



Initial Application Date: 5/29/2024

Application # \_\_\_\_\_

COUNTY OF HARNETT RESIDENTIAL LAND USE APPLICATION  
Central Permitting 420 McKinney Pkwy, Lillington, NC 27546 Phone: (910) 893-7525 ext:1 Fax: (910) 893-2793 www.harnett.org/permits

\*\*A RECORDED SURVEY MAP, RECORDED DEED (OR OFFER TO PURCHASE) & SITE PLAN ARE REQUIRED WHEN SUBMITTING A LAND USE APPLICATION\*\*

LANDOWNER: Carolina Construction of Fayetteville Mailing Address: 3117 Cope St  
City: Fayetteville State: NC Zip: 28306 Contact No: (910)-339-4779 Email: Samantha@ccfnc.com

APPLICANT\*: Carolina Construction Mailing Address: 3117 Cope St.  
City: Fayetteville State: NC Zip: 28306 Contact No: (910)-339-4779 Email: Samantha@ccfnc.com  
\*Please fill out applicant information if different than landowner

ADDRESS: 5011 Ray Rd, Spring Lake, NC PIN: 0505-65-1815.000

Zoning: \_\_\_\_\_ Flood: \_\_\_\_\_ Watershed: \_\_\_\_\_ Deed Book / Page: \_\_\_\_\_

Setbacks - Front: 67' Back: 25' Side: 10' Corner: 15'

PROPOSED USE:

SFD: (Size 29'1" x 60'1" # Bedrooms: 3 # Baths: 2 Basement(w/wo bath): N/A Garage:  Deck: N/A Crawl Space: N/A Slab:  Slab: N/A <sup>Monolithic</sup> Slab: N/A  
TOTAL HTD SQ FT 1254 GARAGE SQ FT 309 (Is the bonus room finished? N/A yes (N/A) no w/ a closet? (N/A) yes (N/A) no (if yes add in with # bedrooms)

Modular: (Size \_\_\_\_\_ x \_\_\_\_\_) # Bedrooms \_\_\_\_\_ # Baths \_\_\_\_\_ Basement (w/wo bath) \_\_\_\_\_ Garage: \_\_\_\_\_ Site Built Deck: \_\_\_\_\_ On Frame \_\_\_\_\_ Off Frame \_\_\_\_\_  
TOTAL HTD SQ FT \_\_\_\_\_ (Is the second floor finished? ( ) yes ( ) no Any other site built additions? ( ) yes ( ) no

Manufactured Home: \_\_\_\_\_ SW \_\_\_\_\_ DW \_\_\_\_\_ TW (Size \_\_\_\_\_ x \_\_\_\_\_) # Bedrooms: \_\_\_\_\_ Garage: \_\_\_\_\_ (site built? \_\_\_\_\_) Deck: \_\_\_\_\_ (site built? \_\_\_\_\_)

Duplex: (Size \_\_\_\_\_ x \_\_\_\_\_) No. Buildings: \_\_\_\_\_ No. Bedrooms Per Unit: \_\_\_\_\_ TOTAL HTD SQ FT \_\_\_\_\_

Home Occupation: # Rooms: \_\_\_\_\_ Use: \_\_\_\_\_ Hours of Operation: \_\_\_\_\_ #Employees: \_\_\_\_\_

Addition/Accessory/Other: (Size \_\_\_\_\_ x \_\_\_\_\_) Use: \_\_\_\_\_ Closets in addition? ( ) yes ( ) no  
TOTAL HTD SQ FT \_\_\_\_\_ GARAGE \_\_\_\_\_

Water Supply:  County \_\_\_\_\_ Existing Well \_\_\_\_\_ New Well (# of dwellings using well \_\_\_\_\_) \*Must have operable water before final  
(Need to Complete New Well Application at the same time as New Tank)

Sewage Supply:  New Septic Tank \_\_\_\_\_ Expansion \_\_\_\_\_ Relocation \_\_\_\_\_ Existing Septic Tank \_\_\_\_\_ County Sewer  
(Complete Environmental Health Checklist on other side of application if Septic)

Does owner of this tract of land, own land that contains a manufactured home within five hundred feet (500') of tract listed above? ( ) yes ( ) no

Does the property contain any easements whether underground or overhead ( ) yes (  ) no

Structures (existing or proposed): Single family dwellings: proposed Manufactured Homes: \_\_\_\_\_ Other (specify): \_\_\_\_\_

If permits are granted I agree to conform to all ordinances and laws of the State of North Carolina regulating such work and the specifications of plans submitted. I hereby state that foregoing statements are accurate and correct to the best of my knowledge. Permit subject to revocation if false information is provided.

