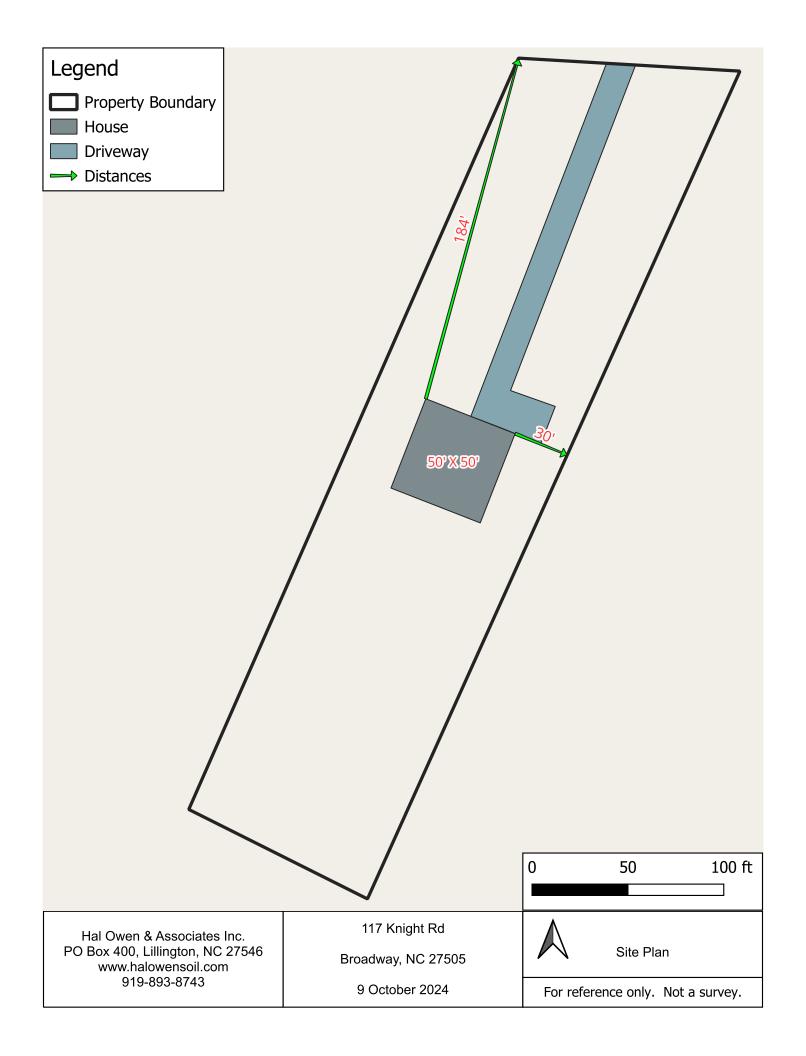


North Carolina Onsite Wastewater Contractor Inspector Certification Board Authorized Onsite Wastewater Evaluator Permit Option for Non-Engineered Systems Notice of Intent (NOI) to Construct

X New Expansion Repair Relocation Relocation of Repair Area
Owner or Legal Representative Information: Name: Jose and Carmela Rubio Mailing address: 1041 Rosser Pittman Rd
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: 117 Knight Rd, Broadway, NC 27505 Tax parcel identification number or subdivision lot, block number of property: PIN 9680-69-1479.000, Lot 4 County: Harnett
System Information: Wastewater System Type: Illbg (Pump to Accepted Status 25% reduction) Daily Design Flow:360 gpd Saprolite System:Yes _ X _ No
Facility Type: X 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: V Plat or Site Plan V Evaluation of Soil and Site Features by Licensed Soil Scientist
Attest: On this the 9 day of October, 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 9 day of October , 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:



HOA-AOWE-2409-14

Issue date 10/9/2024 **Expiration** 10/9/2029

APPLICANT INFORMATION

Name	Jose and Carmela Rubio				
Mailing Address	1041 Rosser Pittman Rd, Broadway, NC 27505				
E-mail Address	ricardo.8777@yahoo.com	Telephone Number	919-356-9933		

PROPERTY IDENTIFIERS

County	Harnett	PIN	9680-69-1479.000
Size (Acre)	1.52	County PID	
Site Address	117 Knight Rd, Broadway, NC 27505		
S/D Name and Lot#	Lot 4		

PROJECT INFORMATION

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

CONSULTANT INFORMATION

Company Name	Hal Owen & Associates, Inc.		
Mailing Address	PO Box 400, Lillington, NC 27546		
E-mail Address	hal@halowensoil.com	Telephone Number	910-893-8743
Licensed Soil Scientist	Britt Wilson, LSS#1351	AOWE	Hal Owen, #10036E

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 Evaluation is being submitted pursuant to and meets the requirements of G.S.130A-336.2. This evaluation includes a 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.









