## HAL OWEN & ASSOCIATES, INC.

### SOIL & ENVIRONMENTAL SCIENTISTS

P.O. Box 400, Lillington, NC 27546-0400 Phone (910) 893-8743 / Fax (910) 893-3594 www.halowensoil.com

Project Name: 25 Corner Ln, Cameron, NC 28326 LHD Reference: BRES2406-0046 County: Harnett Provided to: Name: Katherine Wilkinson Address: 25 Corner Ln, Cameron, NC 28326 I, Kathrine Wilkinson, acknowledge receipt of the Licensed Soil Scientist Report which includes: • Signed and sealed copy of the AOWE's report that includes the information in G.S. 130A-336.2(k) Operation and Management Program Authorization to Operate I accept the septic system installation and understand that I will be responsible for continued adherence to the Operations and Management program established by the AOWE.

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13 January 2025

Katherine Wilkinson 25 Corner Ln, Cameron, NC 28326

Reference: LSS Report for Authorization to Operate (ATO)

25 Corner Ln, Cameron, NC 28326

LHD # BRES2406-0046

AOWE # HOA-AOWE-2412-04

Dear Ms. Wilkinson,

This LSS Report is being provided pursuant to and meets the requirements of G.S. 130A-336. This report is based on information provided by the property owner or their representative. Hal Owen & Associates, Inc. is not responsible for false or misleading information that may have been provided to us in pursuit of this permit, nor for concealed conditions on the property. Hal Owen & Associates Inc. does not warrant that the septic system will continue to function satisfactorily in the future.

The septic system for the above referenced property has been installed and was inspected by Hal Owen & Associates staff on 8 January 2025. The system has been installed in compliance with applicable NC General Statutes, Rules for Sewage Treatment and Disposal, and all conditions of the AOWE Permit. The system was installed in conformance with the Permit design and specifications. Enclosed with this report are the Septic System Final Inspection Report, As-Built map (Figure 1), and Operation and Management Program.

You will need to sign a document confirming receipt of this report and acceptance of the installed system (pg 1) and submit this report to the Local Health Department (LHD). The LHD shall issue a certificate of occupancy upon receipt of a complete ATO.

I appreciate the opportunity to provide this service. If you have any questions or need additional information, please contact me at your convenience.

SOIL SCIENTIFIC OF NORTH CARD

Certification The Number 10036E

Sincerely,

Hal Owen

Licensed Soil Scientist

Authorized Onsite Wastewater Evaluator

## **Contacts**

#### **APPLICANT**

Applicant Name Katherine Wilkinson

Mailing Address 25 Corner Ln, Cameron, NC 28326

Telephone Number 803-468-5165

E-mail Address wilkinsonwayne12@yahoo.com

#### SOIL SCIENTIST

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

System Inspector Jocelyn Proulx #9943I

#### **INSTALLER**

Company Name Superior Septic, LLC

Mailing Address 608 Dogwood St, Aberdeen, NC 28315

Telephone Number 910-690-1336

Installer & Certification # Patrick Gallimore #9218

#### LOCAL HEALTH DEPARTMENT

Agency Name Harnett County Health Department Environmental Health Division

Mailing Address 307 W Cornelius Harnett Blvd, Lillington, NC 27546

Telephone Number (910) 893-7547 LHD Application # BRES2406-0046

# **Septic System Final Inspection Report**

**Property Identifiers** 

County

Harnett

PIN

9565-78-6778.000

Size (Acre)

0.72

County PID

Site Address

25 Corner Ln, Cameron, NC 28326

S/D Name and Lot#

System Description

Facility Type

Single Family Residence

Basis of flow

4bedrooms Domestic

Wastewater Strength Design Wastewater Flow

480 gpd

Water Supply

.0403 Eng Low Flow

Public No

Soil LTAR

0.90

System Type

IIIbe

Installation

Date

8 January 2025

System Inspector

Jocelyn Proulx, #9943I

Installer

Patrick Gallimore #9218

Septic Tank:

