BCW

ICHD - ENVIRONMENTAL HEALTH DIVISION

Statesville Office (704) 878-5305 | Mooresville Office (704) 660-3625 | PERMIT # AP319531

SEPTIC: IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PIN # 4636 -- 13 --5250

APPLICANT/OWNER: Towe Homes / Jim Hood | APPLICANT ADDRESS: 2646 Breckenridge Drive, Monroe NC 28110

SITE ADDRESS: 123 Farm Knoll Way, Mooresville NC 28117 | PHONE: 704-506-3852 | ALT. PHONE

SITE DIRECTIONS: Brawley School Rd @ on Isle of Pine @ Rock Ridge Point | SAP CONTROLLED: ☐ YES ☒ NO

SUBDIVISION: Rock Ridge Point | SECTION: - | LOT # 26 | LOT AREA: .98 Ac | DESIGN FLOW: 600 | L.T.A.R.: .25

Septic Tank	1500	(gal)	STB	STOAF 964	Date	3/29/22	☒ New System ☐ Repair ☐ Expansion	System Type: I II (III) IV V VI	☒ Residence	No. Bedrooms	5
Pump Tank	1500	(gal)	PT	STOAF 353	Date	4/3/22	System Description: PM - 25% Reduction		☐ Business	No. Persons	10
Pump Make		Model			Serial #		Repair System Description: LD-PPBPS - 50% Reduction		☐ Other	No. Employees	
# Nitrification Fields	1	# Lines	5		Linear Ft	600	Maintenance Agreement Required: ☐ YES ☒ NO		☐ Slab	☐ Crawl Space	
Trench Width	36in	Trench Bottom Depth ~~(variable)~~	36in max		Gravel Depth	-	☐ GRAVITY ☒ PRESSURE		☒ Basement w/plumbing	☐ Basement w/o plumbing	

Water Supply: ☐ Private ☒ Public ☐ Community

Comments / Conditions:

Easement Bk 2267 Pg 2298.

6/7/22 2:00 pm Pressure Gauge @ 3.3psi / 3.3psi 6/8/22 @ 1400 BW

INITIAL SITE SKETCH

This permit is issued pursuant to Section 11 . (C) of S.L. 2018-114 using the signed and sealed LSS Evaluation by:

Septic Environmental Solutions, Inc

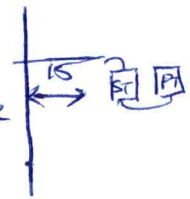
LSS # 1154

AS BUILT SKETCH

FOR SEPTIC FINAL INSPECTION CALL: 704-664-3703 between 8am-9am the day the inspection is needed. Be sure to speak with an inspector to confirm your time.

Tank 15' off house - Check for risers & cover over tanks when checking plumbing

As Built → House



Riser good 8/12/22

Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ☒ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☐ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: [signature] Date: 9-8-22 | Installed by: Sid Gaskins

IMPROVEMENT PERMIT by: [signature] Date: 8/12/2022 | OPERATION PERMIT by: [signature] Date: 8/17/22

AUTHORIZATION TO CONSTRUCT by: [signature] Date: 1/7/2024 | Existing System Inspected by: Date:

FOR SEPTIC FINAL INSPECTION: CALL 704-664-3703 between 8am-9am the day the inspection is needed.

Item	Date	Initials
Drain Lines Checked		
Tanks Checked	5/4/22	DWS
Pressure Manifold or Valve Box Checked		
Pressure Head Set		
Electrical Checked		
Floats Set		
Alarm Checked		
Maintenance Contract Needed? Y / (N)		
Comments:		

Repairs Only	
	State Code
Failing System Code	
Type of Distribution	G or P
Type of Failure/Malfunction	
Primary Cause of Failure/Malfunction	
Age of System? _____	
Initial or Repair? _____	

Design Specifications Proposal Lot 26 Rock Ridge Point, Iredell North Carolina

Note: "The *LSS* Evaluation is being submitted pursuant to and meets the requirements of SL 2018-114 Section 11. (c)."

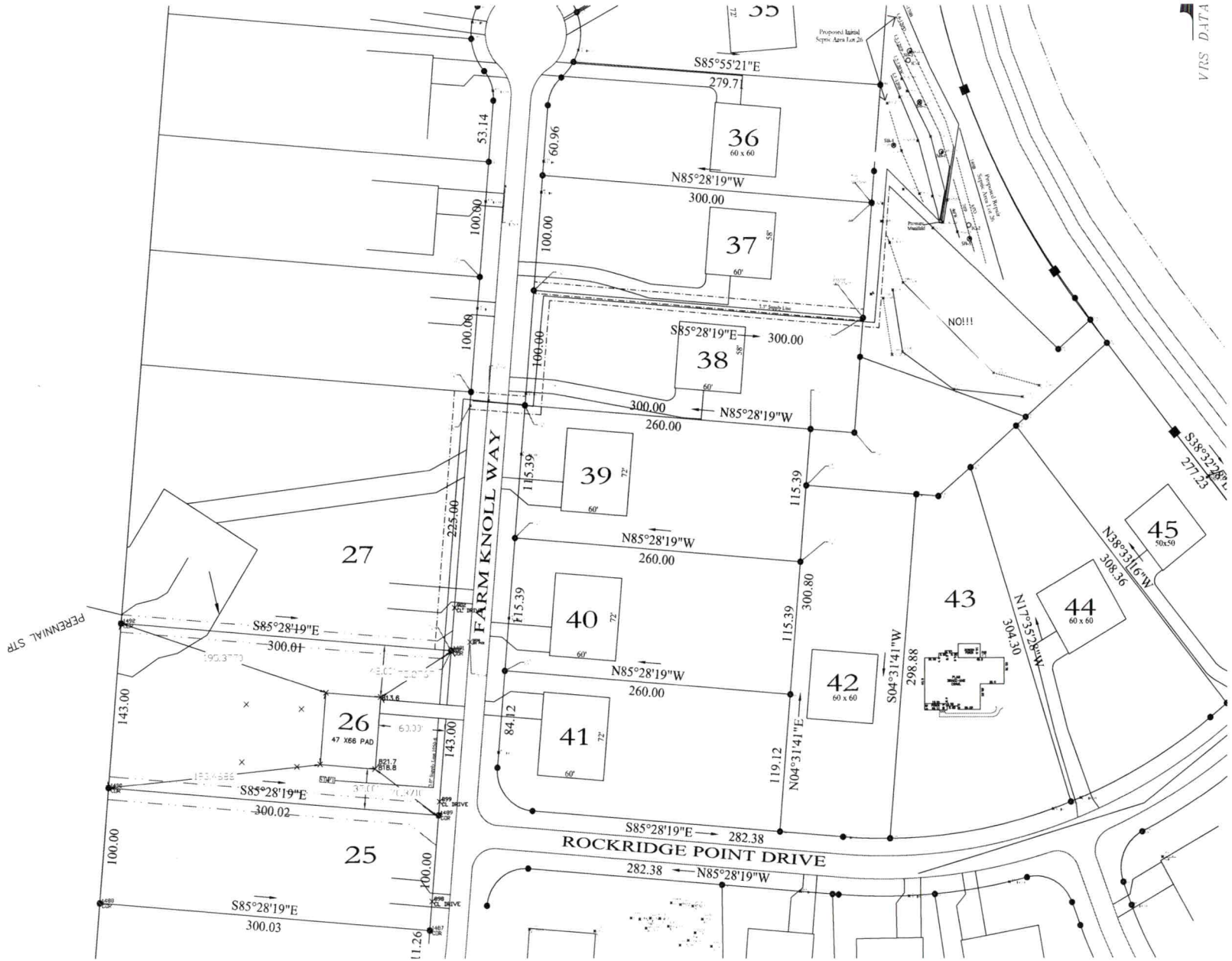
Daily Design Flow:	600 gpd
Number of Bedrooms	5 bedroom
Basement or Crawlspace	Basement
Septic Tank Size	1500 gal, Delliger Tank with effluent filter Poly Lock PL68
Pump Tank Size	1500 gal, Delliger Tank
Primary System Loading Rate (LTAR)	0.25 gpd/ft^{2,} LTAR including Soils Evaluations were determined by Septic Environmental Solutions, Inc.
Primary System	Pump offsite to offsite pressure manifold 25% reduction, all lines to be a minimum of 9-ft on center with 3-ft wide trench widths. Trench depth shall be maximum 36-inches. See scale map for total length.
Number and Length of Lines	5 See attached drawing for offsite drainfield.
Total foot of Primary System	requires 600-ft
Distribution Device	Pressure Manifold
Maintenance Agreement Required	No
Dosing Volume	260 gal, 2.0 doses/day@ design flow =130 gals.
Depth of effluent Pumped per Dose	Approximately 4.48", use 4.5"
Supply Line	1050-ft, 3" SCH 40 PVC