HOA-AOWE-2409-14

WASTEWATER SYSTEM DESIGN SPECIFICATIONS

Proposed Design Daily Flow	360	gpd	Drainfield Meeets Req	uirements:
Septic Tank Size (minimum)	1000	gallons	.0508 Available Space	Yes
Pump Tank Size (minimum)	1000	gallons, if required	.0601 Setbacks	Yes

Initial System

iai Oyotoiii							
System Type	IIIbg -Pump to	Other nor	n-convention	al syst	ems		
Pump Required	Yes			12.1	ft TDH at	27.3	GPM
Trenches:	Accepted (25%	reduction	n) System				-
Design LTAR	0.35	gal/day/ft ²		Sapro	olite System	No	
Total Trench/ Bed	260	feet			Fill System	No	
Trench Spacing		9	ft on center	-			
Usable soil depth	to LC	34	inches				
Maximum Trench	18	inches, measured on downhill side of trench				nch	
Minimum Soil Co	ver	6	inches				
Artificial Drainage	e Required	No					

Repair System

System Type:	IIIbe - Pump to	PPBPS 9	system				
Pump Required	Yes						
Trenches:	PPBPS, horizo	ntal					
Design LTAR	Design LTAR		gal/day/ft²	Saprolite System	No		
Total Trench/ Bed Length		171	feet	Fill System	No		
Trench Spacing		9	ft on center	_			
Usable soil depth	to LC	32	inches				
Maximum Trench Depth of 16			inches, measured on downhill side of trench				
Minimum Soil Co	ver	6	inches				

Potential Drainlines flagged at site on 9-ft centers.

r otentia		es naggeu at si	te on 9-it o	enters.	_			
		Relative	Drainline	Field				
Line#	Color	Elevation (ft)	Length(ft)	Length(ft)				
1	Υ	102.03	50		ר[ajr		
2	R	101.46	121		۲[Repai		
3	В	101.20	100		٦,			
4	W	100.92	92]	Initial		
5	Υ	100.60	68]]	ੋਂ		
Septic 1	Tank:	98.88		=	-			
Pump T	ank:	99.35]	Notes:				
Referenc	e Elev:	100.00		*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

HOA-AOWE-2409-14

PERMIT 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 System Design Specificaitons. See attached SYSTEM LAYOUT for wastewater system design and location.

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 than specified in the septic regulations.

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

The dispersal 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.