Volume (gallons)

1000

Brand and Tank ID#

HPPP-STB 760

Date of Manufacture

12/2/24

Certified watertight

NA 7'

Distance to Structure Elevation of tank inlet

5' 9"

Elevation of tank outlet

5' 11"

Effluent Filter:

Make and Model

Polylok PL-68

Pump Tank:

Volume (gallons)

1000

Brand and Tank ID#

**HPPP PT-308** 

Date of Manufacture

11/17/24

Certified watertight

NA

Elevation of tank inlet Elevation of tank outlet 6' 6' 2" Pump:

Make and Model	Zoeller 152	
Pump Sys- Elevation Head	6.08	
Pump Sys- Friction Loss	2.03	
Pump Sys- Design Head	2.0	
Pump Sys- TDH	10.11	
GPM (actual)	24.57	

#### Control Panel:

Manufacturer

Aquaworx IPC-SCB-02

#### Distribution:

Supply Line Length to Distribution	148'
Supply Line Diameter	2"
Distribution Device:	Pressure Manifold
Number of outlets (laterals)	2

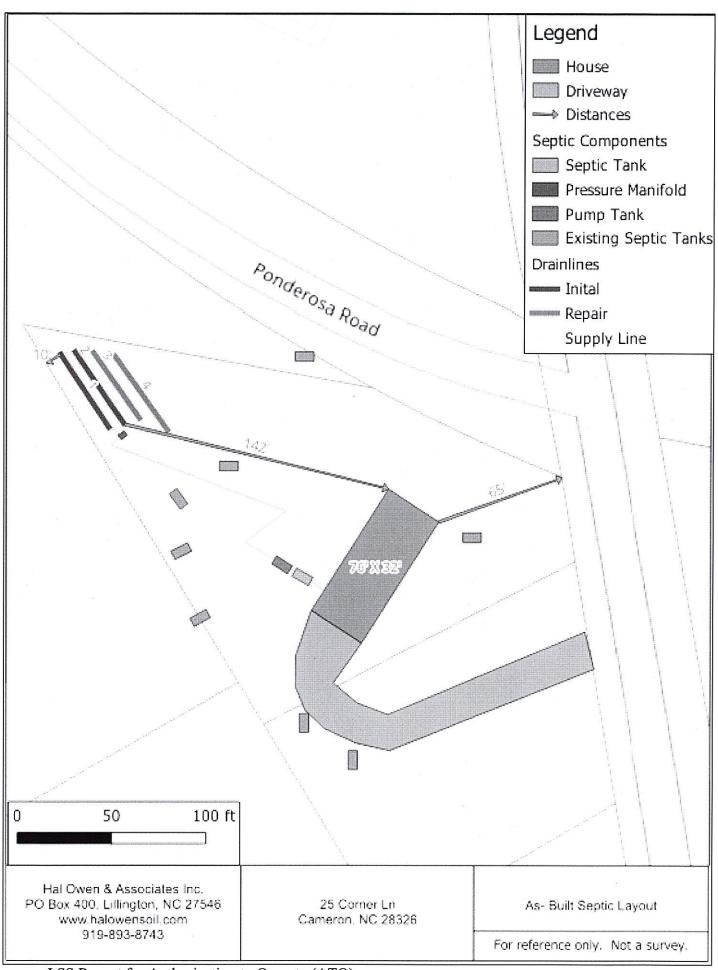
#### Drainfield:

Type		Horizontal PP	BPS		
Distance to Structure		142'			
Distance to Well		NA			
Trench Depth		21" Trench width 36"		36"	
Trench Spacing		9'	Aggregate		
	Length (ft)	Start	Middle	End	
Line 1	10 panels	4' 9 1/4"	4' 9 1/4"	4' 9 1/4"	
Line 2	10 panels	4' 10 1/2"	4' 10 ½"	4' 10 ½"	
Tot	al 88'				

All elevations are given as relative grade rod reading.

