

Permit/File #:	
Harrister of the same	

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

County: Harnett	Pre-Construction Conference Required: Yes ☐ No ■
PIN/Lot Identifier: 0519-69-6604.000	
Issued To: LGI Homes NC LLC	
Property Location: 64 Teepee Drive, Lillington, NO	>
AOWE/PE Plans/Evaluations Provided: Yes 🔳 No 🗌 If yes, n	ame and license number of AOWE/PE: Scott Mitchell - PE 27458
Facility Type: Single-Family Dwelling Unit	
Number of bedrooms: 4 Number of Occupants: 8 or less	Other:
■ New	ystem Relocation Change of Use
Basement? Yes No Base	ment Fixtures? Yes No
Crawl Space? Yes No Slab	Foundation?
Type of Wastewater System*	(Initial) IIIb(Repair)
*Please include system classification for proposed wastewater sy	stem types in accordance with Rule .1301 Table XXXII
Design Daily Flow: 480 GPD Wastewater	Strength: Domestic High Strength Industrial Process WW
Session Law 2014-120 Section 53, Engineering Design Utilizing Lo (if yes, please provide engineering documentation)	ow-flow Fixtures and Low-flow Technologies? Yes No
Effluent Standard: DSE HSE NSF/ANSI 40	TS-I TS-II RCW
Type of Water Supply: Private well Public well Sh	ared well Municipal Supply Spring Other:
Installation Requirements/Conditions	
Septic Tank Size: 1,000 gallons Total Trench/Bed Length	: 400 feet Trench/Bed Spacing: 9 feet on center
Trench/Bed Width: 36 inches LTAR: 0.3	spd/ft ² Usable Depth to LC (Initial) ^x : 36" *Limiting condition
Soil Cover: 12 inches Slope Corrected Maximum Trench/	Bed Depth [‡] : 24 inches * Measured on the downhill side of the trench
Pump Tank Size (if applicable): 1,000 gallons Requ	ires more than 1 pump? Yes No
Pump Requirements: 13 ft. TDH vs. 24 GPM Great	se Trap Size (if applicable): N/A gallons
Distribution Method: Serial D-Box or Parallel	
Artificial Drainage Required: Yes No III If yes, please spec	
Legal Agreements (If the answer is "Yes" to any type of legal agr	eements, please attach a copy of the agreement.)
Multi-party Agreement Required [.0204(g)]: Yes No	Declaration of Restrictive Covenants: Yes No
Easement, Right-of-Way, or Encroachment Agreement Required	
Management Entity Required: Yes 🔳 No Minimum O&M	Requirements:
Permit conditions: Secondary lid, concrete plug, or other safety	machanisms shall be provided incide all sizes.
Trench walls shall be raked when any Group III or Group I	V soils are present. Inspector to confirm prior to product placement.
Photo documentation of trench sidewall raking is required	, where Group III or Group IV soils are present.
All lot corners and boundaries shall be clearly marked by a	conditions are near saturation within initial or repair drainfield areas.
No garbage disposals / insinkerators allowed in the house	County shall provide system O&M guidance materials to Owner.
The requirements of 15A NCAC 18E are incorporated by retailer with the attached site sketch. This Construction Authorization	de Imo this permit and shall be met. Systems shall be installed in accordance as ubject forevocation if the site plan, plat, or the intended use changes. The
Construction Authorization shall not be affected by a change in	Some ship of the site. This Construction Authorization is subject to compliance s applicable and to the conditions of this permit.
OWE/FE FIIII Name.	7458
AOWE/PE Signature:	Date: April 10, 2025
This AOWE/PE submittal is pursuant to	mA free te the requirements of G.S. 130A-335(a2) and (a5).
TA SEPTIMENT	ttached site sketch*
	ATT



Permit/File #:

This Section for Local Health Department Use Only

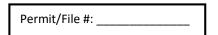
	Initial submittal received:	t	DY
		Date	Initials
G.S. 130A-335(a5) states the follow	ing:		
Improvement Permit and Construction Author Department, and any necessary signed and sengineer or a person certified pursuant to Ar department shall, within five business days of the Construction Authorization or Improvem determines that the Construction Authorizat applicant of the components needed to come additional information to the local health de Authorization. The local health department of the partment fails to act within any period set apply for the building permit for the project Authorization by the local health departmen dicensed engineer submitting the evaluation Authorization or Improvement Permit and Co	orization application together, the persealed plans or evaluations conducted tricle 5 of Chapter 90A of the General of receiving the application, conduct of the Fermit and Construction Authorization or Improvement Permit and Consiplete the Construction Authorization appropriate the Construction Authorization as to shall make a final determination applicant upon the decision of completeness of the first the local health department far pursuant to this subsection may requirement of the construction Authorization for cause. Ususpend or revoke the Construction A	rmit fee charged by the lot by a person licensed puil Statutes as an Authorize a completeness review of action includes all of the retruction Authorization is or Improvement Permit a the Construction Authorization whether the Construction and treat the failure to a fee the Construction Authorialis to act within five busing uses that the local health of Upon written request of the Uthorization or Improvem	ation together, submits a Construction Authorization, or an ocal health department, the common form developed by the resuant 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 sincomplete, the local health department shall notify the and Construction Authorization. The applicant may submit action or Improvement Permit and Construction and information from the applicant. If the local health fact as a determination of completeness. The applicant may reaction or Improvement Permit and Construction ess days. The Authorized On-Site Wastewater Evaluator or department revoke or suspend the Construction he Authorized On-Site Wastewater or licensed then the Permit and Construction pursuant to G.S.
The review for completeness of this	s Construction Authorization v	was conducted in ac	cordance with G.S. 130A-335(a5). This
Construction Authorization is deter	mined to be:		
☐ Incomplete (If box is checked, i	nformation in this section is r	equired.)	
The following items are missing:			
10 100	100,770		
Copies of this were sent to the AOV	VE/PE and the Applicant on _		
		Date	
State Authorized Agent:			Date:
70.			
Complete Complete			
State Authorized Agent:			Date of Issuance:
attached here. This Construction A Construction Authorization shall no to compliance with the provisions The Department, the Department's any liabilities, duties, and responsi plans, evaluations, preconstruction the General Statutes as a licensed Authorized On-Site Wastewater Ev	outhorization is subject to revot be affected by a change in of the Laws and Rules for Seven sauthorized agents, and the ibilities imposed by statute on conference findings, submit engineer or a person certified valuator in GS 130A-335(a2), (the terminal of the issuance of the conference of the issuance of the conference of the confer	ocation if the site p ownership of the si wage Treatment and local health departr r in common law fro ttals, or actions fron d pursuant to Article (a5), and (a7). The D nd bear liability for e operations permit	sing the signed and sealed plans or evaluations lan, plat, or the intended use changes. The te. This Construction Authorization is subject d Disposal and to the conditions of this permit. The ments shall be discharged and released from any claim arising out of or attributed to a person licensed pursuant to Chapter 89C of a 5 of Chapter 90A of the General Statutes as an department, the Department's authorized their actions and evaluations and other a pursuant to GS 130A-337.



Permit/File #:

Re-submittal of Construction Authorization

	LUD LICE ONLY.	This CA was the maithed was sites	1.	h	
	LHD USE ONLY:	This CA resubmittal received	J: Date	by Initials	
The following i	tems are being resul	omitted pursuant to G.S. 130A	A-335(a5) for issuance of	of the Construction Authoriz	zation:
		Jul. 5	VAJTE		
is accurate and		hereby attest tor (Print Name) st of my knowledge and that ations, rules, and ordinances.	the proposed Construc	equired to be included with tion Authorization meets al	
Signatu	re of Authorized On-Site \	Nastewater Evaluator	v_ 70	Date	
LHD Follow-		w is for Local Health Departmen s Review of Construction		tems noted as missing above.	
	completeness of thi	s Construction Authorization determined to be:	re-submittal was cond	ucted in accordance with G	S. 130A-335(a5).
☐ Incomplete	(If box is checked, ir	nformation in this section is re	equired.)		
The following it	ems are missing:				
		The Control of the	AM VIII		
Copies of this w	vere sent to the AOV	NE/PE and the Applicant on _	Date	_	
State Authorize	ed Agent:			Date:	
☐ Complete					
State Authorize	ed Agent:			Date:	





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

County:	
PIN/Lot Identifier:	
Issued To:	
Additional Improvement Permit Conditions:	
Additional Construction Authorization Conditions:	
WEARING THE SECOND SECO	
	_

Mitchell Environmental, P.A.

