

Subsurface Wastewater Disposal System Design Packet

PIN:

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PAC-ONE, PLLC

Subsurface Wastewater Disposal System Design Packet

Date:

Proposed for a:
-bedroom residential dwelling

Located at:

DESIGNED BY:

Steve Bristow

920 Garner Rd, Selma NC 27576

Email: stevebristow57@gmail.com

Phone: (919)906-4737

Session Law 2022-11 (S372) Introduction Letter

This information contained within this packet concerns a soils and subsurface wastewater evaluation conducted by:

Stephen W. Bristow (LSS#1167) of Permit Acquisition Company – One, PLLC

for the property hereafter describe	d as:
at the behest of:	
Owner Print:	
Owner Signature:	
Owner's Representative (if any):	Natascha Clark
Date:	

The LSS/LG evaluation(s) attached to this application is to be used to issue an Improvement Permit in accordance with G.S 130A-335(a2) and (a3).

The plans or evaluations attached to this application are to be used to issue a Construction Authorization Permit in accordance with G.S. 130A-335 (a2), (a5), and (a6).

The LSS Evaluation is being submitted pursuant to, and meets the requirements, of G.S. 130A-335(a2).





ROY COOPER • Governor KODY H. KINSLEY • Secretary MARK BENTON • Chief Deputy Secretary for Health SUSAN KANSAGRA • Assistant Secretary for Public Health

Division of Public Health

Application for Services

This application, in conjunction with the common form established in G.S. 130A-335(a3) and (a5), is optional for local health departments to be used for applications submitted in accordance with G.S. 130A-335(a2), (a3), and (a5). [hereinafter, G.S. 130A-335(a3) and (a5) permits referred to as (a2) Improvement Permit and (a2) Construction Authorization]

Applying for: [(a2) Improvement Permit [(a2) Construction Author	rization (a2) Repair/Construction Authorization
If applying for a Construction Authorization, please indicate desire Accepted Conventional Innovative Other	
 New Construction □ Expansion □ System Relocation □ S-Year Expiration Requested (site plan provided) □ Non-Exp Requesting DHHS review? (systems >3000 GPD or IPWW) □ Yes 	iring Permit Requested (plat provided, defined in G.S.130A-334(7a)
Applicant:	Owner:
Mailing Address:	Mailing Address:
City:	City:
State: Zip:	State: Zip:
Phone #:	Phone #:
Email:	Email:
If the answer to any of the following questions is "yes", applican	· · · · · · · · · · · · · · · · · · ·
Yes No Does the site contain any jurisdictional	
	ed on the site other than domestic sewage?
Yes No Is the site subject to approval by any ot Yes No Are there any easements or right of wa	
res No Are there any easements of right of wa	ys on this property:
are to be used to issue an Improvement Permit and/or Construct I understand that authorized county and state officials are grant conduct necessary inspections to determine compliance with ap the application for an Improvements Permit and/or Construction then the Improvement Permit and Construction Authorization is	oplicable laws and rules. I understand that if the information in on Authorization is falsified, changed, or the site is altered, shall become invalid.
Applicant Signature:	Date:
Owner's Signature:	Date:

Permit/File #:	



ROY COOPER • Governor

KODY H. KINSLEY • Secretary

MARK BENTON • Chief Deputy Secretary for Health

SUSAN KANSAGRA • Assistant Secretary for Public Health

Division of Public Health

Submittal Includes:	(a2) Improvement Permit	(a2) Construction Authorization	☐ Fee \$
	IMPROVEN	MENT PERMIT FOR G.S. 130A-33	35(a2)
County:			
Subdivision (if applical	.ble)	Lot #:	Block: Section:
LSS Report Provided: `	Yes No No		
If yes, name and licens	se number of LSS:		
New 🗌	Expansion	System Relocation	Change of Use
Facility Type:			
Number of bedrooms:	: Number of Occupants:	Other:	
Design Wastewater St	trength: Domestic	High Strength Industr	rial Process Wastewater
Proposed Design Daily	y Flow: GPD	Proposed LTAR (Initial): P	Proposed LTAR (Repair):
Proposed Wastewater	r System Type*:	(Initial) Pump Re	equired: Yes No May be required
Proposed Wastewater	r System Type*:	(Repair) Pump Re-	equired: 🗌 Yes 🔲 No 🔲 May be required
*Please include systen	n classification for proposed wastev	water system types in accordance with Rule	e .1301 Table XXXII
Effluent Standard:	☐ DSE ☐ HSE ☐ NSF/ANSI 40	J ∏TS-I ∏TS-II ∏RCW	
Saprolite System (Initi	ial): 🗌 Yes 🔲 No Saprolite	e System (Repair): 🗌 Yes 🔲 No	
Fill System (Initial):	Yes No If yes, specify: Ne	ew Existing (when adding more than	6 inches of fill to system area provide a fill plan)
Fill System (Repair):	Yes No If yes, specify: No	ew Existing (when adding more than	n 6 inches of fill to system area provide a fill plan)
Usable Depth to LC (Ir	nitial) ^x :	Usable Depth to LC (Repair)x:	^x Limiting Condition
Max. Trench Depth (Ir	nitial)‡: Max. Tr	ench Depth (Repair) [‡] :	[‡] Measured on the downhill side of the trench
Artificial Drainage Rec	quired: Yes No If yes, pleas	se specify details:	
Type of Water Supply:	: Private well Public well	Shared well Municipal Supply	Spring Other:
Drainfield location me	ets requirements of Rule .0508: Ye	es No Drainfield location meets	s requirements of Rule .0601: Yes \to \to \to \to
Permit valid for: 🗌 Fi	íve years [site plan submitted pursu	ant to GS 130A-334(13a)] 🔲 No expirati	ion [plat submitted pursuant to GS 130A-334(7a)]
Permit conditions:			
1			

The LSS evaluation is being submitted pursuant to and meets the requirements of G.S. 130A-335(a2).

