## 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: 1286 W Blac	kman Rd, Lot 1			
County: Harnett	LHD Reference: SFD2408-	0016		
Provided to:				
Name: BVA Builders	s, Inc			
Address: 1300 Benso	on Rd, Suite 110, Garner, NC 27529			
I, Anna Ford		acknowledge	receipt	of the
Licensed Soil Scientist Rep	port which includes:			
• Signed and sealed	copy of the AOWE's report that i	includes the in	nformation	in G.S.
130A-336.2(k)				
Operation and Man	nagement Program			
• Authorization to O	perate			
I accept the septic system	n installation and understand that I v	will be respon	sible for c	ontinued
adherence to the Operation	ns and Management program establish	ned by the AO	WE.	
	_			
		3.24	4.25	
Signature		Da	te	_

## 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

24 March 2025

BVA Builders Inc 1300 Benson Rd, Suite 110, Garner, NC 27529

Reference: LSS Report for Authorization to Operate (ATO)

1286 W Blackman Rd, Dunn, NC 28334

LHD # SFD2408-0016

**AOWE # HOA-AOWE-2409-11** 

Dear BVA Builders Inc.,

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 31 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.





Sincerely,

Hal Owen

Licensed Soil Scientist

Authorized Onsite Wastewater Evaluator

## **Contacts**

#### **APPLICANT**

Applicant Name	BVA Builders Inc.
Mailing Address	1300 Benson Rd, Suite 110, Garner, NC 27529
Telephone Number	919-520-2181
E-mail Address	aford@vfgrealty.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	Pro Septic Tanks, LLC
Mailing Address	136 Sugartree Ln, Mount Olive, NC 28365
Telephone Number	(919) 273-1784
E-mail Address	proseptictanks@gmail.com
Installer & Certification #	Litzy Herrera #11274

### 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 #	SFD2408-0016

# **Septic System Final Inspection Report**

## Property Identifiers

County	Harnett	PIN	1504-29-3394
Size (Acre)	1.08	County PID	
Site Address	1286 W. Blackman l	Rd	
S/D Name and Lot#	Lot 1		

## System Description

Facility Type	Single Family Residence
Basis of flow	3 bedrooms
Wastewater Strength	Domestic
Design Wastewater Flow	360 gpd
Water Supply	Public
.0403 Eng Low Flow	No
Soil LTAR	0.40
System Type	IIIbg

#### Installation

	Drainlines inspected on 31 January 2025 Pump final on 7 February 2025
Date	Control Panel Inspection on 24 March 2025
System Inspector	Jocelyn Proulx, #9943I
Installer	Litzy Herrera #11274

## Septic Tank:

Volume (gallons)	1000
Brand and Tank ID#	MCP STB-814
Date of Manufacture	NA
Certified watertight	NA
Distance to Structure	12'
Elevation of tank inlet	5'
Elevation of tank outlet	5' 2 ½"

### Effluent Filter:

Make and Model	Watercore C4CBF
----------------	-----------------

## Pump Tank:

Volume (gallons)	1000
Brand and Tank ID#	MCP PT-53
Date of Manufacture	NA
Certified watertight	NA
Elevation of tank inlet	5' 3"
Elevation of tank outlet	5' 6"

## Pump:

Make and Model	Liberty 280-5
Pump Sys- Elevation Head	6.14
Pump Sys- Friction Loss	1.61
Pump Sys- Design Head	2.0
Pump Sys- TDH	9.75
GPM (actual)	27.37

#### Control Panel:

Manufacturer APS Simplex Model No. APS120-AB	
--	--

#### Distribution:

Supply Line Length to Distribution	37'
Supply Line Diameter	2"
Distribution Device:	Pressure Manifold
Number of outlets (laterals)	3