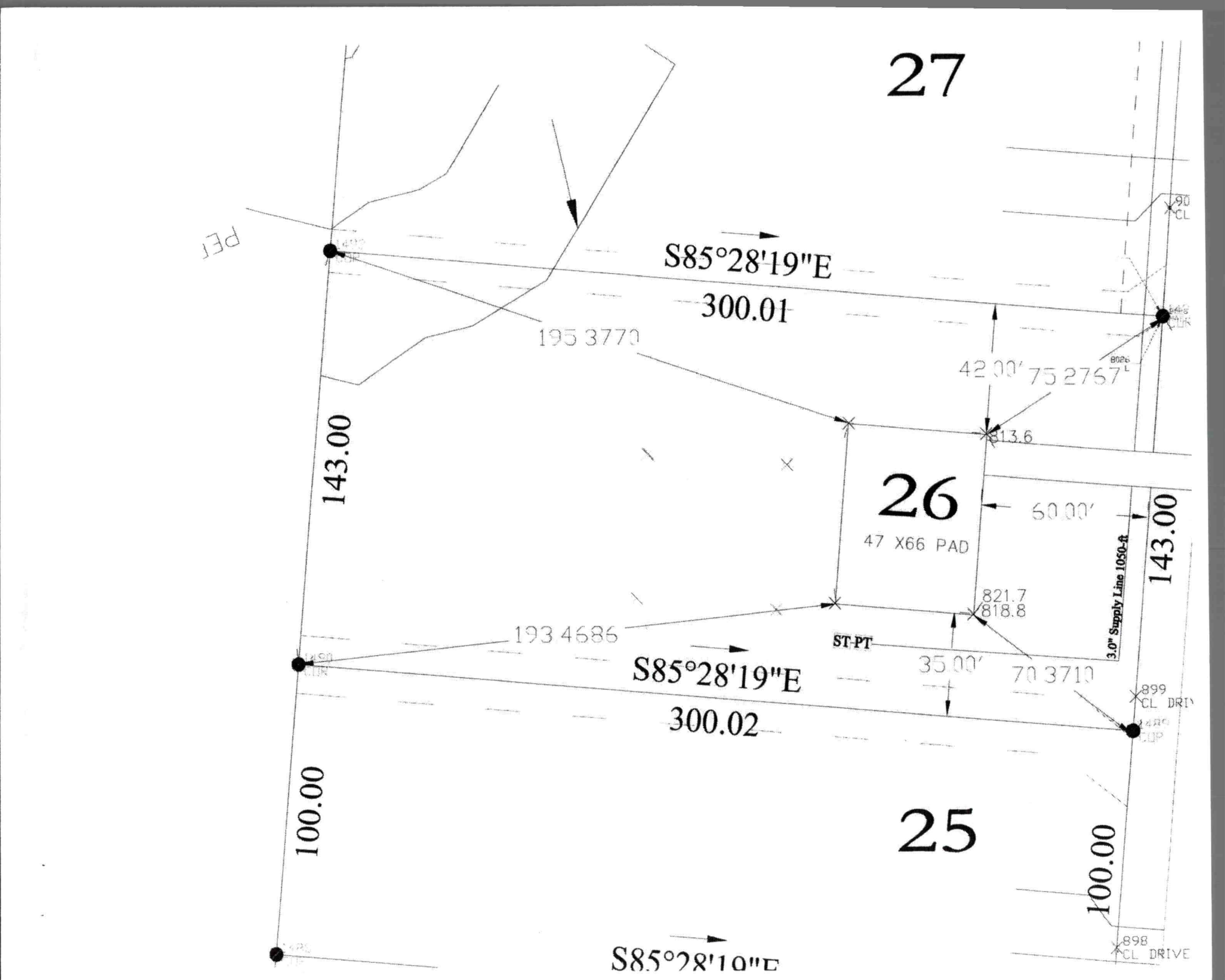
Pressure Manifold

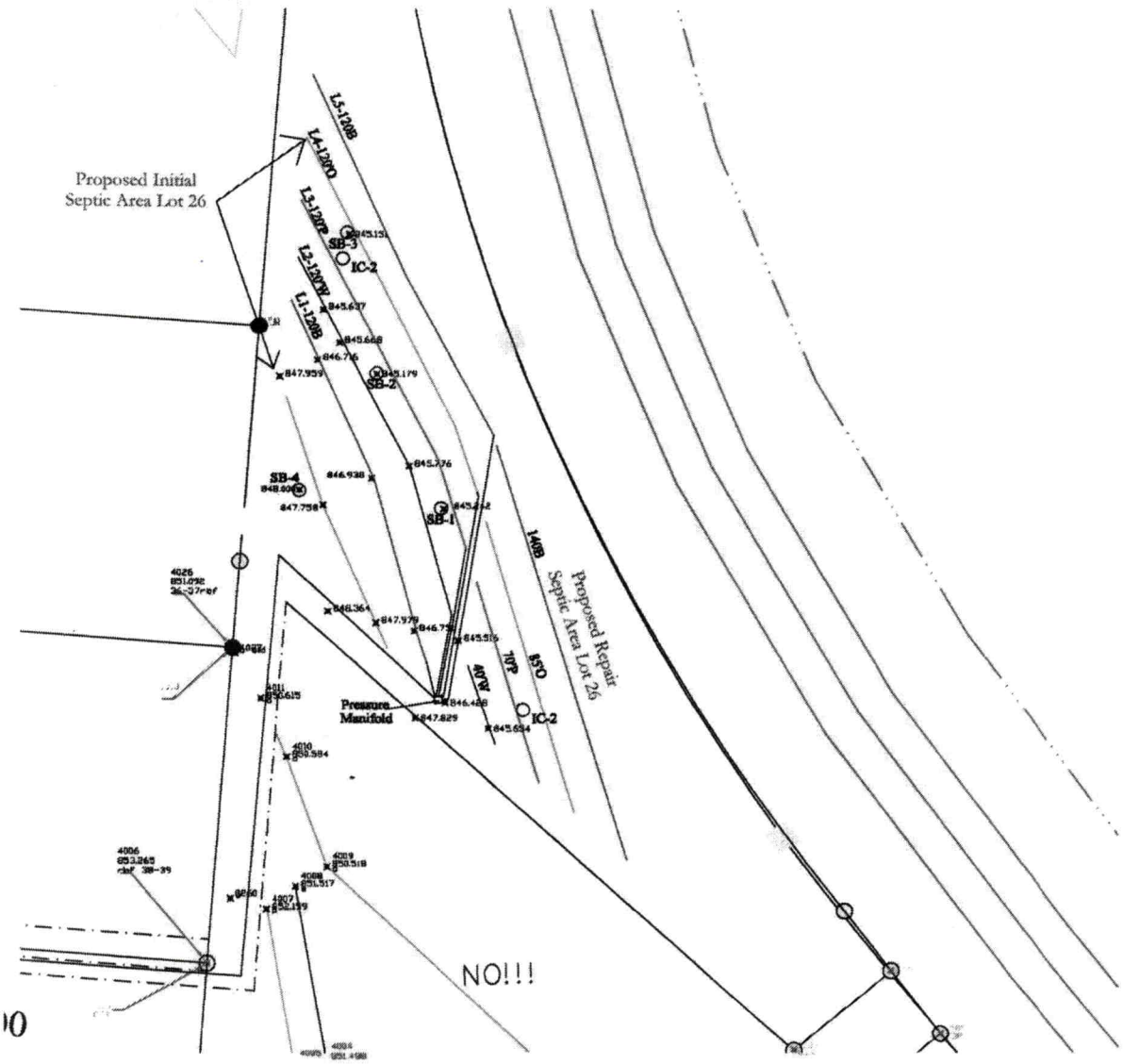
No. of Lines	Line Length (ft)	Tap Size/Type	GPM/Linear Ft	% GPM/Linear Ft
1 (L1)	120	5.48 ½ sch 80	0.04567	1.00
2 (L2)	120	5.48 ½ sch 80	0.04567	1.00
3 (L3)	120	5.48 ½ sch 80	0.04567	1.00
4 (L4)	120	5.48 ½ sch 80	0.04567	1.00
5 (L5)	120	5.48 ½ sch 80	0.04567	1.00
	Total	27.40		

Flow rate through the system	27.40 gpm
Elevation head+pump Height	Approximately 37-ft
Pressure head	2-ft
Friction head	4.84-ft
20% Contingency	8.77-ft
Total Head	52.61-ft
Pump Type	27.40 gpm@52.61ft of head; Use Goulds WE10HL, 230 V. Pump or equivalent with compatible electrical.
Pump Run Time	4.74 minutes
Check Valve	Yes
Siphon Break Hole	Yes
Repair System Loading Rate	0.25 gpd/ft^2
Repair System	LP PPBPS located offsite, See attached drawing
Total foot of Line	400+, See attached drawing

Flow rate through the system	27.40 gpm
Elevation head+pump Height	Approximately 37-ft
Pressure head	2-ft
Friction head	4.84-ft
20% Contingency	8.77-ft
Total Head	52.61-ft
Pump Type	27.40 gpm@52.61ft of head; Use Goulds WE10HL, 230 V. Pump or equivalent with compatible electrical.
Pump Run Time	4.74 minutes
Check Valve	Yes
Siphon Break Hole	Yes
Repair System Loading Rate	0.25 gpd/ft^2
Repair System	LP PPBPS located offsite, See attached drawing
Total foot of Line	400+, See attached drawing


FARM KNOLL WAY
ROCKRIDGE POINT DRIVE
PERENNIAL STR
S85°55'21"E
279.71
36
60 x 60
N85°28'19"W
300.00
37
60'
S85°28'19"E
300.00
38
60'
N85°28'19"W
260.00
39
60'
N85°28'19"W
260.00
40
60'
N85°28'19"W
260.00
41
60'
S85°28'19"E
282.38
N85°28'19"W
282.38
S85°28'19"E
300.03
S85°28'19"E
300.02
S85°28'19"E
300.01
26
47 X66 PAD
25
27
42
60 x 60
43
44
60 x 60
45
50x50
NO!!!
53.14
60.96
100.00
100.00
100.00
100.00
115.39
115.39
115.39
115.39
225.00
143.00
143.00
100.00
100.00
84.12
119.12
11.26
300.80
298.88
304.30
308.36
277.23
S04°31'41"W
N04°31'41"E
N17°35'28"W
N38°33'16"W
S38°32'28"E


27
S85°28'19"E
300.01
193.3770
42.00'
75.2767
813.6
26
47 X66 PAD
60.00'
143.00
143.00
821.7
818.8
193.4686
ST-PT
3.0" Supply Line 1050-ft
35.00'
70.3710
S85°28'19"E
300.02
899
CL DRIV
100.00
25
100.00
898
CL DRIVE
S85°28'19"E


Proposed Initial
Septic Area Lot 26
L5-120B
L4-120O
L3-120P
L2-120W
L1-120B
SB-3
IC-2
SB-2
SB-4
SB-1
140B
Proposed Repair
Septic Area Lot 26
40W
Pressure
Manifold
IC-2
NO!!!

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

Sheet 1 of 2
PROPERTY ID #:
COUNTY:

SOIL/SITE EVALUATION
***for* ON-SITE WASTEWATER SYSTEM**
(Complete all fields in full)

LICENSED SOIL SCIENTIST
KENNETH L. OWEN
STATE OF NORTH CAROLINA

OWNER: Rock Ridge Point LOT 26 APPLICATION DATE: 6/7/15
ADDRESS: Rock Ridge Point, 123 FARM ROAD, NH EVALUATED: 6/9/15
PROPOSED FACILITY: 5 PROPOSED DESIGN FLOW (.1949): 600 PROPERTY SIZE: 2.0 ACRES
LOCATION OF SITE: RockRidge PT, LOT 26 PROFILE(S) RECORDED:
WATER SUPPLY: ☐ Private ☒ Public ☒ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☒ Auger Boring ☒ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	<2%	0-9	FI/VFI-GR C	FI NS/NP	2.5YR 4/6	60"	NA	60"	0.25
		9-25	FI/2ABK C	FI SS/SP	7.5YR 5/6				0.25
		25-48	FR/1SBK CL	FRI SS/SP	10YR 4/6				0.25
		48-60	FR/1SBK	FR DS/NP	5YR 5/6				
			SiC/SiCL						
2	<2%	0-9	1GR/C	FI/VFI/NS/NP	2.5YR 4/6	60"	SAP/S	60"	0.25
		9-24	2ABK/C	FI/SS-SP	7.5YR 5/6				0.3
		24-48	1SBK/L	VFR/NS-NP	10YR 4/6				0.4
		48-60	~~Fm~~ Nm/S	VFR/NS-NP	5YR 5/6				
3	<2%	0-10	1GR/C	FI/VFI/NS-NP	5YR 4/4	60"	NA	60"	0.25
		10-29	2ABK/SCL	FI/FR/SS-SP	7.5YR 5/6				0.25
		29-60	2ABK/SCL	FR/SS-SP	10YR 4/6				
4	<2%	0-16	1GR/C	FI/VFI/NS-NP	2.5YR 4/6	60"	NA	60"	0.25
		16-26	2ABK/SCL	FR/SS-SP	2.5YR 4/4				0.25
		26-60	2ABK/SCL	FR/SS-SP	5YR 5/6				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	100% Required	100% Required
System Type(s)	25% Reduction	LPP PBPS
Site LTAR	0.25	0.25

OTHER FACTORS (.1946): NA
SITE CLASSIFICATION (.1948): Suitable
EVALUATED BY: Kenny Owen
OTHER(S) PRESENT: NA

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

PROPERTY ID #: 4636135

DATE OF EVALUATION:

COUNTY: Iredell

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS & LTAR
5	12%	0-16	1GR/C FR/FM	NS/NP/VFR	2.5YR 4/6	60"	NONE	60"	0.25
		16-25	2 AKR/SCL/VFR	FR/SS/SP/SER	2.5YR 4/4				
		25-60	2 AKR/SCL/FR/VFR	VFR/SS/SP/SER	2.5YR 5/6				

AGENT AUTHORIZATION FORM

PROPERTY LEGAL INFORMATION

PROPERTY OWNER NAME: Mr.