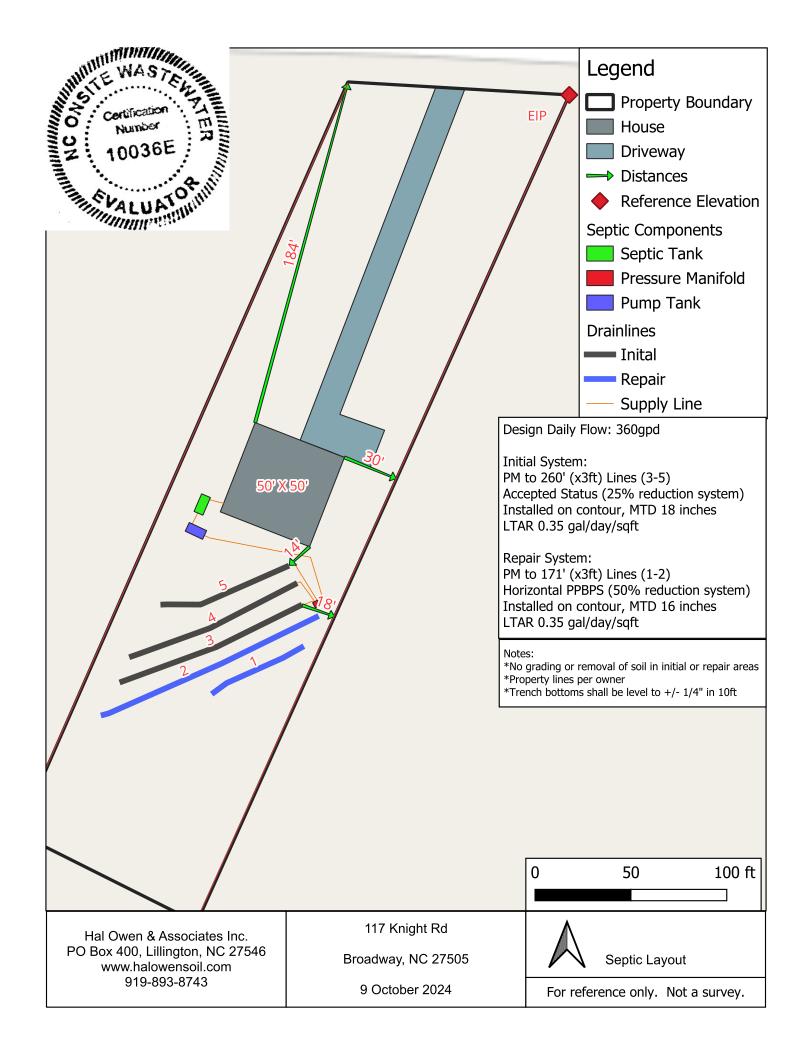
The wastewater system shall not be covered until inspected by Hal Owen & Associates and shall not be placed into use until an Authorization to Operate is issued.

SPECIFIC REQUIREMENTS

A pre-construction conference with the septic contractor is required prior to installation. Call Hal Owen & Associates at least five days in advance to schedule 910-893-8743

The inlet and outlet of all tanks shall be equipped with an approved pipe penetration boot.

The pump tank may be eliminated if gravity distribution can be demonstrated.

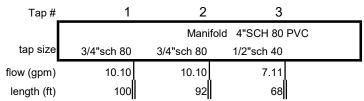


INITIAL WASTEWATER SYSTEM

Pressure Manifold Design Criteria								
	GN DAILY FI		360	gallons/day	SOIL LTAR:	0.35	gpd/ft ²	
	(S (min)			gallons			gallons	
	PLY LINE		80	_gallons _ft	•		. 94110115 " SCH 40 F	2\/C
00	_	J	m flow (gpm) to	- ' '			gpm	VO
TDEN	ICHES D		Accepted (25%	•	•		. gpiii	
IIXLI	iones b		Trench Depth of			sured on l	ow side of tr	rench
	Т	rench width:	•		ffective Tren			ft
		orption Area:		ft ²	Minimum Line			- '` ft
	Absc	лрион діса.		- ''	Willimidin Line	ar Lengur.		-"
MAN	IFOLD	Length (ft):	3	Diameter:	4" sch 80 pvo		Elevation:	102.2
		# Taps	3	Tap Configura	tion: 6in. spac	cing, 1 sid	e of manifol	ld
TAP	CHART			-				_
		Relative		Tap Size/	flow/tap		LTAR]
Line	Color	Elevation	Length(ft)	Schedule	gpm	gpd/ft	(gpd/ft ²)	
3	В	101.2	100	3/4"sch 80	10.10	1.331	0.444]
4	W	100.92	92	3/4"sch 80	10.10	1.447	0.482	1
5	Υ	100.6	68	1/2"sch 40	7.11	1.378	0.459	1
								1
								1
								1
								1
	Tot	tal Drainline:	260	Total Flow:	27.31			1
				•		rget LTAR*:	0.47	-
PUMI	P CALCULAT	TIONS				TAR + 5%:		-
Dose	Volume:	127.34	gallons, with Pip	e Volume at				t pipe
			4.66		Pump Run Ti	•		
			gallons ÷		gal/ inch =	6.29	inches	-
	Tank Elevat		99.35		Elevation (ft):		•	
			*Hazen Williams Fo		` '		- oump tank)	
	tion Head:	7.9	•		-		, ,	
	ın Head:	2.0	•	Total	l Dynamic Hea	ad (TDH):	12.09	ft
			•		•	,		-
Pump	to Deliver:	12.1	ft TDH @	27.3	gpm			
			_		•			
NEM	A 4X Simplex	Control Pan	el with elapsed t	ime meter, eve	nt counter. au	idible and	visible aları	m (w/
	•		atic (HOA) switc					•
	•		nounted a minim			•		•
			Floats to be dete				55 1. 51 p	
oop		•	Brantley 1000 S		Possible Se			
		•	Brantley 1000_l		- Vol(gal):		GPI:	20.25
		sible Pump:		. 20.		ight (in) =	-	
		ontrol Panel:				S'' ("')	17	-
							_	