See attached site sketch



Licensed Soil Scientist Print Name:

Licensed Soil Scientist Signature: _ Alan Buter

Date: __



This Section for Local Health Department Use Only

Initial submittal	received:	b	У	
		Date	Initials	
G.S. 130A-335(a3) states the following:				
When an applicant for an Improvement Permit submits to a local department, the common form developed by the Department, a within five business days of receiving the application, conduct a Permit includes all of the required components. If the local healt shall notify the applicant of the components needed to complete department to cure the deficiencies in the Improvement Permit is complete within five business days after the local health department and period set out in this subsection, the applicant maccommon form for use as the Improvement Permit.	and a soil evaluation is completeness review th department deterne the Improvement P The local health department receives the comment r	oursuant to subsection of the submittal. A de mines that the Improve Jermit. The applicant m artment shall make a f additional information	(a2) of this section, the local attermination of completeness ament Permit is incomplete, the ay submit additional informational determination as to whet from the applicant. If the loca	health department shall, means that the Improvement de local health department tion to the local health ther the Improvement Permit al health department fails to
The review for completeness of this Improvement Permit is determined to be:	Permit was cond	ucted in accordan	ce with G.S. 130A-335(a	13). This Improvement
☐ Incomplete (If box is checked, information in t	his section is req	uired.)		
The following items are missing:				
			-/3W	
Copies of this were sent to the LSS and the Applica	nt on			
State Authorized Agent:			Date:	<u>4</u>
☐ Complete	//19			1
State Authorized Agent:	1	1	Date:	
This Improvement Permit is issued pursuant to G. attached here. The issuance of this permit in no version for checking with appropriate governing bodies in plat, or the intended use changes. The Improvem permit is subject to compliance with the provision. The Department, the Department's authorized agany liabilities, duties, and responsibilities imposed evaluations, submittals, or actions from a licensed. Improvement Permit Expiration Date:	way guarantees to meeting their re- ent Permit shall ns of 15A NCAC 1 ents, and the loo d by statute or in d soil scientist or	the issuance of otle equirements. This not be affected be 1.8E and to the contain cal health departn in common law fro be licensed geologis	her permits. The permit permit is subject to rev y a change in ownership ditions of this permit. nents shall be discharge m any claim arising out	t holder is responsible vocation if the site plan, p of the site. This ed and released from to for attributed to

See attached site sketch



Permit/File #:	
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Re-submittal of Improvement Permit

	LUD LISE ONLY. This ID reculpy ittal reco	si radi	hv	
	LHD USE ONLY: This IP resubmittal rece	Date	Dy Initials	-
Γhe following i	items are being resubmitted pursuant to G.S.	130A-335(a3) for issuance	e of the Improvement Permi	t:
	THE	SIAIF		
s accurate and	hereby a Scientist (Print Name) complete to the best of my knowledge and to laws, regulations, rules, and ordinances.		n required to be included wi	
Signatui	re of Licensed Soil Scientist		Date	
	The section below is for Local Health Depar	tment use after submittal o	f items noted as missing above	·
LHD Follow-ı	up Completeness Review of Improve	ment Permit		
	completeness of this Improvement Permit re Permit is determined to be:	e-submittal was conducte	d in accordance with G.S. 13	OA-335(a3). This
☐ Incomplete	e (If box is checked, information in this section	on is required.)		
Γhe following it	ems are missing:			
Copies of this w	vere sent to the LSS and the Applicant on	 Date		
State Authorize	ed Agent:		Date:	
☐ Complete				
State Authorize	ed Agent:		Date:	



Permit/File #:	
----------------	--

CONSTRUCTION AUTHORIZATION FOR G.S. 130A-335(a2)

County:			Pre-Construction Conference Required: Yes No	
PIN/Lot Identifie	er:			
Issued To:				
Property Locatio	on:			
AOWE/PE Plans/	Evaluations Provided	d: Yes 🔲 No 🗌	If yes, name and license number of AOWE/PE:	
Facility Type:				
Number of bedro	ooms: Num	ber of Occupants:	Other:	
New	Expansion	Repair	System Relocation Change of Use	
Basement?	Yes	☐ No	Basement Fixtures?	
Crawl Space?	Yes	☐ No	Slab Foundation?	
Type of Wastewa	ater System*		(Initial)	(Repair)
*Please include s	system classification	for proposed waste	tewater system types in accordance with Rule .1301 Table XXXII	
Design Daily Flov	w:	_GPD Wa	astewater Strength: Domestic High Strength Industrial Pr	ocess WW
	4-120 Section 53, En ovide engineering do		Jtilizing Low-flow Fixtures and Low-flow Technologies?	
Effluent Standar	d: DSE H	SE NSF/ANSI	40 TS-I TS-II RCW	
Type of Water Su	upply: 🗌 Private we	ll Public well	I Shared well Municipal Supply Spring Other:	
Installation Requ	uirements/Condition	<u>15</u>		
Septic Tank Size:	: gallons	Total Trench/Be	ed Length:feet Trench/Bed Spacing:feet on center	
Trench/Bed Wid	th: inches	LTAR:	gpd/ft ² Usable Depth to LC (Initial) ^x : ^x Limitin	g condition
Soil Cover:	_ inches	orrected Maximum	m Trench/Bed Depth‡: inches * Measured on the downhill side of	the trench
Pump Tank Size ((if applicable):	gallons	Requires more than 1 pump?	
Pump Requireme	ents: ft. TDH	vs GPM	Grease Trap Size (if applicable): gallons	
Distribution Met	thod: Serial	D-Box or Parallel	Pressure Manifold(s) LPP Other:	
Artificial Drainag	ge Required: Yes	No 🗌 If yes, ple	ease specify details:	
Legal Agreemen	ts (If the answer is "	Yes" to any type of	f legal agreements, please attach a copy of the agreement.)	
Multi-party Agre	ement Required [.02	:04(g)]:	☐ No Declaration of Restrictive Covenants: ☐ Yes ☐ I	No
Easement, Right-	-of-Way, or Encroach	nment Agreement F	Required [.0301(b)]: Yes No	
Management En	tity Required: 🗌 Ye	es 🗌 No Minimu	num O&M Requirements:	
Permit conditi	ons:			
ho roquiromon	to of 1EA NCAC 19E	are incorporated b	ny reference into this permit and shall be met. Systems shall be installed in	accordance

with the attached site sketch. This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be affected by a change in ownership of the site. This Construction Authorization is subject to compliance Certification Number 10012E with the provisions of 15A NCAC 18E, or 15A NCAC 18A .1900, as applicable, and to the conditions of this permit.

AOWE/PE Print Name: _ AOWE/PE Signature: _ Date: ___

This AOWE/PE submittal is pursuant to and meets the requirements of G.S. 130A-335(a2) and (a5).