Signature of Owner or Owner's Agent

Date

\*\*\*It is the owner/applicants responsibility to provide the county with any applicable information about the subject property, including but not limited to: boundary information, house location, underground or overhead easements, etc. The county or its employees are not responsible for any incorrect or missing information that is contained within these applications.\*\*\*

\*\*This application expires 6 months from the initial date if permits have not been issued\*\*

APPLICATION CONTINUES ON BACK

strong roots • new growth

**\*\*This application expires 6 months from the initial date if permits have not been issued\*\***

**\*This application to be filled out when applying for a septic system inspection.\***

**County Health Department Application for Improvement Permit and/or Authorization to Construct**

IF THE INFORMATION IN THIS APPLICATION IS FALSIFIED, CHANGED, OR THE SITE IS ALTERED, THEN THE IMPROVEMENT PERMIT OR AUTHORIZATION TO CONSTRUCT SHALL BECOME INVALID. The permit is valid for either 60 months or without expiration depending upon documentation submitted. (Complete site plan = 60 months; Complete plat = without expiration)

**Environmental Health New Septic System**

- **All property irons must be made visible.** Place "pink property flags" on each corner iron of lot. All property lines must be clearly flagged approximately every 50 feet between corners.
- Place "orange house corner flags" at each corner of the proposed structure. Also flag driveways, garages, decks, out buildings, swimming pools, etc. Place flags per site plan developed at/for Central Permitting.
- Place orange Environmental Health card in location that is easily viewed from road to assist in locating property.
- If property is thickly wooded, Environmental Health requires that you clean out the **undergrowth** to allow the soil evaluation to be performed. Inspectors should be able to walk freely around site. **Do not grade property.**
- **All lots to be addressed within 10 business days after confirmation. \$25.00 return trip fee may be incurred for failure to uncover outlet lid, mark house corners and property lines, etc. once lot confirmed ready.**

**Environmental Health Existing Tank Inspections**

- Follow above instructions for placing flags and card on property.
- Prepare for inspection by removing soil over **outlet end** of tank as diagram indicates, and lift lid straight up (*if possible*) and then **put lid back in place.** (Unless inspection is for a septic tank in a mobile home park)
- **DO NOT LEAVE LIDS OFF OF SEPTIC TANK**

**"MORE INFORMATION MAY BE REQUIRED TO COMPLETE ANY INSPECTION"**

**SEPTIC**

If applying for authorization to construct please indicate desired system type(s): can be ranked in order of preference, must choose one.

- { } Accepted      { } Innovative      {  } Conventional      { } Any  
 { } Alternative      { } Other \_\_\_\_\_

The applicant shall notify the local health department upon submittal of this application if any of the following apply to the property in question. If the answer is "yes", applicant **MUST ATTACH SUPPORTING DOCUMENTATION**:

- { } YES    {  } NO    Does the site contain any Jurisdictional Wetlands?
- { } YES    {  } NO    Do you plan to have an irrigation system now or in the future?
- { } YES    {  } NO    Does or will the building contain any drains? Please explain. \_\_\_\_\_
- { } YES    {  } NO    Are there any existing wells, springs, waterlines or Wastewater Systems on this property?
- { } YES    {  } NO    Is any wastewater going to be generated on the site other than domestic sewage?
- { } YES    {  } NO    Is the site subject to approval by any other Public Agency?
- { } YES    {  } NO    Are there any Easements or Right of Ways on this property?
- { } YES    {  } NO    Does the site contain any existing water, cable, phone or underground electric lines?

If yes please call No Cuts at 800-632-4949 to locate the lines. This is a free service.

**I Have Read This Application And Certify That The Information Provided Herein Is True, Complete And Correct. Authorized County And State Officials Are Granted Right Of Entry To Conduct Necessary Inspections To Determine Compliance With Applicable Laws And Rules. I Understand That I Am Solely Responsible For The Proper Identification And Labeling Of All Property Lines And Corners And Making The Site Accessible So That A Complete Site Evaluation Can Be Performed.**



**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:**  
 Name: Carolina Construction of Fayetteville, Inc.  
 Mailing address: 3117 Cope St City: Fayetteville State: NC Zip: 28306  
 Phone: 910-339-4779 Email: billing@ccfnc.com, rmiller@ccfnc.com

**Authorized Onsite Wastewater Evaluator Information:**  
 Name: Hal Owen Certification #: 10036E  
 Mailing address: PO Box 400 City: Lillington State: NC Zip: 27546  
 Phone: 910-893-8743 Email: hal@halowensoil.com


**Site Location Information:**  
 Site address: 5011 Ray Rd, Spring Lake, NC  
 Tax parcel identification number or subdivision lot, block number of property: The Flatts at Ray Lot 5  
0505-65-1815.000 County: Harnett

**System Information:**  
 Wastewater System Type: 11b  
 Daily Design Flow: 360 gpd  
 Saprolite System:  Yes  No    Subsurface Operator Required:  Yes  No  
 Water Supply Type:  Private Well  Public Water Supply     Spring     Other: \_\_\_\_\_

**Facility Type:**  
 Residential 3 # Bedrooms 6 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 Site Plan  
 Evaluation of Soil and Site Features by Licensed Soil Scientist

Attest: On this the 13 day of May, 2024 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 13 day of May, 2029.