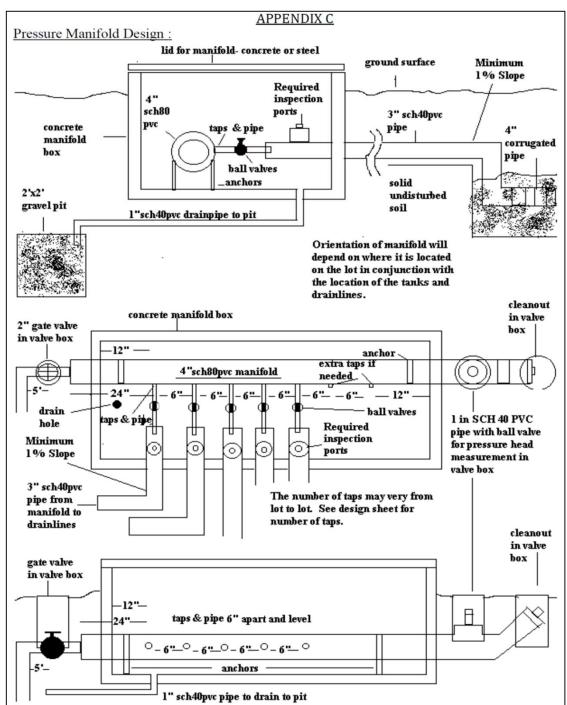
INITIAL WASTEWATER SYSTEM

Pressure Manifold Diagram



<u>Typical</u>

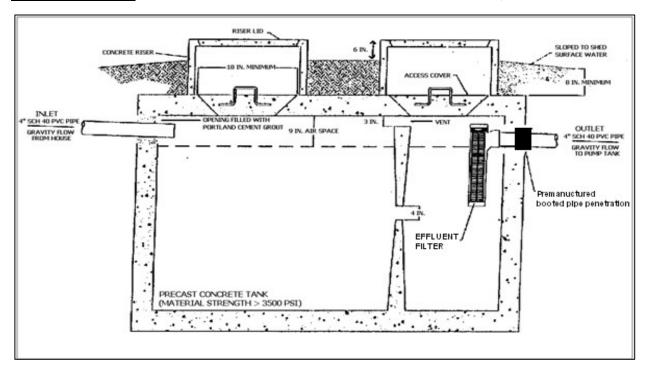
1.



