN -Initial**

Caruso Homes

of BDR: 4 Daily Flow: 480 gal/day L.T.A.R.: 0.3000 gal/day/sq.ft

Septic Tank: 1000 gals Pump Tank: 1000 gals Sq. Foot: 900 System Type: PPBPS-Horizontal

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: 150 ft Diameter: 2 in sch 40pvc

Friction Loss + Fitting Loss: 4.16 ft(supply line length + 70' for fittings in pump tank)

Design Head: 2 ft Elevation Head: 16.00 ft

Total Head: 22.16 ft Pump to Deliver: 28.44 gals/min at 22.16 ft head

Dosing Volume: 245 gals,

Drawdown: 245 gals divided by 21.4 gals/in = 11.4 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	<u>Q</u>	is = 100.00	set at				Design Head:					
Pump tank elev.		<u>18</u>	95.00	Pump elev.	90.00		Manifold elev.	1.00		# of Panels	Change in	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR	(PPBPS)	Spacing of	
1				75	1/2in SCH 40	7.11	120.00	225	0.5333	17	6.8	
2				75	1/2in SCH 40	7.11	120.00	225	0.5333	17	6.8	
3				75	1/2in SCH 40	7.11	120.00	225	0.5333	17	6.8	
4				75	1/2in SCH 40	7.11	120.00	225	0.5333	17	6.8	

Total # of Panels (PPBPS)	68	Total Feet =	300	gal/min =	28.44	LTAR =	0.3000
% of Dose Vol.	<u>70</u>	Feet Required =	267	Velocity =	2.72	(ltar + 5%)	0.3150
Dose Volume	245	Des. Flow	<u>480</u>			(ltar w/50% red)	0.6000
Dose Pump Time	8.61	Pump Run=	16.88			(ltar + 5%)	0.6300
Drawdown in Inches	11.4	Tank Gal/IN	<u>21.4</u>				
Comments:		Elev. Head	16.00				

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

OWNER: Carusso Homes
ADDRESS: 196 Little Gem LN
PROPOSED FACILITY: Single Family, 4-bedroom PROPOSED DESIGN FLOW (.1949): 480 gpd
LOCATION OF SITE: 196 Little Gem LN
WATER SUPPLY: Public Water
EVALUATION METHOD: Auger Boring

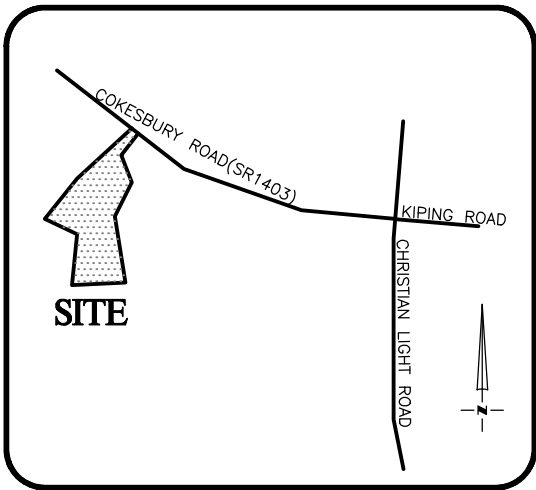
APPLICATION DATE:
DATE EVALUATED: 10-31-25
PROPERTY SIZE: ~0.79 Acres

TYPE OF WASTEWATER: Sewage

P R O F I L E #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTLSE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
1	Linear Slope/15%	0-26	SBK/C	FR,SS,SP,SEXP	NA	38"	S	N.O	P.S .3
		26-38	GR/SL	VFR,NS,NP,SEXP					
2	Linear Slope/15%	0-20	SBK/C	FR,SS,SP,SEXP	NA	40"	S	N.O	P.S .3
		20-40	GR/SL	VFR,NS,NP,SEXP					
3	Linear Slope/15%	0-22	SBK/C	FR,SS,SP,SEXP	NA	40"	S	N.O	P.S .3
		22-40	GR/SL	VFR,NS,NP,SEXP					
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM	OTHER FACTORS (.1946): _____ SITE CLASSIFICATION (.1948): PS EVALUATED BY: A. Adams OTHER(S) PRESENT:
Available Space (.1945)	S	S	
System Type(s)	Type III B	Type III B	
Site LTAR	0.3	0.3	