See attached site sketch



This Section for Local Health Department Use Only

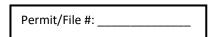
	Initial submittal received:	b	У
		Date	Initials
G.S. 130A-335(a5) states the follow	ving:		
Improvement Permit and Construction Author Department, and any necessary signed and sengineer or a person certified pursuant to Aid department shall, within five business days of the Construction Authorization or Improvem determines that the Construction Authorizat applicant of the components needed to com additional information to the local health de Authorization. The local health department selepartment fails to act within any period sele apply for the building permit for the project Authorization by the local health department licensed engineer submitting the evaluation Authorization or Improvement Permit and Co	orization application together, the per sealed plans or evaluations conducted ricle 5 of Chapter 90A of the General of receiving the application, conduct a nent Permit and Construction Authorization or Improvement Permit and Construction or Improvement Permit and Construction Authorization of the Construction Authorization of the Construction Authorization of the Shall make a final determination as to say after the local health department out in this subsection, the applicant if upon the decision of completeness of the or if the local health department fair pursuant to this subsection may requirement to this subsection for cause. Ususpend or revoke the Construction Authorization for cause.	rmit fee charged by the lod by a person licensed purious Statutes as an Authorized a completeness review of the action includes all of the retruction Authorization is in or Improvement Permit and the Construction Authorization whether the Construction area the additional may treat the failure to act the Construction Authorization to act within five business that the local health a Upon written request of the uthorization or Improvem	ation together, submits a Construction Authorization, or an iocal health department, the common form developed by the suant to Chapter 89C of the General Statutes as a licensed of On-Site Wastewater Evaluator, the local health the submittal. A determination of completeness means that required components. If the local health department necomplete, the local health department shall notify the indicate the local health department shall notify the indicate the local health department shall notify the indicate the local health department and construction in Authorization or Improvement Permit and Construction in Authorization or Improvement Permit and Construction in Information from the applicant. If the local health cat as a determination of completeness. The applicant may reation or Improvement Permit and Construction it is a description of the Authorized On-Site Wastewater Evaluator or department revoke or suspend the Construction in Authorized On-Site Wastewater Evaluator or licensed ent Permit and Construction Authorization pursuant to G.S.
The review for completeness of this	s Construction Authorization v	was conducted in acc	cordance with G.S. 130A-335(a5). This
Construction Authorization is deter	mined to be:		
☐ Incomplete (If box is checked, i	information in this section is re	equired.)	
The following items are missing:		1	
9104			
Copies of this were sent to the AOV	NE/PE and the Applicant on		
		Date	
State Authorized Agent:			Date:
- ///			
Complete			
State Authorized Agent:	VALUE OF THE SECOND SEC		Date of Issuance:
attached here. This Construction A Construction Authorization shall not to compliance with the provisions The Department, the Department' any liabilities, duties, and responsi plans, evaluations, preconstruction the General Statutes as a licensed Authorized On-Site Wastewater Ev	tuthorization is subject to revo ot be affected by a change in of the Laws and Rules for Sev is authorized agents, and the ibilities imposed by statute or n conference findings, submit engineer or a person certified valuator in GS 130A-335(a2), (tments shall be responsible and e, including the issuance of the	ocation if the site pl ownership of the sit wage Treatment and local health departn r in common law fro tals, or actions from d pursuant to Article (a5), and (a7). The D nd bear liability for the e operations permit	ing the signed and sealed plans or evaluations an, plat, or the intended use changes. The te. This Construction Authorization is subject I Disposal and to the conditions of this permit. Inents shall be discharged and released from many claim arising out of or attributed to a a person licensed pursuant to Chapter 89C of 5 of Chapter 90A of the General Statutes as an epartment, the Department's authorized their actions and evaluations and other pursuant to GS 130A-337.



Permit/File #:

Re-submittal of Construction Authorization

	LHD USE ONLY: This CA resubmittal received:	Date	by Initials	
The following it	L tems are being resubmitted pursuant to G.S. 130A-33	35(a5) for issuance of	the Construction Authoriz	zation:
is accurate and	hereby attest the native Wastewater Evaluator (Print Name) complete to the best of my knowledge and that the and local laws, regulations, rules, and ordinances.		quired to be included with on Authorization meets al	
Signatur	re of Authorized On-Site Wastewater Evaluator		Date	
	The section below is for Local Health Department us		ms noted as missing above.	
LHD Follow-ւ	up Completeness Review of Construction A	luthorization		
	completeness of this Construction Authorization reson Authorization is determined to be:	submittal was conduc	ted in accordance with G	S. 130A-335(a5).
☐ Incomplete ((If box is checked, information in this section is requ	ired.)		
The following it	ems are missing:			
	AND 35E ONY	M VIDER		
Copies of this w	vere sent to the AOWE/PE and the Applicant on	Date		
State Authorize	d Agent:		Date:	
☐ Complete				
State Authorize	d Agent:		Date:	





ADDENDUM TO G.S. 130A-335(a2) SUBMITTAL

County:	
PIN/Lot Identifier:	
Issued To:	
Additional Improvement Permit Conditions:	
	200
STATE STATE	
MAT DO 155	
9/23/03 9	
11 57 L AS. 10	
	35 AB \ - V
Not In State of the State of th	
Additional Construction Authorization Conditions:	
1PRII 12 17	16/19
W Esse	DERIT /
QUAM V	



Permit #:	
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Re-submittal of Construction Authorization

	THD LISE ONLY:	This CA resultmittal resolved:		by	
	LHD OSE ONLY.	This CA resubmittal received:	Date	by Initials	
The following it	tems are being resub	omitted pursuant to G.S. 130A-33	35(a5) for issuance o	f the Construction Authoriz	cation:
		T	ATE	<i>y</i>	
l,			at the information re	equired to be included with	this re-submittal
is accurate and		tor (Print Name) st of my knowledge and that the ations, rules, and ordinances.	proposed Construct	cion Authorization meets all	applicable
Signatur	e of Authorized On-Site V	Vastewater Evaluator		Date	
		w is for Local Health Department us		ems noted as missing above.	
LHD Follow-เ	up Completeness	s Review of Construction A	uthorization		
	completeness of this on Authorization is c	s Construction Authorization re-s determined to be:	submittal was condu	icted in accordance with G.	S. 130A-335(a5).
☐ Incomplete (If box is checked, in	formation in this section is requi	ired.)		
The following it	ems are missing:				
		ALIO 3CO ALIA	M VIDERLY		
Copies of this w	ere sent to the AOV	VE/PE and the Applicant on	Date		
State Authorize	d Agent:			Date:	
☐ Complete					
State Authorize	d Agent:			Date:	

DEPARTMENT OF HEALTH AND HUMAN SERVICES DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION ON-SITE WATER PROTECTION BRANCH

	Page <u>1</u> of
PROPERTY ID #:	
COUNTY:	

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

OWNE				(Complete all				E EVALU	JATED:	
ADDR PROPO	ESS: DSED FACILITY FION OF SITE:	<u></u>	PR	OPOSED DESIGN	FLOW (.0400):		PROP	ERTY SIZI	E:	
WATE	R SUPPLY: 🗆 1	Public 🗌 Sin		☐ Shared Well ☐ ☐ Cut TY			WATE	R SUPPLY	SETBACK:_	
P R O F	P R O SOIL MO			IORPHOLOGY OTHER PROFIL						
I L E	.0502 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	.0503 STRUCTURE/ TEXTURE	.0503 CONSISTENCE/ MINERALOGY	.0504 SOIL WETNESS/ COLOR	.0505 SOIL DEPTH	.0506 SAPRO CLASS	.0507 RESTR HORIZ	.0509 PROFILE CLASS & LTAR*	.0502(d) SLOPE CORRE CTION
1					- - -					
2					-					
3					-					
4					-					
	ESCRIPTION	INITIAL SYS	STEM REPAIR ST	YSTEM						
	le Space (.0508) Type(s)			SITE CLA EVALUA	SSIFICATION (.0509):		500 SOI	E SCIENT	
Site LT				OTHER(S	PRESENT:		//			
	ım Trench Depth						((-
Comme	ents:						\	NOR NOR		
								The second second		

