

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY  
NOTICE OF INTENT  
INDIVIDUAL TREATMENT FACILITIES  
NPDES GENERAL PERMIT ARG550000

Application Type: New ☒ Renewal ☐ (Permit # ARG55 \_\_\_\_\_)

**I. PERMITTEE/OPERATOR INFORMATION**

Permittee (Legal Name): Robert and Lynley Bellomy Operator Type:  
Permittee Mailing Address: 515 Grant 13 ☐ State ☐ Partnership  
Permittee City: Sheridan ☐ Federal ☐ Corporation\*  
Permittee State: AR Zip: 72150 ☒ Sole Proprietorship/Private  
Permittee Telephone Number: 501-680-3347 \*State of Incorporation: \_\_\_\_\_  
Permittee Fax Number: \_\_\_\_\_ The legal name of the Permittee must be  
Permittee E-mail Address: \_\_\_\_\_ identical to the name listed with the  
Arkansas Secretary of State.

**II. INVOICE MAILING INFORMATION (Home owners are exempt.)**

Invoice Contact Person: N/A City: \_\_\_\_\_  
Invoice Mailing Company: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Invoice Mailing Address: \_\_\_\_\_ Telephone: \_\_\_\_\_

**III. FACILITY INFORMATION**

Facility Name: Bellomy Residence Facility Contact Person: Robert Bellomy  
Facility Address: 515 Grant 13 Telephone Number: 501-380-3347  
Facility County: Grant Facility City, State & Zip: Sheridan, AR 72150  
Facility Latitude: 34 Deg 12 Min 6.05 Sec Facility Longitude: -92 Deg 25 Min 2.54 Sec  
Datum  
Accuracy: \_\_\_\_\_ Method: \_\_\_\_\_ : \_\_\_\_\_ Scale: \_\_\_\_\_ Description: \_\_\_\_\_

**IV. DISCHARGE INFORMATION**

Outfall Number: 001 Flow: 450 gpd (Gallons per Day)  
Stream Segment: 2C Hydrologic Basin Code: 8040203  
Outfall Latitude: 34 Deg 12 Min 7.16 Sec Outfall Longitude: -92 Deg 25 Min 0.86 Sec  
Datum  
Accuracy: \_\_\_\_\_ Method: \_\_\_\_\_ : \_\_\_\_\_ Scale: \_\_\_\_\_ Description: \_\_\_\_\_  
Type of Treatment: Bio Microbics Microfasst 0.5 with UV and Post Aeration  
Receiving Stream: Ouachita River

**V. FACILITY PERMIT INFORMATION**

NPDES Individual Permit Number (If Applicable): AR00  
NPDES General Permit Number (If Applicable): ARG  
State Construction Permit Number: \_\_\_\_\_  
NPDES General Construction Stormwater Permit Number (If Applicable): ARR15

WATER DIVISION  
5301 NORTHSORE DRIVE / NORTH LITTLE ROCK, ARKANSAS 72118  
PHONE 501-682-0623 / FAX 501-682-0880  
www.adeq.state.ar.us

**VI. OTHER INFORMATION:**

Operator Name: David Meints  
Operator License Number: 009055 License Class: III  
  
Consultant Contact Name: David Meints  
Consultant Email Address: david@meincowastewater.com  
Consultant Address: PO Box 1001 City: Bryant State: AR Zip: 72089  
Consultant Phone Number: 501-804-0837 Consultant Fax Number: 501-821-4048

Has this treatment system been approved by AHD? Yes ☒ No ☐

**Disclosure Statements:**

Arkansas Code Annotated Section 8-1-106 requires that all applicants for the issuance or transfer of any permit, license, certification or operational authority issued by the Arkansas Department of Environmental Quality (ADEQ) file a disclosure statement with their applications. The filing of a disclosure statement is mandatory. No application can be considered complete without one. You must submit a new disclosure statement even if you have one on file with the Department. The form may be obtained from ADEQ web site at: [http://www.adeq.state.ar.us/disclosure\\_stmt.pdf](http://www.adeq.state.ar.us/disclosure_stmt.pdf).

**VII. CERTIFICATION OF OPERATOR**

RB (Initial) "I certify that, if this facility is a corporation, it is registered with the Secretary of the State of Arkansas."

RB (Initial) "I certify that the cognizant official designated in this Application is qualified to act as a duly authorized representative under the provisions of 40 CFR 122.22(b). If no cognizant official has been designated, I understand that the Department will accept reports signed only by the Applicant."

RB (Initial) "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Responsible Official Printed Name: Robert Bellomy Title: Owner  
Responsible Official Signature: Robert Bellomy Date: 3-18-21  
Responsible Official Email: johnson.lynley@gmail.com  
Cognizant Official Printed Name: David Meints Title: Class III Operator  
Cognizant Official Signature: David Meints Telephone: 501-804-0837  
Cognizant Official Email: david@meincowastewater.com

**X. PERMIT REQUIREMENT VERIFICATION**

Please check the following to verify completion of permit requirements.

	Yes	No	* If No is answered for any of the questions, then a permit can not be issued!
Submittal of Complete NOI?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Submittal of Required Permit Fee?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Check Number: _____
Submittal of AHD Form EHP-19?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Submittal of Site Map?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Submittal of Disclosure Statement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

WATER DIVISION  
5301 NORTHSHORE DRIVE / NORTH LITTLE ROCK, ARKANSAS 72118  
PHONE 501-682-0623 / FAX 501-682-0880  
[www.adeq.state.ar.us](http://www.adeq.state.ar.us)



Arkansas Department of Health  
Environmental Health Protection

Receipt Number  
**23460569**

Individual Onsite Wastewater System Permit Application

Permit Type ☒ New Installation  
☐ Alteration / Repair

DR Environmental ID #

7 6 0 2 1 3 2 0 9 0

Fee Schedule for Structures		✓
Structures 1500 sq ft or less	\$ 30.00	<input type="checkbox"/>
Structures more than 1500 sq ft and up to 2000 sq ft	\$ 45.00	<input checked="" type="checkbox"/>
Structures more than 2000 sq ft and up to 3000 sq ft	\$ 90.00	<input checked="" type="checkbox"/>
Structures more than 3000 sq ft and up to 4000 sq ft	\$120.00	<input type="checkbox"/>
Structures more than 4000 sq ft	\$150.00	<input type="checkbox"/>
Alteration and Repair	\$ 30.00	<input type="checkbox"/>

Part 1 Application

Treatment Type (check one)

- ☐ STD = Standard Septic Tank  
☐ ISF = Intermittent Sand Filter  
☐ PMF = Proprietary Media Filter  
☐ OTH = Other (Describe)
- ☒ ATU = Aerobic Treatment Plant  
☐ RSF = Re-circulating Sand Filter  
☐ RGF = Re-circulating Gravel Filter  
☐ HLD = Holding Tank

Disposal Method (check one)

- ☐ STD = Standard Absorption Field  
☒ SUR = Surface Discharge  
☐ CPF = Capping Fill  
☐ OTH = Other
- ☐ LPD = Low Pressure Distribution  
☐ HLD = Holding Tank  
☐ SRL = Serial Distribution  
☐ DRP = Drip Irrigation

1. Owner's/Applicant's Name

Robert / Lynley Bellomy

2. Phone Number

501-680-3347

3. Mailing Address

57 Horton Hills Dr. Sheridan AR 72150

4. County

Grant

5. Address of Proposed System (If a 911 address is not available, attach detailed directions or map)

515 Grant 13 Sheridan AR 72150

6. Subdivision Name

None

7. Approval Date

None

8. Date Recorded

None

9. Lot Number

None

10. Lot Dimensions

421 X 517

11. Total Area (Acres)

5.0

12. # Bedrooms # People

4

13. Daily Flow (GPD)

450

14. Brief Legal Description of Property (Attach a separate sheet of paper, if necessary)

S-16 T-6-S R-13 W

15. Water Supply (Specify supplier, if Public Water)

South Sheridan

16. GPS Coordinates

34.2020 - 92.4169

17. Loading Rates

(gpd/ft<sup>2</sup>)

18. System Specifications

Primary Area	N/A	a. Size of Septic Tank	1500	gal	f. Trench Depth	N/A	inches
Secondary Area	N/A	b. Size of Dose Tank	250	gal	g. Trench Spacing	N/A	feet
Percolation Test	(min/in)	c. Absorption Area	None	ft <sup>2</sup>	h. Trench Media (List Below)	Surface Disc.	i. Trench Width
Primary Area Avg	X	d. Number of Field Lines	None				in
Secondary Area	X	e. Length of Field Lines	None	ft			in

TO THE OWNER

The permit for construction may be deemed invalid by the local Environmental Health Specialist before the start of construction, if the site and/or soil conditions have changed after approval of this permit, or if the information within this permit is inaccurate or has been found to be misrepresented. Approval for operation does not constitute a guarantee that the system will function properly. The approval states that the system was designed and installed according to the Arkansas Department of Health, Rules and Regulations Pertaining to Onsite Wastewater Systems, unless there are exceptions or deviations noted in the comments. A Permit for Construction is valid for one (1) year from the date of approval. The authorized agent must revalidate a permit more than one (1) year old prior to the start of any construction.

19. Utilization Verification

I hereby attest that item 12, the number of bedrooms (number of persons for commercial) and square footage of the structure that will utilize the designed individual onsite wastewater system in this permit application, is accurate. I have reviewed the permit application and understand the layout, installation, maintenance, operation and expense(s) that may be associated with this system.

Owner/Applicant Signature

Date 3/10/2020

20. I certify that I have conducted the above tests and that the above listed information is in accordance with the latest requirements of the Arkansas Department of Health Rules and Regulations Pertaining to Onsite Wastewater Systems.

Designated Representative Signature

D.R.

Soil Certified ☒ Yes ☐ No

KEVIN CASTLEBERRY

Title

3/10/20

870-692-5742

Print Name

Date

Phone Number

21. Approval of Health Authority

The information and specifications in the application has been reviewed and found to meet the requirements of the Arkansas Department of Health Rules and Regulations Pertaining to Onsite Wastewater Systems. A PERMIT FOR CONSTRUCTION is hereby issued.