I hereby authorize representatives of Mitchell Environmental, P.A., to provide subsurface wastewater evaluations and septic system designs on my behalf, for the issuance of an IP and CA, for the property identified below.

For Improvement Permit (IP) issuance:

"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)."

For Construction Authorization (CA) issuance:

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

The LSS evaluation attached to this application was used to produce and design a subsurface wastewater septic system for permitting to obtain an IP and CA in accordance with G.S. 130A-335(a2), (a3), (a5), and (a6).

Lot 43 (64 Tecpce Dr.) Lot 44 (44 Tecpce Dr.) Boone TRAIL Subject Property (Address, PIN, etc.): Lot 45 (20 Tecpce Dr.) Village
Subject Property (Address, PIN, etc.): Lot 45 (20 Tecpce Dr.) / Village
Property Owner Name (Print): LGI Homes
Owner Representative (Print): Keith Sears
Owner Representative (Sign): Little Sum
Date: 4/11/25



EMARTY



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 1/16/2025

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 the terms and conditions of the policy, certain policies may require an endorsement. A statement on s certificate does not confer rights to the certificate holder in lieu of such endorsement(s).										
PROD	RODUCER					CONTACT Select Business Unit					
						PHONE (A/C, No, Ext): (919) 469-2473 FAX (A/C, No): (919) 4					37
Raleigh, NC 27612					E-MAIL ADDRE	_{ss:} em@tris	ure.com				
							INS	SURER(S) AFFOR	RDING COVERAGE	NAI	C#
						INSURE	R A: Westch	ester Surpl	us Lines	10172	
INSUF	ED					INSURE	RB:Sirius A	America Ins	urance Company	38776	
Mitchell Environmental PA				INSURER C:							
Scott Mitchell 5601 Maggie Run Lane				INSURER D:							
		Fuquay Varina, NC 27526				INSURER E:					
						INSURER F:					
COV	ΈR	AGES CER	TIFIC	CATE	E NUMBER:				REVISION NUMBER:		
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HINDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION					OF A	NY CONTRA	CT OR OTHER	DOCUMENT WITH RESPEC	T TO WHICH	THIS	
CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERN EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.							tMS,				
NSR LTR		TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER		POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
Α	Χ	COMMERCIAL GENERAL LIABILITY					•		EACH OCCURRENCE S	1,0	00,000
			1	1	I .						

INSR LTR		TYPE OF INSURANCE	ADDL INSD	SUBR	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	rs	
A	Х	COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR			G28210486009	1/27/2025	1/27/2026	EACH OCCURRENCE DAMAGE TO RENTED	\$	1,000,000 50,000
		CEANING-MADE X			320210400009	1/2//2023	1/2//2020	PREMISES (Ea occurrence) MED EXP (Any one person)	\$	10,000
								PERSONAL & ADV INJURY	\$	1,000,000
	GEN	N'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$	2,000,000
		POLICY X PRO- JECT LOC						PRODUCTS - COMP/OP AGG	\$	2,000,000
	AUT	OTHER: OMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$	
		ANY AUTO OWNED SCHEDULED						BODILY INJURY (Per person)	\$	
		AUTOS ONLY AUTOS ONLY AUTOS ONLY AUTOS ONLY AUTOS ONLY						BODILY INJURY (Per accident) PROPERTY DAMAGE		
		AUTOS ONLY AUTOS ONLY						(Per accident)	\$	
Α		UMBRELLA LIAB X OCCUR						EACH OCCURRENCE	\$	1,000,000
	X	EXCESS LIAB CLAIMS-MADE			G46616182008	1/27/2025	1/27/2026	AGGREGATE	\$	1,000,000
		DED RETENTION \$						DED	\$	
В	WOR AND	RKERS COMPENSATION EMPLOYERS' LIABILITY			WC PC 602055-000	2/7/2025	2/7/2026	PER OTH- STATUTE ER		1,000,000
	OFFI	PROPRIETOR/PARTNER/EXECUTIVE CER/MEMBER EXCLUDED?	N/A		WC FC 602055-000	2/1/2023	21112020	E.L. EACH ACCIDENT	\$	1,000,000
	If yes	idatory in NH)						E.L. DISEASE - EA EMPLOYEE		1,000,000
	_	CRIPTION OF OPERATIONS below fessional Liabili			G28210486009	1/27/2025	1/27/2026	E.L. DISEASE - POLICY LIMIT	\$	1,000,000
- 1					G28210486009	1/27/2025	1/27/2026	Limit		1,000,000
^		icosional Liabin			02021040000	1/21/2023	.,21,2020			1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Operations of the Named Insured covered by the above referenced policies.

CERTIFICATE HOLDER	CANCELLATION
LGI Homes – NC, LLC 1450 Lake Robbins Drive Suite 430	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
The Woodlands, TX 77380	AUTHORIZED REPRESENTATIVE

Mitchell Environmental, P.A.

SEPTIC SYSTEM DESIGN

for

BOONE TRAIL VILLAGE SUBDIVISION- LOT 43

Lillington, Harnett County, North Carolina

Submitted to:

Harnett County Health Department 307 Cornelius Harnett Blvd. Lillington, NC 27546

Prepared for:

LGI Homes 5511 Capital Center Drive Suite 560 Raleigh, North Carolina 27612

Prepared by:

Scott Mitchell, PE, LSS Adam Aycock, El

DATE: April 7, 2025 PROJECT NO.: 1624 SOL SCIENTIST WITCH



Harnett County GIS

PID: 130519 0103 48 **PIN:** 0519-69-6604.000

Account Number: 1500028388

Owner: LGI HOMES NC LLC

Mailing Address: 1450 LAKE ROBBINS DR STE 430 THE WOODLANDS, TX 77380-3294

Physical Address: 64 TEEPEE DR LILLINGTON, NC 27546 ac

Description: LOT#43 BOONE TRAIL VILLAGE PH1 MAP#2024-600

Surveyed/Deeded Acreage: 0.6

Calculated Acreage: 0.6

Deed Date:

Deed Book/Page: 4144 - 0878

Plat(Survey) Book/Page: 2024 - 600

Last Sale: 2022 - 4
Sale Price: \$2220000
Qualified Code: A
Vacant or Improved: V
Transfer of Split: T
Actual Year Built:

Heated Area: SqFt
Building Count: 0

Building Value: \$0

Parcel Outbuilding Value: \$0
Parcel Land Value: 26460
Market Value: \$26460

Deferred Value: \$0

Total Assessed Value: \$26460

Zoning: RA-30 - 0.6 acres (100.0%)

Zoning Jurisdiction: Harnett County

Wetlands: No

FEMA Flood: Minimal Flood Risk

Within 1mi of Agriculture District: Yes

Elementary School: Boone Trail Elementary

Middle School: Western Harnett Middle

High School: Western Harnett High

Fire Department: Boone Trail

EMS Department: Medic 12, D12 EMS

Law Enforcement: Harnett County Sheriff

Voter Precinct: Boone Trail

County Commissioner: Duncan Edward Jaggers

School Board Member: John Hairr



PRESSURE MANIFOLD DESIGN

Name: <u>LGI Homes</u> **P.I.N.** #: 0519-69-6604 **D** #: N/A

Address: 64 Teepee Drive Subdiv: Boone Trail Village Lot#: 43

of BDR: 4 Daily Flow: 480 gal/day L.T.A.R.: 0.300 gal/day/sq.ft

Septic Tank: 1000 gals (min.) Pump Tank: 1000 gals (min.) Sq. Foot: 1200 Stone Depth: N/A

(EZ Flow)

Number of Taps: Length of Trenches: 100 ft(See Tap Chart for Details)

Depth of Trenches: $\underline{24}^{"}$ Manifold Length: $\underline{42}$ in

Manifold Diameter: 4 in sch 80pvc (minimum) Tap Configuration: 6 in spacing 1 side(s) of manifold

Supply Line: length: 55 ft Diameter: 2 in sch 40pvc

Friction Loss + Fitting Loss: 1.46 ft(supply line length + 70' for fittings in pump tank)

Design Head: 2.0 ft Elevation Head: 8.09 ft

Vent Hole Size: 3/16 in Orifice Coefficient of Discharge: 0.60

Orifice Coefficient of Contraction: 0.62 Orifice Coefficient of Velocity: 0.97

Maximum Head Supplied by Selected Pump(s) at Total Design Flowrate: 22 ft

Orifice / Vent Hole Flowrate: 1.94 gpm Head Loss at Orifice / Vent Hole: 1.40 ft

Total Head: $\underline{12.95}$ ft Pump to Deliver: $\underline{23.86}$ gals/min at $\underline{12.95}$ ft head

Dosing Volume: 171.60 gals.