Signature of Authorized Onsite Wastewater Evaluator: 

Signature of Owner or Legal Representative: \_\_\_\_\_

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: \_\_\_\_\_



HALOWE1

OP ID: TOW

# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
05/16/2024

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 have ADDITIONAL INSURED provisions or 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).

<b>PRODUCER</b> INSURANCE SERVICE CTR -LILLING LILLINGTON BRANCH OFFICE PO Box 1565 LILLINGTON, NC 27546 DANIEL L. BABB	910-893-5707		<b>CONTACT NAME:</b> SHARON WOODY <b>PHONE (A/C, No, Ext):</b> 910-893-5707 <b>E-MAIL ADDRESS:</b> SWOODY@ISCFAY.COM	<b>FAX (A/C, No):</b> 910-893-2077
	<b>INSURED</b> HAL OWEN & ASSOCIATES, INC. PO BOX 400 LILLINGTON, NC 27546			<b>INSURER(S) AFFORDING COVERAGE</b> INSURER A : STARSTONE NATIONAL INSURER B : INSURER C : INSURER D : INSURER E : INSURER F :

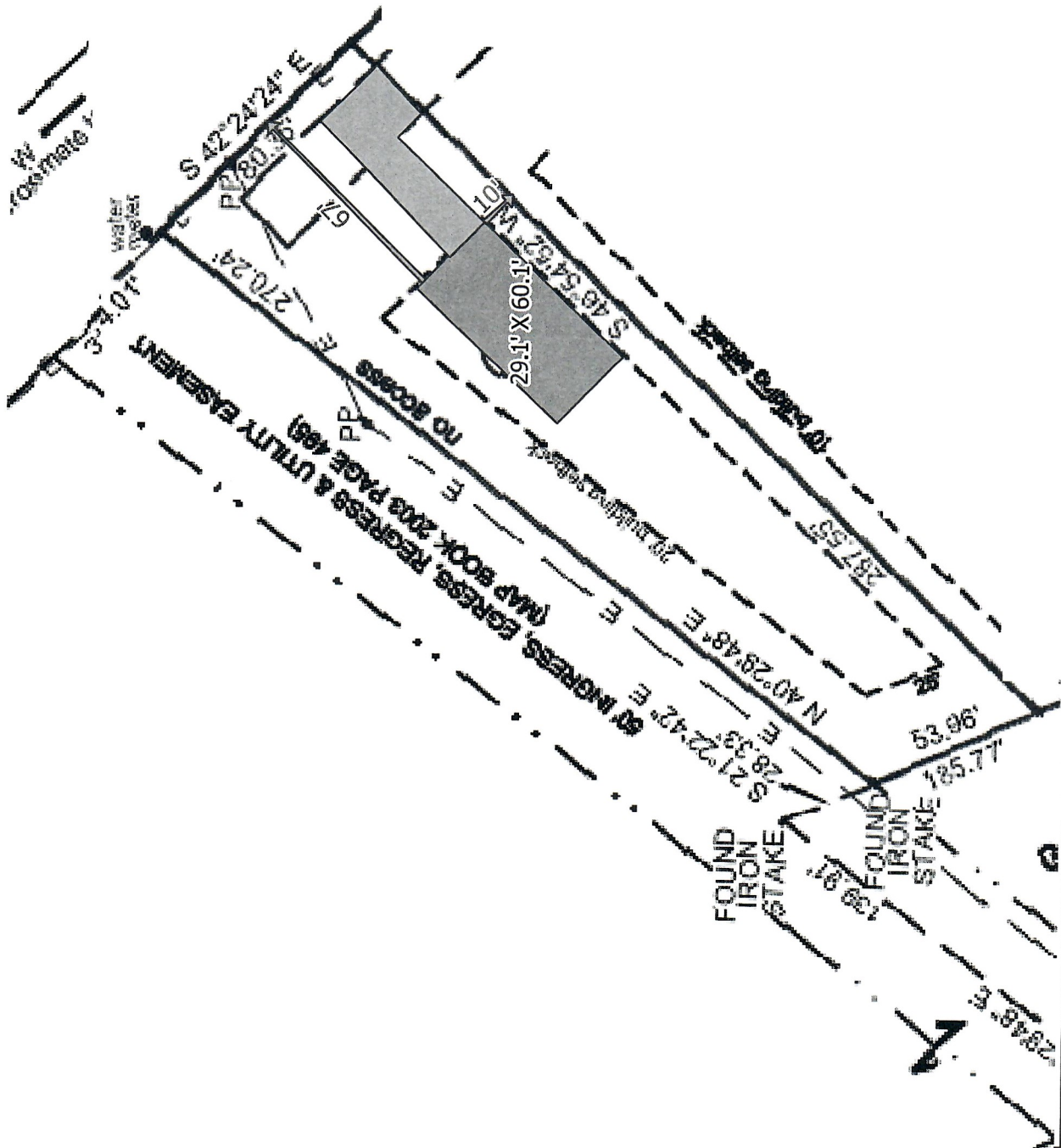
**COVERAGES** **CERTIFICATE NUMBER:** **REVISION NUMBER:**

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
	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> <input type="checkbox"/> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N If yes, describe under DESCRIPTION OF OPERATIONS below		N/A				<input type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	<b>PROFESSIONAL LIAB.</b>			42ESP00143901	01/27/2024	01/27/2025	PER OCC. 1,000,000 AGGREGATE 2,000,000

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

<b>CERTIFICATE HOLDER</b>  CAROLINA CONSTRUCTION OF FAYETTEVILLE INC. 3117 COPE ST FAYETTEVILLE, NC 28306	<b>CANCELLATION</b>  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 <i>Taylor Wallace</i>
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**Legend**

- House
- Driveway
- Dimensions

Site Plan

The Flatts at Ray Rd  
Lot 5  
29 May 2024

0      50      100 ft

For reference only. Not a survey.

Hal Owen & Associates Inc.  
PO Box 400, Lillington, NC 27546  
www.halowensoil.com  
919-893-8743

# HAL OWEN & ASSOCIATES, INC.

SOIL & ENVIRONMENTAL SCIENTISTS

P.O. Box 400, Lillington NC 27546-0400

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www.halowensoil.com

29 May 2024

Carolina Construction of Fayetteville Inc.  
3117 Cope St  
Fayetteville, NC 28306

Reference: AOWE Evaluation  
5011 Ray Rd, Spring Lake, Harnett Co., NC  
The Flatts at Ray-Lot 5 PIN 0505-65-1815.000

Dear Carolina Construction of Fayetteville Inc.,

A soil and site evaluation has been conducted for the referenced property for the purpose of permitting a subsurface wastewater system. This evaluation was prepared based on information provided by the applicant to include the basis for design flow, proposed structure location(s), and property boundaries. Any false, inaccurate, or incomplete information provided by the applicant, owner, or legal representatives may result in denial or revocation of applications, approvals, or permits.