Environmental Specialist Signature

864

4-3-2020

# Individual Onsite Wastewater System Permit Application

Receipt Number

Continue Part 1

22. Soil Criteria (Primary Area)				Indicate the depth to items a-f, if observed in the soil (designate in inches)			
a. Bedrock	b. BSWT	c. MSWT	d. LSWT	e. Adj. MSWT	f. Adj. LSWT	g. H.C./Depth	h. Loading Rate (gpd/ft <sup>2</sup> )
\	0"	0"	N/A	N/A	N/A	\	N/A
23. Soil Criteria (Secondary Area)				Indicate the depth to items a-f, if observed in the soil (designate inches)			
a. Bedrock	b. BSWT	c. MSWT	d. LSWT	e. Adj. MSWT	f. Adj. LSWT	g. H.C./Depth	h. Loading Rate (gpd/ft <sup>2</sup> )
\	0"	0"	\	\	\	\	N/A
24. Seasonal Water Table (SWT) Classes Detail							
Primary Area		List Redoximorphic Features and/or Clay Content Restrictions					
Brief	0" in	2.5YR 5/8					
Moderate	0" in	10YR 6/2					
Long	in						
Secondary Area		List Redoximorphic Features and/or Clay Content Restrictions					
Brief	0" in	2.5 YR 5/8					
Moderate	0" in	10 YR 6/2					
Long	in						
Comments MTP w/ surface Discharge							

## Part 2 Installation Inspection

Septic tank manufacturer	Pump information
Septic tank material	Trench media and width
Dose tank manufacturer	Depth of Interceptor drain
Dose tank material	Depth of settled fill
Name of Installer	License Number
Installation Inspected by <input type="checkbox"/> Environmental Health Specialist <input type="checkbox"/> Designated Representative (check one or installer signs System Installation Verification below)	
Signature	EHS / License Number Date
System Installation Verification I have installed this system as designed and in compliance with all Rules and Regulations Pertaining to Onsite Wastewater Systems.	
Installer Signature	License Number Date

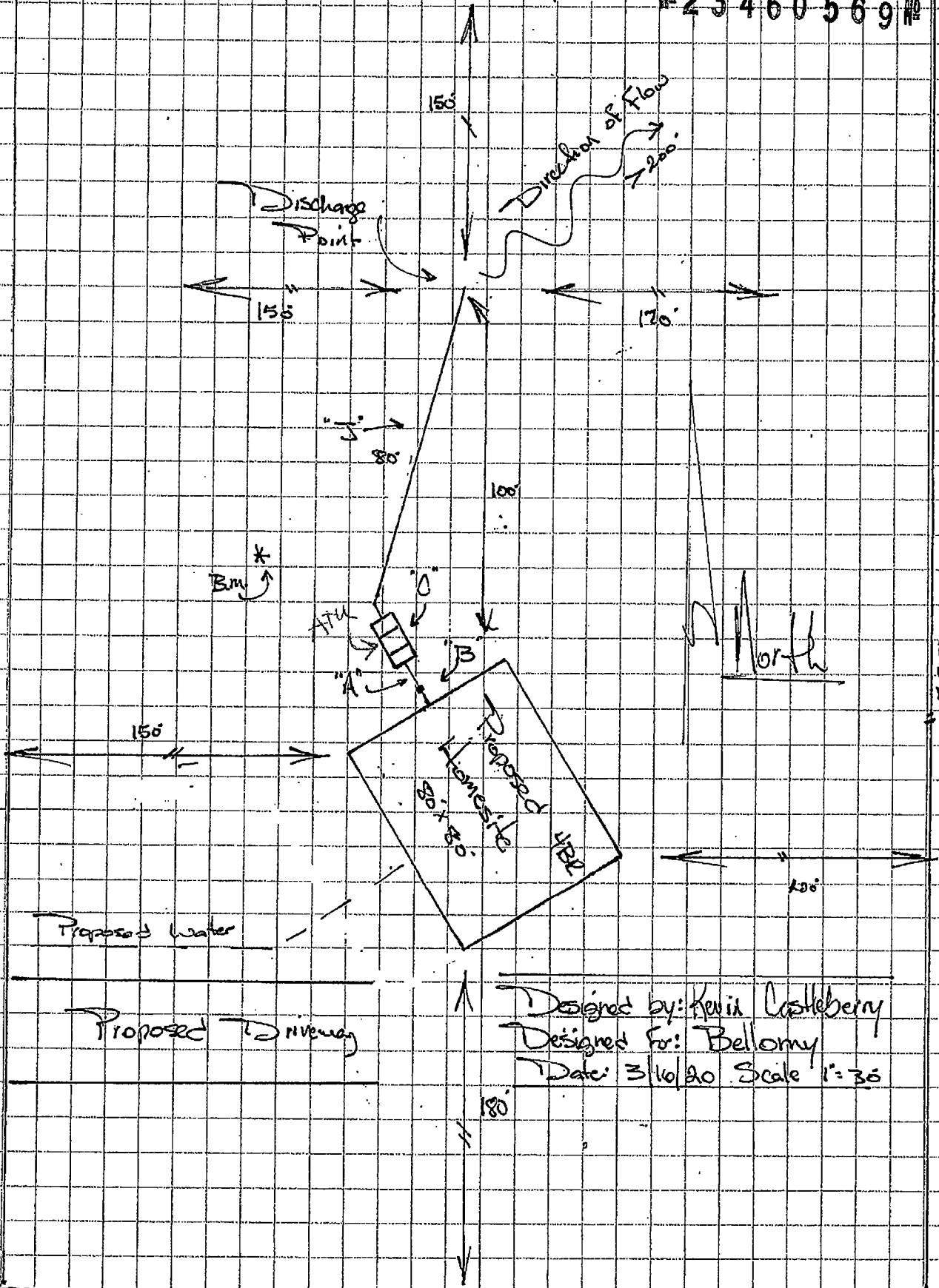
## Part 3 Permit for Operation

The information contained in Part 1 and 2 of this form has been reviewed and found to meet the requirements of the Arkansas Department of Health. THE PERMIT FOR OPERATION of this system is hereby issued.		
Environmental Health Specialist	Signature	EHS Number Date
Comments		
Site Revalidation conducted by <input type="checkbox"/> Environmental Health Specialist <input type="checkbox"/> Designated Representative (check one)		
Signature	EHS / License Number	Date

421.21

23460569

OL 1515 Grant 13  
517.83



Designed by: Kevin Castleberry  
Designed for: Bellomy  
Date: 3/16/20 Scale 1"=30'

421.21

**APPLICANT: BELLAMY**

**#23460569#**

**ELEVATIONS**

	GROUND ELEV.	FLOW LINE ELEV.
BENCHMARK:	5.5	
STUB OUT:	5.1	6.1
CLEAN OUT:	5.1	6.1
TANK IN:	5.2	6.3
TANK OUT:	5.3	6.9
PUMP INTAKE:	5.3	9.6
SURF. DISCHARGE	5.7	5.7

LINE #	BEG.	MID.	END	TRENCH BOTTOM	TRENCH DEPTH	LINE LENGTH
#1						
#2						
#3						
#4						
#5						
#6						
CURT. DRAIN						
ALT AREA:						
A1						
A2						
A3						
A4						
A5						

**LEGEND:**

- (A) 4" SCH. 40 PIPE  
(B) 4" CLEAN OUT AND PLUG  
(C) SEPTIC TANK *ATA Fast 0.5*  
(D) PRESSURE MANIFOLD  
(E) 4" SDR 35  
(F) FIELD LINE LATERALS

- (G) PIT #1  
(H) PIT #2  
(I) 2" SCH. 40  
(J) 1 1/2" SCH. 40  
(K) 3/4" SCH 40

#23460569#

## **NOTES:**

### **SEPTIC TANK**

1. INSTALL 1500 GALLON THREE COMPARTMENT COMBINATION SEPTIC TANK. (SEE SPEC SHEET) BOTTOM OF HOLE MUST BE FIRM AND GRADED LEVEL.
2. INSTALL RISERS AS SHOWN ON SPEC SHEET. EXTEND ABOVE NATURAL GROUND ELEVATION. APPLY 1/4" BUTYL SEALANT BETWEEN ALL RISER EXTENSIONS.
3. INSTALL SEPTIC TANK WITH CAST-A-SEAL 402 BOOTS. (SEE SPEC SHEET)
4. INSTALL BIOMICROBICS SANITEE OUTLET FILTER IN THE OUTLET BAFFLE OF THE TRASH TANK. (SEE SPEC SHEET)
5. INSTALL BIOMICROBICS D.5 FAST UNIT IN THE TREATMENT CHAMBER AS SHOWN.
6. INSTALL SALCOR 3G ULTRAVIOLET LIGHT IN THE PUMP CHAMBER AS SHOWN
- 7.

### **PUMP/ALARM**

1. INSTALL ZOELLER BN 53 PUMP, SET ON TWO 8X8X16 CONCRETE BLOCKS.
2. PLUMB PUMP WITH 1 1/2" SCH 40 PIPE THROUGH THE RISER USING AN 1 1/2" POLYLOK GROMMET. (DO NOT USE THE BOOT SEAL CAST INTO TANK, UNLESS BOOT IS DESIGNED TO FIT 1 1/2" PIPE)
3. PLUMBING SHOULD INCLUDE:
  - A. 1 1/2" CHECK VALVE
  - B. 1 1/2" UNION
  - C. 1 1/2" BALL VALVE
4. SET PUMP FLOAT SWITCH WITH 3.5" TETHER LENGTH. THIS WILL PUMP APPROXIMATELY 50 GALLONS PER DOSE. PUMP SHOULD STAY SUBMERGED IN WATER WHEN SWITCH IS IN OFF POSITION.
5. INSTALL ZOELLER 10-0623 OUTDOOR HIGH-WATER ALARM.
6. ALARM FLOAT SHOULD BE POSITIONED ABOVE THE ON POSITION OF THE PUMP FLOAT. TETHER ON ALARM FLOAT SHOULD BE POSITIONED SO THE ALARM SOUNDS BEFORE THE WATER LEVEL IN THE PUMP CHAMBER RISES INTO THE OUTLET PIPE OF THE SEPTIC TANK.
7. PUMP AND ALARM MUST BE ON SEPARATE BREAKERS.
8. ALL ELECTRICAL CONNECTIONS SHOULD BE MADE IN WATERPROOF SPLICE BOX WITH CORD GRIPS. (SEE SPEC SHEET)
9. USE PIPE SEAL/GROMMET FOR ELECTRICAL CONDUIT. CONDUIT SHOULD EXIT THROUGH RISER.



ENVIRONMENTAL

Zoeller Family of Water Solutions

# Zoeller Company

## System Head Curve and Pump Selection Tool



PUMP COMPANY

Zoeller Family of Water Solutions

### Static Head Information

Static Head - elevation difference  
from low water to outfall  
System high point above outfall?