Comments:

Drawdown: 171.60 gals divided by $\frac{18}{2}$ gals/in = $\frac{9.53}{2}$ inches

SJE Rhombus Installer Friendly Series simplex control panel, or equivalent, required

A septic tank filter, or equal is required.

Possible pumps: Hydromatic: Goulds: Myers:

Zoeller: 137 Other:

TAP CHART

Bench Mark	3.85	is = 100.00	set at		EG at 43/44 back EIF	•	Design Head:	2.0	
Pump tank elev.		7.5	96.35	Pump elev.	91.35		Manifold elev.	99.44	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
7	Red	5.41	98.44	100	1/2in SCH 80	5.48	120.00	300	0.4000
8	Yellow	5.73	98.12	100	1/2in SCH 80	5.48	120.00	300	0.4000
9	Orange	6.02	97.83	100	1/2in SCH 80	5.48	120.00	300	0.4000
10	White	6.06	97.79	100	1/2in SCH 80	5.48	120.00	300	0.4000
		total	feet =	400	gal/min =	21.9		LTAR =	0.3000
% of Pipe Vol.		66		Des. Flow	480.00			(Itar + 5%)	0.3150
Dose Volume		171.60		Pump Run=	21.90			(Itar W/ INOV)	0.4000
Dose Pump Time		7.83		Tank Gal/IN	18			(Itar + 5%)	0.4200
Drawdown in Inc	hes	9.53		Elev. Head	8.09				
Supply Line Leng	gth	55							

PRESSURE MANIFOLD DESIGN

 Name:
 LGI Homes
 P.I.N. #:
 0519-69-6604
 D #: N/A

Address: 64 Teepee Drive Subdiv: Boone Trail Village Lot#: 43

of BDR: 4 Daily Flow: 480 gal/day L.T.A.R.: 0.300 gal/day/sq.ft

Septic Tank: 1000 gals (min.) Pump Tank: 1000 gals (min.) Sq. Foot: 1230 Stone Depth: N/A

Number of Taps: Length of Trenches: Varies ft(See Tap Chart for Details)

Length of Tenones. <u>values</u> injoined that for Details

Manifold Diameter: 4 in sch 80pvc (minimum) Tap Configuration: 6 in spacing 1 side(s) of manifold

Supply Line: length: 110 ft Diameter: 2 in sch 40pvc

Friction Loss + Fitting Loss: 5.52 ft(supply line length + 70' for fittings in pump tank)

Design Head: <u>2.0</u> ft Elevation Head: <u>8.90</u> ft

Vent Hole Size: 3/16 in Orifice Coefficient of Discharge: 0.60

Orifice Coefficient of Contraction: 0.62 Orifice Coefficient of Velocity: 0.97

Maximum Head Supplied by Selected Pump(s) at Total Design Flowrate: 19 ft

Orifice / Vent Hole Flowrate: 1.81 gpm Head Loss at Orifice / Vent Hole: 1.21 ft

Total Head: 17.62 ft Pump to Deliver: 38.72 gals/min at 17.62 ft head

Dosing Volume: 175.89 gals.

Drawdown: 175.89 gals divided by gals/in = 9.77 inches

SJE Rhombus Installer Friendly Series simplex control panel, or equivalent, required

A septic tank filter, or equal is required.

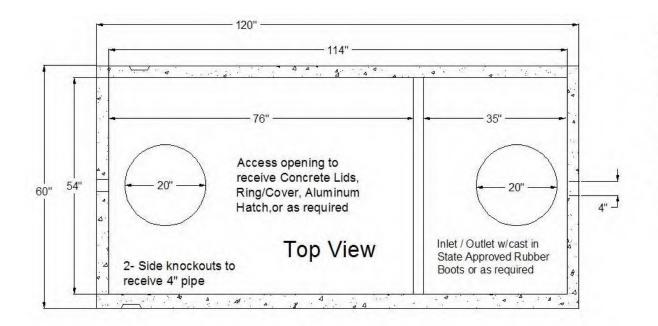
Possible pumps: Hydromatic: Goulds: Myers:

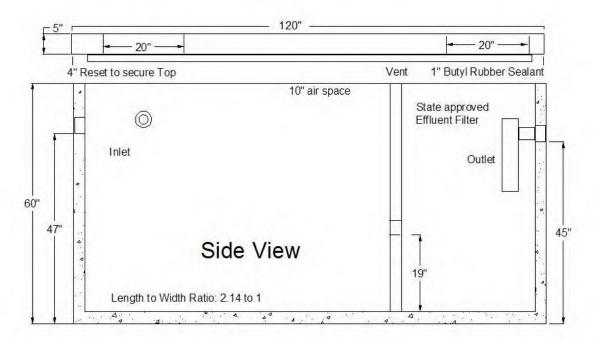
Zoeller: 137 Other:

TAP CHART

				AP CHAI	X I				
Bench Mark	3.85	is = 100.00	set at		EG at 43/44 back EIP		Design Head:	2.0	
Pump tank elev.		7.5	96.35	Pump elev.	91.35		Manifold elev.	100.25	
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
1 & 2	nf & R	4.60	99.25	80	1/2in SCH 40	7.11	92.46	240	0.3853
3	Purple	4.91	98.94	60	1/2in SCH 80	5.48	71.27	180	0.3959
4	Orange	4.91	98.94	80	1/2in SCH 40	7.11	92.46	240	0.3853
5	Blue	5.26	98.59	80	1/2in SCH 40	7.11	92.46	240	0.3853
6	White	5.35	98.50	110	3/4in SCH 80	10.10	131.35	330	0.3980
		total	feet =	410	gal/min =	36.9		LTAR =	0.3000
% of Pipe Vol.		66		Des. Flow	480.00			(Itar + 5%)	0.3150
Dose Volume		175.89		Pump Run=	13.00			(Itar W/ INOV)	0.4000
Dose Pump Time		4.77		Tank Gal/IN	18			(Itar + 5%)	0.4200
Drawdown in Inch	nes	9.77		Elev. Head	8.90				
Supply Line Leng	th	110							
Comments:									

4/7/2025





STB - 345 - Top Seam

Approval Date: 12 - 09 - 99

Liquid Capacity 1007 Gallons

Non Traffic Rated

Reinforcing Schedule: # 3 Grade 60 Rebar 4500 PSI Concrete w/ State Approved Structural Fiber Est. Weight: 8,200 lbs.

Manufactured By:

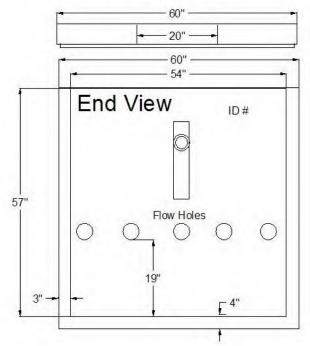


Eddie Garner, President 919-718-5181

121 Stanton Hill Road

Carthage, NC 28327

Fax 919-775-2229 Eddie@garnersseptictanks.com





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 (GPD). 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.

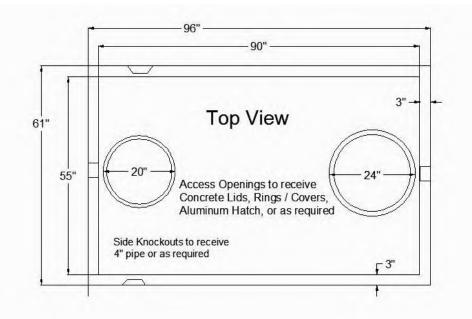
Related Products:

PL-68 Filter Concrete Baffle Extend & Lok $^{\text{TM}}$



Extend & LokTM
Easily installs
into existing tanks.





PT - 214

Date: 12-16-93 Non Traffic Rated

Liquid Capacity 1,028 Gallons

18 gals. per inch

Reinforcing Schedule: # 3 Grade 60 Rebar 4500 PSI Concrete w/ State Approved Structural Fiber 2 yds. Est Weight 8200 lbs

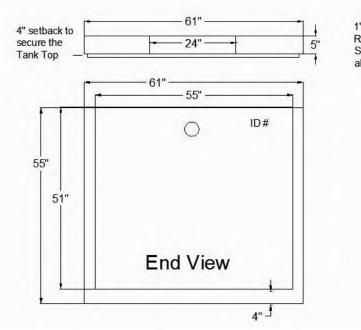
Manufactured By:

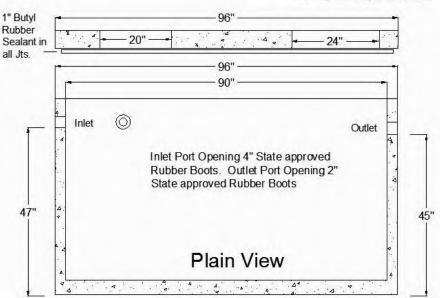


Eddie Garner, President 919-718-5181

121 Stanton Hill Road Carthage, NC 28327

ge, NC 28327 Fax 919-775-2229 Eddie@garnersseptictanks.com





INSTALLER FRIENDLY SERIES® - IFS Single Phase Simplex (Demand/TD)

Single phase, simplex demand dose or timed dose, float controlled system for pump control and system monitoring.