PROPERTY STREET ADDRESS: 123 Farm Knoll Way, Mooresville, North Carolina, 28117

TAX PARCEL ID: 4636935250.0000

LOT #: 26

SECTION/PHASE: NA

I, Mr. Chad Boucher, am the legal owner of the property located at
123 Farm Knoll Way, Mooresville, NC 28117 0.98-acres (address, subdivision and lot#). The tax parcel
Identification numbers(s) 4636935250.0000, located in Iredell, North Carolina.

I do hereby authorize Mr. Kenneth Owens, Septic Environmental Solutions, Inc. (print agent and company name, if Applicable), to act as an agent on my behalf in applying for/signing/obtaining any of the documents Associated with Iredell County Environmental Health.

BUYER/PROPERTY OWNER ADDRESS (IF DIFFERENT THAN PROPERTY ABOVE):
151 Capital Ave., Apt 3105
Mooresville, NC 28117

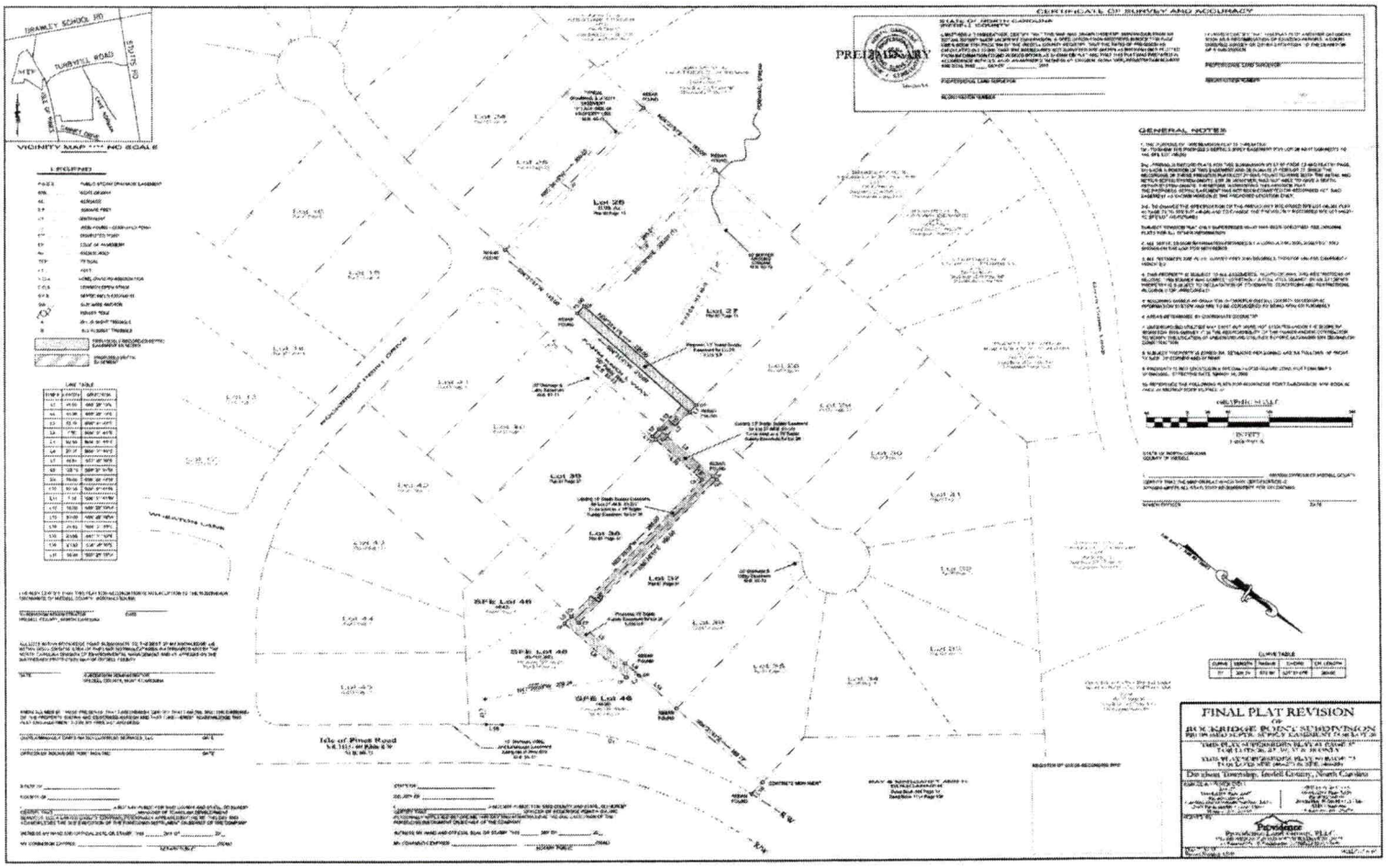
CONTACT INFORMATION: 704-414-0457

WE HEARBY CERTIFY THE ABOVE INFORMATION SUBMITTED IN THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF OUR KNOWLEDGE.

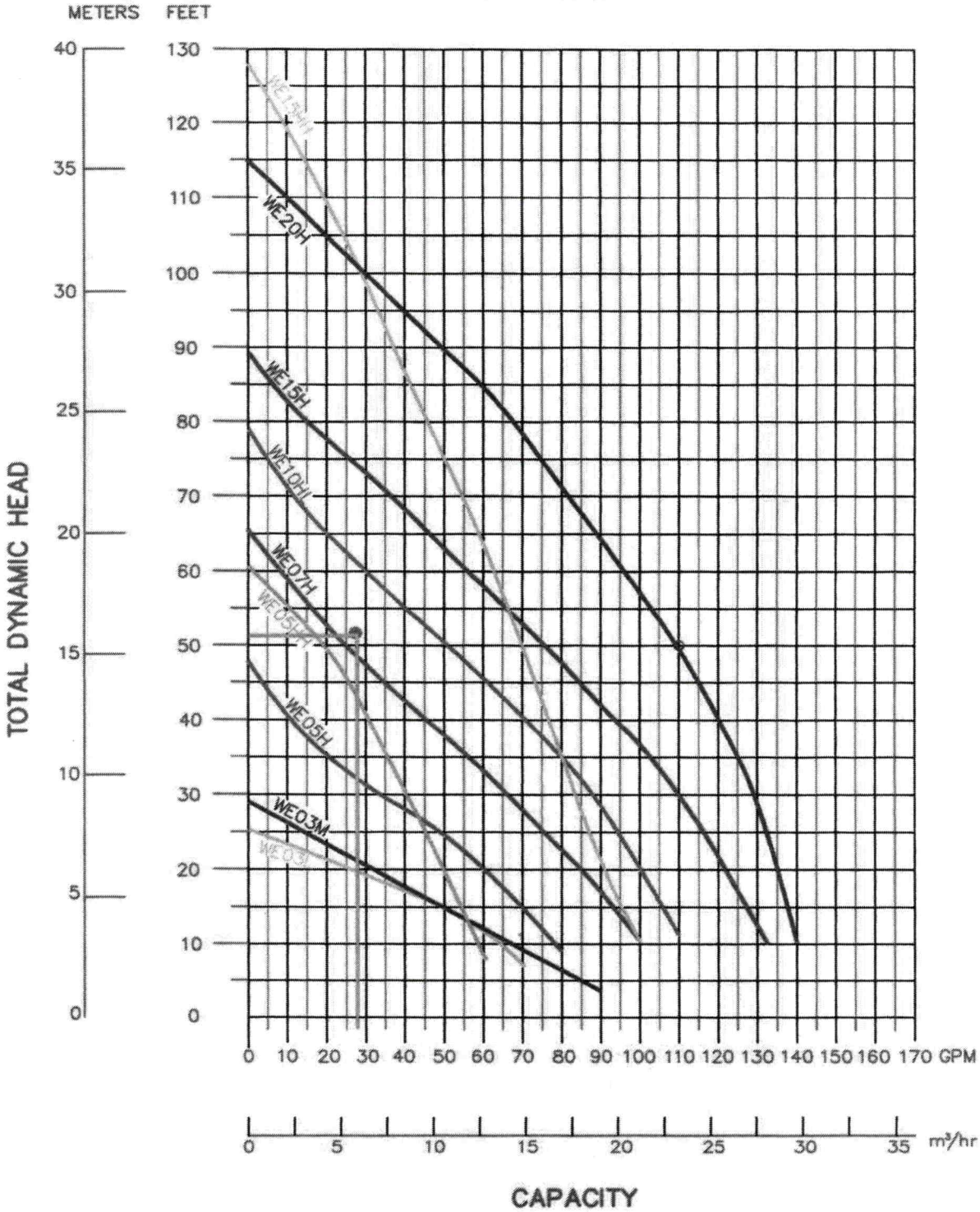
"The LSS Evaluation attached to this application is to be used to produce design and construction features for permitting in accordance with SL 2018-114 Section11. (c)."

AUTHORIZED SIGNATURE

DATE: 7/9/21


PRELIMINARY
FINAL PLAT REVISION
BUCKRIDGE POINTE SUBDIVISION
Dobson Township, Surry County, North Carolina
GENERAL NOTES
Lot 26
Lot 27
Lot 28
Lot 29
Lot 30
Lot 31
Lot 32
Lot 33
Lot 34
Lot 35
Lot 36
Lot 37
Lot 38
Lot 39
Lot 40
Lot 41
Lot 42
Lot 43
Lot 44
Lot 45
Lot 46
Isle of Pines Road
Buckridge Point Drive
Buckridge Point Court
Waterstone Lane
Hawthorne Trace
Rockingham Trail
Drawley School Rd
Dobbins Road
VICINITY MAP ***** NO SCALE

PUMP CURVE
LOT 26



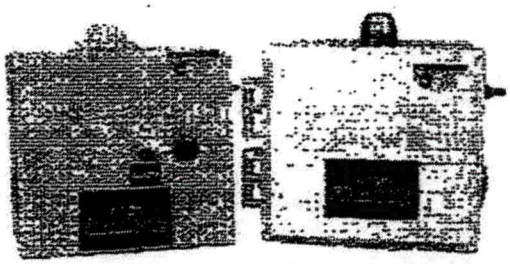
GOULDS PUMP PERFORANCE CURVES

Submersible Effluent Pump WE Series

MODEL 112 Control Panel

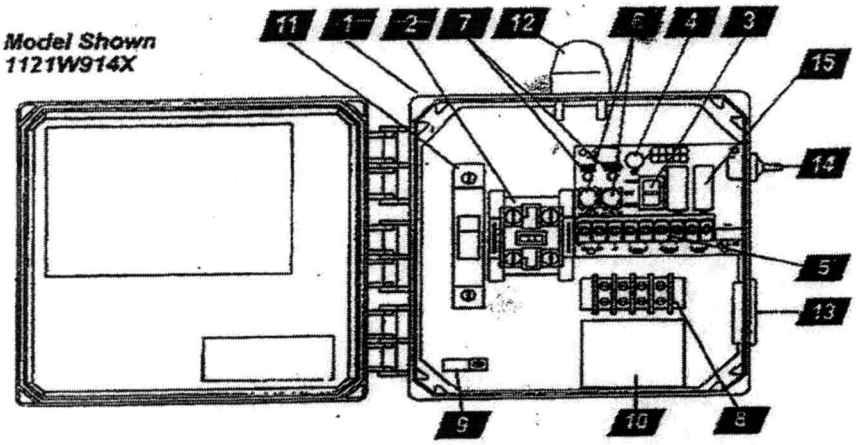
Single phase, simplex motor contactor control.