#### Notes:

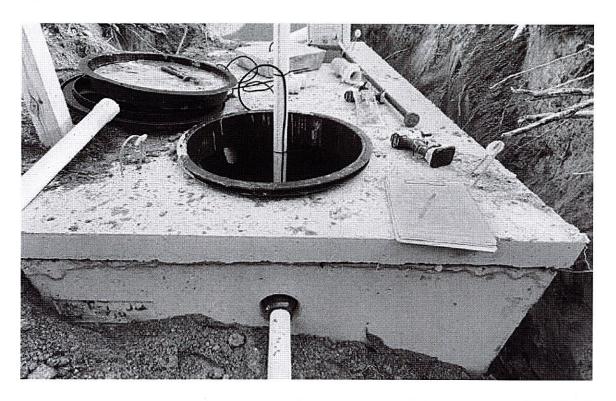
\*TRN-40 INFILTRATOR AQUAWORX TRANSDUCER was utilized rather than floats\*



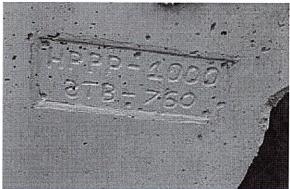
LSS Report for Authorization to Operate (ATO)

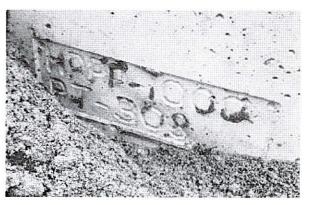
25 Corner Ln, Cameron, NC LHD # BRES2406-0046

# Installation pictures

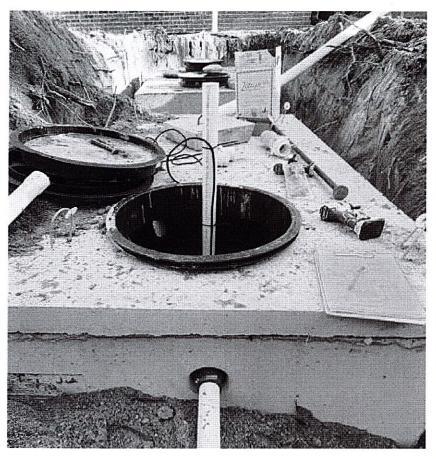




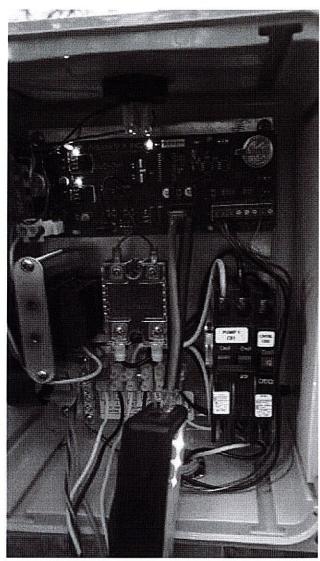


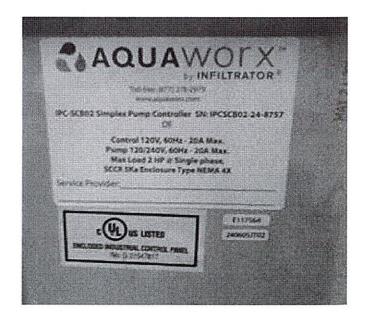


## HAL OWEN & ASSOCIATES, INC.





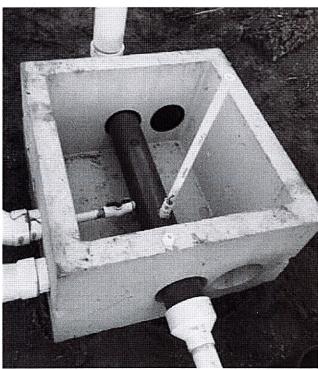




LSS Report for Authorization to Operate (ATO) 25 Corner Ln, Cameron, NC LHD # BRES2406-0046















LSS Report for Authorization to Operate (ATO)
25 Corner Ln, Cameron, NC
LHD # BRES2406-0046
13 January 2025



# **Operation and Management Program**

In accordance with G.S. § 130A-336.2, the owner is responsible for continued adherence to the operations and management program. Septic systems safely treat and dispose of wastewaters produced in the bathroom, kitchen, and laundry. These wastewaters may contain disease-causing germs and pollutants that must be treated to protect human health and the environment. Septic systems must be properly used, operated, and maintained by the homeowner to assure the long-term performance of the system.