5.0 feet

No

### Friction Head Information

Pipe

How many different pipes in the  
system (not counting laterals)?

1

Pipe 1 Length

80 feet

Pipe 1 Size

1 1/2 inches

Pipe 1 Class

SCH 40

Pipe 2 Length

Pipe 2 Size

Pipe 2 Class

Pipe 3 Length

Pipe 3 Size

Pipe 3 Class

Pressurized Laterals?

No

Headmark indicated as below

Location of first lateral

Size of lateral

Check or station

### Fittings & Discharge Assemblies

Type

Size

Quantity

Flow

90 Elbow

1 1/2 inches

5

100 %

Check Valve

1 1/2 inches

1

100 %

Gate Valve (full open)

1 1/2 inches

1

100 %

### Special Friction Considerations

Weep Hole

Yes

1/8 "

Add-In Friction

15 % of Pipe Loss

Automatic Multizone Valve?

No

Pressure Filter?

No

### Operating Head Information

System Type

Non-Pressurized

Specify Flow  
Requirement?

No

Flow Rate (GPM)

Flow Rate (MGD)

Flow Rate (CFS)

Flow Rate (GPD)

Flow Rate (MGD)

Flow Rate (CFS)

Flow Rate (GPD)

### Factors and Coefficients

Hazen-Williams C Factor

130

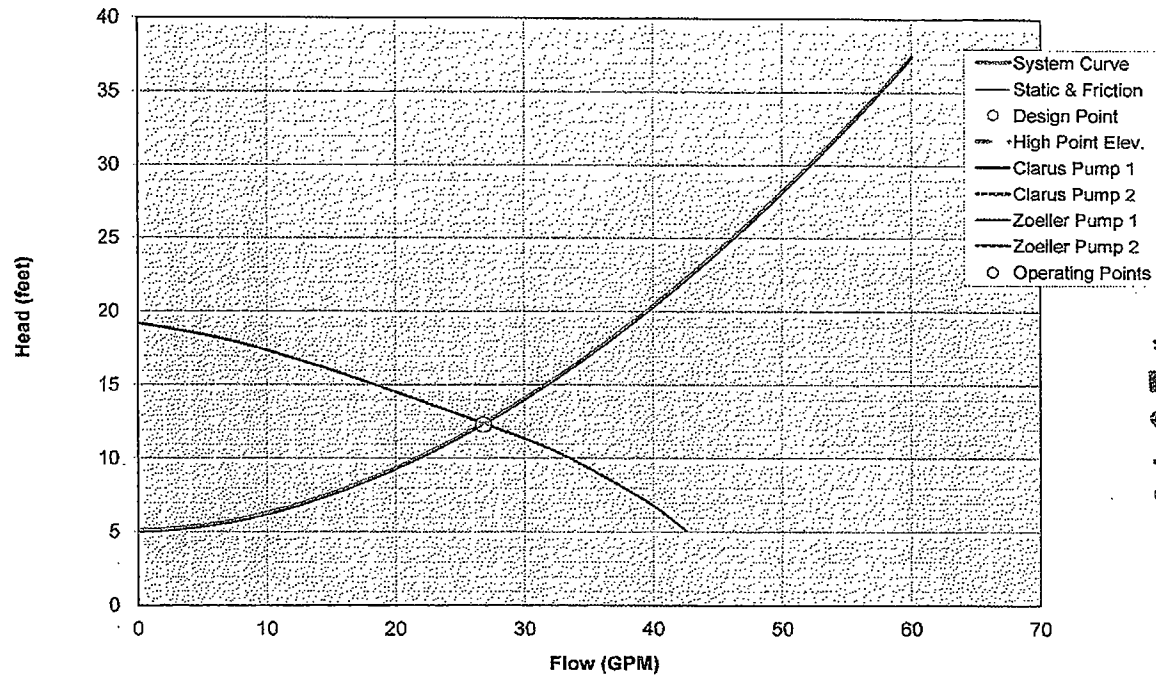
Discharge Coefficient (Cd)

0.61

Lateral Design Mode

Off

### System / Pump Interaction Curves



NOTE: THE DISPLAYED PUMP CURVES HAVE BEEN ADJUSTED TO ACCOUNT FOR THE EFFECT OF THE WEEP HOLE

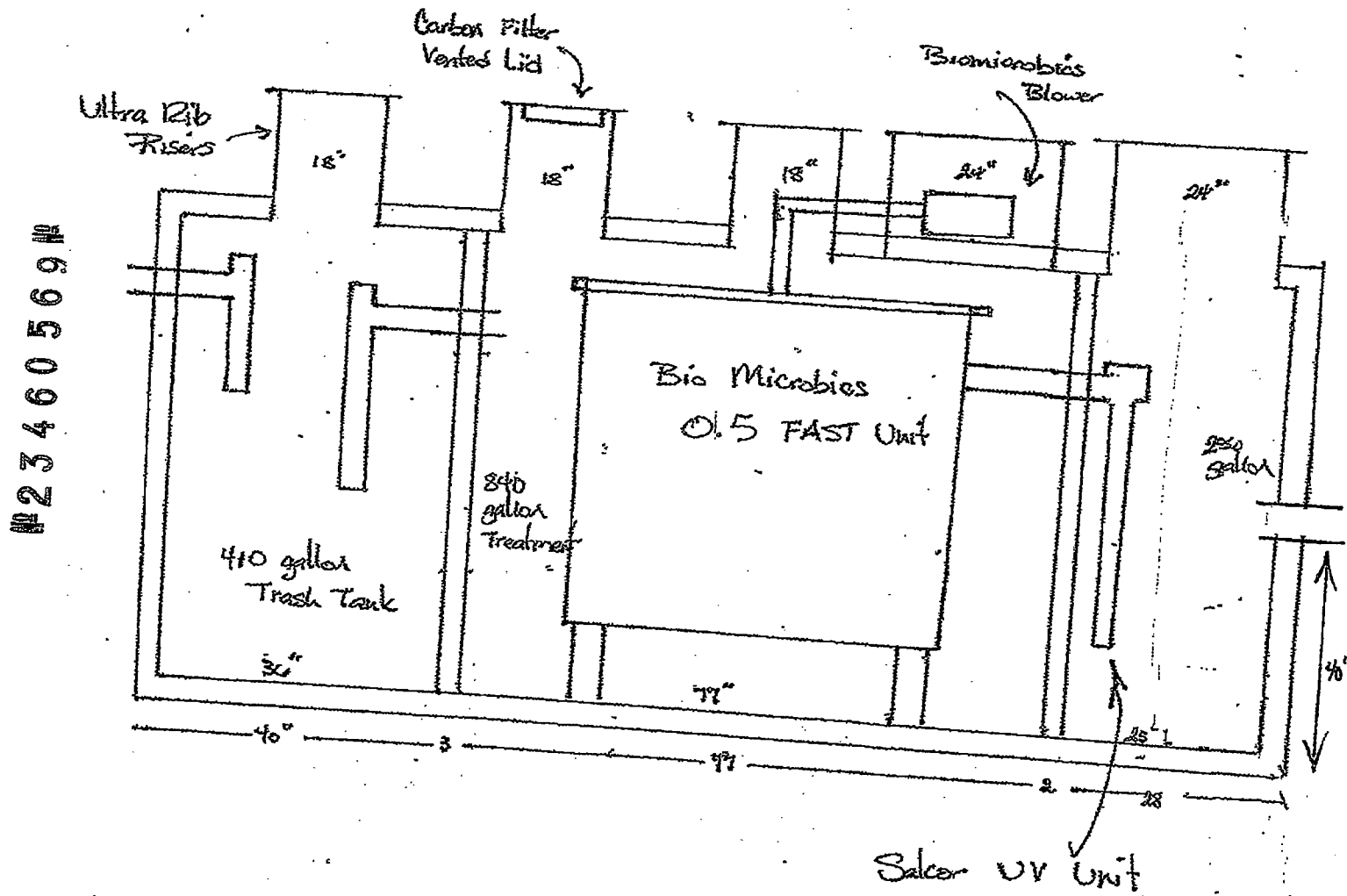
Pump Selection		60 Hz	Frequency
Clarus Environmental Pumps			
Operating Points			
Clarus Pump 1			
Clarus Pump 2			
Zoeller Pump Company Pumps			
Zoeller Pump 1	53/55/57/59	0.3hp, 60Hz	26.8 GPM @ 12.3'
Zoeller Pump 2			

Curve Zoom Range 60 GPM

Project Data		Notes:
Project Name:		
Project Address:		
Contact Info:		



1500 gallon 3 compartment FAST Unit





# CAST-A-SEAL® 402/402F

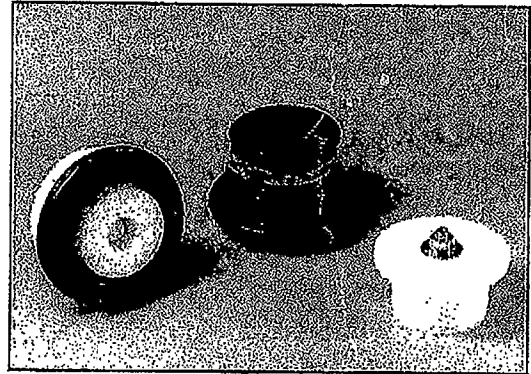
## CAST-IN BOOT-TYPE CONNECTOR

for 1-1/4" to 6" PVC Pipe  
(32 mm - 150 mm)

### What It Is

# 2 3 4 6 0 5 6 9 #

**CAST-A-SEAL 402/402F** is a watertight flexible connector that is cast into the structure when the concrete is poured. The connector is folded into the casting position and placed on the reusable heavy-duty solid plastic mandrel that is installed directly to the form. After the concrete is cured, the form is opened, removing the mandrel from the gasket, but leaving the **CAST-A-SEAL 402/402F** connector embedded in the concrete. The gasket is then simply unfolded at the jobsite and is tightened around the pipe using the supplied stainless steel take-up clamp.