This AOWE/LSS Evaluation is being submitted pursuant to and meets the requirements of G.S.130A-336.2. This evaluation includes a signed and sealed soil and site evaluation, specifications, plans, and reports for the site layout and construction of a proposed onsite wastewater system by an Authorized On-Site Wastewater Evaluator (AOWE). The evaluation of soil conditions and site features is provided in accordance with G.S. 130A-335(e), the Rules for "Wastewater Treatment and Dispersal Systems", 15A NCAC 18E, and local septic regulations (if any). This report represents my professional opinion as a Licensed Soil Scientist and Authorized Onsite Wastewater Evaluator.

This AOWE Evaluation is intended to file a Notice of Intent to construct a wastewater system with the Local Health Department and shall expire in five years.

Sincerely,



Hal Owen  
Senior Licensed Soil Scientist  
Authorized Onsite Wastewater Evaluator



Britt Wilson  
Licensed Soil Scientist



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## TERMS AND CONDITIONS

This evaluation is not a permit to develop. The owner and subcontractors will need to abide by all state and local rules and regulations pertaining to planning, zoning, and land use development.

Notice of Intent to Construct – Prior to commencing or assisting in the construction, siting, relocation, or repair of a wastewater system, a complete Notice of Intent (NOI) to Construct a wastewater system using an AOWE must be submitted to the Local Health Department (LHD). The owner may apply for a building permit for the project upon submitting a complete NOI and the required fee.

Plan Alterations – If there are any changes in the site plan that can impact the wastewater system, such as moving the house or driveway, site alterations, or if the applicant chooses to change the design daily flow prior to wastewater system construction, a new NOI shall be submitted to the LHD. The applicant shall request in writing that the PE or AOWE invalidate the prior NOI with a signed and sealed letter sent to the applicant and LHD.

Site Alterations – The applicant shall be responsible for preventing modifications or alterations of the site for the wastewater system and the system repair area before, during, and after any construction activities for the facility, unless approved by the AOWE.

On-Site Wastewater System Contractor – The AOWE shall assist the owner in the selection of a certified on-site wastewater system contractor who shall be under contractual obligation to the owner and have sufficient errors and omissions, liability, or other insurance for the system constructed.

Inspections, Construction Observations, and Reports – The AOWE shall make periodic visits to the site to observe the progress and quality of the construction of the wastewater system.

Authorization to Operate (ATO) – Upon determining that the wastewater system has been properly installed and is capable of being operated in accordance with the conditions of the permit, the AOWE shall provide the owner with a report that includes inspection reports, a written operation and management program, any special reports, and an Authorization to Operate. The owner shall sign confirming acceptance and receipt of the report, and then provide a copy to the LHD who will issue the certificate of occupancy for the facility.