The IFS simplex control panel is designed to control one 120, 208, 240 VAC single phase pump in water and sewage installations.

The IFS control panel features an easy-to-use touch pad with display on the inner door for programming and system monitoring.

The panel configuration can be easily converted in the field to either a timed dose or demand dose.

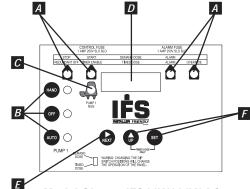
TOUCH PAD FEATURES

- A. Float Indicators illuminate when floats are activated. Alarm will activate if a float operates out of sequence.
- B. HOA (Hand-Off-Automatic) Buttons control pump mode with indication. Hand mode defaults to Automatic when stop level or redundant off level is reached.
- C. Pump Run Indicator illuminates when pump is called to run.
- D. LED Display shows system information including: mode, pump elapsed time (hh:mm), events (cycles), alarm counter, float error count, timed dose override counter (timed dose only), and ON/OFF times (timed dose only).
- E. NEXT Push Button toggles display.
- F. UP and SET Push Buttons set pump ON/OFF times (timed dose only).

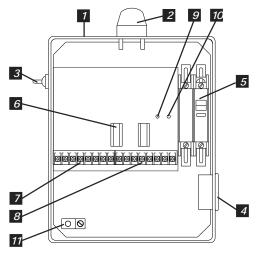
PANEL COMPONENTS

- Enclosure base measures 10 X 8 X 4 inches (25.4 X 20.32 X 10.16 cm). NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use). Note: Options, voltage, and amp range selected may change enclosure size and component layout.
- 2. Red Alarm Beacon provides 360° visual check of alarm condition.
- Exterior Alarm Test/Normal/Silence Switch allows horn and light to be tested and horn to be silenced in an alarm condition. Alarm automatically resets once alarm condition is cleared.
- **4. Alarm Horn** provides audio warning of alarm condition (83 to 85 decibel rating).
- Circuit Breaker (optional) provides pump disconnect and branch circuit protection.
- **6. Power Relay** controls pump by switching electrical lines. Definate purpose contactor used when pump full load amps are above 15.
- 7. Float Connection Terminal Block
- 8. Incoming Control/Alarm Power & Pump Terminal Block
- 9. Control Power Indicator/Fuse indicator light illuminates if control power is present in panel. Alarm will activate if control fuse is blown.
- Alarm Power Indicator/Fuse indicator light illuminates if alarm power is present in panel.
- 11. Ground Lug

NOTE: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel on enclosure cover



Model Shown IFS11W114X8AC (Inner door view)



Model Shown IFS11W114X8AC (Inside view)

Reg. Cdn Pat. & TM Off

FEATURES

- Entire control system (panel and switches) is UL Listed to meet and/or exceed industry safety standards
- Dual safety certification for the United States and Canada
- Standard package includes:

 Demand Dose three 20' SJE

 MilliAmpMaster™ control switches

 Timed Dose two 20' SJE

 MilliAmpMaster™ control switches
- Complete with step-by-step installation instructions
- Three-year limited warranty LISTED





PO Box 1708, Detroit Lakes, MN 56502 1-888-DIAL-SJE • 1-218-847-1317 1-218-847-4617 Fax

email: sje@sjerhombus.com

Model Type

Alarm Package

Enclosure Rating

Starting Device

Pump Full Load Amps

Pump Disconnects

Switch Application

Options: Display, Lockable Latch, SJE MilliAmpMaster™/pipe clamp

IFS 2 1 W Note Note 4 H 8AC, 10E, 10F 15A
MODEL IFS
MODELTYPE ——
1 = SPLX TIMED DOSE (includes option 8AC standard) 2 = SPLX DEMAND DOSE (includes option 8AC standard)
_ ALARMPACKAGE ————
1 = alarm package (includes test/normal/silence switch, fuse, red light & horn)
ENCLOSURERATING ————————————————————————————————————
W = NEMA4X
STARTING DEVICE ————————————————————————————————————
1 = 120/208/240 VAC
9 = 120 VAC
PUMP FULL LOAD AMPS ————————————————————————————————————
0 = 0-7 FLA
1 = 7-15 FLA
2 = 15-20 FLA
PUMP DISCONNECTS
0 = no pump disconnect 4 = circuit breaker
120 VAC (must select starting device option 9)
120/208/240 VAC (must select starting device option 1)
SWITCH APPLICATIONS —
H = floats (Timed dose = low level and alarm / Demand dose = stop, start, and alarm) (select 17 option)
X = no float
timed dose demand Dose
Note: Pump down applications only.
OPTIONS Listed below —
Note: Ctarting device numberfull lead among and length and float true to be adjusted
Note: Starting device, pump full load amps, cord length, and float type to be selected

<u>Note:</u> Starting device, pump full load amps, cord length, and float type to be selected by installer and their electrician upon selection of pump.

If additional features are required, call the factory for a quote on an Engineered Custom control panel.

	1J 3A 3B 4A 4D 6A 8AC 10E 10F	E DESCRIPTION Duo alarm inputs Alarm flasher Manual reset alarm Redundant off (select option 4D if floats are required) Demand Dose Timed Dose Redundant off float Auxiliary alarm contacts, form C Display board includes: ETM counter, events (cycles) counter, alarm counter, and override counter (timed dose only). (Included as standard.) Lockable latch - NEMA 4X Lightning arrestor (must select pump circuit breaker, control and alarm power combined) Anti-condensation heater NEMA 1 remote alarm panel (must select option 6A)		11D 15A 16A 16B 16C 16D 17C 17D 17G 17H 17J	DESCRIPTION NEMA 4X remote alarm panel (must select option 6A) Control / Alarm circuit breaker 10' cord in lieu of 20' (per float) 15' cord in lieu of 20' (per float) 30' cord in lieu of 20' (per float) 40' cord in lieu of 20' (per float) Sensor Float® / internally weighted ▲ (per float) Sensor Float® / externally weighted ▲ (per float) MilliAmpMaster™/ pipe clamp ♠ (per float) MilliAmpMaster™/ externally weighted ♠ (per float) Sensor Float® / pipe clamp ♠ (per float) Timer override option with float (timed dose only) Mechanically-activated ♠ Mercury-activated	
SA.	MP.		<u></u>	11	0 4 6 10 5 1 7 6	_

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.

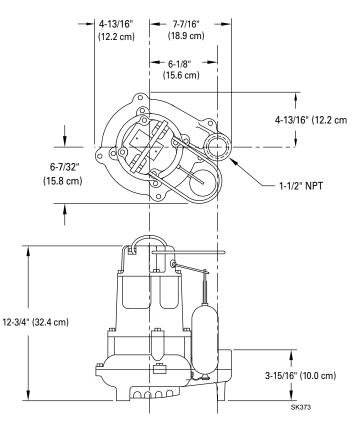


SECTION: 2.15.060FM2782
1016
Supersedes
0916

TECHNICAL DATA SHEET FLOW-MATE SERIES Models 137, 139 Effluent / Dewatering Pumps

PRODUCT SPECIFICATIONS

	Horse Power	1/2
	Voltage	115 - 460
<u>~</u>	Phase	1 or 3 Ph
일	Hertz	60 Hz
моток	RPM	1750
Σ	Туре	Split phase or 3 phase
	Insulation	Class B
	Amps	1.4 - 10.7
	Operation	Automatic or nonautomatic
	Auto On/Off Points	10" (25.4 cm) / 2-3/4" (7 cm)
	Discharge Size	1-1/2" NPT
	Solids Handling	5/8" (15 mm) spherical solids
PUMP	Cord Length	10' (3 m) automatic, 15' (5 m) nonautomatic
	Cord Type	UL listed, neoprene cord
집	Max. Head	26' (8 m)
	Max. Flow Rate	93 GPM (352 LPM)
	Max. Operating Temp.	130° F (54° C) [extra duty 140°F (60°C)]
	Cooling	Oil filled
	Motor Protection	Auto reset thermal overload (1 Ph)
	Motor Housing	Cast iron (137) or bronze (139)
	Pump Housing	Cast iron (137) or bronze (139)
(A)	Base	Cast iron (137) or bronze (139)
MATERIALS	Upper Bearing	Sleeve bearing
Z	Lower Bearing	Sleeve bearing
E	Mechanical Seals	Carbon and ceramic
	Impeller Type	Non-clogging vortex
7	Impeller	Cast iron or bronze
	Hardware	Stainless steel
	Motor Shaft	AISI 1215 cold rolled steel
	Gasket	Neoprene



NOTE: See model comparison chart for specific details.