Revised January 2024 Form SSE-24.2

Hen Buter

LEGEND

LANDSCAPE POSITION	SOIL GROUP	SOIL TEXTURE	CONVENTIONAL LTAR (gpd/ft²)	SAPROLITE LTAR (gpd/ft²)	LPP LTAR (gpd/ft²)	MINERA CONSIS	•	STRUCTURE				
CC (Concave slope)		S (Sand)		0.6 - 0.8		MOIST	WET	SG (Single grain)				
CV (Convex Slope)	j '	LS (Loamy sand)	0.8 - 1.2	0.5 -0.7	0.4 -0.6	Lo (Loose)	NS (Non-sticky)	M (Massive)				
D (Drainage way)	li li	SL (Sandy loam)	0.6 - 0.8	0.4 -0.6	0.3 - 0.4	VFR (Very friable)	SS (Slightly sticky)	GR (Granular)				
FP (Flood plain)		L (Loam)		0.2 - 0.4		FR (Friable)	S (Sticky)	SBK (Subangular blocky)				
FS (Foot slope)		SiL (Silt loam)		0.1 - 0.3		FI (Firm)	VS (Very sticky)	ABK (Angular blocky)				
H (Head slope)		SCL (Sandy clay loam)		0.05 - 0.15**		VFI (Very firm)	NP (Non-plastic)	PR (Prismatic)				
L (Linear Slope)	III	CL (Clay loam)	0.3 - 0.6		0.15 - 0.3	EFI (Extremely firm)	SP (Slightly plastic)	PL (Platy)				
N (Nose slope)		SiCL (Silty clay loam)	None				P (Plastic)					
R (Ridge/summit)		Si (Silt)						VP (Very plastic)				
S (Shoulder slope)		SC (Sandy clay)								SEXP (Slightly	expansive)	
T (Terrace)	IV	SiC (Silty clay)	0.1 - 0.4			0.05 - 0.2	EXP (Exp	ansive)				
TS (Toe Slope)]	C (Clay)						-				
	•	O (Organic)	None									

^{*} Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.
**Sandy clay loam saprolite can only be used with advanced pretreatment in accordance with 15A NCAC 18E .1200.

HORIZON DEPTH In inches below natural soil surface DEPTH OF FILL RESTRICTIVE HORIZON In inches from land surface

Thickness and depth from land surface

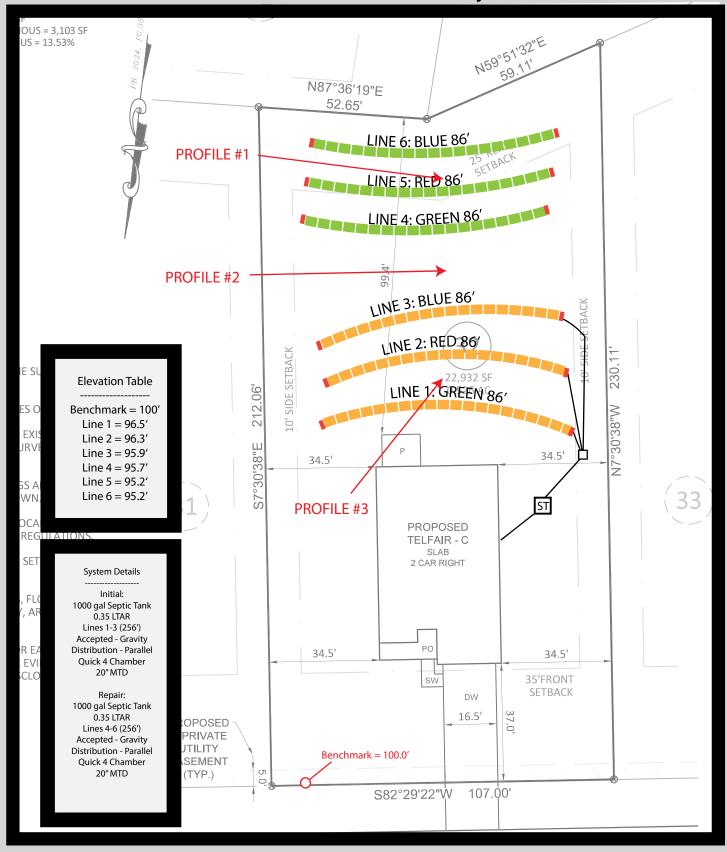
SAPROLITE S(suitable) or U(unsuitable); Evaluation of saprolite shall be by pits.

Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation SOIL WETNESS

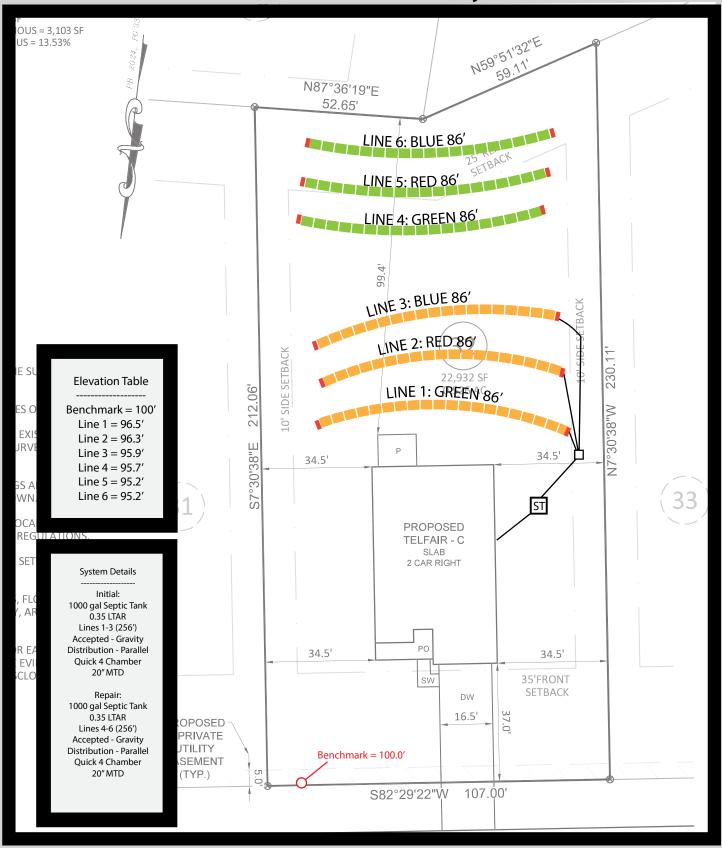
CLASSIFICATION S (Suitable) or U (Unsuitable)

Show profile locations and other site features (dimensions, reference or benchmark, and North).