The Model 112 control panel provides a reliable means of controlling one 120, 208, or 240 VAC single-phase pump in pump chambers, sump pump basins, irrigation systems and lift stations. Two control switches activate a magnetic motor contactor to turn the pump on and off. If an alarm condition occurs, an additional alarm switch activates the audio/visual alarm system.



indoor *Indoor/outdoor*

Model Shown
1121W914X



1. **Enclosure** measures 8 x 8 x 4 inches (20.32 X 20.32 X 10.16 cm). Choice of NEMA 1 (steel for indoor use), or NEMA 4X (ultraviolet stabilized thermoplastic with removable flanges for outdoor or indoor use).
   * Options selected may increase enclosure size and change component layout.
2. **Magnetic Motor Contactor** controls pump by switching hot electrical lines.
3. **HOA Switch** for manual pump control (mounted on circuit board).
4. **Green Pump Run Indicator Light** (mounted on circuit board).
5. **Float Switch Terminal Block** (mounted on circuit board).
6. **Alarm and Control Fuses** (mounted on circuit board).
7. **Alarm and Control Power Indicators** (mounted on circuit board).
8. **Pump Input Power and Pump Connection Terminal Block**
9. **Ground Lug**
10. **Terminal Block Installation Label**
11. **Circuit Breaker** (optional) provides pump disconnect and branch circuit protection.

STANDARD ALARM PACKAGE (other options available)

12. **Red Alarm Beacon** provides 360° visual check of alarm condition. **Note:** NEMA 1 style utilizes a door mounted indicator in lieu of a beacon.
13. **Alarm Horn** provides audio warning of alarm condition (83 to 85 decibel rating). **Note:** NEMA 1 style utilizes an internally mounted buzzer (83 to 85 decibel) in lieu of horn.
14. **Exterior Horn Test/Normal/Silence Switch** allows alarm horn to be silenced and testing of horn and light to ensure proper operation of alarm system.
15. **Horn Silence Relay** automatically resets alarm after alarm condition has been resolved (mounted on circuit board).

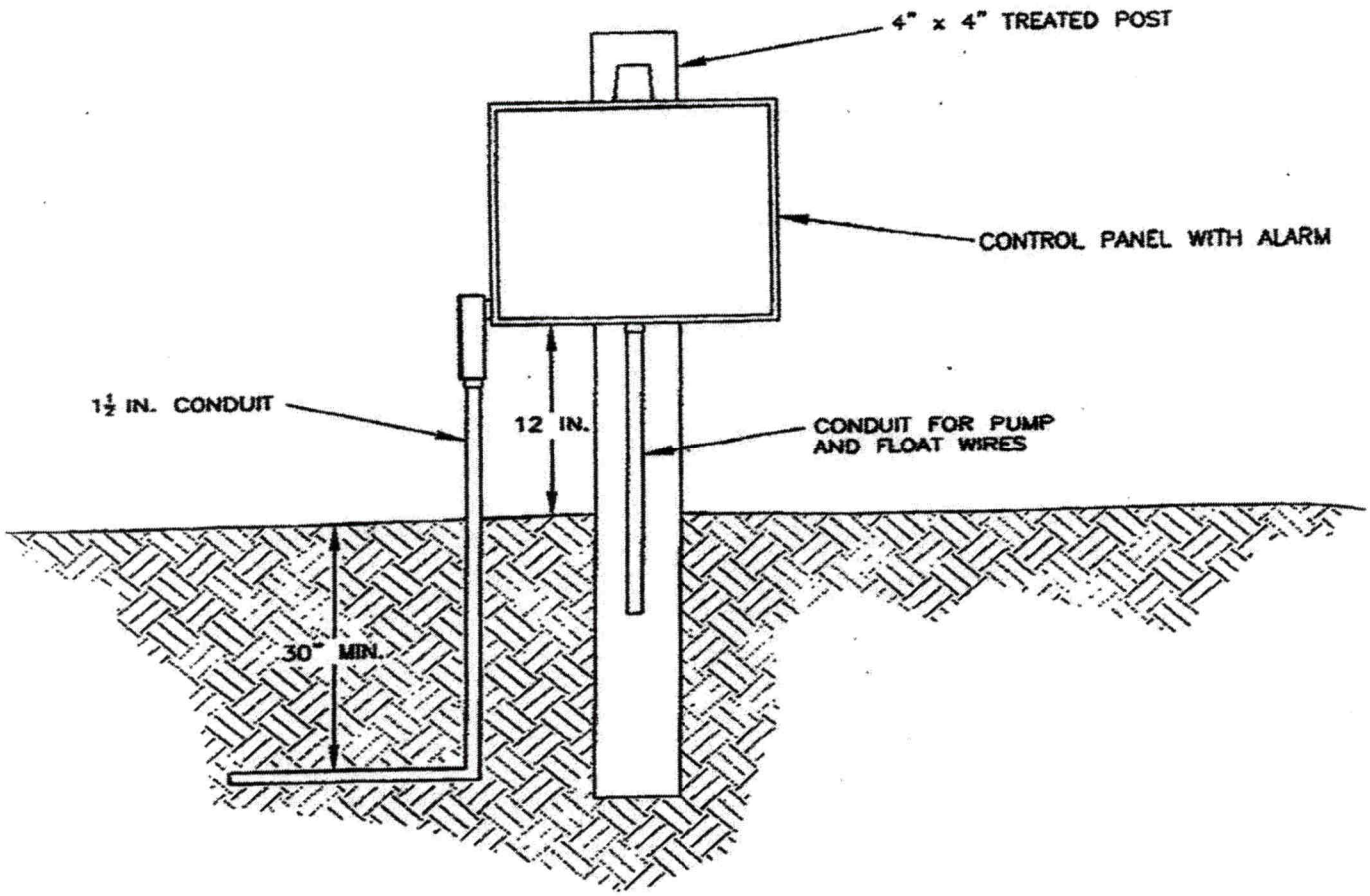
FEATURES

- 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 three 20' Sensor Float® control switches
- Complete with step-by-step installation instructions
- Three-year limited warranty

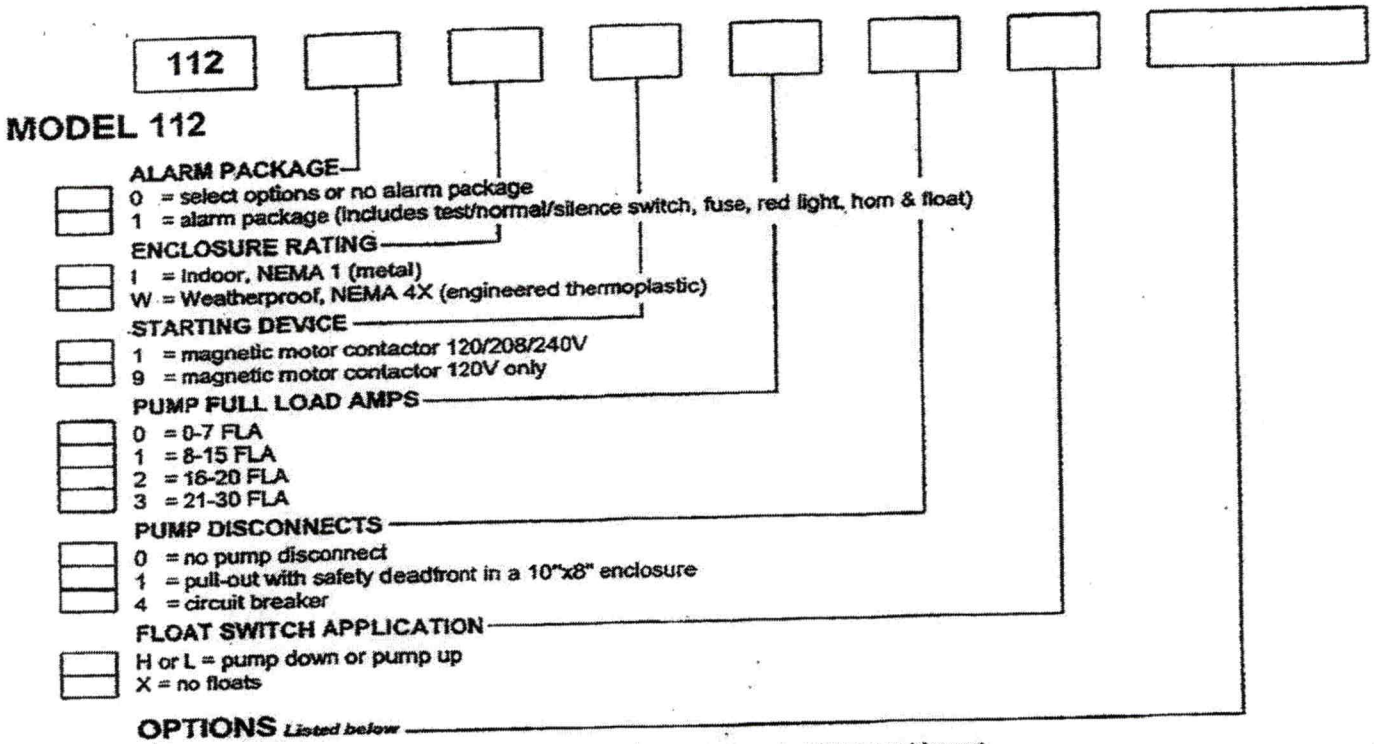
c UL us LISTED

sjerhombus CONTROLS
SJ ELECTRO SYSTEMS, INC.
PO Box 1708, Detroit Lakes, MN 56502
1-888-DIAL-SJE 1-218-847-1317
1-218-847-4617 Fax
email: sje@sjerhombus.com
www.sjerhombus.com

ELECTRIC BOX



NOTES: ELECTRICAL SYSTEM COMPONENTS SHALL BE INSTALLED TO MEET OR EXCEED MINIMUM REQUIREMENTS SPECIFIED IN THE ELECTRICAL CODE. ALL WIRING SHALL BE #12 MINIMUM, AND RATED FOR DIRECT BURY. PROVIDE GROUNDING AS REQUIRED. AND PROVIDE 30" MINIMUM BURY ON CABLES. PROVIDE ONE 20 AMP, DOUBLE POLE, 230 VOLT CIRCUIT BREAKER (FOR PUMP). AND ONE 20 AMP, SINGLE POLE, 115 VOLT CIRCUIT BREAKER (FOR ALARM) IN MAIN PANEL.