### Why It's Better

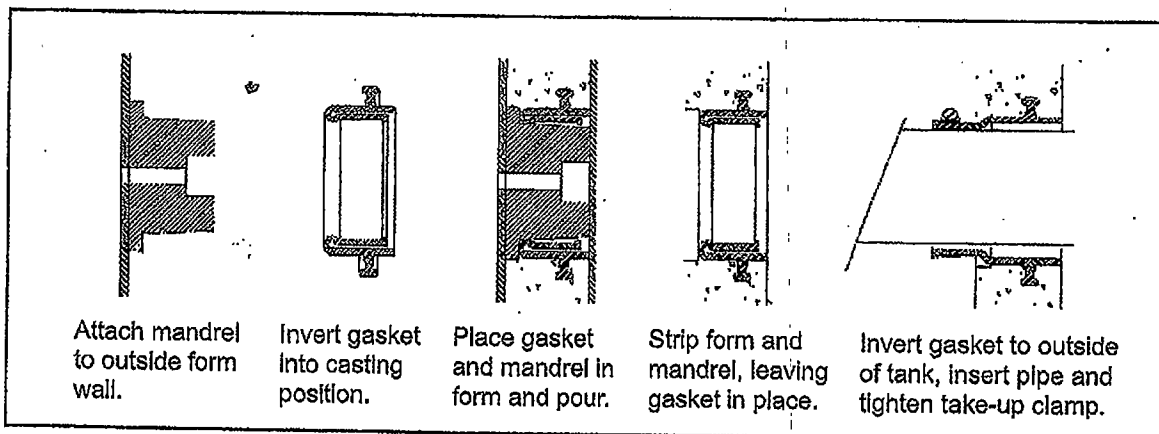
- Simple cast-in design provides flexible watertight connection
- Eliminates infiltration and exfiltration
- Improves on-site system performance and minimizes maintenance
- Protects groundwater from unintended discharges
- Use in on-site treatment structures, grease interceptors, manholes, wet wells, pump and lift stations, stormwater structures, or any application requiring a flexible watertight connector

### How It Performs

**CAST-A-SEAL 402/402F** meets or exceeds all requirements of the following Standards, Codes, Specifications and/or Test Methods:

ASTM C 1227  
ASTM C 1644  
ASTM C 923  
ASTM C 1244

IAPMO Z1000  
IAPMO Z1001  
NPCA Best Practices  
NOWRA Model Code  
ASTM C 1478



Press-Seal believes all information is accurate as of its publication date. Information, specifications, and prices are all subject to change without notice. Press-Seal is not responsible for any inadvertent errors. Copyright 2012.

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**PRESS-SEAL GASKET CORPORATION**

Protecting Our Planet's Clean Water Supply

Press-Seal Gasket is an ISO 9001:2008 Registered Company

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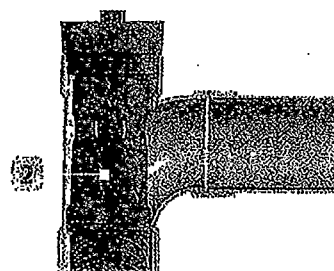
email: sales @press-seal.com

web: www.press-seal.com





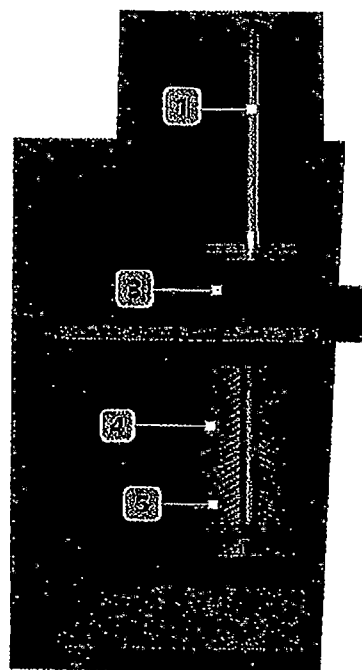
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## Unique Design Characteristics

In the interest of technological progress, all products are subject to design change without notice.

- 1) **Self-Cleaning Screen and Swab Feature** - The smooth exterior surface of the SaniTEE promotes the deflection of solids back into the septic tank. Any solids that become trapped in the angled slots can be easily dislodged with a simple swab of the screen.
- 2) **Keyhole Weirs** - Surge flows are common in normal residential applications due to simultaneous discharge from many fixtures in the home (i.e. laundry day). The patented keyhole weirs provide flow attenuation to dampen these surge flows that otherwise may scour solids out of the septic tank with the effluent.
- 3) **Custom Diverter** - Used in 8" and 16" SaniTEE applications, the diverter acts as a custom-engineered outlet tee to prevent scum and gas-lifted solids from being discharged into the drainfield. Once the custom diverter is secured to the tank wall and connected to the outlet pipe, the SaniTEE screen easily slips into the diverter like a sword in a sheath.
- 4) **Angled Slots** - Angled slots, similar to those used in industrial well screens, are used because they resist blinding (clogging) better than mesh-type screening devices. The appropriate slot width does not allow nuisance solids to be discharged. Additionally, it has been found that most solids suspended in a tank float horizontally, like a leaf at the water surface. Therefore, the angled orientation of the slots is most likely to block the entrance of most solids.
- 5) **Gas-lifted Solids Deflection** - It is well known that solids are lifted by various gasses present in septic tanks. These gas-lifted solids often rise into the end of the outlet tee and are discharged with the effluent. When SaniTEE is utilized, flow must enter from the side, not the bottom, so the escape of gas-lifted solids is virtually eliminated.



## SaniTEE Specifications

Model Sizes	Screen Diameter	Screening Level	Flow Range
SNT416	4 inch	1/16 inch	Up to 1000 GPD
SNT418	4 inch	1/8 inch	Up to 2000 GPD
SNT818	8 inch	1/8 inch	Up to 6000 GPD
SNT838	8 inch	3/8 inch	Up to 10,000 GPD
SNT1618	16 inch	1/8 inch	Up to 10,000 GPD
SNT1638	16 inch	3/8 inch	Up to 20,000 GPD

## Simple Installation and Maintenance

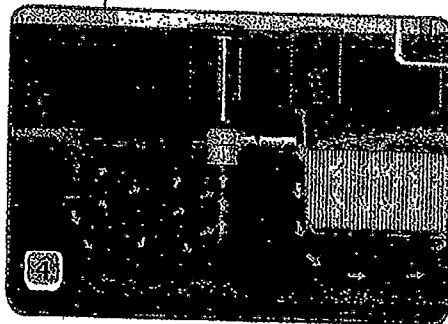
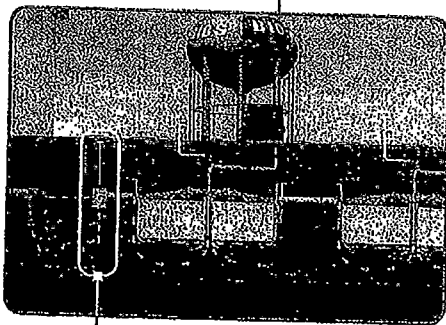
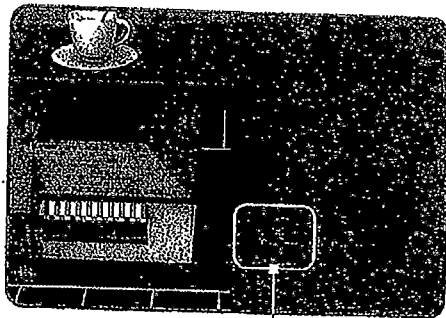
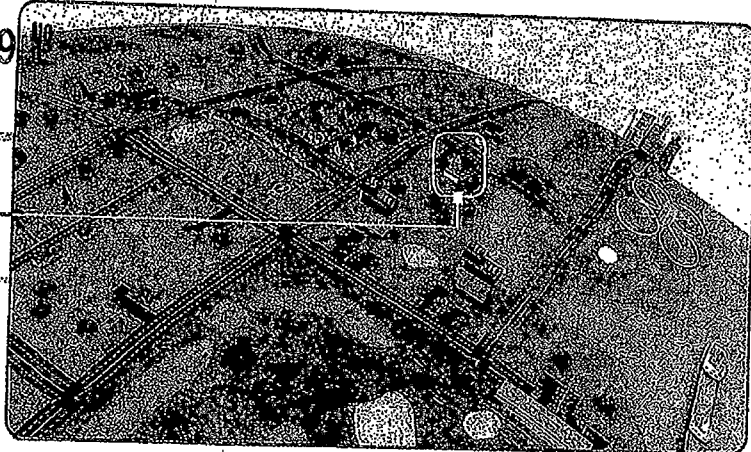
The installation of SaniTEE consists of dropping it inside a standard septic tank outlet tee or custom diverter. When cleaning the SaniTEE, simply move the swab handles forcefully up and down to pass the swab through the center or exterior of the screen. This swabbing action will dislodge any debris that might be trapped in the angled slots. If inspection is required, SaniTEE can be removed easily by simply lifting the screen out of the outlet tee or diverter.

**BIO-MICROBICS**  
INCORPORATED

**Better Water. Better World.**

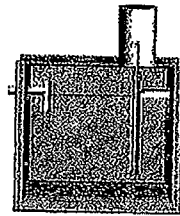
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**SaniTEE**  
Wastewater Screens

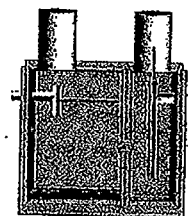


### SaniTEE® Wastewater Screens

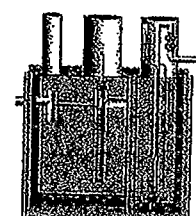
SaniTEE® self-cleaning wastewater deflection screens (commonly known as septic tank effluent filters) are designed to reduce suspended solids discharged in septic tank effluent by promoting natural sedimentation and excluding gas-lifted particles from entering the outlet pipe. Additionally, SaniTEE's patented keyhole weirs help to attenuate surge flows, delivering a more consistent flow for further treatment or dispersal. These features help extend the lives of drain fields, reduce the clogging of orifices in effluent disposal systems and allow flexibility in the use of different types of effluent pumps. SaniTEE wastewater screens are available in 4", 8" and 16" model sizes with flow capacities up to 20,000 GPD. Multiple screens can be used for flows higher than 20,000 GPD.



1



2



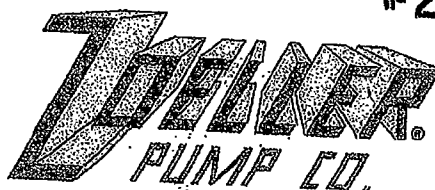
3

### Applications

- 1) **Single Compartment Tank with Gravity Discharge** - SaniTEE® is installed into the outlet tee of the tank. Its angled slots protect the drain field by retaining the suspended solids inside the tank.
- 2) **Dual Compartment Tank with Gravity Discharge** - This configuration utilizes the SaniTEE in the outlet tee of the second compartment, and provides additional solids retention due to flow attenuation and the dual-compartment design.
- 3) **Dual Compartment Tank utilizing an effluent pump** - This configuration provides primary screening in the first compartment and allows flexibility in the use of different types of effluent pumps.
- 4) **Commercial Usage** (In any of the above configurations) - SaniTEE can also be utilized at such decentralized commercial properties as restaurants, laundromats, gas stations, beauty shops or veterinary clinics. When used in these applications, SaniTEE provides many benefits including prolonged drain field life and ease of maintenance.