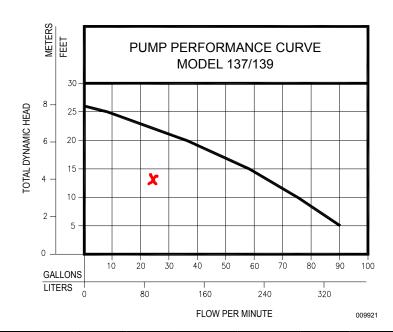






TOTAL DYNAMIC HEAD FLOW PER MINUTE

МО	DEL	137	/139
Feet	Meters	Gal.	Liters
5	1.5	90	340
10	3.0	75	284
15	4.6	58	220
20	6.1	36	136
25	7.6	8	30
Shut-of	f Head:	26 ft.(8.0m)



Model					МО	DEL CO	OMPAR	ISON					IFICA- ONS
	Seal	Mode	Volts	Ph	Amps	HP	Hz	Lbs	Kg	Simplex	Duplex	CSA	UL
M137	Single	Auto	115	1	10.7	1/2	60	47	21	1	4	Υ	Y
N137	Single	Non	115	1	10.7	1/2	60	46	21	2 or 3	2 or 4	Y	Y
BN137	Single	Auto	115	1	10.7	1/2	60	48	22	**	4	Υ	Υ
D137	Single	Auto	230	1	5.8	1/2	60	47	21	1	4	Y	Υ
E137	Single	Non	230	1	5.8	1/2	60	48	22	2 or 3	4	Y	Υ
* H137	Single	Auto	200	1	6.2	1/2	60	48	22	1	4	Y	N
* I137	Single	Non	200	1	6.2	1/2	60	48	22	3	4	Y	N
* J137	Single	Non	200	3	2.6	1/2	60	46	21	3	4	Y	Y
* F137	Single	Non	230	3	2.6	1/2	60	48	22	3	4	Y	Y
* G137	Single	Non	460	3	1.4	1/2	60	48	22	3	4	N	N
BE137	Single	Auto	230	1	5.8	1/2	60	48	22	**		Y	Υ
M139	Single	Auto	115	1	10.7	1/2	60	51	23	1	4	Y	Υ
N139	Single	Non	115	1	10.7	1/2	60	51	23	2 or 3	2 or 4	Y	Υ
D139	Single	Auto	230	1	5.8	1/2	60	47	21	1	4	Y	Y
E139	Single	Non	230	1	5.8	1/2	60	48	22	2 or 3	4	Y	Y
*H139	Single	Auto	200	1	6.2	1/2	60	48	22	1	4	Y	N
*I139	Single	Non	200	1	6.2	1/2	60	48	22	3	4	Y	N
*J139	Single	Non	200	3	2.6	1/2	60	50	23	3	4	Υ	Y
*F139	Single	Non	230	3	2.6	1/2	60	48	22	3	4	Y	Υ
*G139	Single	Non	460	3	1.4	1/2	60	48	22	3	4	N	N

^{*} No molded plug

SELECTION GUIDE

- 1. Integral float-operated mechanical switch, no external control required.
- 2. For automatic, use single piggyback variable level float switch or double piggyback variable level float switch. Refer to FM0477.
- See FM1228 for correct model of simplex control panel.
- 4. See FM0712 for correct model of duplex control panel or FM1663 for a residential alternator system.

AUTION All installation of controls, protection devices and wiring should be done by a qualified licensed electrician. All electrical and safety codes should be followed including the most recent National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).

^{**} Single piggyback switch included

BE and BN models include a piggyback variable level pump switch.



GEOSYNTHETIC AGGREGATE TECHNOLOGY



EZflow by Infiltrator is an environmentally friendly replacement to traditional stone and pipe drainfields using an engineered geosynthetic aggregate modular design. The EZflow system is designed to improve infiltration performance by eliminating the fines associated with crushed stone, and reducing compaction and embedment associated with stone. Preassembled units include a 3" or 4" perforated pipe surrounded by aggregate and held in place with a durable high-strength netting. This product comes in easy-to-contour 5' and 10' lengths and in diameters of 7, 8, 9, 10, 12, 13, or 14 inches.

Lightweight expanded polystyrene

construction offers structural integrity and resists compaction. Engineered flow-channels increase void space creating improved water flow and greater storage.



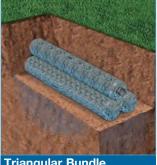
Compared with stone and pipe, benefits include:

- · Always clean and free of fines
- Bundles are quick to install, saving costs on heavy machinery and labor
- Modular construction allows configurations to match trench dimensions for most system shapes and sizes
- Engineered for optimal storage and absorption efficiencies
- Ability to contour along sloped sites and around trees or landscaping
- Lightweight system is perfect for repairs and tight job sites
- Easily hand-carried into position reducing time and labor
- 5' or 10' lengths with simple snap, internal couplers
- Easier cleanup at the job site with the elimination of stone
- Manufactured from recycled materials rather than a mined natural resource
- A wide variety of diameters and configurations to meet any installation professional's needs
- Approved in many jurisdictions with an increased efficiency rating, reducing drainfield size
- Backed by the leader in the onsite wastewater industry

Bundle System Configurations: Available in 7", 8", 9", 10", 12", 13" and 14" diameter bundles.

Single Bundle

0701P-GEO 1201P-GEO 0801P-GEO 1401P-GEO 1201P-GEO 1801P-GEO 1001P-GEO



Triangular Bundle

1003T-GEO 1303T-GEO 1203T-GEO 1403T-GEO





Horizontal Bundles

0705H-GEO 1303H-GEO 0904H-GEO 1202H-GEO 1002H-GEO 1203H-GEO 1206H-GEO 1303H-GEO 1402H-GEO 1802H-GEO





Vertical Bundles

1002V-GEO 1006V-GEO 1003V-GEO 1202V-GEO 1004V-GEO

1203V-GEO 1206V-GEO 1204V-GEO 1402V-GEO

Notes:

- 1. Other systems include 10" and 12" bed systems. Bed size will dictate the number of bundles.
- 2. System dimensions are dependent upon bundle diameter and
- 3. LLP is for "Low Pressure Pipe" in which a pressurized distribution pipe is field installed within the corrugated pipe.
- 4. Internal pipe and couplings meet the requirements of ASTM F405.
- 5. Bundles are also available without geotextile between the netting and synthetic aggregrate.

INFILTRATOR WATER TECHNOLOGIES STANDARD LIMITED WARRANTY

(a) The structural integrity of each EZflow by Infiltrator expanded polystyrene drainfield system and other accessories manufactured by EZflow 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 EZflow by Infiltrator to be covered by this Limited Warranty. EZflow by 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

(c) This Limited Warranty shall be void if any part of the EZflow system is manufactured by anyone other than EZflow by 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.