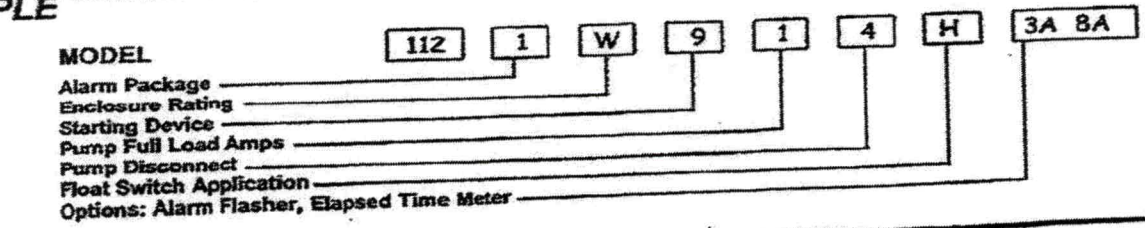
If additional features are required, call the factory for a quote on either a Pro-Line or Engineered Custom control panel system.

	CODE	DESCRIPTION
☐	1A	Rod beacon only / no audio *must select 1E if floats included*
☐	1C	Horn only / no visual *must select 1E if floats included*
☐	1E	Alarm float
☐	3A	Alarm flasher
☐ ★	4A	Low level cutout *select option 4D if floats included*
☐ ★	4B	Red low-level indicator & alarm *must select 4A also*
☐	4D	Low-level float
☐	6A	Auxiliary alarm contact, form C type
☐ ★	8A	Elapsed time meter
☐ ★	8C	Event (cycle) counter
☐	10E	Lockable latch - NEMA 4X
☐	10E	Lockable latch - NEMA 1
☐ ★	10F	Lightning arrester
☐ ★	10K	Anti-condensation heater

	CODE	DESCRIPTION
☐	11C	NEMA 1 alarm panel *must select option 6A*
☐	11D	NEMA 4X alarm panel *must select option 6A*
☐	15A	Control / alarm circuit breaker *Does not include the circuit board as in standard.*
☐	16A	10' cord in lieu of 20'
☐	16B	15' cord in lieu of 20'
☐	16C	30' cord in lieu of 20'
☐	16D	40' cord in lieu of 20'
☐	17A	SJE SignalMaster® / mounting strap ●
☐	17B	SJE SignalMaster® / externally weighted ●
☐	17C	Sensor Float® / internally weighted ▲
☐	17D	Sensor Float® / externally weighted ▲
☐	17E	Sensor Float® Mini / pipe clamp ▲
☐	17F	Sensor Float® Mini / externally weighted ▲
☐	19X	Door mounted pump run indicator
☐	21A	Pumpmaster® in lieu of on/off switches ●
☐	21B	PumpMaster® Plus in lieu of on/off switches ●
☐	21C	Super Single® in lieu of on/off switches ▲
☐	21D	Double Float™ in lieu of on/off switches ▲

● Mechanically-activated ▲ Mercury-activated

SAMPLE



© RJE-Rhombus Printed in USA 01/00

SENSOR FLOAT® control switch

Mercury-activated, narrow-angle float switch designed to activate pump control panels and alarms.



This narrow-angle sensing device is used to accurately monitor liquid levels in sewage and non-potable water applications. The Sensor Float® control switch is not sensitive to rotation and is suitable for use with intrinsically safe circuits. Contact SJE-Rhombus regarding specific intrinsically safe applications.

Normally Open Model (high level)
The control switch turns on (closes) when the float tips slightly above horizontal signaling a high level, and turns off (opens) when the float drops slightly below horizontal.

Normally Closed Model (low level)
The control switch turns on (closes) when the float drops slightly **below** horizontal signaling a low level, and turns off (opens) when the float tips slightly above horizontal.

FEATURES

- Suitable for use with intrinsically safe circuits.
- Not sensitive to rotation.
- Control differential of .5 inches (1 cm) above or below horizontal.
- UL Listed for use in non-potable water and sewage.
- CSA Certified.
- Three-year limited warranty.

LR54245 LISTED E2H2

Hydraulic

OPTIONS

This switch is available:

- for normally open (high level) applications or normally closed (low level) applications.
- in standard cable lengths of 10, 15, 20, or 30 feet and 3, 5, 6, or 10 meters.
- with three mounting options that allow for flexibility in installation:

  Mounting Clamp: for applications where the switch can be attached to a discharge pipe or similar mounting device.

  Internally Weighted: for applications where the switch can be suspended from above.

  Externally Weighted: for applications where the switch can be suspended from above.

SPECIFICATIONS

CABLE: flexible 18 gauge, 2 conductor (UL,CSA) SJOW, water-resistant (CPE) jacket

FLOAT: 3.38 inch diameter x 4.55 inch long (8.58 cm x 11.56 cm), high-impact, corrosion resistant, PVC housing for use in sewage and non-potable water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 psi

MERCURY TILT SWITCH: single pole, single throw, mercury-to-mercury contacts, hermetically sealed in a steel capsule and epoxy sealed in the float housing

ELECTRICAL: 5 amp, 120/230 VAC, 50/60 Hz

CONTROLS SJE Rhombus SJ ELECTRO SYSTEMS, INC.
PO Box 1708, Detroit Lakes, MN 56502
1-888-DIAL-SJE (1-218-847-1317
1-218-847-4617 Fax
email: sje@sjerhombus.com
www.sjerhombus.com

Sensor Float® control switch installation instructions

⚠WARNING **ELECTRICAL SHOCK HAZARD**
Disconnect power before installing or servicing this product. A qualified service person must install and service this product according to applicable electrical and plumbing codes.

⚠WARNING **EXPLOSION OR FIRE HAZARD**
Do not use this product with flammable liquids. Do not install in hazardous locations as defined by National Electrical Code, ANSI/NFPA 70.

Failure to follow these precautions could result in serious injury or death. Replace product immediately if switch cable becomes damaged or severed. Keep these instructions with warranty after installation. This product must be installed in accordance with National Electric Code, ANSI/NFPA 70 so as to prevent moisture from entering or accumulating within boxes, conduit bodies, fittings, float housing, or cable.

MOUNTING THE SWITCH

1. Place the cord into the clamp as shown in Figure B.
2. Locate clamp at desired activation level and secure the clamp to the discharge pipe as shown in Figures A and B. Note: Do not install cord under hose clamp.
3. Tighten the hose clamp using a screwdriver. Over tightening may result in damage to the plastic clamp. Make sure the float cable is not allowed to touch the excess hose clamp band during operation.
4. Bring cable leads back to control device and wire according to Figure C.
5. Check installation. Allow system to cycle to insure proper operation.

Note: All hose clamp components are made of 18-8 stainless steel material. See your SJE-Rhombus supplier for replacements.

Figure A

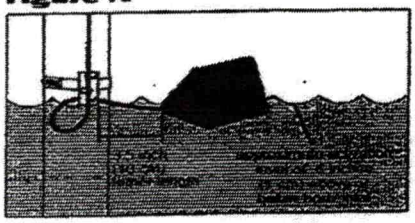
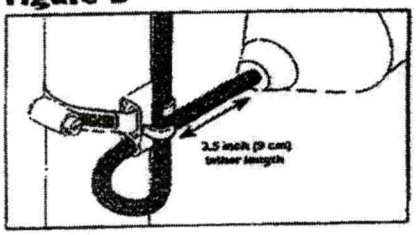


Figure B



INTERNAL WEIGHT

1. Determine desired activation level.
2. Suspend switch 7 inches (18 cm) below desired activation level as shown in Figure D. Switch remains partially submerged during the "on" tipping action. Switch can be totally submerged and still continue to operate properly.
3. Wire cable leads directly into control device as shown in Figure C.
4. Check installation. Allow system to cycle to insure proper operation.

Figure C - Wiring Diagram

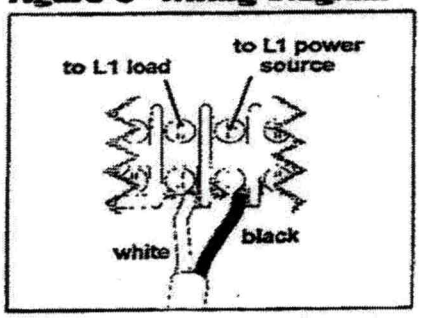
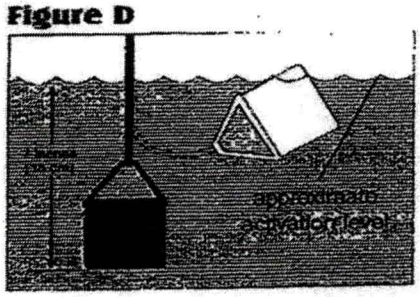


Figure D



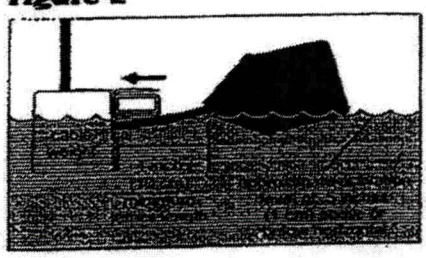
CABLE WEIGHT

1. Determine desired activation level.
2. Suspend switch and cable weight at desired activation level as shown in Figure E.
3. Wire cable leads directly into control device as shown in Figure C.
4. Check installation. Allow system to cycle to insure proper operation.

Cable weight is attached to switch cable at the factory. To adjust:

1. Release clip.
2. Adjust cable weight to desired position.
3. Lay switch cable in weight channel.
4. Align clip with weight channel and slide towards switch cable as shown in Figure E.
5. Snap clip snugly up to cable, moving clip to tightest possible position.

Figure E



CONTROLS
SJE Rhombus
SJ ELECTRO SYSTEMS, INC.
22650 County Highway 6 ■ P.O. Box 1708 ■ Detroit Lakes, Minnesota 56502 USA
1-888-DIAL-SJE (1-888-342-5753) ■ Phone: 218-847-1317 ■ Fax: 218-847-4617
E-mail: sjc@sjerhombus.com

Instl. Instr. PN 1009646A
Cat. Page PN 1009609A

©SJE-Rhombus
Printed in USA 03/00

GOULDS PUMPS



Submersible Effluent Pump

MODEL 3885

WE Series

PROSURANCE AVAILABLE FOR RESIDENTIAL APPLICATIONS.

APPLICATIONS

Specifically designed for the following uses:

- Homes
- Farms
- Trailer courts
- Motels
- Schools
- Hospitals
- Industry
- Effluent systems

SPECIFICATIONS

Pump

- Solids handling capabilities: ¾" maximum.
- Discharge size: 2" NPT.
- Capacities: up to 140 GPM.
- Total heads: up to 128 feet TDH.
- Temperature: 104°F (40°C) continuous 140°F (60°C) intermittent.
- See order numbers on reverse side for specific HP, voltage, phase and RPM's available.