*"QUALITY PUMPS SINCE 1939"*

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



№ 2 3 4 6 0 5 6 9 №

SECTION: 4.10.110

FM0732

0706

Supersedes

0705

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SHIP TO: 3649 Cane Run Road • Louisville, KY 40211-1961  
(502) 778-2731 • 1 (800) 928-PUMP • FAX (502) 774-3624

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[www.zoeller.com](http://www.zoeller.com)

## A-PAK - ALARM SYSTEMS

### INDOOR/OUTDOOR ALARM SYSTEM FEATURES

- Indoor & Outdoor use per UL 864.
- UL Listed and CSA Certified.
- Alarm system (horn & light) operates to warn of a high water condition.
- Horn is rated 82 decibels at 10'.
- Alarm Test and Horn Silence Switch with auto reset.
- Terminal connections for a pump & float switch.

Standard Model (P/N 10-0623) Includes:

- 15 ft. float switch.

Deluxe Model (P/N 10-0682) Includes:

- 20 ft. float switch.
- 6 ft. power cord plugs into 115V outlet.
- Watertight cord connectors.

### "A-PAK" ALARM SYSTEM FEATURES

10-1494 (115V/1Ph/9V DC)

- Auto reset solid state alarm.
- 9 Volt battery back-up (battery not included).
- NEMA 1 non-corrosive enclosure for indoor use.
- Manual shut off.
- Float operates on 12 VAC.
- Float switch with 15' cable included.
- 6 ft. power cord plugs into 115V outlet.
- Horn is rated at 86 decibels at 10'.

### "A-PAK II" ALARM SYSTEM FEATURES

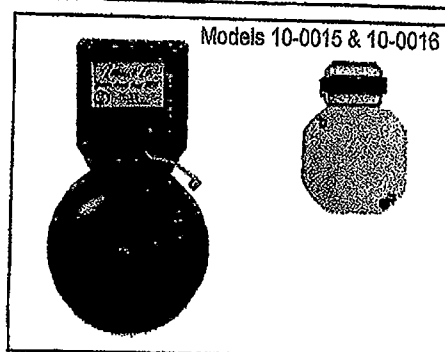
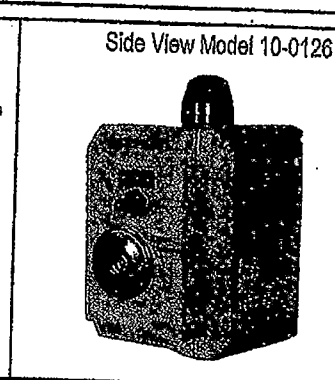
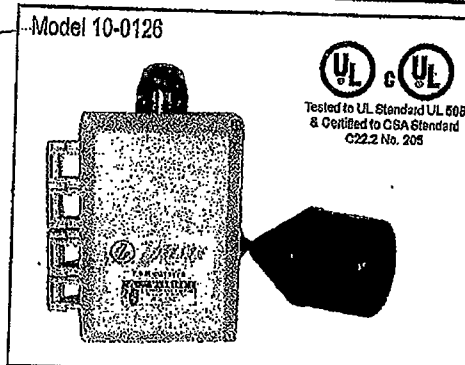
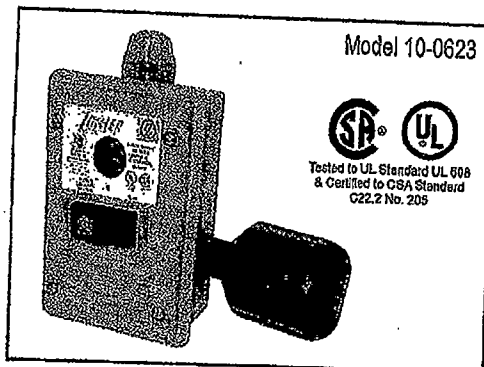
10-0126 (115V/1Ph)

- NEMA 4X thermoplastic alarm panel.
- Horn & light warn of high liquid levels
- Test and silence switch.
- Auxiliary dry high level alarm contacts - 5 amps.
- Operates on separate circuit from pump 115 VAC.
- UL Listed for US & Canada.
- Float switch with 15 ft. cable included.
- Can be used with liquids to 140°F (60°C).
- Horn is rated at 88 decibels at 10'.

10-0015 (115V) / 10-0016 (230V)

- Non-enclosed model.
- 6" magnetic bell with transformer.
- Mount on standard utility box (not included).
- Operates with 10-0743 float switch or mechanical alternator (not included).

Note: All variable level float switches in this section are mechanically activated and do not contain mercury.





**ENVIRONMENTAL**

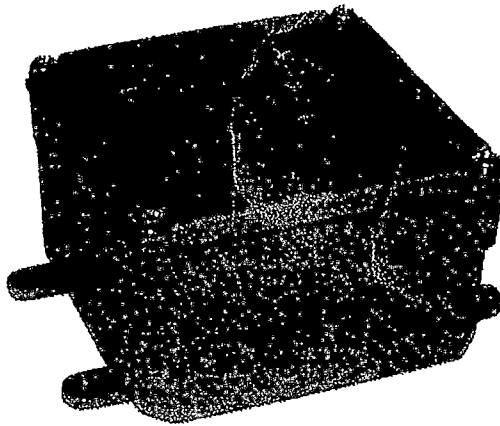
Zoeller Family of Water Solutions™

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№ 2 3 4 6 0 5 6 9 №

CL0121  
Updated 1111  
Supersedes 0210

## Junction Boxes



UL listed and CSA certified high impact, corrosion resistant, weatherproof thermoplastic enclosure with flexible PVC gasket and brass screws. Presassembled at the factory for convenience and ease of installation.



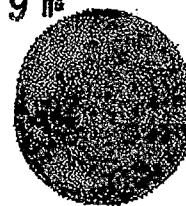
Junction Boxes CL0625	
Part Number	Description
10-1398	4"x4"x4" J-Box w/ 0.75" hub, 4 small cord grips, 1 plug
10-1399	4"x4"x4" J-Box w/ 1.5" hub, 4 small cord grips, 1 plug
10-1402	6"x6"x4" J-Box w/ 1.5" hub, 4 small cord grips, 1 plug
10-1403	6"x6"x4" J-Box w/ 2.0" hub, 5 small cord grips, 1 plug
10-1710	6"x6"x4" J-Box w/ 2.0" hub, 6 small cord grips, 1 plug

23460569

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**ZOELLER** *On Line*  
PUMP CO.



Zoeller Corp. Home Page	Company Profile Related Links Pump Sizing Program	Service Stations Contact Info Literature Index	Comments Extended Warranty Technical Support	What's New Order Info Technical Briefs	Products Technical Briefs
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## Technical Briefs by Zoeller Professionals



### The Do's and Don'ts of Submersible Pump Applications . . .

1. Do thoroughly read all installation material provided with the pump.
2. Do inspect pump for any visible damage caused by shipping. Contact dealer if pump appears to be damaged.
3. Do clean all built up debris in sewage pit if debris can obstruct the pumps initial start up. Be sure that the pump will have a hard, flat surface beneath it.
4. Do be sure that the pit is large enough to allow proper clearance for the pumps float switch.
5. **Do Always Disconnect Pump From Power Source Before Handling.**
6. Do always connect to a separately protected and properly grounded circuit.
7. Don't ever cut, splice or damage the power cord.
8. Don't carry or lift the pump by its power cord.
9. Don't use an extension cord with a sewage pump.
10. Do install a check valve and a union in the discharge line.
11. Don't use a discharge pipe smaller than the pumps discharge size.
12. Do drill a 3/16" weep hole between the check valve and the pump housing.
13. Do review all applicable local and national codes and verify that the installation conforms to each of them.
14. Do consult manufacturer for clarifications or questions.
15. Do consider a Two Pump System with an alarm where an installation may become overloaded or primary pump failure would result in property damage.
16. Don't flush any items that are not biodegradable such as paper towels, feminine hygiene products, condoms, or other items that could jam the pump impeller. A moderate amount of tissue paper in a system is acceptable.
17. Don't pour chemicals into the pump system such as acid's, floor wax, paints, or any degreasing chemicals. Common household soaps and detergents are acceptable. Contact the manufacturer with any chemical questions.
18. Do keep all warranty information, installation instructions, and receipts for future use.
19. Do size the pump to the proper capacity of the home. In a two-pump system each pump should be sized to meet the homes pumping requirements.
20. Do verify that the sewage pit is gas tight and well vented to prevent odors.

**"QUALITY PUMPS SINCE 1939"**

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Pump Sizing Program | 2008 Recall Info.

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ARKANSAS DEPARTMENT OF

# Health

Keeping Your Hometown Healthy

#23460569#

## Wire Gauge Calculation Chart

  - Indicates wire is insufficient to carry load

\*Information provided by  
Whelen Engineering, Inc.

### Maximum Current Draw

	5 Amps	10 Amps	15 Amps	20 Amps	25 Amps	30 Amps	35 Amps	40 Amps	45 Amps	50 Amps
22 AWG	6	3								
20 AWG	9.5	5	3							
18 AWG	15	7.5	5	4	3					
16 AWG	24.5	12	8	6	5	4	3.5	3		
14 AWG	39	19.5	13	9.5	8	6.5	5.5	5	4.5	4
12 AWG	62	31	20.5	15.5	12.5	10.5	9	7.5	7	6
10 AWG	98	49	32.5	24.5	19.5	16.5	14	12.5	11	10
8 AWG	158	78	52	39	31	28	22.5	19.5	17.5	15.5
6 AWG	248.5	124	82.5	62	49.5	41.5	35.5	31	27.5	25
4 AWG	395	197.5	131	98.5	78	68	58.5	49.5	44	39.5
2 AWG	629	314	209	157	125.5	104.5	89.5	78.5	69.5	63

Maximum wire length - measured in feet.