PEI	RMIT CONDITIONS:
I.	Performance: System shall perform in accordance with Rule .1961.
II.	Monitoring: As required by Rule .1961.
III.	Maintenance: Ground absorption sewage treatment and disposal systems shall be checked,
	and the contents of the septic tank removed, periodically from all compartments, to ensure
	proper operation of the system. The contents shall be pumped whenever the solids level is
	found to be more than 1/3 of the liquid depth in any compartment.
	Other:
	Subsurface system operator required? Yes NoX
	If yes, see attached sheet for additional operation conditions, maintenance and reporting
IV.	Operation:
V.	Other:

### KNOW WHERE YOUR SEPTIC SYSTEM IS LOCATED

Your property has an onsite subsurface sewage waste disposal system. Familiarize yourself with the location of the system including the tanks, distribution devices, and disposal fields (including repair area). These areas shall be protected from excavation, building additions, outbuildings, pool construction, and soil disturbing activities. Prohibit vehicular traffic over the ground absorption field.

### **DAY-TO-DAY MANAGEMENT**

Don't use too much water.

- The drainfield does not have unlimited capacity.
- ◆ Typical daily water use is 50 gallons per person.
- ◆ The soil drainfield usually has a maximum daily design capacity of 120 gallons per bedroom, even for short periods of time.
- Overloads can occur seasonally, daily, or on the weekend.
- Water conservation will extend the life of your system.
- Repair dripping faucets and toilets.

Limit disposal to sewage.

- ♦ Don't use your septic tank as a trash can for cigarette butts, tissues, sanitary napkins, cotton swabs, cat box litter, coffee grounds, or disposable diapers.
- Restrict the use of your garbage disposal. These add quite a lot of extra solids.
- Don't pour grease or cooking oil down the drain.
- Don't poison your system with harmful chemicals such as solvents, oils, paints, thinners, discarded medications, disinfectants, pesticides, poisons, and other substances.
- Save money. Commercial septic tank additives are usually not necessary.

Protect the system from physical damage (site maintenance).

- Keep the soil over the drainfield covered with vegetation to prevent soil erosion.
- Don't drive vehicles over the system.
- Avoid construction over the system and repair area.
- Don't cover the tank or drainfield with asphalt or concrete.
- Do not install irrigation systems over your drainfield as these could damage the system and/or hydraulically overload the soils.

Dispose of all wastewater in an approved system.

- ◆ Don't put in a separate pipe to carry wash waters to a side ditch or the woods. This is illegal.
- Don't connect pipes from air conditioners or ice makers to the septic system.

#### PERIODIC MAINTENANCE AND REPAIR

Home and yard (site maintenance):

- Protect and maintain the site of your septic tank and drainfield.
- ♦ In the drainfield area, cut down and remove trees that like wet conditions. This includes willows, elms, sweetgums, and some maples.
- ♦ Landscape the yard to divert surface waters away from the tank and drainfield. Eliminate depressional areas within the drainfield.
- Be sure that the water from the roof, gutters, and foundation drains does not flow over the system.
- ♦ Maintain drainage ditches, subsurface tiles, and drainage outlets so that water can flow freely from them.