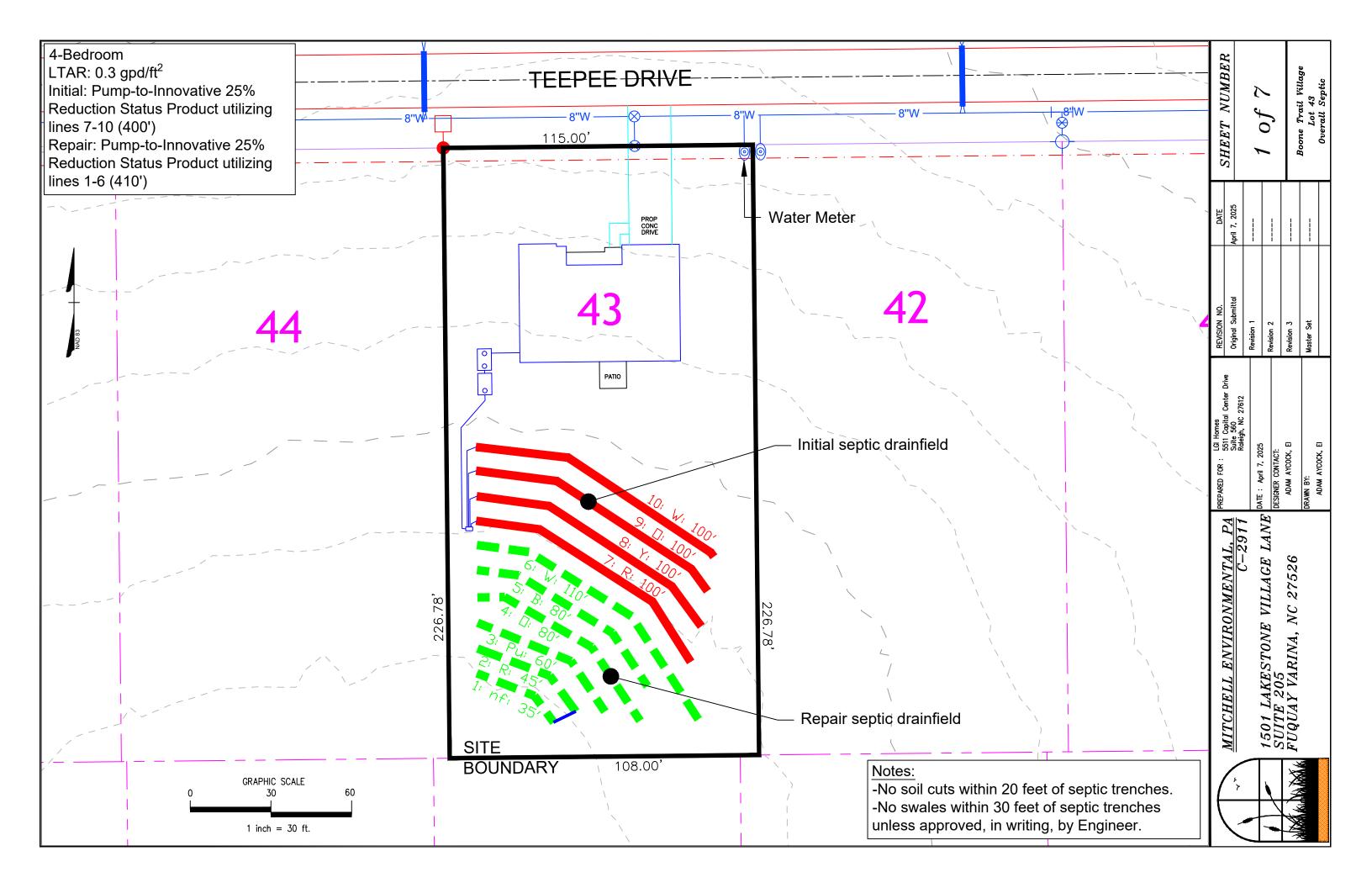
4 Business Park Road P.O. Box 768 Old Saybrook, CT 06475 860-577-7000 • Fax 860-577-7001