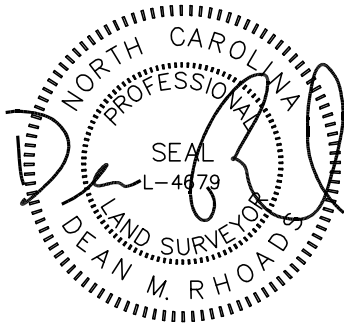
COMMENTS: _____
Updated February 2014



VICINITY MAP
Not To Scale

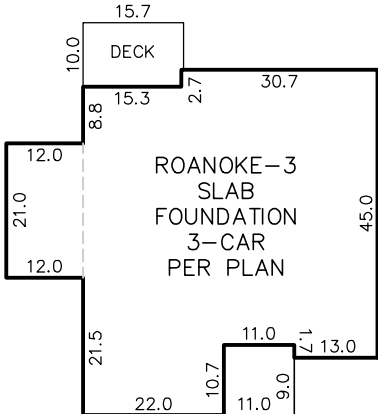
SETBACKS: (ZONE RA-30)

FRONT - 35'
REAR - 25'
SIDE - 10'
CORNER SIDE - 20'



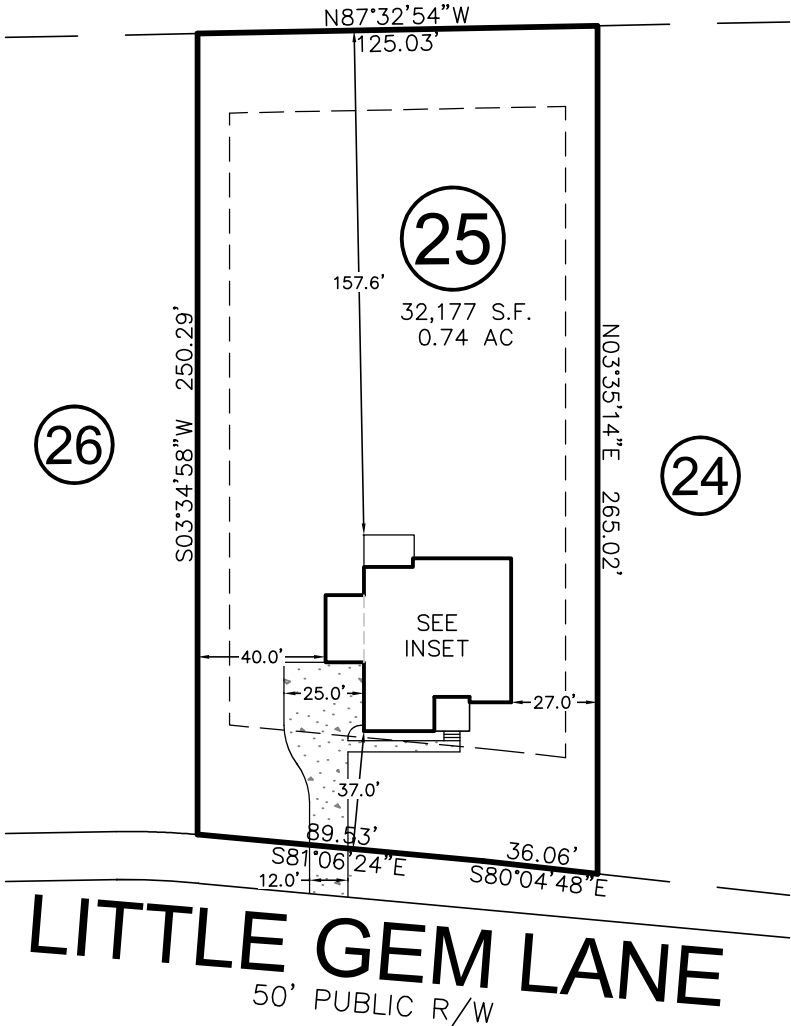
IMPERVIOUS SURFACE AREA	
DESCRIPTION	AREA
HOUSE & PORCH	2,579 S.F.
HVAC PAD/MISC	18 S.F.
DRIVEWAY/WALKS 50%	1,185 S.F.
TOTAL (PROPOSED)=	3,782 S.F.
*TOTAL (ALLOWED)=	3,850 S.F.