#### Septic tank:

- Ensure tank risers remain accessible for measuring and pumping solids as well as cleaning the effluent filter.
- ♦ Measure how quickly sludge and scum accumulate in the tank. Pump septage when solids occupy 1/3 to 1/4 of the liquid capacity of the tank (frequency 1 to 3 years).
- ◆ Don't wait until your drainfield fails to have your tank pumped. By then, the drainfield may be ruined. With septic systems, an ounce of prevention is worth a ton of cure!

Table 1. Estimated septic tank inspection and pumping frequency (in years). Tank Size (gallons)

	Number of People Using the System						
Tank Size (gallons)	1	2	4	6	8		
900	11	5	2	1	<1		
1000	12	6	3	2	1		
1250	16	8	3	2	1		
1500	19	9	4	3	2		

Experience and study have shown that pressure manifold systems require routine maintenance in order to function properly. Items 1, 4, and 6 are also recommended for conventional septic systems. The maintenance schedule frequency is as follows:

System Component	Frequency	Maintenance
Septic Tank	6-12 months	Check riser condition (must be accessible from ground surface), excess in/exfiltration, entry of water at riser, and solids accumulation.  Check and clean septic tank filter.  Pump septage when 1-3 to ¼ of
	1-3 years	the liquid capacity of the tank is occupied by solids.
Pump or Dosing Tank	6-12 months	Check riser conditions (must be accessible from ground surface), excess in/exfiltration, entry of water at riser, and solids accumulation. Pump sludge accumulation as required and when septic tank is pumped.  Check pump(s), controls, floats, electrical connections, and alarm for proper operation. Wash (hose) sludge accumulation from pump housing.
Supply Lines (Manifold)	6-12 months	Check for settling, pipe exposure and leakage
Ground Absorption Field	1-4 weeks	Maintain vegetative cover (mow grass and remove weeds and brush). Check for settling, erosion
	6-12 months	and surfacing effluent. Check site drainage, eliminate low or settled areas and divert surface or shallow groundwater movement around fields.
Pressure Manifold	6-12 months	Flush sludge from pressure manifold (any discharge sludge and effluent is to be treated with a chlorine solution). Check and reset pressure head.
General	At all times	Prohibit vehicular or equipment traffic on ground absorption field. Prohibit tillage (gardening) or other soil disturbance over septic field. Practice water conservation to reduce wastewater load on system. Do not permit entry of grease and non-domestic waste to system. Use of garbage disposal is prohibited. Addition of chemical or biological additives has not been demonstrated to be necessary to maintain proper system function. Prevention of root intervention on lateral lines and trenches may be necessary on certain sites. Surface and groundwater diversion structures must be maintained.

#### SIGNS OF POSSIBLE SEPTIC SYSTEM PROBLEMS

- Sewage backing up into your toilets, tubs, or sinks.
- Slowly draining fixtures, particularly after it has rained.
- ♦ The smell of raw sewage accompanied by soggy soil or sewage discharged over the ground or in nearby ditches or woods.
- ♦ Note: pump systems sewage may come to the ground surface when the pump is turned on and then disappear after the pump turns off. This is still a system failure and must be repaired.
- ♦ An alarm flashing (red light) or beeping in the house or in the yard indicating a pump is not working properly or that the water level in a pump tank is too high and close to failure.
- Don't attempt to repair a failing system yourself. Get a repair permit and hire an experienced contractor.

#### **REGULATIONS AND PRECAUTIONS:**

- Be sure the pump and electrical components continue working properly between scheduled maintenance visits.
- Sewage contains germs that can cause diseases. Never enter a septic tank. Toxic and explosive gases in the tank present a hazard. Old tanks may collapse. Electrical controls present a shock and spark hazard. Secure the septic tank lid so that children cannot open it.