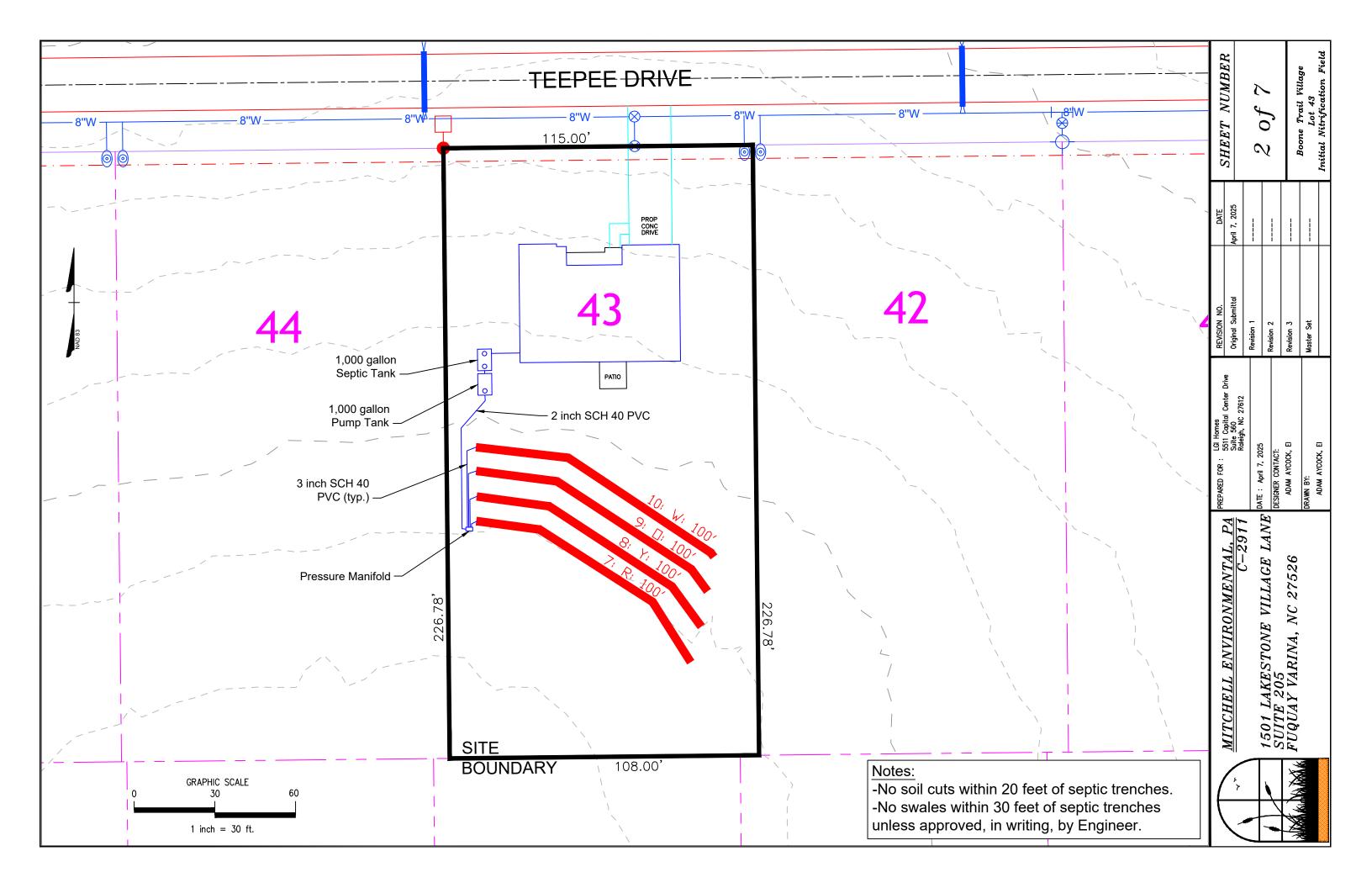
1-800-221-4436 www.infiltratorwater.com

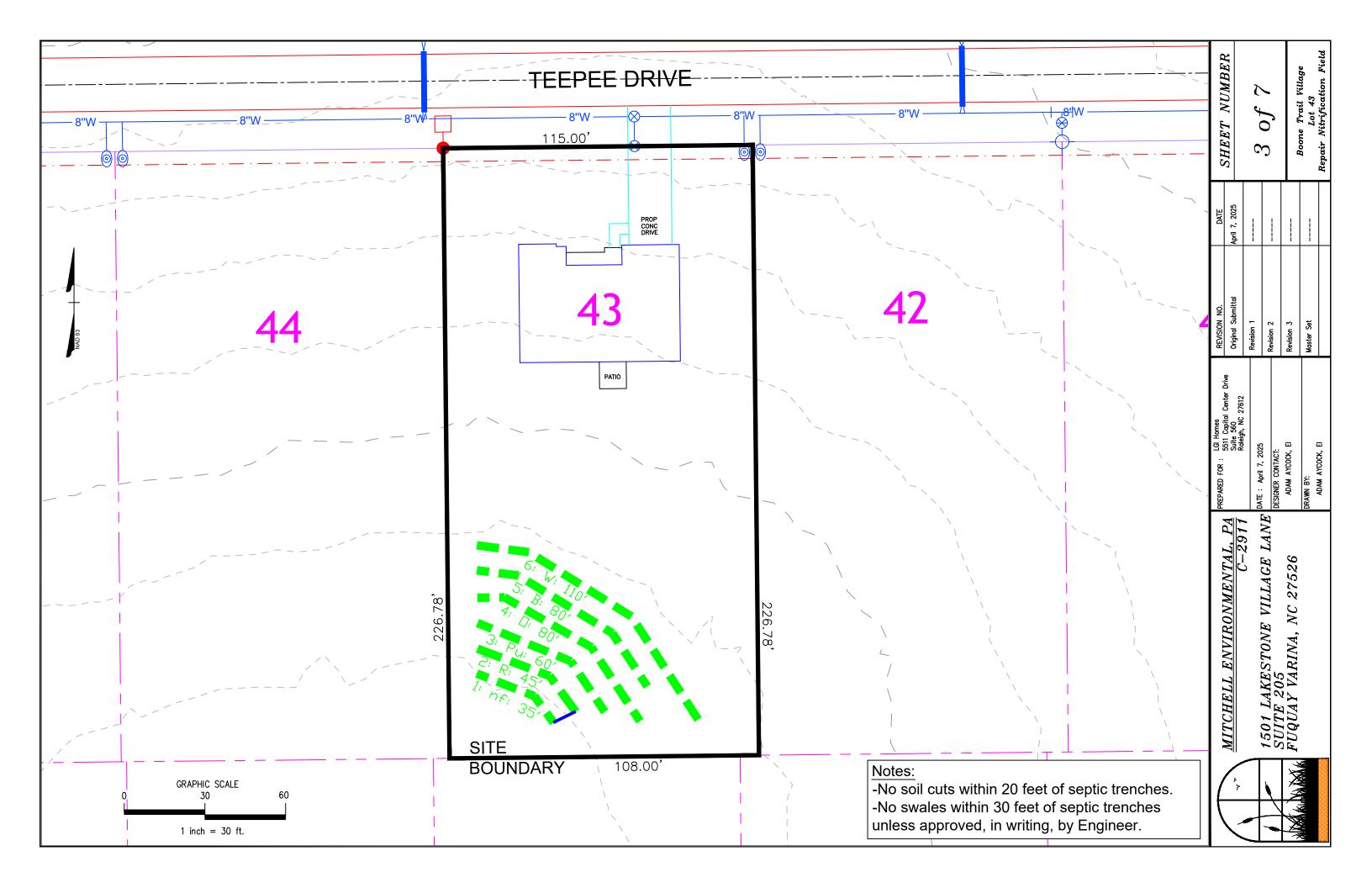
U.S. Patents: 4,759,661; 5,017,041; 5,156,488; 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,716,163; 5,588,778; 5,839,844 Canadian Patents: 1,329,959; 2,004,564 Other patents pending. Infiltrator, Equalizer, Quick4, and SideWinder are registered trademarks of Infiltrator Water Technologies. Infiltrator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

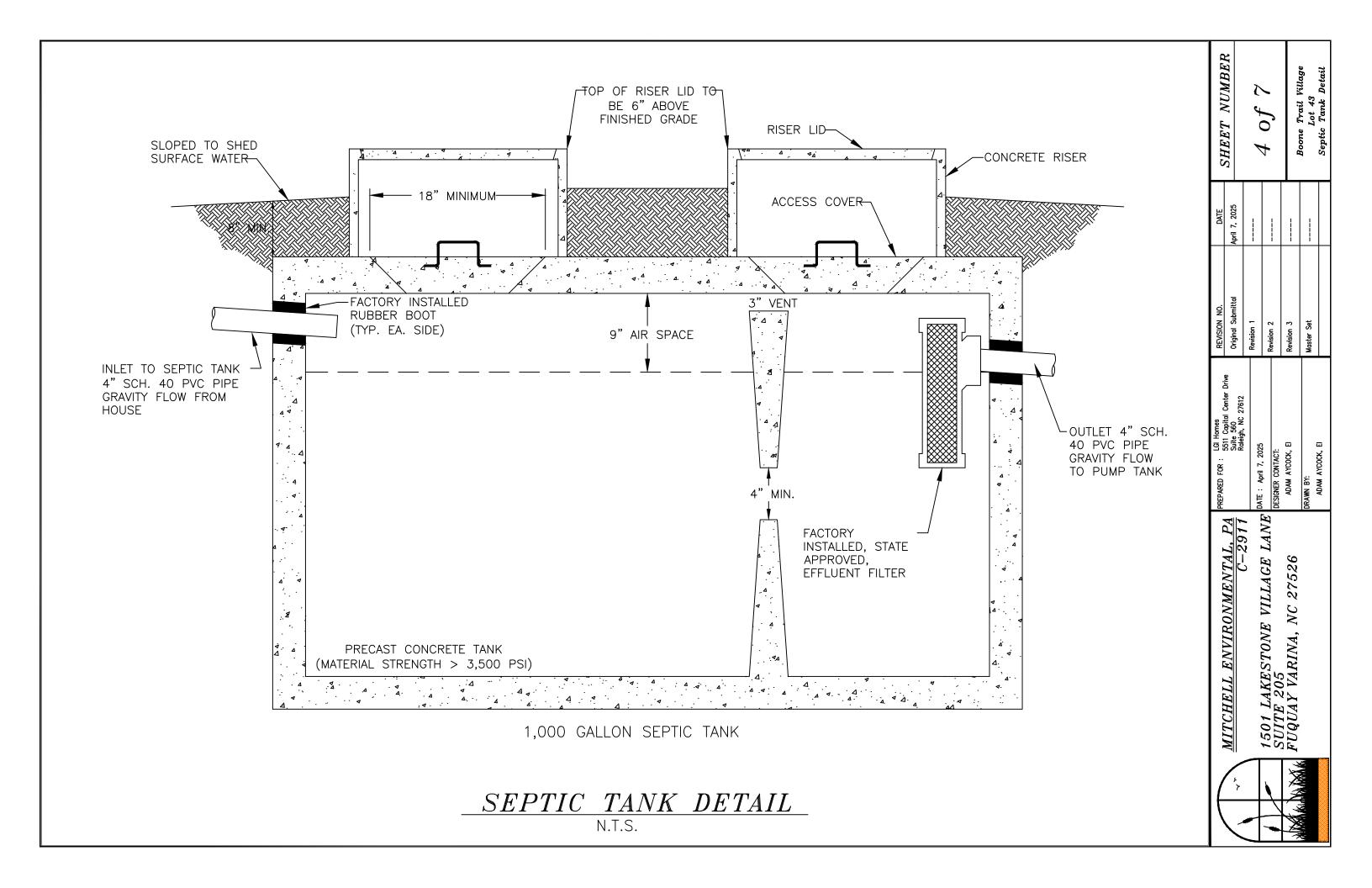
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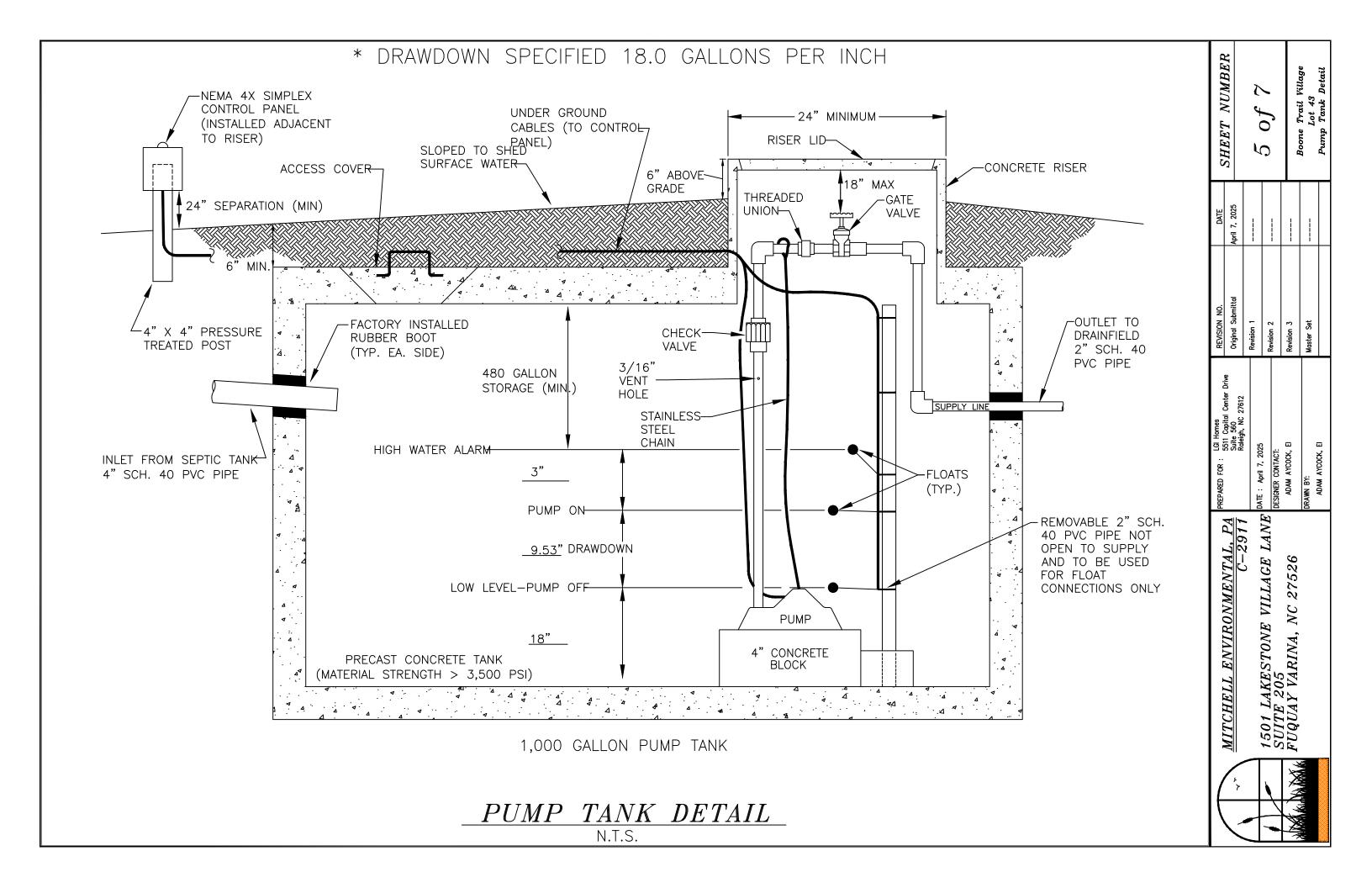
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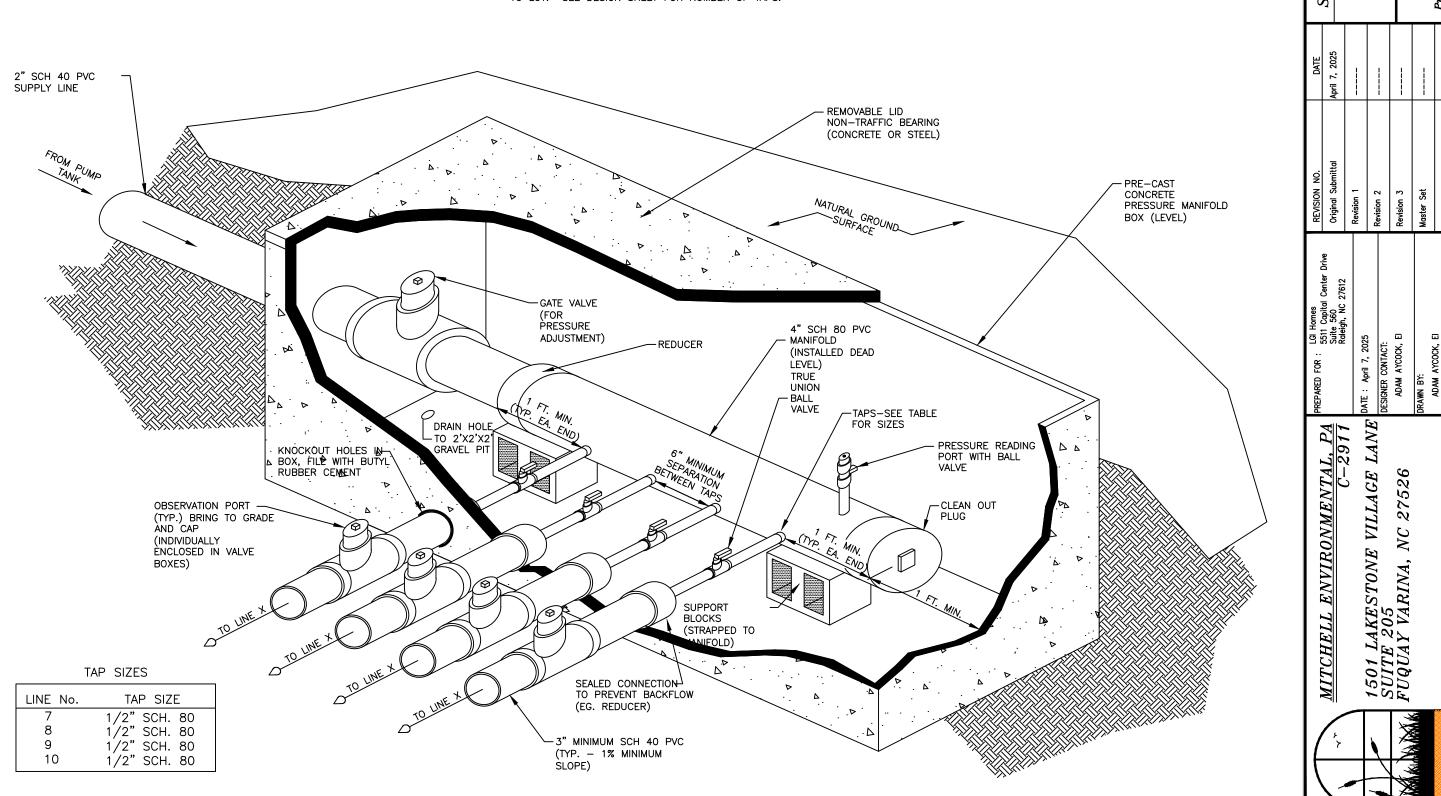
PRESSURE MANIFOLD DETAIL FOR BOONE TRAIL VILLAGE LOT 43 INITIAL SEPTIC SYSTEM N.T.S.