*PB 2025 PG 139



INSET
N.T.S.

N.F.
STATE OF NORTH CAROLINA
"RAVEN ROCK STATE PARK"
DB 611 PG 210



THIS PROPERTY MAY BE SUBJECT TO ANY AND ALL APPLICABLE DEED RESTRICTIONS, EASEMENTS, RIGHT-OF-WAY, UTILITIES AND RESTRICTIVE COVENANTS WHICH MAY BE OF RECORD OR IMPLIED

THIS DRAWING DOES NOT
REFLECT AS-BUILT INFORMATION

PRELIMINARY PLAT
NOT FOR RECORDATION, CONVEYANCES, OR SALES.

60060

SCALE: 1" = 60'

RESIDENTIAL
LAND SERVICES, PLLC.

3951917 Evans Road
Cary, North Carolina 27513
Phone (919) 378-9316
Firm License # P-0873

HOUSE LOCATION PLOT PLAN

FOR

#196 LITTLE GEM LANE
LOT 25, MAGNOLIA ACRES

Hector's Creek Township, Harnett County, North Carolina

PROPERTY OF: CARUSO HOMES

MAP BOOK 2025 PAGE 139 DEED REFERENCE

DRAWN: JWW

SURVEYED: N/A

CHECKED: DMR

DATE: OCTOBER 1, 2025



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/22/2025

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 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	CONTACT NAME: Angela Sensenig
Wade Associates, LLC	PHONE (A/C, No, Ext): (252) 631-5269
250 Pollock St.	FAX (A/C, No): (252) 649-2443
	E-MAIL ADDRESS: asensenig@wadeict.com
	INSURER(S) AFFORDING COVERAGE
New Bern NC 28560	INSURER A: Lloyd's of London
	NAIC # A1122J
INSURED	INSURER B:
Alex Adams, DBA: Adams Soil Consulting	INSURER C:
1676 Mitchell Rd.	INSURER D:
	INSURER E:
Angier NC 27501	INSURER F:

COVERAGES

CERTIFICATE NUMBER: 25-26

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
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE
	CLAIMS-MADE						DAMAGE TO RENTED PREMISES (Ea occurrence)
							MEDICAL (Any one person)
							PERSONAL ADVISOR
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE
	POLIC						PRODCTS - COMP/OP AGG
	PRO-ECT						
	LOC						
	OTHER:						
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)
	ANALYST TO						BODIL INR (Per person)
	ALL OWNED						BODIL INR (Per accident)
	A TOS						PROPERTY DAMAGE (Per accident)
	HIRED A TOS						
	UMBRELLA LIAB						EACH OCCURRENCE
	EXCESS LIAB						AGGREGATE
	DED						
	RETENTION						
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						PER STATE
	AN PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EMPLOYED (Mandatory in NH)	Y/N					OTH-ER
	If yes, describe under DESCRIPTION OF OPERATIONS below	N/A					E.L. EACH ACCIDENT
							E.L. DISEASE - EMPLOYEE
							E.L. DISEASE - POLICY LIMIT
A	Errors & Omissions			PSN0040221161	1/31/2025	1/31/2026	Each Occurrence \$1,000,000
							General Aggregate \$1,000,000

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

CERTIFICATE HOLDER

CANCELLATION

FOR INFORMATIONAL PURPOSES ONLY

XXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXX

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

N Whitsett/RACHEL

© 1988-2014 ACORD CORPORATION. All rights reserved.

ACORD 25 (2014/01)

The ACORD name and logo are registered marks of ACORD

INS025 (201401)