INITIAL WASTEWATER SYSTEM

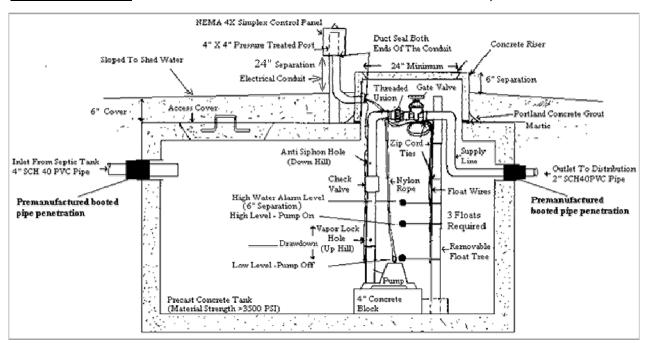
Typical Septic Tank

1000 GALLON SEPTIC TANK, minimum

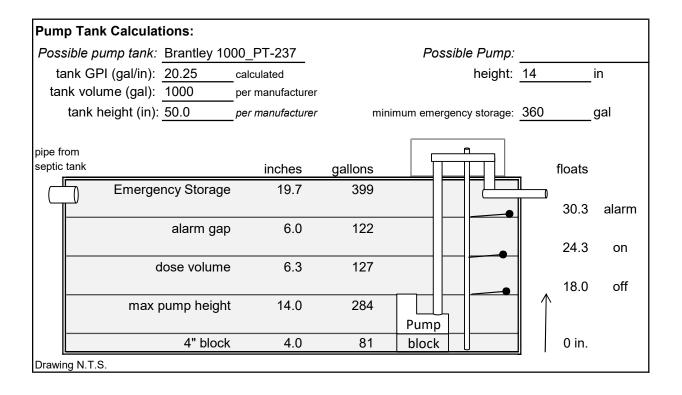


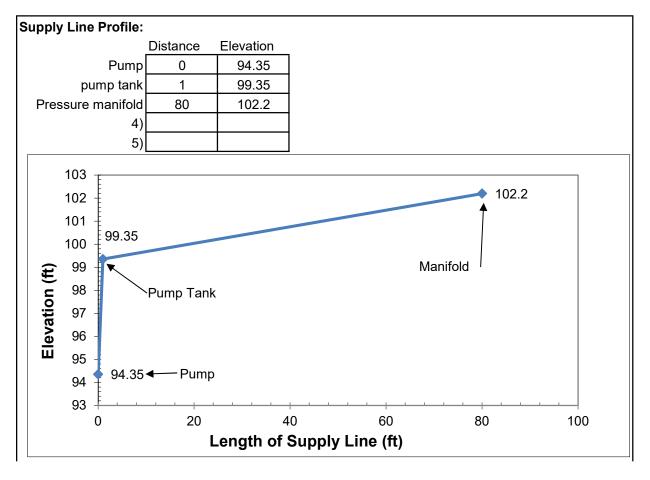
Typical Pump Tank

1000 GALLON PUMP TANK, minimum



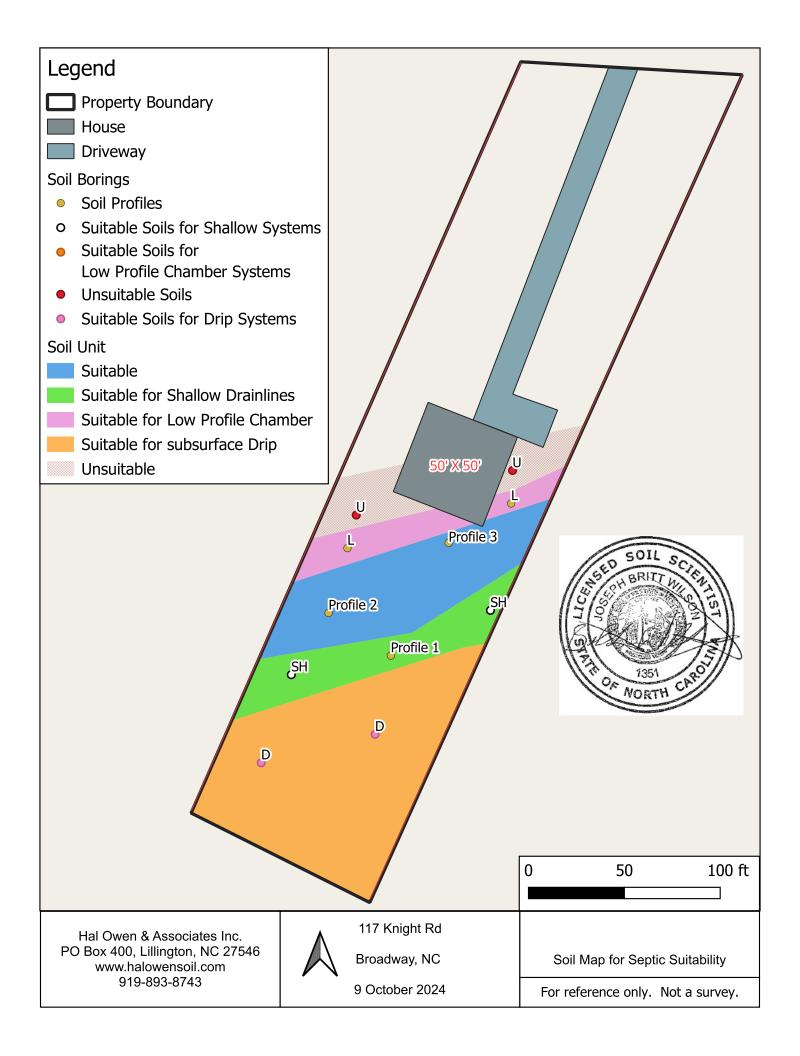
INITIAL WASTEWATER SYSTEM





REPAIR WASTEWATER SYSTEM

DESIGN DAILY FLOW		360	gallons/day	5	SOIL LTAR:	0.35	gpd/ft ²	
TANK	(S (minimur	n)	Septic Tank	1000	gallons	Pump Tank	1000	gallons
SUPF	LY LINE	Length (ft):	100	Diameter:	2	sch 40 pvo	;	
		Min total flo	ow (gpm) to mair	າtain 2 fps scoເ	r velocity =	20.89		
TREN	ICHES Drai	inline Type:	PPBPS, horizon	tal				
		Maximum ³	Trench Depth of	18	inches, mea	asured on lov	w side of trer	nch
	Tr	ench width:	3	feet	Effective Tr	ench Width:	6	ft
	Absor	ption Area:	514	ft ²	Minimum L	inear Length:	171	ft
					÷ 4.33 f	t per panel :	40	panels
PRES	SURE MAN	IFOLD						
		# Taps	2	Tap Configura	tion: 6in. spa	acing, 1 side	of manifold	
		Length (ft):	2.5	Diameter:	4" sch 80 p	vc	Elevation:	103.03
TAP (CHART							
Тар				Drainline	Number of	Tap Size/	Flow/tap	LTAR
#	Line#	Color	Elevation (ft)	Length(ft)	Panels	Schedule	(gpm)	(gpd/ft ²)
1	1	Υ	102.03	50	12	1/2"sch 40	7.11	0.714
2	2	R	101.46	121	28	1"sch 80	16.80	0.697