FEATURES

■ **Impeller:** Cast iron, semi-open, non-clog with pump-out vanes for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.

■ **Casing:** Cast iron volute type for maximum efficiency. 2" NPT discharge.

■ **Mechanical Seal: SILICON CARBIDE VS. SILICON CARBIDE** sealing faces. Stainless steel metal parts, BUNA-N elastomers.

■ **Shaft:** Corrosion-resistant, stainless steel. Threaded design. Locknut on all models to guard against component damage on accidental reverse rotation.

■ **Fasteners:** 300 series stainless steel.

■ Capable of running dry without damage to components.

■ Designed for continuous operation when fully submerged.

MOTORS

■ Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.

■ Class B insulation on ⅓-1½ HP models.

■ Class F insulation on 2 HP models.

Single phase (60 Hz):

- Capacitor start motors for maximum starting torque.
- Built-in overload with automatic reset.
- SJTOW or STOW severe duty oil and water resistant power cords.
- ⅓ and ½ HP models have NEMA three prong grounding plugs.
- ¾ HP and larger units have bare lead cord ends.

Three phase (60 Hz):

- Class 10 overload protection must be provided in separately ordered starter unit.
- STOW power cords all have bare lead cord ends.

■ **Designed for Continuous Operation:** Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged.

■ **Bearings:** Upper and lower heavy duty ball bearing construction.

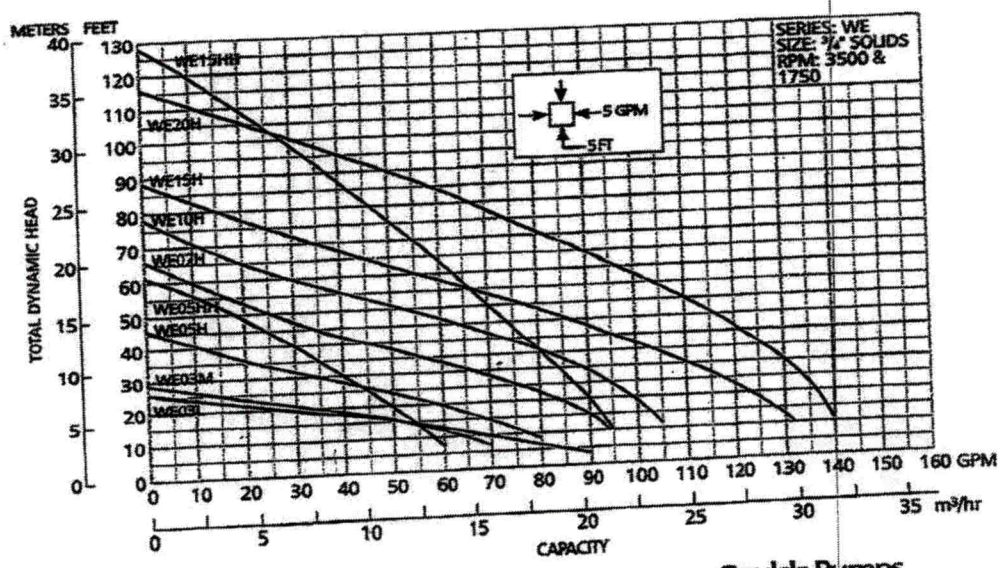
■ **Power Cable:** Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.

■ **O-ring:** Assures positive sealing against contaminants and oil leakage.

AGENCY LISTINGS

Tested to UL 778 and CSA 22.2 108 Standards By Canadian Standards Association File #LR38549

Goulds Pumps is ISO 9001 Registered.



Goulds Pumps

ITT Industries

© 2003 Goulds Pumps
Effective July, 2003
B3885

www.goulds.com

GOULDS PUMPS

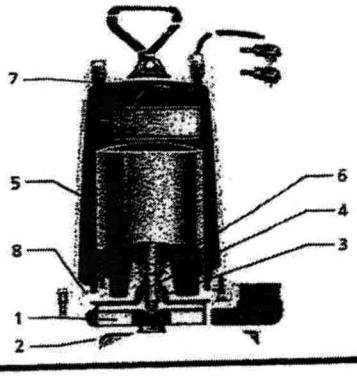
Submersible Effluent Pump

MODEL 3885

WE Series

COMPONENTS

Item No.	Description
1	Impeller
2	Casing
3	Mechanical Seal
4	Motor Shaft
5	Motor
6	Ball Bearings
7	Power Cable
8	Casing O-Ring



MODELS

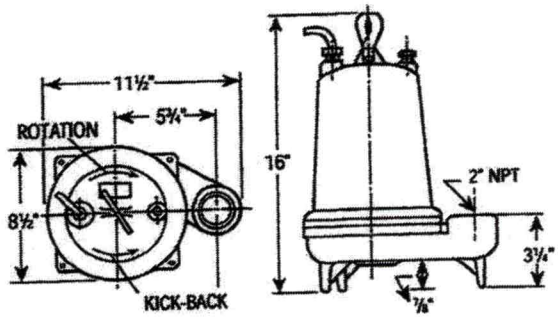
Order No.	HP	Volts	Phase	Max. Amp.	RPM	Solids	Wt. (lbs.)
WE0311L	⅓	115	1	10.7	1750	¾"	56
WE0318L		208		6.8			
WE0312L		230		4.9			
WE0311M		115		10.7			
WE0318M		208		6.8			
WE0312M		230		4.9			
WE0511H	½	115	1	14.5	3500		60
WE0518H		208		8.1			
WE0512H		230		7.3			
WE0538H		200	3	4.9			
WE0532H		230		3.3			
WE0534H		460		1.7			
WE0537H		575		1.4			
WE0511HH		115	1	14.5			
WE0518HH		208		8.1			
WE0512HH		230		7.3			
WE0538HH		200	3	4.9			
WE0532HH		230		3.6			
WE0534HH		460		1.8			
WE0537HH		575		1.5			
WE0718H	¾	208	1	11.0			70
WE0712H		230		10.0			
WE0738H		200	3	6.2			
WE0732H		230		5.4			
WE0734H		460		2.7			
WE0737H		575		2.2			
WE1018H	1	208	1	14.0			
WE1012H		230		12.5			
WE1038H		200	3	8.1			
WE1032H		230		7.0			
WE1034H		460		3.5			
WE1037H		575		2.8			
WE1518H	1½	208	1	17.5			80
WE1512H		230		15.7			
WE1538H		200	3	10.6			
WE1532H		230		9.2			
WE1534H		460		4.6			
WE1537H		575		3.7			
WE1518HH		208	1	17.5			
WE1512HH		230		15.7			
WE1538HH		200	3	10.6			
WE1532HH		230		9.2			
WE1534HH		460		4.6			
WE1537HH		575		3.7			
WE2012H	2	230	1	18.0			83
WE2038H		200	3	12.0			
WE2032H		230		11.6			
WE2034H		460		5.8			
WE2037H		575		4.7			

PERFORMANCE RATINGS (gallons per minute)

Order No.		WE03L	WE03M	WE05H	WE07H	WE10H	WE15H	WE05HH	WE15HH	WE20H
	HP	⅓	⅓	½	¾	1	1½	½	1½	2
	RPM	1750	1750	3500	3500	3500	3500	3500	3500	3500
Total Head Feet of Water	5	86	–	–	–	–	–	–	–	–
	10	70	63	78	–	–	–	58	–	–
	15	52	50	70	90	–	–	53	–	–
	20	27	35	60	83	98	123	49	90	136
	25	–	–	48	76	94	117	45	87	133
	30	–	–	35	67	88	110	40	83	130
	35	–	–	20	57	82	103	35	80	126
	40	–	–	–	45	74	95	30	77	121
	45	–	–	–	35	64	86	25	74	116
	50	–	–	–	25	53	77	–	70	110
	55	–	–	–	–	40	67	–	66	103
	60	–	–	–	–	30	56	–	63	96
	65	–	–	–	–	20	45	–	58	89
	70	–	–	–	–	–	35	–	55	81
	75	–	–	–	–	–	25	–	51	74
	80	–	–	–	–	–	–	–	47	66
	90	–	–	–	–	–	–	–	37	49
	100	–	–	–	–	–	–	–	28	30

DIMENSIONS

(All dimensions are in inches. Do not use for construction purposes.)



Goulds Pumps and the ITT Engineered Blocks Symbol are registered trademarks and tradenames of ITT Industries.

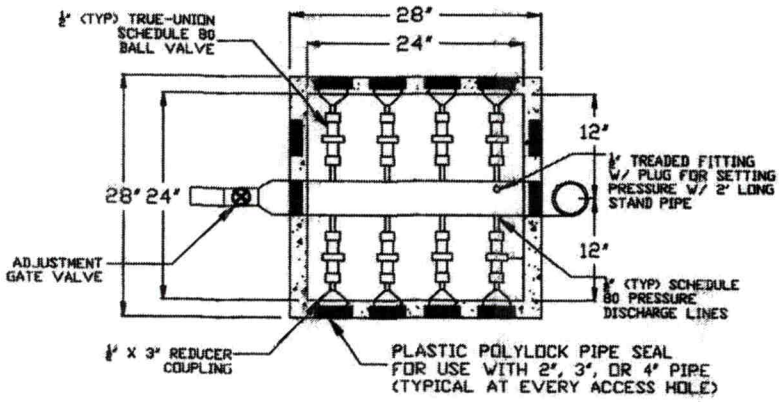
PRINTED IN U.S.A.

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Goulds Pumps

ITT Industries

**NOTE-TOP VIEW MEASUREMENTS ARE TO THE WIDEST DIMENSIONS

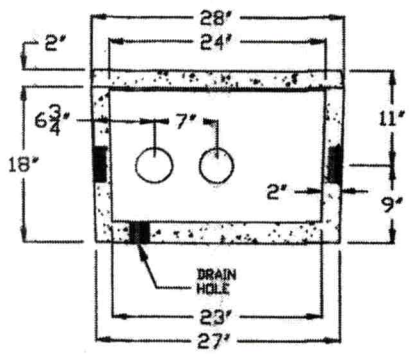


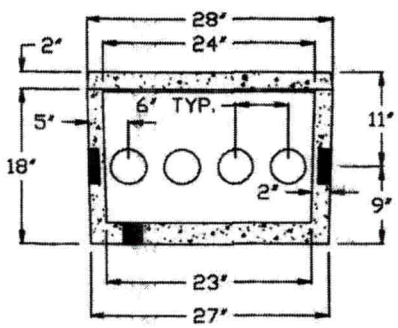
SMALL MANIFOLD BOX
NON TRAFFIC

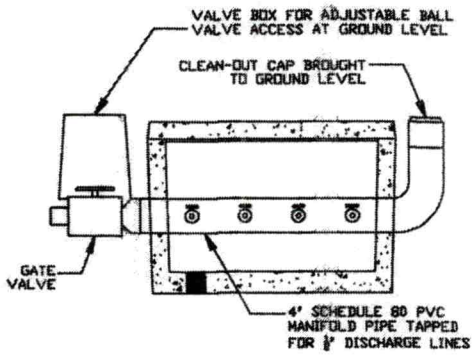
SHOAF PRECAST SEPTIC INC.
4130 WEST US HWY 64
LEXINGTON, NC 27295
PHONE (336) 787-5826
FAX (336) 787-2826
WWW.SHOAFPRECAST.COM
CONCRETE PSI-4,000
REINFORCING PER STATE CODE
MANIFOLD HEIGHT-20"

SCALE - N.T.S.