Operation and Management – The owner shall be responsible for continued adherence to the operations and management program established by the AOWE. This permit shall in no way be taken as a guarantee or implied warranty that the septic system will function satisfactorily for any given period of time.

Change in System Ownership. – An authorized wastewater system shall be transferrable to a new owner with the consent of the AOWE. The new owner and the AOWE shall enter a contract for the wastewater system.

Revocation – The AOWE permit is subject to revocation if the site plan, plat, or the intended use changes. This permit is subject to compliance with the provisions of the Laws and Rules for Wastewater Treatment and Dispersal Systems and to the conditions of this permit.

Repair of Malfunctioning Systems. – The owner may apply for an Improvement Permit and a Construction Authorization from the LHD or obtain a NOI from an AOWE to repair a malfunctioning wastewater system.



### **PROPOSED USE**

A new single-family residence will be built at the site. The home will not have a basement. The proposed single-family residence will contain three bedrooms and have a design wastewater flow of 360 gallons per day. The maximum occupancy of the home is 6 people.

### **WATER SUPPLY**

Water will be provided by public water supplies.

### **EXISTING SITE CONDITIONS**

At the time of the investigation, the site had not been cleared, lot corners were staked, and the new building footprint was not marked.

No existing wells, streams, or wetlands were observed within 50 feet of the proposed septic system and repair area.

There is a joint driveway easement at the front of the property.

### **SOIL AND SITE INVESTIGATION**

The soils were evaluated under moist soil conditions through the advancing of auger borings. This evaluation included observations of topography and landscape position, soil morphology (texture, structure, clay mineralogy, organics), soil wetness, soil depth, and restrictive horizons. Descriptions of the soil borings located within the investigated portions of the site are provided in the attached Soil/Site Evaluation form.

Soils in the proposed system area were observed to rate as suitable for subsurface sewage waste disposal systems. (Figure 1). The subsoils were observed to be firm sandy clay loams and extended to greater than 48 inches below ground surface. Evidence of a soil wetness condition was not observed within 48 inches below surface. These soils appear adequate to support long-term acceptance rates of 0.4 gal/day/ft<sup>2</sup> for accepted status drainlines.



**SOIL/SITE EVALUATION FORM FOR ON-SITE WASTEWATER SYSTEM**

OWNER NAME: Carolina Construction of Fayetteville, Inc OWNER ADDRESS: 3117 Cope St  
 PROPOSED FACILITY: Residential PROPOSED DESIGN FLOW: 360 PROPERTY SIZE: 0.42  
 LOCATION OF SITE: 5011 Ray Rd, Spring Lake, NC PIN: 0505-65-1815.000  
 WASTEWATER TYPE: Domestic COUNTY: Harnett  
 WATER SUPPLY: Public Water WATER SUPPLY SETBACK: 10  
 EVALUATION METHOD: AUGER BORING  PIT  CUT   
 EVALUATED BY: Britt Wilson, LSS 1351 DATE EVALUATED: \_\_\_\_\_

	INITIAL SYSTEM	REPAIR SYSTEM
AVAILABLE SPACE	675 ft <sup>2</sup> trench bottom	675 ft <sup>2</sup> trench bottom
SYSTEM TYPE	Accepted (25% reduction) System	Accepted (25% reduction) System
SITE LTAR	0.40 gpd/ft <sup>2</sup>	0.40 gpd/ft <sup>2</sup>
MAX TRENCH DEPTH	24 inches (measured on downhill side)	18 inches (measured on downhill side)
SITE CLASSIFICATION	Suitable	OTHER FACTORS _____
COMMENTS	_____	

**PROFILE 1**

HORIZON DEPTH	COLOR	CONSISTENCE	TEXTURE	STRUCTURE	MINERALOGY	OTHER PROFILE FACTORS	
0-12	10YR 5/3	VFR	SL	GR	SEXP	LANDSCAPE POSITION	L
12-22	10YR 6/3	VFR	SL	GR	SEXP	SOIL WETNESS DEPTH	>48"
22-48	10YR 6/8	FI	SCL	SBK	SEXP	SOIL WETNESS COLOR	
						SOIL DEPTH	48"
						SAPROLITE CLASS	NA
						RESTRICTIVE HORIZON	NA
						SLOPE %	7
PROFILE CLASSIFICATION			Suitable	LTAR gpd/ft <sup>2</sup>	0.4	SLOPE CORRECTION (IN)	
COMMENT			_____				