	55 Amps	60 Amps	65 Amps	70 Amps	75 Amps	80 Amps	85 Amps	90 Amps	95 Amps	100 Amps
22 AWG										
20 AWG										
18 AWG										
16 AWG										
14 AWG	3.5	3	3	3						
12 AWG	5.5	5	5	4.5	4	4	3.5	3.5	3.5	3
10 AWG	8	8	7.5	7	6.5	6	5.5	5.5	5	5
8 AWG	14	13	12	11	10.5	10	9	8.5	8	8
6 AWG	22.5	20.5	19	17.5	16.5	15.5	14.5	14	13	12.5
4 AWG	38	33	30.5	28	26.5	24.5	23	22	21	19.5
2 AWG	67	52.5	48.5	45	42	39	37	35	33	31.5

### American Wire Gauge (AWG) - diameter in inches

Gauge	Diameter	Gauge	Diameter	Gauge	Diameter	Gauge	Diameter
000000	0.5800	7	0.1443	19	0.0359	31	0.0089
00000	0.5165	8	0.1285	20	0.0319	32	0.0079
0000	0.4600	9	0.1144	21	0.0285	33	0.0071
000	0.4096	10	0.1019	22	0.0253	34	0.0063
00	0.3648	11	0.0907	23	0.0228	35	0.0056
0	0.3249	12	0.0808	24	0.0201	36	0.0050
1	0.2893	13	0.0719	25	0.0179	37	0.0045





ARKANSAS DEPARTMENT OF

# Health

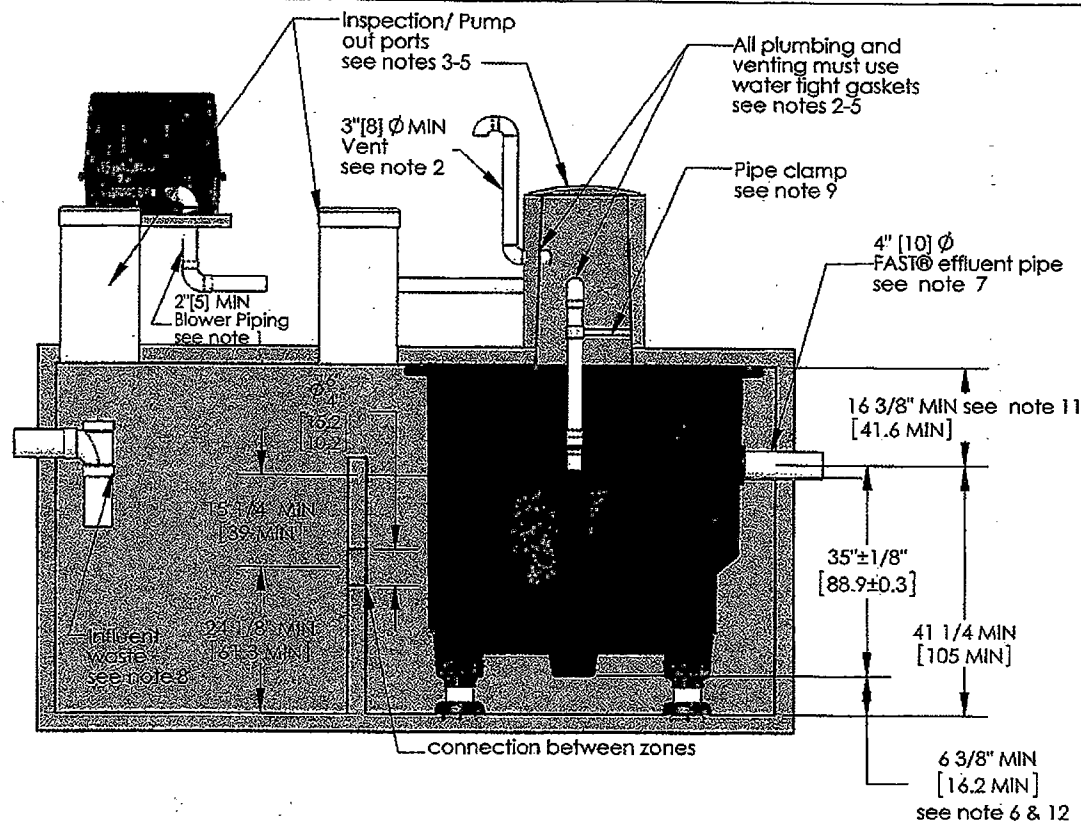
*Keeping Your Hometown Healthy*

#23460569#

## Basic Electrical Information for Septic Systems Using Pumps, Floats, and Warning Alarms or Control Panels

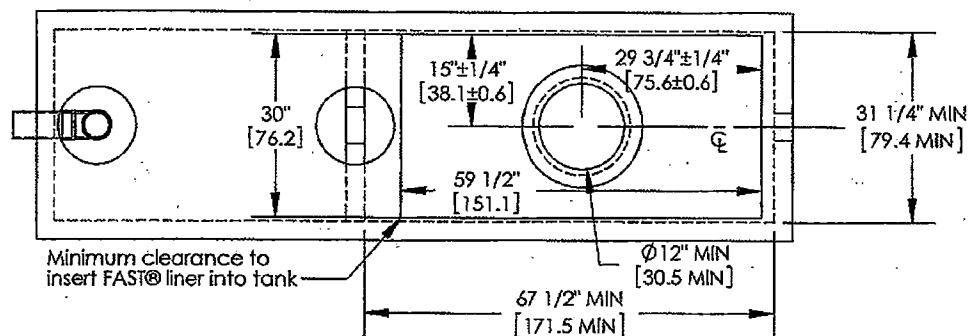
\*ALL Aspects of the wiring and electrical system must meet the current National Electrical Code\*.

- All components of a pumped septic system including: pump vaults, pump chambers, tank draw-downs, pumps, floats and alarms, controls, wiring, conduit, all electrical connections and breakers must be specified with examples included in the design by Designated Representative.
- All septic system electrical work must be performed by an Arkansas licensed Septic System Installer, or an Arkansas licensed Master Electrician.
- Any electrical work inside a building must be performed by the property owner, or an Arkansas licensed Master Electrician.
- All enclosures, panels, breaker boxes or other housings must be NEMA-4X rated with gas-proof and waterproof gaskets and seal offs.
- No exposed plug-in electrical cords are allowed, they must be entirely sealed in a NEMA-4X enclosure to be both gas resistant and water resistant.
- All wire splices and connections must be made with heat shrink-butt connectors, or silicone encapsulated wire nuts.
- All conduit opening s into control boxes, splice boxes, or alarm and breaker boxes must have gel-filled seal off kits or plugs.
- All power cable or wire must be UF (underground rated) and of correct gauge for the total amperage and total length of run.
- Any power cable or wire buried 12-inches or less deep must be entirely inside UF (underground rated) conduit of correct size to allow for heat dispersal of the wire.
- The pump must have an individual breaker of correct amperage in line of site to its location.
- The float/alarm set up must have an individual breaker of correct amperage in line of site to its location.
- The main breaker for the entire septic system set up must have amperage at least equal to pump, alarm, or control breakers coming to the main breaker. This main breaker must be labeled and its location noted on the septic system permit/design.
- No deviations from the approved design may be made without prior approval of Designated Representative and Environmental Health Specialist.



**Settling Zone**  
350 Gallon MIN [1300 L MIN]

**Treatment Zone**  
450 Gallon MIN [1700 L MIN]



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#### NOTES

1. Airline piping to FAST® may not exceed 100 FT [30m] total length and have a maximum of 4 elbows in the piping system. For distances greater than 100 FT [30m] consult factory. Blower must be located above flood levels on a concrete base 24" X 20" X 2" [65 X 50 X 5cm] min.
2. Vent to desired location and cover opening with a vent grate with at least 7 sq in. [45 sq. cm] open surface area. Secure with stainless steel screws. Vent piping must not allow condensate build up or create back pressure. Vent must be above finished grade or higher (see sheet 4 of 4).
3. All appurtenances to FAST® (e.g. tanks, access ports, electrical, etc.) must conform to all applicable country, state, province, and local plumbing and electrical codes. Pump out access shall be adequate to thoroughly clean out both zones.
4. All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access.
5. Tank, piping, conduit, etc. are provided by others. Blower control system by Bio-Microbics, Inc. See Installation Manual.
6. If less than the specified minimums are considered necessary, consult factory for guidance.
7. All piping and ancillary equipment installed after FAST must not impede or restrict free flow of effluent.
8. The tank(s) shall be designed to prevent air passage between the settling zone/tank and the treatment zone and preventing an air lock. Examples include a baffle wall sealed to the lid or treatment zone inlet line with a pipe cap. Consult factory for guidance.
9. The air supply line into the FAST® unit must be secured to prevent vibration induced damage. The air supply line should be secured with a non-corrosive clamp every 2' min [60 cm]. See alternate air supply option on sheet 4 of 4.
10. Specialized treatment levels may require specific features to be incorporated into the design. Consult factory for guidance.
11. Min. height may be reduced, consult factory and reference "Low Profile Module Procedure.pdf"
12. Refer to sheet 4 of 4 for leg extensions requirements.

DO NOT SCALE  
UNLESS NOTED  
DIMENSIONS  
ARE IN INCHES  
[CENTIMETERS]  
TOLERANCES  
± 0.02 IN/IN  
[± 0.05 CM/CM]

**BIO MICROBICS**

BETTER WATER. BETTER WORLD.™

MicroFAST 0.50 FAST Unit

WEIGHT	lb	SIZE	DRAWING NUMBER	SHEET
		A	MicroFAST® 0.50 with feet	2 OF 4
DRAWN	CTC	DATE	12/18/2006	
CHECKED	PF	9/18/2013	REVISED 9/18/2013	REV. INI-05-V

## Specifications for MicroFAST 0.50 Wastewater Treatment System

### 1. GENERAL

The contractor shall furnish and install (1) MicroFAST@0.50 treatment system as manufactured by Bio-Microbics, Inc. The treatment system shall be complete with all needed equipment as shown on the drawings and specified herein.

The principal items of equipment shall include the FAST@ system insert, blower assembly, blower controls and leg extensions or lid. All other items will be provided by others. The MicroFAST 0.50 unit shall be situated within a 450 Gallon [1700L] minimum compartment as shown on the drawings. Suggested maximum settling zone is (1) X the daily flow. Tank must provide adequate pump out access and conform to local, state, and all other applicable codes. The contractor shall coordinate the proper fabrication of the tank between the FAST system and tank supplier with regard to fabrication of the tank, installation of the FAST unit, and delivery to the job site.