NUMBER

0

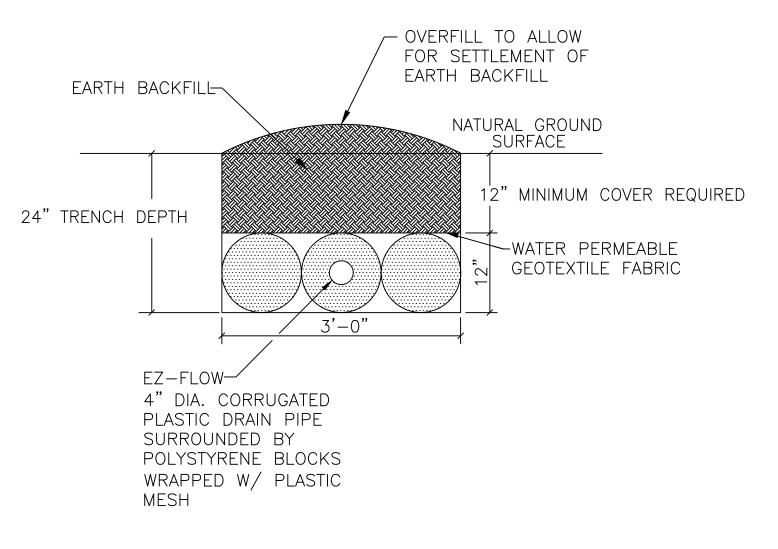
NOTE: MANIFOLD MAY NEED TO BE FLIPPED SO THAT SUPPLY LINE ENTRANCE AND CLEANOUTS ARE REVERSED. SEE SITE PLAN.

NOTE: THE NUMBER OF TAPS MAY VARY FROM LOT TO LOT. SEE DESIGN SHEET FOR NUMBER OF TAPS.



NITRIFICATION TRENCH DETAIL FOR EZ-FLOW

N.T.S.



NOTES:

- 1. PERFORATED CORRUGATED PLASTIC PIPE SHALL MEET REQUIREMENTS OF ASTM D 2729.
- 2. PIPE SHALL BE LEVEL.
- 3. ENDCAP SHALL BE PROVIDED AT END OF ALL CORRUGATED PLASTIC PIPE LINES.
- 4. TRENCH BOTTOM SHALL BE LEVEL.
- 5. HAND RAKE TRENCH WALLS PRIOR TO PLACEMENT OF TRENCH MEDIA IF SOIL SMEARING IS PRESENT.

	/		PREPARED FOR: LGI Homes	REVISION NO.	DATE	CHEET MINDED
	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	MITCHELL ENVIRONMENTAL, PA	Solit Capital Center Drive Suite 560 Raleiah, NC 27612	Original Submittal	April 7, 2025	SHEEL NUMBER
-		1167-0		Revision 1		
†	T		DATE: April 7, 2025			
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WASHING IN	CHANGE OF THE STREET		DRAWN BY:	Master Set		Doone Tran Vinage Lot 43
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			ADAM ATCUCA, EI			Trench Detail