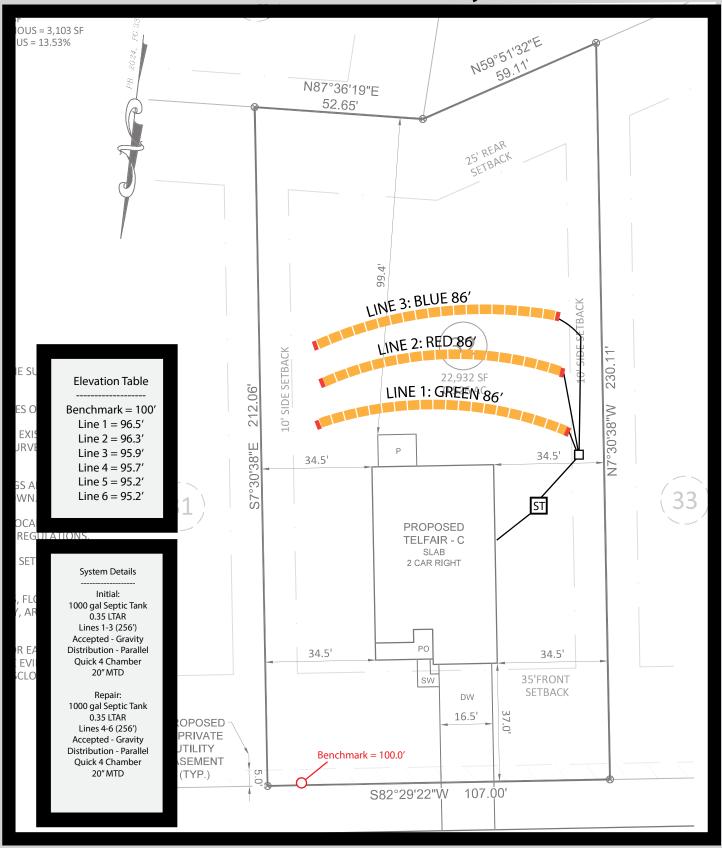
NCDHHS/DPH/EHS/OSWP Revised January 2024



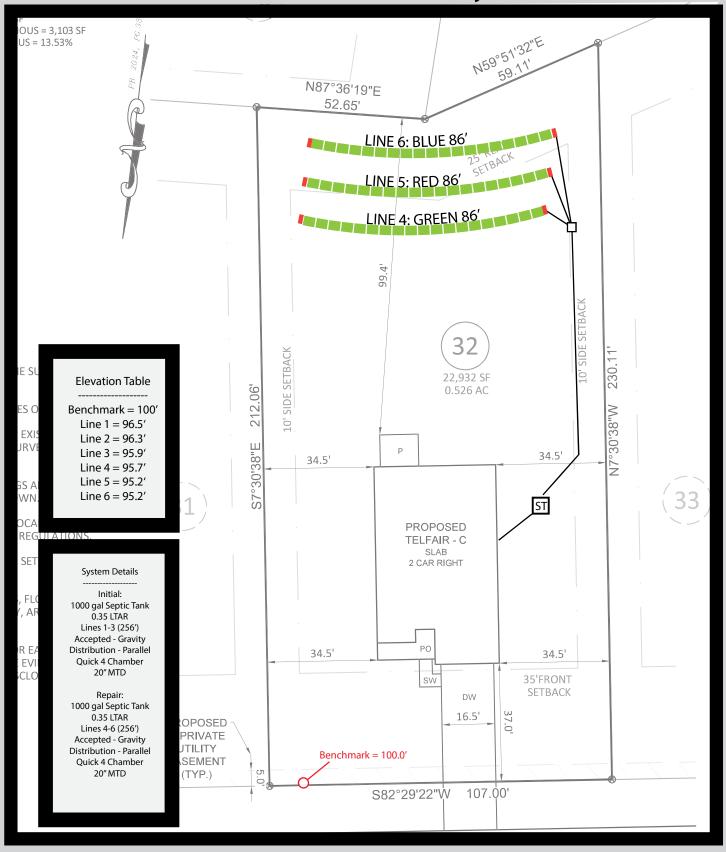














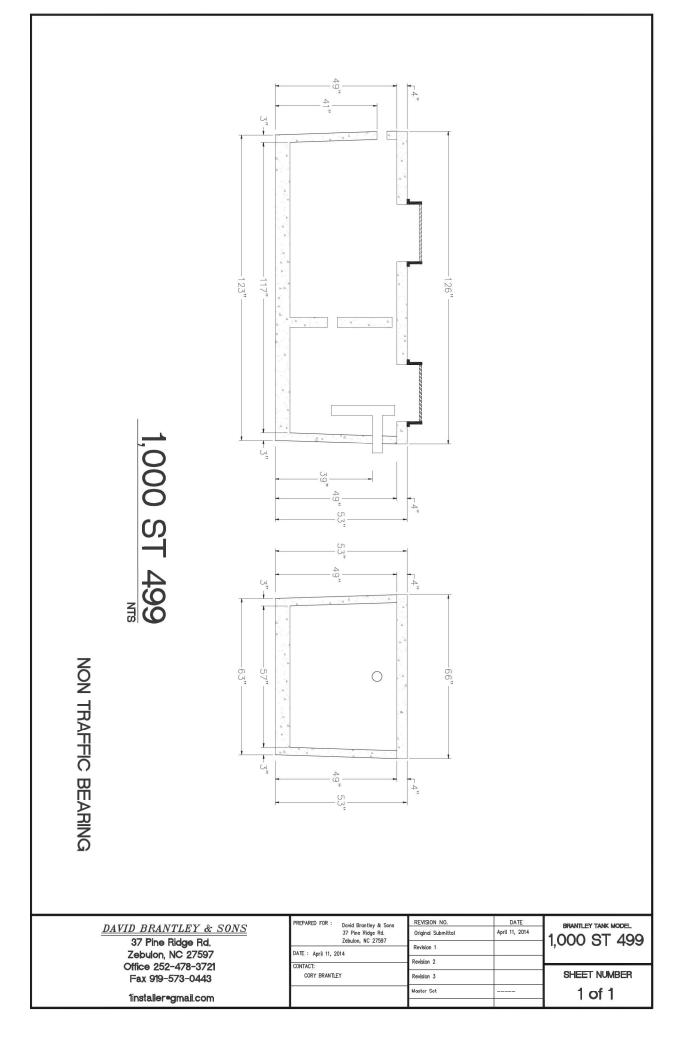
SYSTEM DETAIL OVERVIEW

Initial System

Design Criteria	
Number of bedrooms Design Flow Soil L.T.A.R.	
System Detail	
Trench Depth Total Trench Length Distribution	
System Components	
Trench Product Septic Tank Effluent Filter	

Repair System

Design Criteria	
Number of bedrooms Design Flow Soil L.T.A.R.	
System Detail	
Trench Depth Total Trench Length Distribution	
System Components	
Trench Product Septic Tank Effluent Filter	





PL-68 Filter and Tee

PL-68 is much more than just an effluent filter. The housing can also be used as an inlet baffle (tee) or an outlet baffle. The housing is designed to accept Polylok's snap in gas deflector to deflect gas bubbles away from the tee and to keep the solids in the tank.