**LEGEND OF ABBREVIATIONS FOR SITE EVALUATION FORM**

<p><b><u>LANDSCAPE POSITION</u></b></p> <p>CC - Concave Slope                  CV - Convex Slope                  DS - Debris Slump                  D - Depression                  DW - Drainage Way                  FP - Flood Plain                  FS - Foot Slope                  H - Head Slope                  L - Linear Slope                  N - Nose Slope                  R - Ridge                  S - Shoulder Slope                  T - Terrace                  TS - Toe Slope</p>	<p><b><u>TEXTURE GROUP</u></b></p> <p>I</p>	<p><b><u>TEXTURE CLASS</u></b></p> <p>S - Sand                  LS - Loamy Sand</p>	<p><b><u>LTAR</u></b> (gal/day/sqft)</p> <p>1.2-0.8</p>
	<p>II</p>	<p>SL - Sandy Loam                  L - Loam</p>	<p>0.8 – 0.6</p>
	<p>III</p>	<p>SCL - Sandy Clay Loam                  CL - Clay Loam                  SiL - Silt Loam                  Si - Silt                  SiCL - Silt Clay Loam</p>	<p>0.6 – 0.3</p>
	<p>IV</p>	<p>SC - Sandy Clay                  C - Clay                  SiC - Silty Clay</p>	<p>0.4 – 0.1</p>
		<p>O - Organic</p>	<p>none</p>
<p><b><u>STRUCTURE</u></b></p> <p>G - Single Grain                  M - Massive                  CR - Crumb                  GR - Granular                  SBK - Subangular Blocky                  ABK - Angular Blocky                  PL - Platy                  PR - Prismatic</p>	<p><b><u>MOIST CONSISTENCE</u></b></p> <p>VFR - Very Friable                  FR - Friable                  FI - Firm                  VFI - Very Firm                  EFI - Extremely Firm</p>	<p><b><u>WET CONSISTENCE</u></b></p> <p>NS - Non Stick                  SS - Slightly Sticky                  MS - Moderately Stick                  VS - Very Sticky</p>	
	<p><b><u>MINERALOGY</u></b></p> <p>SEXP - Slightly Expansive                  EXP - Expansive</p>	<p>NP - Non Plastic                  SP - Slightly Plastic                  MP - Moderately Plastic                  VP - Very Plastic</p>	
<p><b><u>MOTTLES</u></b></p> <p>f - few                      1 - fine                      F - Faint                  c - common                2 - medium                D - Distinct                  m - many                    3 - coarse                    P - Prominent</p>			

Give Horizon Depth in inches below natural soil surface and Fill Depth in inches above land surface.  
 Depth to Soil Wetness: inches below land surface to free water or to soil colors with chroma 2 or less.  
 Classification: S – Suitable                      U – Unsuitable

## SEPTIC SYSTEM DESIGN

See section *Wastewater Treatment System Plans* and Figure 2 for a diagram of the septic system layout and design specifications.

A 1000 gallon (at minimum) septic tank and an approved septic effluent filter is required. There appears to be adequate fall from the house to the initial drainfield for a gravity driven system; however, a pump tank (1000 gallon at minimum) should be added if gravity distribution cannot be demonstrated.

The initial septic system is proposed as a gravity driven system to 232 linear feet of Accepted Status drainlines utilizing a 25% reduction in total drainline length (Figure 2). A long-term acceptance rate (LTAR) of 0.40 gal/day/ft<sup>2</sup> was used to design the dispersal field. A distribution box will be used to deliver effluent in parallel distribution to two 116-ft long drainlines. The drainlines shall be installed off contour (not to exceed 2 inches) with maximum trench bottom depths at 24 inches below surface (as measured on low side).

The repair septic system is proposed as a gravity driven system to 232 linear feet of Accepted Status drainlines utilizing a 25% reduction in total drainline length (Figure 2). A long-term acceptance rate (LTAR) of 0.40 gal/day/ft<sup>2</sup> was used to design the dispersal field. A distribution box will be used to deliver effluent in parallel distribution to two 116-ft long drainlines. The drainlines shall be installed off contour (not to exceed 13 inches) with maximum trench bottom depths at 18 inches below surface (as measured on low side).

## SEPTIC AREA PREPARATION

**It is important that you do not disturb the septic areas during site construction.** A staked line or protective fence should be placed around the system areas prior to construction to eliminate any potential damage to the soil or the layout of the system. Septic areas should not be used for staging construction materials or subjected to vehicular traffic. Do not cut, grade, fill, install utilities, or otherwise alter the designated septic areas.

Care should be taken when clearing vegetation from the septic area. Work should only occur when the soil is at the appropriate moisture content to limit the impact to the soil structure in the soil treatment area. Do not scrape the ground inside the drainfield. **Any clearing or preparation of the septic areas shall be done without removal, disturbance, or compaction of the soil.**

## PERMIT CONDITIONS

### GENERAL CONDITIONS:

The requirements of 15A NCAC 18E are incorporated by reference into this permit and shall be met.

System shall be installed in accordance with the attached *Wastewater Treatment System Plans*.