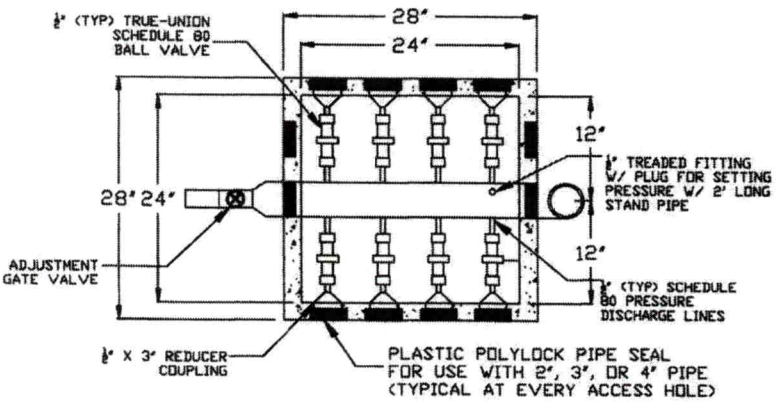
**NOTE-PRESSURE MANIFOLD AVAILABLE W/ 2 TO 8 DISCHARGE LINES







**NOTE-TOP VIEW MEASUREMENTS ARE TO THE WIDEST DIMENSIONS

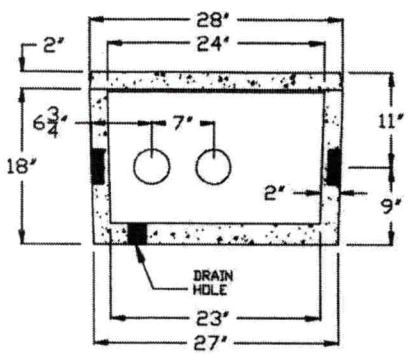


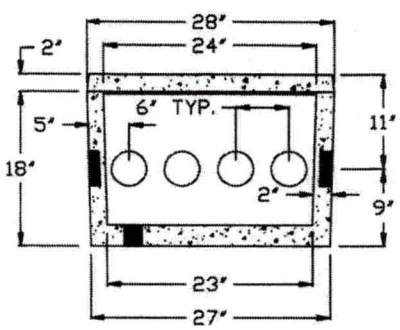
SMALL MANIFOLD BOX
NON TRAFFIC

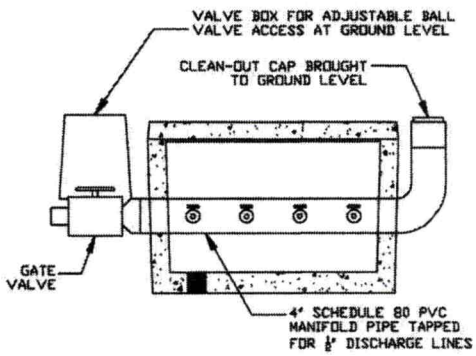
SHOAF PRECAST SEPTIC INC.
4130 WEST US HWY 64
LEXINGTON, NC 27295
PHONE (336) 787-5826
FAX (336) 787-2826
WWW.SHOAFPRECAST.COM
CONCRETE PSI-4,000
REINFORCING PER STATE CODE
MANIFOLD HEIGHT-20"

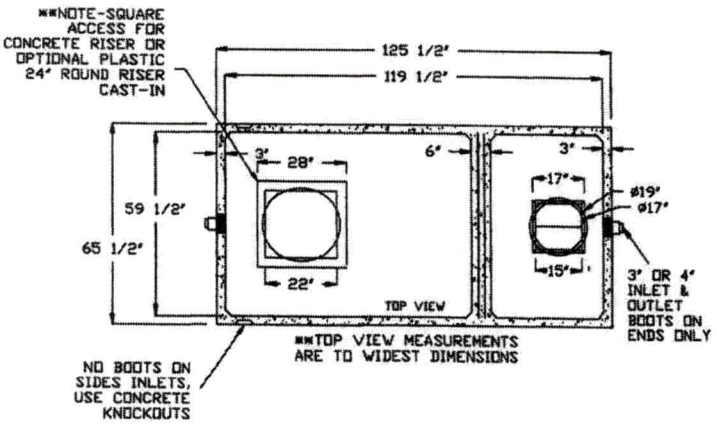
SCALE - N.T.S.

**NOTE-PRESSURE MANIFOLD AVAILABLE W/ 2 TO 8 DISCHARGE LINES







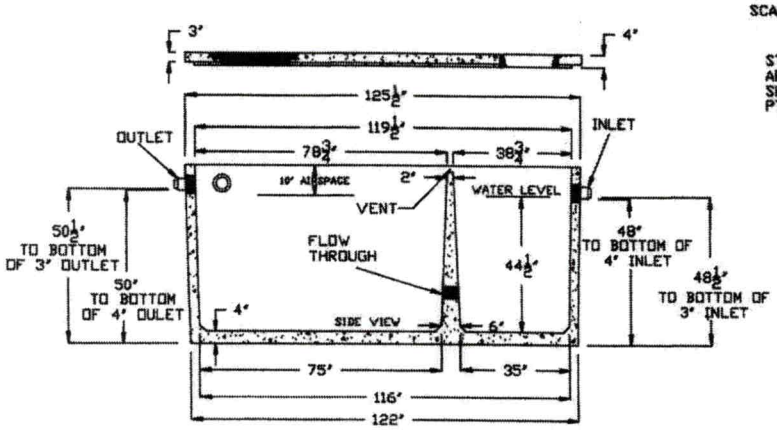


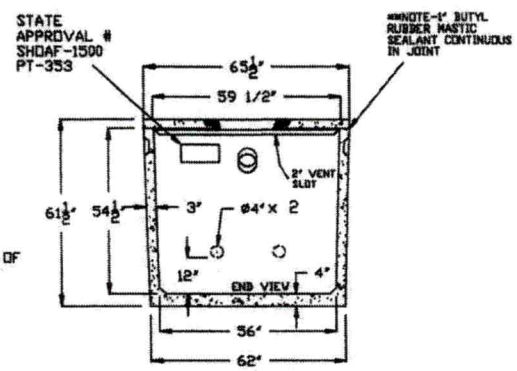
SHOAF PRECAST SEPTIC INC.
4130 WEST US HWY 64
LEXINGTON, NC 27295
PHONE (336) 787-5826
FAX (336) 787-2826

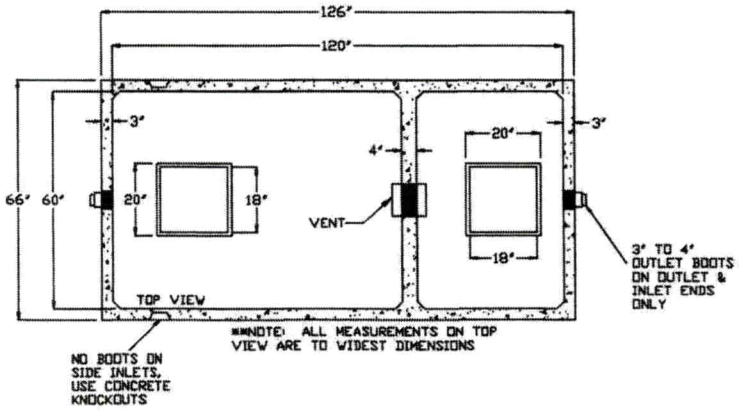
MODEL: TS 1500 PT
NON TRAFFIC
1500 Gallon Pump Tank

WWW.SHOAFPRECAST.COM
SHOAF-1,500 PUMP TANK
PT-353
LIQUID CAPACITY-1,518 GALLONS INCLUDING 10" AIRSPACE
GALLONS PER INCH-27.85 (AVERAGE)
TANK HEIGHT-61 1/2"
BOTTOM OF TANK TO CENTER OF INLET-50"
BOTTOM OF TANK TO CENTER OF OUTLET-52"
LENGTH TO WIDTH RATIO-2 TO 1
SIZE OF INLET & OUTLET-3" OR 4" PIPE
TYPE OF INLET & OUTLET-POLYLOCK OR EQUAL (MEETS ASTM C-923)
CONCRETE PSI-4000; TANK WEIGHT- 11,000 LBS.
REINFORCEMENT PER STATE CODE

SCALE - N.T.S.





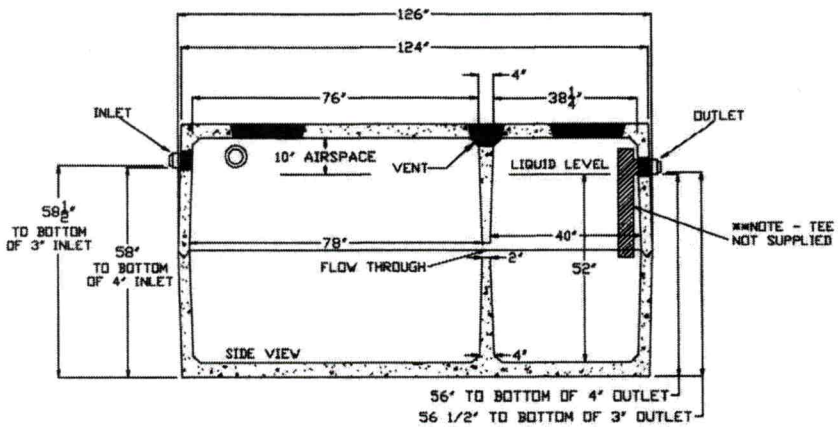


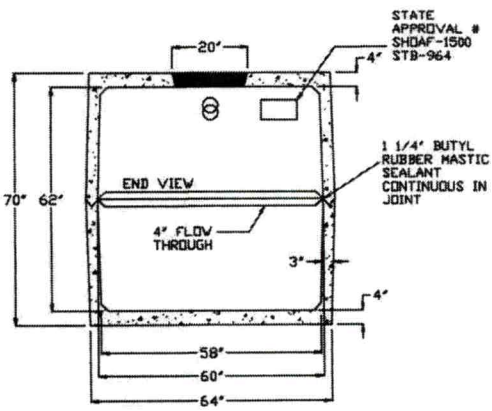
SHOAF PRECAST SEPTIC INC.
4130 WEST US HWY 64
LEXINGTON, NC 27295
PHONE (336) 787-5826
FAX (336) 787-2826

MODEL: MS 1500 STB
NON TRAFFIC
1500 Gallon Septic Tank

WWW.SHOAFPRECAST.COM
SHOAF-1500 NON TRAFFIC RATED
STB-964 NON TRAFFIC
LIQUID CAPACITY-1500 US GALLONS/10" AIRSPACE
TANK HEIGHT-70"
BOTTOM OF TANK TO CENTER OF INLET-60"
BOTTOM OF TANK TO CENTER OF OUTLET-58"
LENGTH TO WIDTH RATIO-2 TO 1
SIZE OF INLET & OUTLET-3" OR 4" PIPE
TYPE OF INLET & OUTLET-POLYLOCK OR EQUAL (MEETS ASTH C-923)
CONCRETE PSI-4000; TANK WEIGHT-12,000 LBS.
REINFORCEMENT PER STATE CODE

SCALE - N.T.S.