			Totals:	171	40	Total Flow:	23.91	
							Target LTAR*:	0.70
Pum	p Calcula	tions:					LTAR + 5%:	0.735
	Numbe	r of Panels:	40					
	Do	se Volume:	144	gallons	# of panels *	3.6	gallons/ pan	el
	Dose Pump	Run Time:	6.02	minutes	Dose volum	ne/total flow		
	Daily Pump	Run Time:	15.06	minutes	Daily Flow/t	otal flow		
Draw	down (in.):	144	gallons ÷	20.25	gal/ inch =	7.11	inches	
Pump	Tank Eleva	tion (ft):	99.35	Pump E	levation (ft):	94.35		
Friction	on Head:	1.99	*Hazen Williams For	rmula (use supply	line length+70'	for fittings in pu	ımp tank)	
Eleva	tion Head:	8.68	Design Head:	2.0		Total Head:	12.67	feet
Pump	to Deliver:	23.91	gpm @	12.67	ft head			
NEMA	A 4X Simple	c Control Pa	nel with elapsed	time meter, ev	ent counter,	audible and	visible alarm	า (w/
silend	e button), ha	and-off-auto	matic (HOA) swit	ch, pump run l	ight, and pur	mp on separa	ate circuits is	required.
Contr	ol panel bott	om shall be	mounted a minir	num of 24 in. a	bove finishe	d grade with	in 50 ft of pu	mp tank.
A sep	tic tank filter	is required.	Floats to be dete	ermined by type	e of pump ta	ınk used.		
	Possible S	eptic Tank:	Brantley 1000 S	TB-502	Septic Filter:			
	Possible P	Pump Tank:	Brantley 1000_F	PT-237	Vol(gal):	1000	GPI:	20.25
	Poss	sible Pump:				pump h	neight (in) =	14
	Possible Cor	ntrol Panel:						