Any changes to the site plan or intended use must be approved by Hal Owen & Associates. Permit modification and resubmittal to the LHD may be necessary to ensure regulatory compliance.

Conformance to all regulatory setbacks shall be maintained. Local regulations (such as well or riparian buffer ordinances) may require more stringent setbacks.

Minimum soil cover of six inches shall be established over nitrification field. Soil cover above the original grade shall be placed at a uniform depth over the entire nitrification and shall extend laterally five feet beyond the nitrification trench. Site shall be graded to shed water away from field and a vegetative cover established to prevent erosion.

The nitrification field and repair area shall not be subject to vehicular traffic. Vehicular traffic can damage soils, pipes, and valve boxes. Do not use septic areas for parking.

Do not allow underground utilities, water lines, or sprinkler systems to be installed in the septic areas. Damage to the septic areas could result in the septic permit being revoked.

The wastewater system shall not be covered until inspected by Hal Owen & Associates and shall not be placed into use until an Authorization to Operate is issued.

### SPECIAL CONDITIONS:

- To ensure a watertight joint, the inlet and outlet of all tanks shall be equipped with an approved pipe penetration boot.

**WASTEWATER TREATMENT SYSTEM PLANS**

**PROJECT INFORMATION**

Wastewater System	New	.0403 Eng Low Flow	No
Wastewater Strength	Domestic		
Effluent Standard	DSE		
Water Supply	Public Water		
Facility Type	Residential		
Design Wastewater Flow	360 gpd	gal/unit	120
Basis for Flow	3 bedrooms	max occupancy	6
Basement	No	Fixtures in basement?	No
Crawl Space	No	Slab Foundation	Yes

**PROPERTY INFORMATION**

County	Harnett
Site Address	5011 Ray Rd, Spring Lake, NC
S/D Name and Lot#	The Flatts, lot 5
PIN	0505-65-1815.000
County PID	
Size (Acre)	0.42

**APPLICANT INFORMATION**

Name	Carolina Construction of Fayetteville, Inc.
Mailing Address	3117 Cope St Fayetteville, NC 28306
Telephone Number	910-339-4779
E-mail Address	billing@ccfnc.com, rmiller@ccfnc.com

**CONSULTANT INFORMATION**

Company Name	Hal Owen & Associates, Inc.
Mailing Address	PO Box 400, Lillington, NC 27546
Telephone Number	910-893-8743 Fax: 910-893-3594
E-mail Address	hal@halowensoil.com
Licensed Soil Scientist	Hal Owen, LSS #1102 and AOWE# 10036E
System Designer	Jocelyn Proulx

Septic System Design Specifications

**SEPTIC SYSTEM DESIGN**

Proposed Design Daily Flow	<u>360</u> gpd	Drainfield Meets Requirements:
Septic Tank Size (minimum)	<u>1000</u> gallons	.0508 Available Space <u>Yes</u>
Pump Tank Size (minimum)	<u>1000</u> gallons, if required	.0601 Setbacks <u>Yes</u>

**Initial System**      \*See Detailed Design Parameters

System Type	<u>IIb – Accepted wastewater gravity system</u>	
Pump Required	<u>No</u>	ft TDH at _____ GPM
Trenches:	<u>Accepted (25% reduction) System</u>	
Design LTAR	<u>0.40</u> gal/day/ft <sup>2</sup>	Saprolite System <u>No</u>
Total Trench/ Bed Length	<u>232</u> feet	Fill System <u>No</u>
Trench Spacing	<u>9</u> ft on center	
Usable soil depth to LC	<u>48</u> inches	Soil Cover <u>6</u> inches
Maximum Trench Depth	<u>24</u> inches, measured on downhill side of trench	
Artificial Drainage Required	<u>No</u>	