RECEIVED JUL 1 2 2021

APPLICATION MUST BE FILLED OUT COMPLETELY & BE LEGIBLE OR IT WILL NOT BE PROCESSED

Iredell County Health Department – Environmental Health Division

PAGE 1: *APPLICATION FORM* AP-319531 $500.00

Application For: ( ) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
( ) Septic Improvement Permit (X) Authorization to Construct ( ) Existing System Inspection ( ) Septic System Repair

THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED. APPLICATION WITH SITE PLAN 60 MONTHS, APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS.

Page 2: *Site Plan Worksheet* form MUST accompany this application

The following optional attachments may also be submitted: (X) Survey Plat, scaled no more than 1 inch = 60 feet
Place an (X) beside whichever is submitted if applicable SEE ATTACHED (X) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information: (PRINT CLEARLY)

Applicant Name: TRUE HOMES, JIM HOOD Address: 2649 BRECKENRIDGE CENTRE DR. MONROE, NC 28110 Zip: 28110
Applicant Email: JHood@truehomesusa.com Phone: 704-506-3852 Alt. Phone: 704-506-3852
Owner Name: TRUE HOMES Address: 2649 BRECKENRIDGE CENTRE Zip: 28110
Owner Email: JHood@truehomesusa.com Phone: MONROE, NC 704-506-3852 Alt. Phone: 704-506-3852

Property Information:

Street Address: 123 FARM KNOLL WAY, MOORESVILLE, NC 28117 ACRE 0.98

Subdivision Name: ROCK RIDGE POINT Section/Phase: 1st Lot Number: 26

Driving Directions: HIGHWAY 77, SOUTH, RIGHT ONTO BRAWLEY SCHOOL RD
TRUE ONTO ISLE OF PINE. TRUE INTO ROCK RIDGE POINT.

Site Development Information: *(check or complete ALL that apply*

CHECK FOUNDATION TYPE

(X) New Single Family Residence Maximum Number of Bedrooms: 5 (X) Crawl Space Foundation
( ) New Multi-Family Residence Maximum Number of Occupants: 10 ( ) Concrete Slab Foundation
( ) Accessory Building ( ) Swimming Pool (X) Basement with Plumbing
( ) Bedroom(s) Addition ( ) Other Addition/Structure: NA NO ( ) Basement without Plumbing
( ) Repair to failing septic system ___ Tank ___ Drain lines Describe Problem:
Non-Residential Site Development: Type of Business:
Square Footage of Building: Max. Number of Employees: NA Max. Number of Seats/Beds/Other:

Water Supply: ( ) Replacement Well – Reason:
( ) Multi-connection Well Number of Houses: NA Number of Persons:

( ) New Well ( ) Existing Well ( ) Community Well ( ) City Water (X) Other Public Water

Desired Septic System Type: *(you may rank in order of preference)* Year existing system installed:
( ) No Preference ( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional ( ) Other:

Please answer the following to the best of your ability:

( ) Yes (X) No Does the site contain any jurisdictional wetlands?
( ) Yes (X) No Is any non-domestic sewage (i.e. industrial) to be generated?
( ) Yes (X) No Is the site subject to approval by any other public agency?

I have read this application and certify that the information provided herein is true, complete, and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed.

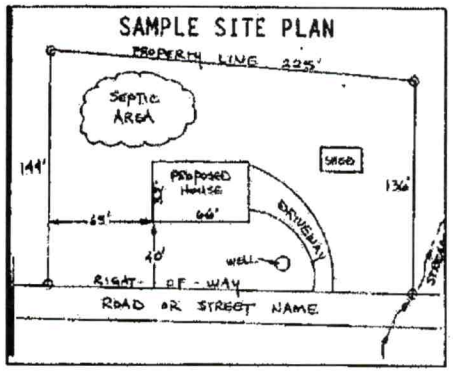
Signature: _____ 7/9/21
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

IREDELL COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

PAGE 2: *SITE PLAN WORKSHEET*

SEE THE "SAMPLE SITE PLAN" BELOW. *INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!*



Place an (X) beside each item as you complete the site plan:

- ( ) **Property Line measurements are clearly identified**
- ( ) **All proposed structures are indicated**
- ( ) **Front and side setbacks from property line**
- ( ) **Preferred driveway location and well location**
- ( ) **Area you prefer your septic system to be placed**
- ( ) **North arrow, or other sufficient indicator of direction**

Circle N/A on the following if appropriate:

Location of septic systems and wells within 100' of your property	**N/A**
Location of easements and rights of ways on your property	**N/A**
Location of any designated wetlands on the property	**N/A**

USE THIS SPACE TO DRAW YOUR SITE PLAN

Show: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

SEE ATTACHED OLD PERMIT

Signature: _____ _____ 7/9/21

Property owner or owner's legal representative signature (SIGNATURE REQUIRED) **DATE**

DRAWING IS A PRELIMINARY PLAT FOR VERIFICATION OF ZONING COMPLIANCE FOR HOME LOCATION AND SHALL NOT BE USED FOR THE SALE, CONVEYANCE OR CONSTRUCTION OF THE DEPICTED LOT.

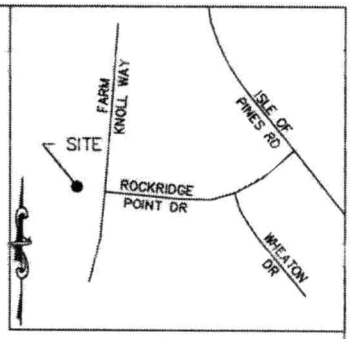
PLOT PLAN DEPICTS THE CONCEPTUAL LOCATION OF THE PROPOSED HOME AND ALL INFORMATION SHOWN TAKEN FROM PRELIMINARY PLAT ON FILE WITH IREDELL COUNTY AND SHOWN IMPROVEMENTS HAVE NOT BEEN AS-BUILT BY R. JOE HARRIS & ASSOCIATES, INC.

LOT IS SUBJECT TO ANY DEED RESTRICTIONS, EASEMENT CONVEYANCES, RIGHTS-OF-WAY, UTILITIES AND RESTRICTIVE COVENANTS ON FILE WITH THE IREDELL COUNTY, NCDOT, CITY OF MOORSVILLE, HOMEOWNERS ASSOCIATION AND/OR OTHER GOVERNMENTAL AGENCIES.

FINAL HOUSE PLACEMENT WILL BE ESTABLISHED BY TRUE HOMES AND MAY VARY BY FIELD CONDITIONS.

SETBACKS:
FRONT 35'
REAR 35'
SIDE 15'

MB 64 PG 24



VICINITY MAP
NOT TO SCALE

BRIAN M JORDAN
HEATHER Z JORDAN
PID 4636132228.000
MB 59 PG 81
DB 2304 PG 1961

N4°31'57"E 143.00'

26
42,902 SQ. FT.
0.985 ACRES±

10.00'

10' DRAINAGE AND UTILITY EASEMENT

178.01'

STREAM BUFFER

N85°28'19"W 300.02'

S85°28'19"E 300.01'

25
LAKSHMAN V T MANEM
RAMA S MANEM
PID 4636135048.000
MB 60 PG 73
DB 2521 PG 223

27
JONATHON R GARTNER
JECOLIA WHITE GARTNER
PID 4636135368.000
MB 44 PG 24
DB 2698 PG 1601

35.00'
4.0'
19.3'
14.6'
14.8'
10.0'
14.0'
4.0'
18.3'
18.3'
47.0'
LOT FIT ONLY #123
58.0'
35.00'
13.6'
2.0'
18.3'
6.0'
12.3'
6.0'
20.7'
2.0'
7.0'
20.6'
42.00'

60.00'

15' SEPTIC EASEMENT TO SERVE LOT 26

15.00'

S4°31'41"W 143.00'

FARM KNOLL WAY
50' PUBLIC R/W

0 20 40 80
1 inch = 40 ft.

LOT IS NOT LOCATED WITHIN THE 100 YEAR FLOOD PER FEMA FLOOD INSURANCE RATE MAP (FIRM) #3710463600J DATED MARCH 18, 2008.

**** Lot Fit Only ***

**** Lot Fit Only *** - Lot 26
For: True Homes
123 Farm Knoll Way @ Rockridge Point
City of Mooresville, Iredell County, North Carolina

Drawn: ZSL	Date: 6-29-2021	MB 64 PG 24
Surveyor: BPL		DB 2449 PG 1212
Job: XXXX	FIRM # C-4168	PID 4636135250.000

R. Joe Harris & Associates, Inc.
Engineering • Land Surveying • Planning Management
1186 Stonecrest Blvd, Tega Cay, S.C. 29708 Phone: (803) 802-1799

IREDELL COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH

DOCUMENTATION TO AUTHORIZE AN OWNER'S LEGAL REPRESENTATIVE

(Check and sign only ONE of the options below)

☒ **1. * APPLICANT AND OWNER ARE THE SAME. *** (*Sign here*) ~~X~~ _____

Applications for permits require the "signature of the owner or owner's legal representative" (15A NCAC 18A .1937). If the owner does not sign the application himself or herself, they can submit any one of the following documents to designate their legal representative: *Power of Attorney; Real Estate Contract; Estate executor; Bankruptcy trustee; Court ordered guardianship* In the absence of the above documentation, the property owner may provide the local health department with documentation that designates a legal representative. A property owner may:
Complete this form to document his or her legal representative, or provide his or her own form that contains the information in this form. If there are multiple property owners, then all property owners must sign the form that designates a legal representative.
By signing a form that designates a legal representative for purposes of 15A NCAC 18A .1937, the property owner authorizes that representative to act on their behalf in matters pertaining to the application and permitting process, including signing or receiving any application, document or permit. The owner retains full responsibility to meet all permit conditions specified by the local health department.

☒ **2.** I, Mr. Chad Bucher, am the legal owner(s) of the property located at 123 Farm Knoll Way, Mooresville, NC 28117, identified as PIN (Parcel Identification Number) 4636935250.000 Lot 26, located in Iredell County, North Carolina.

I do hereby authorize (**print legal representative/company name**) Mr. Kenneth L. Avers w/ Septic Environmental Services to act as an agent on my behalf in applying for/signing/obtaining any of the documents described below.

- Application for Improvement Permit (IP) / Authorization to Construct (AC)
- Improvement Permit (IP) / Authorization to Construct (AC)
- Application for soil-site evaluation (new/repair)
- Application/permit for private drinking water well/well abandonment
- Application for Compliance Inspection

I agree to abide by all decisions and/or conditions between the legal representative acting on my behalf and the Iredell County Department of Public Health, Environmental Health Division.

X _____ X 7/9/24
Signature of Owner(s) Date

Mooresville - Environmental Health
Fax: 704-662-3239
610 E. Center Avenue, Mooresville, NC 28115

Statesville - Environmental Health
ronda.hart@co.iredell.nc.us
Fax: 704-871-3483
349 N. Center Street, Statesville, NC 28677