Features:

- Offers 68 linear feet of 1/16" filter slots, which significantly extends time between cleaning.
- Accepts 3/4" PVC handle.
- Locks in any 360° position when used with PL-68 Tee.
- PL-68 Housing can be used as an inlet or outlet tee.
- Gasket prevents bypass.

PL-68 Installation:

Ideal for residential waste flows up to 800 gallons per day (CPD). Easily installs in any new or existing 4" outlet tee.

- 1. Locate the outlet of the septic tank.
- 2. Remove the tank cover and pump tank if necessary.
- 3. Glue the filter housing to the outlet pipe, or use a Polylok Extend & Lok if not enough pipe exists.
- 4. Insert the PL-68 filter into tee.
- 5. Replace and secure the septic tank cover.

PL-68 Maintenance:

The PL-68 Effluent Filter will operate efficiently for several years under normal conditions before requiring cleaning. It is recommended that the filter be cleaned every time the tank is pumped, or at least every three years.

- 1. Do not use plumbing when filter is removed.
- 2. Pull PL-68 out of the tee.
- 3. Hose off filter over the septic tank. Make sure all solids fall back into septic tank.
- 4. Insert filter back into tee/housing.

Related Products:

PL-68 Filter Concrete Baffle

Extend & LokTM



Extend & Lok™ Easily installs into existing tanks.

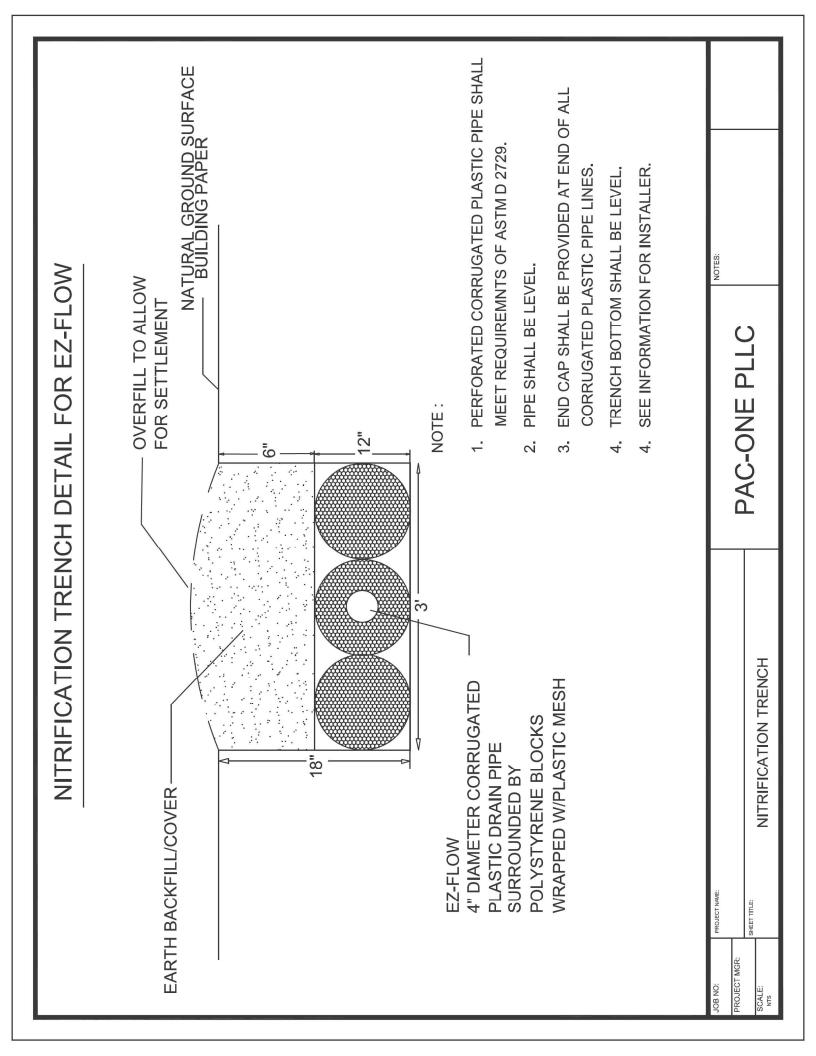


4" SCHD 40

to 110mm Pipe

4" SCHD 40

to SDR 35







The Quick4® Standard Chamber

Quick4® Series

Ouick4 Standard with MultiPort EndCap



turns up to 10°, right or left. The MultiPort™ endcap allows multiple piping options and eliminates pipe fittings. The chamber's four-foot length provides optimal installation flexibility.

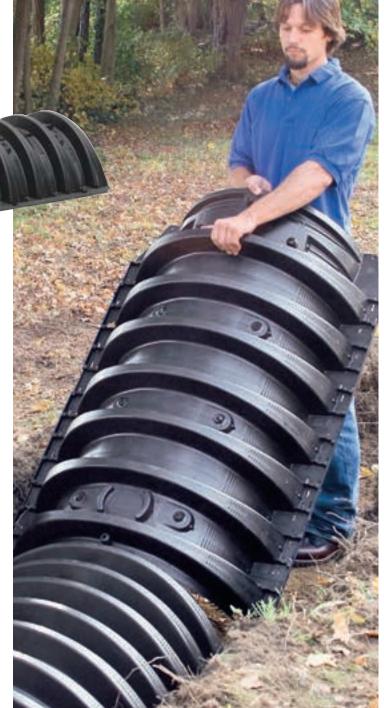
Chamber Benefits:

- Advanced contouring connections swivel up to 10°, right or left
- Latching mechanism allows for quick installation
- · Four-foot chambers are easy to handle and install
- · The Quick4 Standard Chamber supports wheel loads of 16,000 lbs/axle with only 12" of cover
- · Certified by the International Association of Plumbing and Mechanical Officials (IAPMO)



MultiPort Endcap Benefits:

- · Tear-out seals on inlet ports provide a tight fit to the pipe
- Eight molded-in inlets/outlets allow for maximum piping flexibility
- · Eliminates pipe fittings
- Fits on either end of the Quick4 Standard Chamber



Quick4® Series

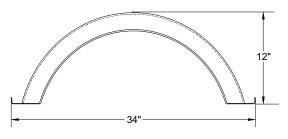
Because installations are faster with Quick4 chambers, you save on heavy equipment operation and labor.