**Repair System**

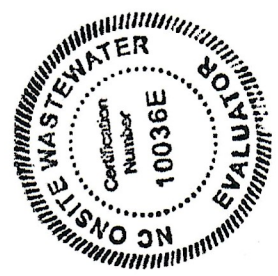
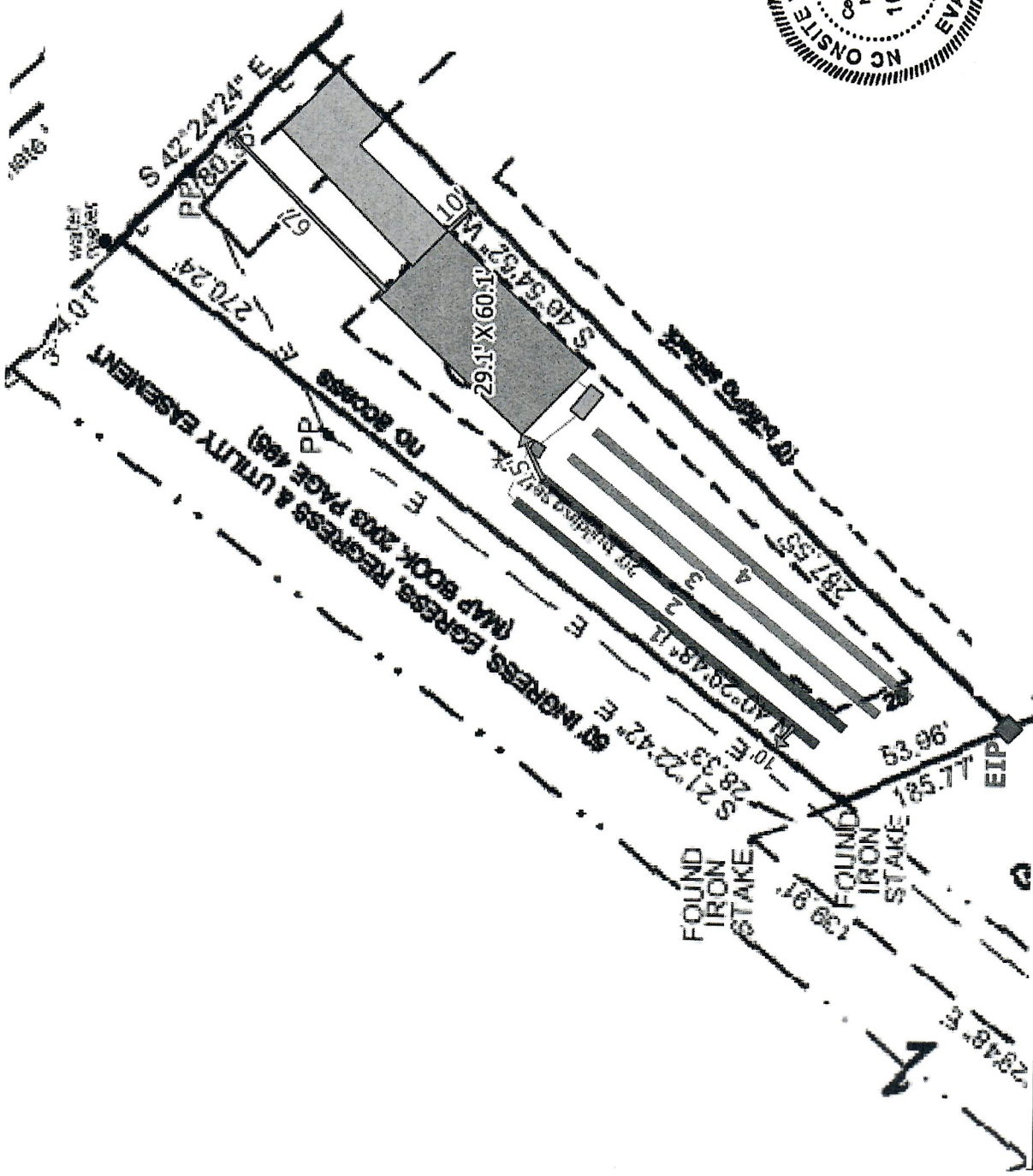
System Type:	<u>IIb – Accepted wastewater gravity system</u>	
Trenches:	<u>Accepted (25% reduction) System</u>	
Design LTAR	<u>0.40</u> gal/day/ft <sup>2</sup>	Saprolite System <u>No</u>
Total Trench/ Bed Length	<u>232</u> feet	Fill System <u>No</u>
Trench Spacing	<u>9</u> ft on center	
Usable soil depth to LC	<u>48</u> inches	
Maximum Trench Depth of	<u>18</u> inches, measured on downhill side of trench	
Pump Required	<u>No</u>	

Potential Drainlines flagged at site on 9-ft centers.

Line #	Color	Relative Elev (ft)	Relative Elev Back of house	Drainline Length(ft)	Field Length(ft)
1	Y	100.56	100.39	116	144
2	B	100.96	101.11	116	148
3	W	101.27	101.64	116	148
4	R	101.10	102.20	116	148
<b>Septic Tank:</b>		102.56			
<b>Reference Elev:</b>		<b>100.00</b>			

- Notes:
- \*No grading or removal of soil in initial or repair areas
  - \*Property lines per owner
  - \*Trench bottoms shall be level to +/- 1/4" in 10ft
  - \*All parts of septic system must meet minimum setbacks





- Legend**
- Boundary
  - House
  - Driveway
  - Reference Elevation
  - Dimensions
  - Septic components
  - Septic Tank
  - Distribution Box
  - Drainlines
  - Initial
  - Repair
  - Supply Line

<p>Hal Owen &amp; Associates Inc. PO Box 400, Lillington, NC 27546 www.halowensoil.com 919-893-8743</p>	<p>The Flatts at Ray Rd Lot 5 29 May 2024</p>	<p>0 50 100 ft</p> <p>For reference only. Not a survey.</p>	<p>Figure 2 Septic Layout</p>
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