### 2. OPERATING CONDITIONS

The MicroFAST 0.50 treatment system shall be capable of treating the wastewater produced by typical family activities (bath, laundry, kitchen, etc.) ranging from (1) one to (8) eight people and not to exceed 500 US Gallons per day (1800 LPD) provided the waste contains nothing that will interfere with biological treatment. The FAST system is a biological treatment system not meant for non-biodegradable or industrial wastewater.

### 3. MEDIA

The FAST@ media shall be manufactured of rigid PVC, polyethylene, or polypropylene and it shall be supported by the polyethylene insert. The media shall be fixed in position and contain no moving or wearing parts and shall not corrode. The media shall be designed and installed to ensure that sloughed solids descend through the media to the bottom of the septic tank.

### 4. BLOWER

The MicroFAST 0.50 unit shall come equipped with a regenerative type blower capable of delivering 17-25 CFM [31-46 m3/hr]. The blower assembly shall include an inlet filter with metal filter element. The blower shall be mounted outside the tank on a contractor supplied concrete base. Blower piping to the tank shall use non-corrosive material (PVC, Galvanized, or stainless Steel). Do not run galvanized pipe inside the treatment tank. Refer to Installation Manual for further details.

### 5. REMOTE MOUNTED BLOWER

The blower shall be placed on a contractor supplied concrete base. The blower must not sit in standing water and its elevation must be higher than the tank and normal flood level. A two-piece, rectangular housing shall be provided. The discharge air line from the blower to the MicroFAST@ System shall be provided and installed by the contractor.

### 6. ELECTRICAL

The electrical source should be within 150 feet [45 meters] of the blower consult local codes for longer wiring distances. All wiring must conform to all applicable codes (IEC, NEC, etc.). Wiring distances must prevent significant voltage loss. Input power on 60Hz electrical systems 110/220VAC, 1Ø, 3.5/1.7 FLA, on 50 Hz electrical systems 220VAC, 1Ø, 1.9 FLA. Other voltages and phase are also available. Actual power consumption varies with site conditions. All conduit and wiring shall be supplied by contractor.

### 7. CONTROLS

The control panel provides power to the blower and contains an alarm system consisting of a visual and audible alarm capable of signaling blower circuit failure and high water conditions. The control panel is equipped with SFR@ (Sequencing Fixed Reactor) timed control feature. A manual alarm silence button is included.

### 8. INSTALLATION AND OPERATING INSTRUCTIONS

All work must be done in accordance with local codes and regulations. Installation of the FAST 0.50 shall be done in accordance with the written instructions provided by the manufacturer. Manuals shall be furnished, which will include a description of system installation, operation, and maintenance procedures.

### 9. FLOW AND DOSING

FAST@ systems have been successfully designed, tested and certified receiving gravity, demand-based influent flow. When influent flow is controlled by pump or other means to help with highly variable flow conditions, then multiple dosing events should be used to maximize performance. The flow rate shall not exceed 5 gpm (19 Lpm) with a maximum hourly flow not to exceed 10% of the design daily flow (50 gph [190 LPH]).

### 10. WARRANTY


Bio-Microbics, Inc. warrants all new residential FAST@ models (MicroFAST@ 0.50, 0.625, 0.75, 0.90, and 1.5) against defects in materials and workmanship for a period of two years after installation or three years from date of shipment whichever ever occurs first. All other FAST@ system models are warranted for a period of one year after installation or eighteen months from date of shipment, whichever occurs first. All are subject to the following terms and conditions below:

During the warranty period, if any part is defective or fails to perform as specified when operating at design conditions, and if the equipment has been installed and is being operated and maintained in accordance with the written instructions provided by Bio-Microbics, Inc., Bio-Microbics, Inc. will repair or replace at its discretion such defective parts free of charge. Defective parts must be returned by owner to Bio-Microbics, Inc.'s factory postage paid, if so requested. The cost of labor and all other expenses resulting from replacement of the defective parts and from installation of parts furnished under this warranty and regular maintenance items such as filters or bulbs shall be borne by the owner. This warranty does not cover general system misuse, aerator components which have been damaged by flooding or any components that have been disassembled by unauthorized persons, improperly installed or damaged due to altered or improper wiring or overload protection. This warranty applies only to the treatment plant and does not include any of the structure wiring, plumbing, drainage, septic tank or disposal system. Bio-Microbics, Inc. reserves the right to revise, change or modify the construction and/or design of the FAST system, or any component part or parts thereof, without incurring any obligation to make such changes or modifications in present equipment. Bio-Microbics, Inc. is not responsible for consequential or incidental damages of any nature resulting from such things as, but not limited to, defect in design, material, or workmanship, or delays in delivery, replacements or repairs.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. BIO-MICROBICS SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO REPRESENTATIVE OR PERSON IS AUTHORIZED TO GIVE ANY OTHER WARRANTY OR TO ASSUME FOR BIO-MICROBICS, INC., ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS. Contact your local distributor for parts and service.

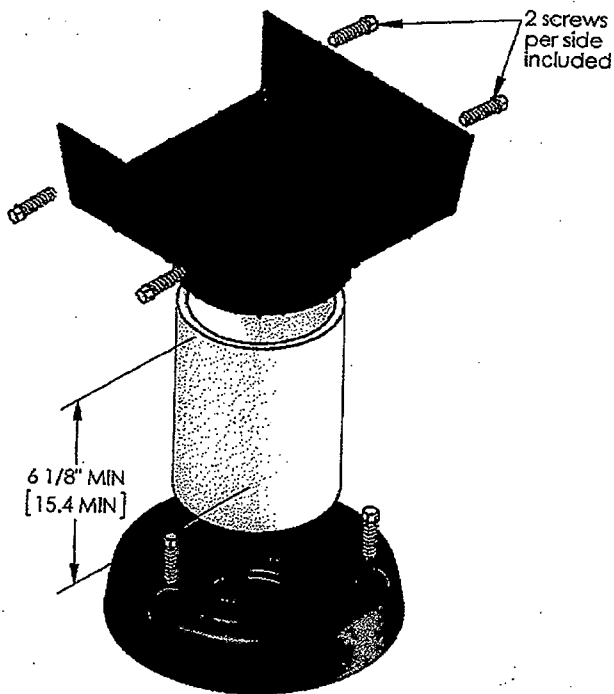
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DO NOT SCALE		 BETTER WATER. BETTER WORLD. <sup>®</sup>		
UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS] TOLERANCES ± 0.02 IN/IN [± 0.05 CM/CM]				
WEIGHT lb		SIZE	DRAWING NUMBER	SHEET 3 OF 4
NAME DATE		A	MicroFAST@ 0.50 Specifications	
DRAWN CTC 12/18/2006		CHECKED PF 9/18/2013	REVISED 9/18/2013 REV. INI-Q5-V	

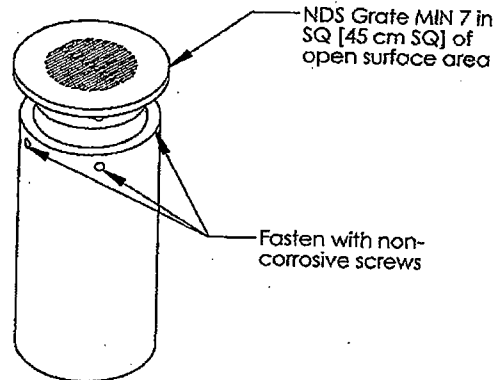
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Minimum leg extension assembly  
see note 1-4



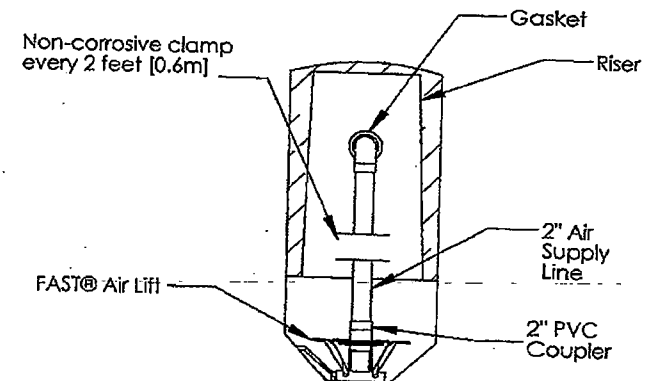
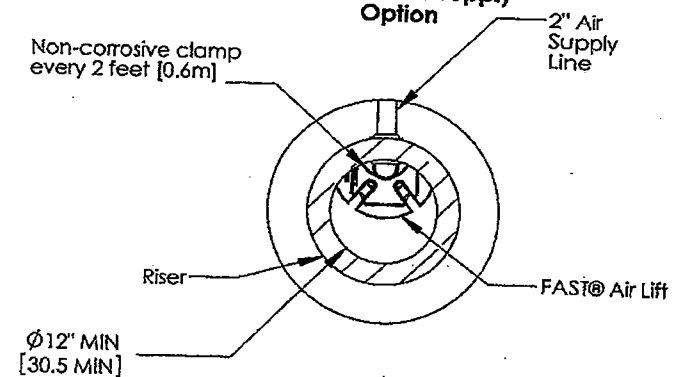
DETAIL  
SCALE 1 : 5