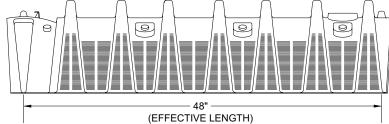
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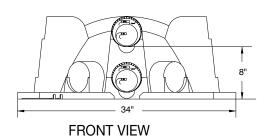
Ouick4 Standard Chamber

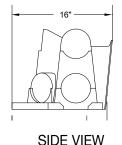


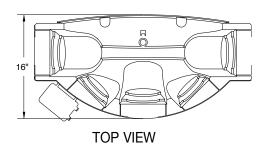




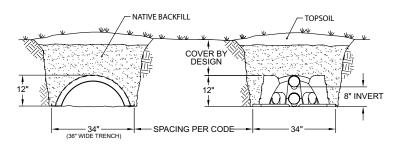
MultiPort EndCap







Typical Trench View -



Quick4® Standard Chamber Specifications				
Size	34"W x 53"L x 12"H (864 mm x 1346 mm x 305 mm)			
Effective Length	48" (1219 mm)			
Louver Height	8" (203 mm)			
Storage Capacity	43 gal (163 L)			
Invert Height	8" (203 mm)			



4 Business Park Road P.O. Box 768 Old Saybrook, CT 06475 860-577-7000 • Fax 860-577-7001 1-800-221-4436 www.infiltratorwater.com

INFILTRATOR WATER TECHNOLOGIES, LLC ("INFILTRATOR") Infiltrator Water Technologies, LLC STANDARD LIMITED Drainfield WARRANTY

(a) The structural integrity of each chamber, endcap, EZflow expanded polystyrene and/or other accessory manufactured by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by Infiltrator to be covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE

(c) This Limited Warranty shall be void if any part of the chamber system is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty. Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder. The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

U.S. Patents: 4,759,661; 5,017,041: 5,156,488; 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,716,163; 5,588,778; 5,839,844 Canadian Patents: 1,329,959; 2,004,564 Other patents pending. Infiltrator, Equalizer, Quick4, and SideWinder are registered trademarks of Infiltrator Water Technologies. Infiltrator is a registered trademark in France. Infiltrator Water Technologies is a registered trademark of Mexico. Contour, MicroLeaching, PolyTuff, ChamberSpacer, MultiPort, PosiLock, QuickPlay, SnapLock and StraightLock are trademarks of Infiltrator Water Technologies. PolyLok is a trademark of PolyLok, Inc. TUF-TITE is a registered trademark of TUF-TITE, INC. Ultra-Rib is a trademark of PEX Inc.

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INFORMATION FOR THE CONTRACTOR

The permit should be read very carefully prior to bidding. The following are details that must be considered by the contractor prior to and during installation:

- Tanks shall be approved by NCDHHS and certification supplied by the manufacturer.
- The installer shall be responsible to the owner for placement of the tanks and to ensure that final grades are returned to the original grade, with exception of added structural features.
- The supply trench shall be compacted to eliminate cavities left during initial fill placement without damage or displacement of pipe or fittings.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy-bodied PVC pipe glue applied to weld all joints.
- Where required by the regulating County Health Department, post installation inspections by the Designer or his representative must be scheduled **5 week days** in advance.
- Trenches shall be carefully excavated so the bottom is level for the entire length and width of the trench. If the trench bottom level needs adjusting after excavation it must be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over-excavated during initial trenching. All fine grading within the trench will be done by hand with a shovel. No loose material will be left in the trench.
- All pipe openings in the tanks shall be properly filled with press boot seal. This also applies to the joints around the riser.
- All tanks shall be properly back filled and compacted to prevent settlement.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
- No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used for installation.
- Elevations at pin flag locations should be checked by the contractor prior to beginning trench excavation.
- Pump tank riser shall be 6" above grade, control panel shall be 18" above grade.
- -Septic tank shall have specified effluent filter or approved equivalent.

System Specifics:

- System uses Quick 4 Chamber drain line.
- Repair uses Quick 4 Chamber drain line.

Miscellaneous errors and omissions

Markel has over 35 years of experience providing miscellaneous errors and omissions insurance. Our leadership has a wealth of knowledge and expertise in protecting small business owners from litigation stemming from actual or perceived negligence. Our underwriting team has crafted policies that fit your specific needs, while our seasoned, in-house claims professionals will help you successfully navigate a loss or claim should you need their assistance.

Reporting new professional liability claims

New Claims can be reported in writing by website, email, fax, or regular mail. Please refer to your specific policy for all relevant reporting requirements.

To report a new claim, visit markelinsurance.com/file-a-claim and select "BOP/Miscellaneous errors and omissions/Workers compensation" from the drop down. You can also email newclaims@markelcorp.com and include the following:

- Policy number
- Insured and claimant names with contact details
- · Date of loss
- Location and description of loss
- All pertinent documentation available (incident report, police report, witness information, photos, etc.)

General claims questions

For information about an already reported Professional Liability claim, email: markelclaims@markelcorp.com, or contact your assigned claim examiner directly.

Additional contact information:

(800) 362-7535 or (800) 3 MARKEL (855) 662-7535 or (855) 6 MARKEL

Markel Claims Department, P.O. Box 2009,

Glen Allen, VA 23058-2009

While your policy is primarily designed to protect against a variety of professional errors and omissions claims, it may also provide protection for other specific exposures such as pollution claims, disciplinary proceedings, third party discrimination claims, subpoena and public relations expenses, among others. Contact your agent for more information, or if you have reported a Claim, your assigned examiner.

Risk management and loss prevention

Policyholders have access to loss control and risk management resources that can assist in a better understanding of potential hazards within their operation and ways to reduce claims.

Here's a sample of the many services available:

- Exposure assessments
- Loss analysis tools
- Safety videos
- Safety training materials
- Regulatory program guidance

Designed Protection® for professional service providers and associations – professional service providers hotline

Our panel of Risk Management experts is available to discuss general risk management related concerns and questions. Please visit **markelcorp.com/riskmanagement** and under "Designed Protection®" click "Click here," enter your policy number, then select "Professional Service Providers Hotline" to access our panel of experts.

Visit our website at:

markelinsurance.com/risk-management-home.

For more information about any of Markel's loss control services, contact us at (888) 500-3344 or email losscontrol@markelcorp.com.

For more information about our programs, risk management articles, and FAQs, please visit **markelinsurance.com**. To pay your bill or view policy documents, please visit **portal.markelinsurance.com**.