For more information about septic systems, contact your county Extension agent or local health department. <a href="https://content.ces.ncsu.edu/septic-system-owners-guide">https://content.ces.ncsu.edu/septic-system-owners-guide</a>

## PREVENTIVE MAINTENANCE RECORD

Your S	Your Septic System Pumper						
	Name:						
	Address:	:					
	Phone:						
Date S	ystem Installed:						
Date	Work Done	el .	Firm	Cost			
		4					
5.0							
11							
_							



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 01/09/2025

Ja		s W Epps		ONLY AN	D CONFERS N THIS CERTIFIC	SSUED AS A MATTER ( NO RIGHTS UPON THE ATE DOES NOT AME	IE CERT ND, EXTE	MATION IFICATE IND OR
P O Box 25		ALTER TH	ALTER THE COVERAGE AFFORDED BY THE POLICE			.ow.		
100		age, NC 28327		INSURERS A	FFORDING CO	/ERAGE	NAIC #	<del>‡</del>
INSL		Superior Septics, LLC			insale Insurand			
	9	608 Dogwood St		INSURER B: A	ccredited Sure	ty and Cas Co., Inc		
		Aberdeen, NC 28315		INSURER C:				
		W. M.		INSURER D:				
CO	VED	AGES		INSURER E:				
A M	HE PO NY R AY P	DOLICIES OF INSURANCE LISTED BEL EQUIREMENT, TERM OR CONDITION ERTAIN, THE INSURANCE AFFORDE IES. AGGREGATE LIMITS SHOWN M	N OF ANY CONTRACT OR OTHER D ID BY THE POLICIES DESCRIBED H	OCUMENT WITH R EREIN IS SUBJECT	ESPECT TO WHIC	H THIS CERTIFICATE MAY	BE ISSUED	OR
	ADD'L		POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMIT	s	
		GENERAL LIABILITY	0400004547.0	09/19/2024	09/19/2025	EACH OCCURRENCE	\$ 1.	000,000
Α	X	X COMMERCIAL GENERAL LIABILITY	0100324547-0	00/10/2024	00/10/2020	DAMAGE TO RENTED PREMISES (Ea occurence)		100,000
		CLAIMS MADE X OCCUR				MED EXP (Any one person)	s E	xcluded
		Special Events Liab Cov				PERSONAL & ADV INJURY	<b>\$</b> 1,	000,000
						GENERAL AGGREGATE	s 2,	000,000
		GEN'L AGGREGATE LIMIT APPLIES PER:				PRODUCTS - COMP/OP AGG	s 2,	000,000
		POLICY X PRO- JECT LOC					\$	
		ANY AUTO				COMBINED SINGLE LIMIT (Ea accident)	\$	
		ALL OWNED AUTOS SCHEDULED AUTOS				BODILY INJURY (Per person)	\$	
		HIRED AUTOS NON-OWNED AUTOS				BODILY INJURY (Per accident)	s	
						PROPERTY DAMAGE (Per accident)	\$	
		GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	\$	
		ANY AUTO	a.			OTHER THAN AUTO ONLY: EA ACC		
		EXCESS/UMBRELLA LIABILITY				EACH OCCURRENCE	\$	
		OCCUR CLAIMS MADE				AGGREGATE	\$	
							s	
		DEDUCTIBLE					s	
		RETENTION \$					s	
В		RKERS COMPENSATION AND	1AUINC160150042600	05/12/2024	05/12/2025	WC STATU- TORY LIMITS ER		
_	50000000	PROPRIETOR/PARTNER/EXECUTIVE	TAUTING 100 150042000			E.L. EACH ACCIDENT	s 1,0	000,000
	OFF	CER/MEMBER EXCLUDED?				E.L. DISEASE - EA EMPLOYEE		000,000
	SPE	s, describe under CIAL PROVISIONS below				E.L. DISEASE - POLICY LIMIT	\$ 1,0	000,000
OTHER  DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS								
CERTIFICATE HOLDER CANCELLATION								
			SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION					
Hal Owen & Associates Inc			DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL DAYS WRITTEN					
P O Box 400			NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL					
Lillington, NC 27546			IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR				/ 1	
iocelvn@halowensoil.com			REPRESENTATIVES.					
,, <u></u>			AUTHORIZED FERRESENTATIVE					
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