Soil/Site Evaluation Form for On-Site Wastewater System

OWNER NAME:	Jose and Carmela Rubio			
PROPOSED FACILITY:	Residential	DESIGN DAILY FLOW:	360	WATER SUPPLY Public Water
LOCATION OF SITE:	117 Knight Rd, Broadway,	NC 27505	PIN:	9680-69-1479.000
WASTEWATER TYPE:	Domestic		COUNTY:	Harnett
EVALUATION METHOD	: AUGER BORING	PIT		сит 🗌
EVALUATED BY:	Britt Wilson, LSS#1351		_ DA	ATE EVALUATED:
	INITIAL SYSTE	ΞM		REPAIR SYSTEM
AVAILABLE SPACE	771 ft ² trench botto	om	514	ft ² trench bottom
SYSTEM TYPE	Accepted (25% re	duction) System		PPBPS, horizontal
SITE LTAR	0.35 gpd/ft ²		0.35	gpd/ft ²
MAX TRENCH DEPTH	18 inches (measu	red on downhill side)	16	inches (measured on downhill side)
SITE CLASSIFICATION	Suitable	OTHE	R FACTORS	
	<u> </u>			

PROFILE 1

COMMENTS:

HORIZON	COLOR	CONSIS	TEXTURE	STRUCTURE	MINERA	OTHER PROFILE FACTORS	
DEPTH		TENCE			LOGY		
0-7	2.5Y 4/2	FR	SL	GR	SEXP	LANDSCAPE POSITION	L
7-21	10YR 6/6	FI	SCL	SBK	SEXP	SOIL WETNESS DEPTH	32"
21-32	10YR 7/4	FI	SCL	SBK	SEXP	SOIL WETNESS COLOR	10YR 7/2
32-48+	10YR 7/4	FI	SCL	ABK	SEXP	SOIL DEPTH	48"
						SAPROLITE CLASS	NA
						RESTRICTIVE HORIZON	NA
						SLOPE %	10
PROFILE CLASSIFICATION			Suitable	LTAR gpd/ft ²	0.35	SLOPE CORRECTION (IN)	3.6
COMMENT						-	

PROFILE 2

HORIZON	COLOR	CONSIS	TEXTURE	STRUCTURE	MINERA	OTHER PROFILE FACTORS	
DEPTH		TENCE			LOGY		
0-11	2.5Y 4/2	FR	SL	GR	SEXP	LANDSCAPE POSITION	L
11-23	10YR 6/6	FI	SCL	SBK	SEXP	SOIL WETNESS DEPTH	34"
23-34	10YR 7/4	FI	SCL	SBK	SEXP	SOIL WETNESS COLOR	10YR 7/1
34-48+	10YR 7/4	FI	SCL	ABK	SEXP	SOIL DEPTH	48"
						SAPROLITE CLASS	NA
						RESTRICTIVE HORIZON	NA
						SLOPE %	10
PROFILE CLASSIFICATION			Suitable	LTAR gpd/ft ²	0.35	SLOPE CORRECTION (IN)	3.6
COMMENT			<u> </u>		<u>-</u>		

PROFILE 3

HORIZON	COLOR	CONSIS	TEXTURE	STRUCTURE	MINERA	OTHER PROFILE FACTORS	
DEPTH		TENCE			LOGY		
0-9	2.5Y 4/2	FR	SL	GR	SEXP	LANDSCAPE POSITION	L
9-27	10YR 6/6	FI	SCL	SBK	SEXP	SOIL WETNESS DEPTH	42"
27-42	10YR 7/4	FI	SCL	SBK	SEXP	SOIL WETNESS COLOR	10YR 7/1
42-48+	10YR 7/4	FI	SCL	ABK	SEXP	SOIL DEPTH	48"
						SAPROLITE CLASS	NA
						RESTRICTIVE HORIZON	NA
						SLOPE %	10
PROFILE CLASSIFICATION			Suitable	LTAR gpd/ft ²	0.35	SLOPE CORRECTION (IN)	3.6
COMMENT			-				

Soil/Site Evaluation Form for On-Site Wastewater System

LEGEND OF ABBREVIATIONS

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

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

All soil characteristics were described in accordance with the USDA Field Book for Describing and Sampling Soils. The soils were evaluated under moist soil conditions. This evaluation included observations of topography and landscape position, soil morphology (texture, structure, clay mineralogy, organics), soil wetness, soil depth, and restrictive horizons.

TERMS AND CONDITIONS

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. 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.

<u>Plan Alterations</u> – 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.

<u>Site Alterations</u> – 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.

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

<u>Authorization to Operate (ATO)</u> – 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.

<u>Change in System Ownership</u> – 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.

<u>Revocation</u> – 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.