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 11/26/2024

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 be endorsed. If SUBROGATION IS WAIVED, subject to

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			·			SSEP0476240AEM		11/22/2024	11/22/2025	MED EXP (Any one person)	\$	10,000
										PERSONAL & ADV INJURY	\$	1,000,000
	GEN	N'L AGGREGATE LIMIT APPLIE	ES PER:							GENERAL AGGREGATE	\$	2,000,000
	х	POLICY PRO- JECT	LOC							PRODUCTS - COMP/OP AGG	\$	2,000,000
		OTHER:									\$	
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В	(Mar	ICER/MEMBER EXCLUDED? ndatory in NH)		N/A		69KOUB-5N24039-7-24		11/14/2024	11/14/2025	E.L. DISEASE - EA EMPLOYEE	\$	500,000
	If yes	s, describe under CRIPTION OF OPERATIONS b	below							E.L. DISEASE - POLICY LIMIT	\$	500,000
A	Erı	rors & Omissions				SSEP0476240AEM		11/22/2024	11/22/2025	Each Occurrence		\$1,000,000
								,,	,,,	General Aggregate		\$2,000,000
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DESC	DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)											
CFF	CERTIFICATE HOLDER CANCELLATION											
Smith Douglas Homes 3412 Apex Peakway Apex, NC 27502			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) BEFORE					
										Man 1	\bigcap	
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MARKEL INSURANCE COMPANY

10275 West Higgins Road, Suite 750 Rosemont, IL 60018 (800) 431-1270

INSURANCE POLICY

Coverage afforded by this policy is provided by the Company (Insurer) and named in the Declarations.

In **Witness Whereof**, the company (insurer) has caused this policy to be executed and attested and countersigned by a duly authorized representative of the company (insurer) identified in the Declarations.

Kathleen Anne Sturgeon By W. Sahres

Secretary

President

MJIL 1000 06 10 Page 1 of 1



MARKEL INSURANCE COMPANY

NOTICE TO POLICYHOLDERS CLAIM REPORTING

Please immediately report a new claim under this policy to:

newclaims@markel.com

For general claims inquiries after a claim has been reported, please email:

markelclaims@markel.com

In order for us to expedite the handling of your claim and quickly refer it to the appropriate party, please have the following information available:

- Claim number (or report as new)
- Your name, contact information and position with the Named Insured
- Date of loss
- Policy number and insured name
- Details of loss

Our address and additional contact information are as follows:

Markel Claims P.O. Box 2009 Glen Allen, VA 23058-2009 Phone: 800-362-7535 (800) 3MARKEL

Fax: 855-662-7535 (855) 6MARKEL

Markel understands the importance of having knowledgeable claims professionals prepared to answer your questions with personal attention and expertise. With claims professionals located across four times zones, you are sure to find the claims assistance you need -- when you need it.

PLEASE REFER TO THE POLICY FOR ANY NOTICE AND REPORTING PROVISIONS AND DUTIES IN THE EVENT OF LOSS OR DAMAGE TO COVERED PROPERTY.

MPIL 1074 07 14 Page 1 of 1



MARKEL INSURANCE COMPANY

U.S. TREASURY DEPARTMENT'S OFFICE OF FOREIGN ASSETS CONTROL ("OFAC") ADVISORY NOTICE TO POLICYHOLDERS

No coverage is provided by this Policyholder Notice nor can it be construed to replace any provisions of your policy. You should read your policy and review your Declarations page for complete information on the coverages you are provided.

This Notice provides information concerning possible impact on your insurance coverage due to directives issued by OFAC. Please read this Notice carefully.

The Office of Foreign Assets Control (OFAC) administers and enforces sanctions policy, based on Presidential declarations of "national emergency". OFAC has identified and listed numerous:

- · Foreign agents;
- Front organizations;
- Terrorists;
- · Terrorist organizations; and
- Narcotics traffickers;

as "Specially Designated Nationals and Blocked Persons". This list can be located on the United States Treasury's web site – https://www.treasury.gov/ofac.

In accordance with OFAC regulations, if it is determined that you or any other insured, or any person or entity claiming the benefits of this insurance has violated U.S. sanctions law or is a Specially Designated National and Blocked Person, as identified by OFAC, this insurance will be considered a blocked or frozen contract and all provisions of this insurance are immediately subject to OFAC. When an insurance policy is considered to be such a blocked or frozen contract, no payments nor premium refunds may be made without authorization from OFAC. Other limitations on the premiums and payments also apply.

Markel Insurance Company



PROFESSIONAL LIABILITY INSURANCE DECLARATIONS

Claims Made and Reported Coverage: The coverage afforded by this policy is limited to liability for only those Claims that are first made against the Insured during the Policy Period or the Extended Reporting Period, if exercised, and reported to Markel Insurance Company during the Policy Period or the Extended Reporting Period, if exercised, or within 60 days after the expiration of the Policy Period or the Extended Reporting Period, if exercised.

Notice: This policy contains provisions that reduce the Limits of Liability stated in the policy by the costs of legal defense and permit legal defense costs to be applied against the deductible, unless the policy is amended by endorsement. Please read the policy carefully.

POLICY NUMBER: MEO1642-05 RENEWAL OF POLICY: MEO1642-04

NAMED INSURED: Permit Acquisition Company-One LLC

BUSINESS ADDRESS: 920 Garner Road Selma, NC 27576

POLICY PERIOD: From 11/22/2023 to 11/22/2024

12:01 A.M. Standard Time at address of Insured stated above.

IN RETURN FOR THE PAYMENT OF THE PREMIUM, AND SUBJECT TO ALL THE TERMS OF THIS POLICY, THE COMPANY AGREES WITH THE NAMED INSURED TO PROVIDE THE INSURANCE AS STATED IN THIS POLICY.

1. PROFESSIONAL SERVICES: soil science

2. LIMITS OF LIABILITY

Professional Liability Coverage

Α.	Each Claim:	\$2,000,000
В.	Policy Aggregate:	\$2,000,000

Additional Payments

A.	Contingent Bodily Injury And Property Damage	\$100,000
B.	Pollution	\$10,000
C.	Pre-Claim Assistance Expenses	\$20,000
D.	Sexual Abuse	\$10,000
E.	Third Party Discrimination	\$25,000

Supplementary Payments

Α.	Disciplinary Proceeding	\$25,000	per Polic	y Period
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В.	Loss Of Earnings And Expense Reimbursement	\$10,000
C.	Public Relations Expenses	\$5,000
D.	Subpoena And Record Request Assistance	\$5.000

Producer Number, Name and Mailing Address

98496

Wade Associates, LLC. - New Bern

PO Box 1209

Davidson, NC, 28036

MDST 1000 07 17 Page 1 of 2

3. DEDUCTIBLE

 A. Each Claim:
 \$1,000

 B. Aggregate:
 \$3,000

4. RETROACTIVE DATE: 11/22/2019

5. PREMIUM RATE: Flat PREMIUM BASE: Flat

6. PREMIUM FOR POLICY PERIOD

Minimum: \$560
Deposit: \$560
Adjusted Annual Premium: \$560

- 7. PREMIUM PERCENTAGE FOR EXTENDED REPORTING PERIOD: ADDITIONAL PERIOD:
- 8. FORMS AND ENDORSEMENTS ATTACHED AT POLICY INCEPTION:

See MDIL 1001 attached.

These declarations, together with the Coverage Form and any Endorsement(s), complete the above numbered policy.

Countersigned: 08/30/2023 (Date)	By: John K Clark
	Authorized Representative Signature

MDST 1000 07 17 Page 2 of 2