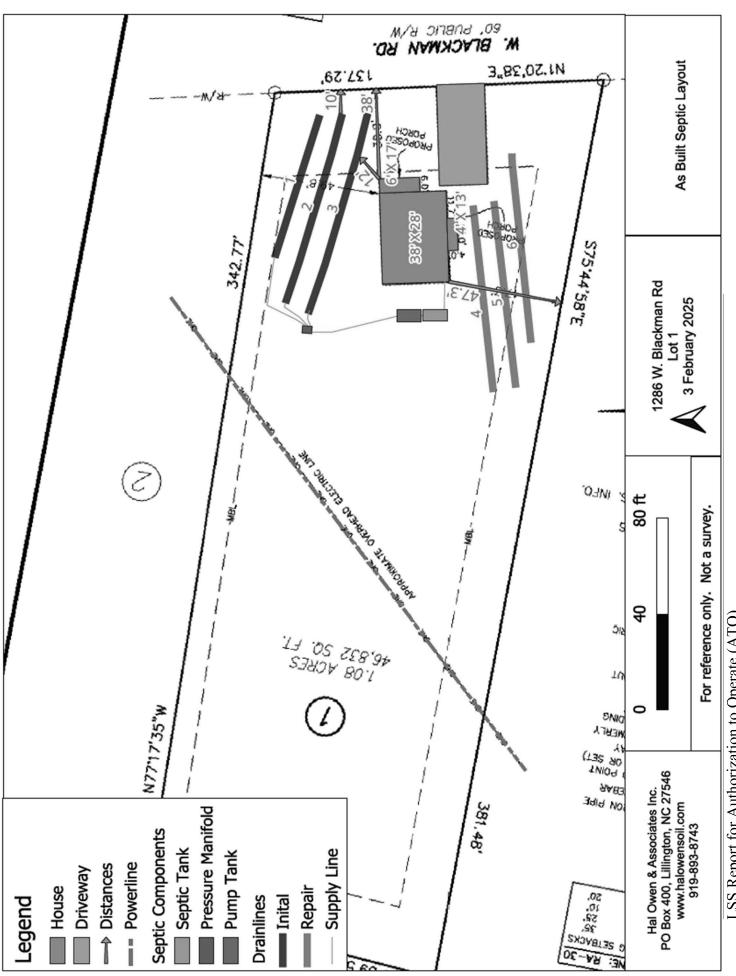
### Drainfield:

Type	Quick4 Standard Chamber
Distance to Structure	12'
Distance to Well	NA

Trench Depth		15"	Trench width	36"
Trench Spacing		9'	Aggregate	chamber
Length (ft)		<u>Start</u>	<u>Middle</u>	<u>End</u>
Line 1 85 Line 2 80		4' 2 1/2"	4' 2 3/4"	4' 3"
		4' 1 1/4"	4' 1 ½"	4' 2"
Line 3	60	4' 1"	4' 1 ½''	4' 2"
Total	225			

All elevations are given as relative grade rod reading.

#### Notes:



LSS Report for Authorization to Operate (ATO) 1286 W. Blackman Rd

LHD # SFD2408-0016

5

## Installation pictures









LSS Report for Authorization to Operate (ATO)
1286 W. Blackman Rd
LHD # SFD2408-0016 24 March 2025





LSS Report for Authorization to Operate (ATO)
1286 W. Blackman Rd
LHD # SFD2408-0016 24 March 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.

p	FRN	ΛIΤ	CON	IDI	$\Gamma \Gamma O$	NS
1	$\mathbf{L}_{1}\mathbf{L}_{1}$	/III		リレノレ	1117	INL).

- I. Performance: System shall perform in accordance with Section .1300.
- II. Monitoring: As required by Section .1300.
- 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.

	ibsurface	system oper	ator require	d? Yes	No_	X		
If	yes, see a	ttached shee	et for additio	nal operation	on condition	ns, mair	ntenance and	d reporting.
IV. O	peration:			_				

**TABLE XXXII.** Management responsibilities based on wastewater system classification type and description.

System Classification Type and Description	LHD Compliance Inspection Frequency	Management Entity	Management Entity Minimum Maintenance Inspection Frequency
IIIb – Wastewater system with a	5 years	Owner or	N/A
single pump or siphon	N/A	Certified Operator	5 years
IIIg- Other non-conventional	N/A	Owner	N/A
systems			

#### **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				

#### 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. https://content.ces.ncsu.edu/septic-system-owners-guide

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.

## PREVENTIVE MAINTENANCE RECORD

Your Septic System Pumper		
Name:		
Address:		
	Email:	
Date System Installed:		
Date Work Done	Firm	Cost



#### CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 1/17/2025

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 have ADDITIONAL INSURED provisions or be endorsed.

	SUBROGATION IS WAIVED, subject to is certificate does not confer rights to							uire an endorsement. A	stateme	nt on
	DUCER				CONTAC NAME:	<del></del>	nchez Cruz			
Pox	vells Insurance							FAX (A/C, No):	9105903	600
	D. Box 376				E-MAIL				000	
1.0	. Box 370				7.551.265					NAI0.#
Cli	aton			NC 28329	INSURER(S) AFFORDING COVERAGE INSURER A: OHIO SECURITY INS CO					NAIC # 24082
INSU						RB: MID SO				55326
							UTHINSUKA	INCE CO		33320
	Septic Tanks LLC				INSURE					
136	136 Sugartree Ln				INSURE					
					INSURE					
_	ınt Olive				INSURE	RF:				
				NUMBER:		IED TO THE I		REVISION NUMBER:	, DEDICE	
IN CI EX	HIS IS TO CERTIFY THAT THE POLICIES OF DICATED. NOTWITHSTANDING ANY REQU ERTIFICATE MAY BE ISSUED OR MAY PER KCLUSIONS AND CONDITIONS OF SUCH PO	IIREM TAIN, OLICI	IENT, THE I ES. LI	TERM OR CONDITION OF AINSURANCE AFFORDED BY	NY CON THE PO	ITRACT OR OT LICIES DESCF DUCED BY PAI	THER DOCUME RIBED HEREIN D CLAIMS.	ENT WITH RESPECT TO WH	ICH THIS	
INSR LTR	TYPE OF INSURANCE	INSD	SUBR WVD	POLICY NUMBER		POLICY EFF (MM/DD/YYYY)	(MM/DD/YYYY)	LIMITS	3	
	COMMERCIAL GENERAL LIABILITY								\$	1,000,000
	CLAIMS-MADE X OCCUR			1				DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	300,000
				1				MED EXP (Any one person)	\$	15,000
A				BKS68225495		09/13/2024	09/13/2025	PERSONAL & ADV INJURY	\$	1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:			1				GENERAL AGGREGATE	\$	2,000,000
	POLICY PRO- JECT LOC			1				PRODUCTS - COMP/OP AGG	\$	2,000,000
	OTHER:			1					\$	
	AUTOMOBILE LIABILITY							COMBINED SINGLE LIMIT (Ea accident)	\$	
	ANY AUTO			1				,	\$	
	OWNED SCHEDULED AUTOS ONLY AUTOS			1				BODILY INJURY (Per accident)	\$	
	HIRED NON-OWNED			1				PROPERTY DAMAGE (Per accident)	\$	
	AUTOS ONLY AUTOS ONLY			1				,	\$	
	UMBRELLA LIAB OCCUR							EACH OCCURRENCE	\$	
	EXCESS LIAB CLAIMS-MADE			1					φ \$	
	DED RETENTION \$			1				AGGREGATE	Φ	
	WORKERS COMPENSATION							PER OTH-	Ψ	
	AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE			1					Φ	500,000
В	OFFICER/MEMBER EXCLUDED?   Y	N/A		WC 08263 2024		09/19/2024	09/19/2025	E.L. EACH ACCIDENT	Φ	500,000
	(Mandatory in NH) If yes, describe under			1				E.L. DISEASE - EA EMPLOYEE :	<b>&gt;</b>	500,000
	DESCRIPTION OF OPERATIONS below			1				E.L. DISEASE - POLICY LIMIT	\$	300,000
DES	DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)									
CEF	RTIFICATE HOLDER				CANC	ELLATION				1
Hal Owen & Associates Inc.				THE	EXPIRATION D	DATE THEREC	ESCRIBED POLICIES BE CA IF, NOTICE WILL BE DELIVE Y PROVISIONS.		) BEFORE	
	PO BOX 400				9,50	RIZED REPRESE				
	Lillington NC 27546				Bertha Sanchez Cruz					