### FAST® Vent Option



DETAIL  
SCALE 1 : 4

### Alternate Air Supply Option




### Notes

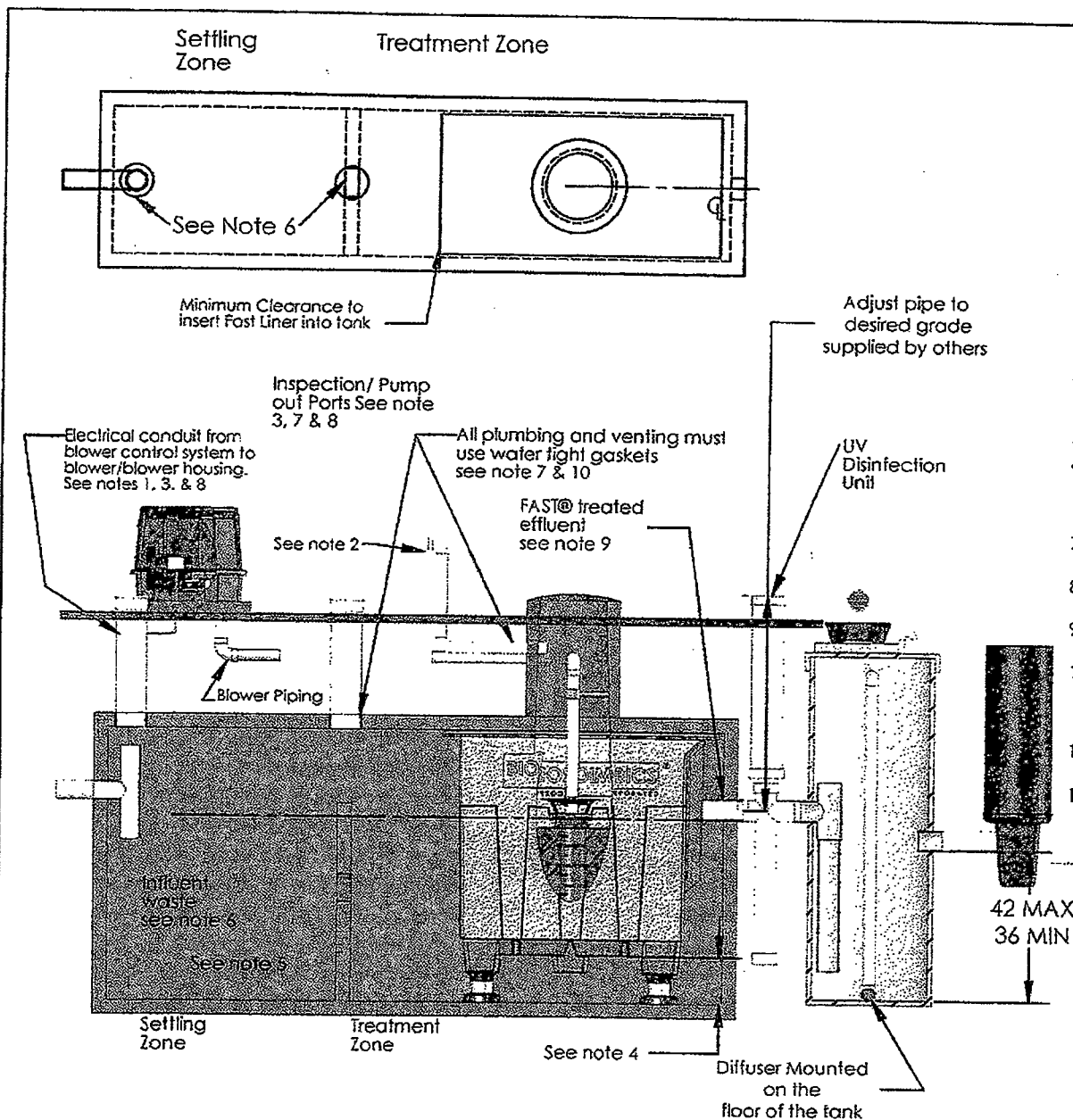
1. Secure leg extension to the FAST® unit by placing two screws on each side of the leg extension (4 screws per foot are included).
2. Cut 4" schd. 40 PVC pipe (not included) to obtain the desired height. Minimum pipe length of 6 1/8" [15.56cm] will provide minimum clearance of 10". For heights greater than 18" [45.7cm] use schd. 80 PVC pipe (not included). Consult factory for extending leg beyond 36" [90 cm].
3. Anchor the leg extensions to the tank with non-corrosive hardware (not included) at the provided mounting points.
4. If less than the specified minimums are considered necessary, consult factory for guidance.
5. The air supply line into the FAST® unit must be secured to prevent vibration induced damage. The air supply line should be secured with a non-corrosive clamp every 2ft [0.6m] minimum.
6. Tank, anchors, piping conduit, blower, housing pad and vents are provided by others.

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DO NOT SCALE		UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS] TOLERANCES ± 0.02 IN/IN [± 0.05 CM/CM]		 BETTER WATER. BETTER WORLD. MicroFAST 0.50 FAST Unit	
WEIGHT	lb	SIZE	A	DRAWING NUMBER	
NAME	DATE			MicroFAST® 0.50 Details	SHEET 4 OF 4
DRAWN	CTC	12/18/2006			
CHECKED	PF	9/18/2013		REVISED 9/18/2013	REV. INI-OS-V

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#### NOTES

1. Blower piping to FAST® may not exceed 100 FT [30.5m] total length and use a maximum of 4 elbows in the piping system (@ 100FT [30m]). For distances greater than 100 FT [30m] consult factory. Blower must be located above flood levels on a concrete base.
2. Vent to be located above finish grade or higher to avoid infiltration. Cap with a vent grate with at least 7.1 sq in. [45.8 sq. cm] open surface area. Secure with stainless steel screws (see sheet 3 of 3 MicroFAST® 0.50 Details).  
or  
Run Vent to desired location and cover opening with a vent grate with at least 7.1 sq in. [45.8 sq. cm] open surface area. Secure with stainless steel screws. Vent piping must not allow excess moisture build up or back pressure.
3. All appurtenances to FAST® (e.g. tank pump outs, etc.) must conform to all applicable country, state, province, and local plumbing and electrical codes. Blower control system by Bio-Microbics, Inc.
4. Tank volume must be increased by 20% if minimum of 10 inches [25.5cm] is used between the unit and the base of tank. Consult factory for approval.
5. The primary compartment may be a separate tank.
6. Either the influent pipe tee shall be fitted with a pipe cap or the baffle separating the two zones shall be extended all the way to the top of the tank. If choosing to use the pipe cap. Then the baffle shall be at least 3" [8cm] higher than the water level as shown on the drawing.
7. All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access.
8. Tank, piping, conduit, blower housing pad and vents are provided by others.
9. All piping and ancillary equipment installed after FAST must not impede or restrict free flow of effluent.
10. The air supply line into the FAST® unit must be secured to prevent vibration induced damage. The air supply line should be secured with a non-corrosive clamp every 2' min [60 cm]. See alternate air supply option on sheet 2 of 2 Details.
11. Min height may be reduced, consult factory and reference "Short-FAST-Module-Procedure.pdf."
12. Refer to sheet 2 of 2 Details drawing for leg extensions requirements.

№ 2 3 4 6 0 5 6 9 №

DO NOT SCALE  
UNLESS NOTED  
DIMENSIONS  
ARE IN INCHES  
[CENTIMETERS]  
TOLERANCES  
± 0.02 IN/IN  
[± 0.05 CM/CM]

**BIO-MICROBICS**  
INCORPORATED

Arkansas NPDES General  
Arrangement

WEIGHT	lb	SIZE	DRAWING NUMBER	SHEET
NAME	DATE	A	MCF UV & Post Aeration	1 OF 4
DRAWN CTC	11/23/2029			
CHECKED PF	8/27/2010		REVISED 8/27/2010	REV. INI-03-V

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BIO-MICROBICS © 2010

# Salcor 3G Disinfection Unit

NOTE: Not all dimensions to scale

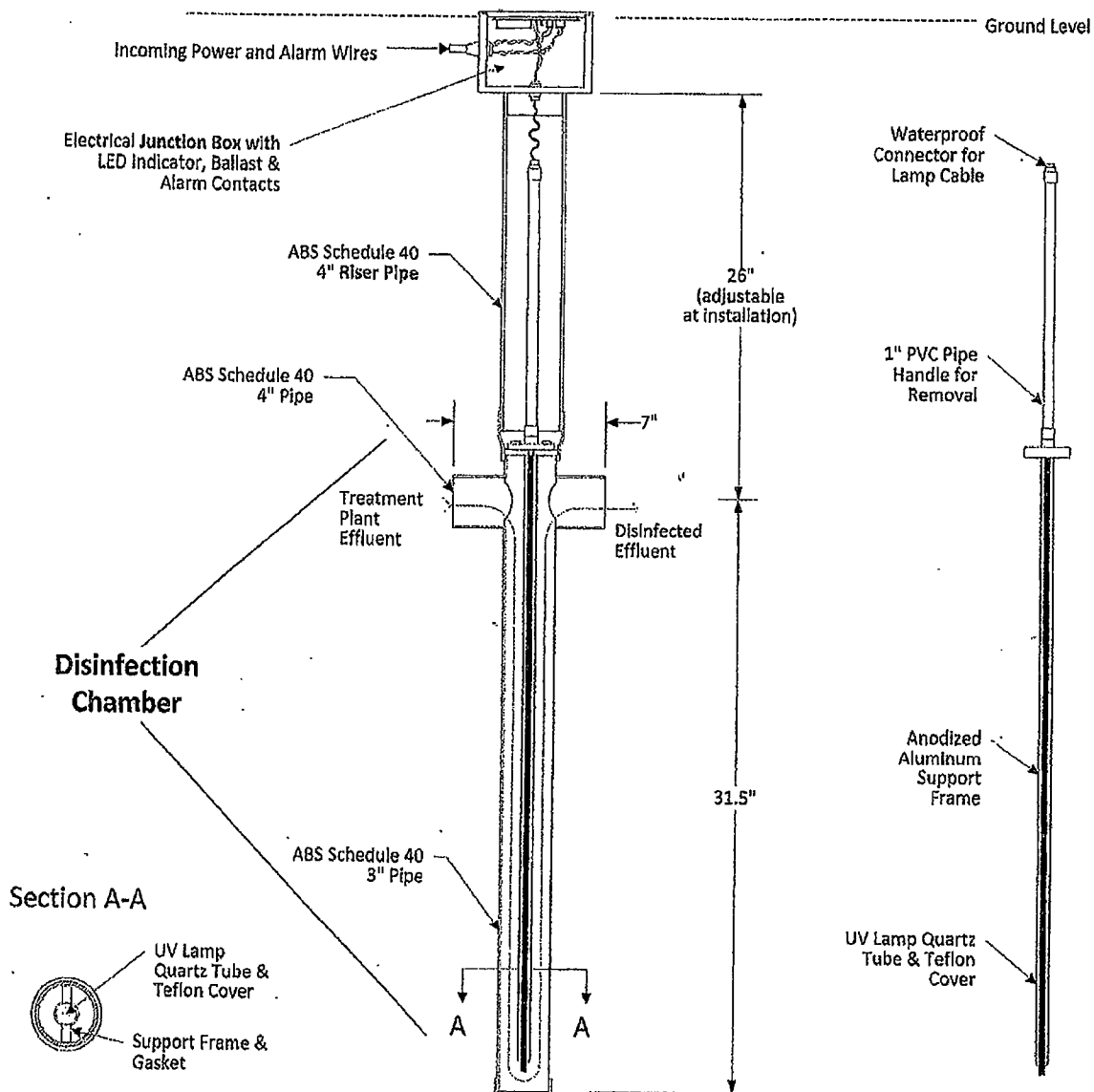


Figure 1

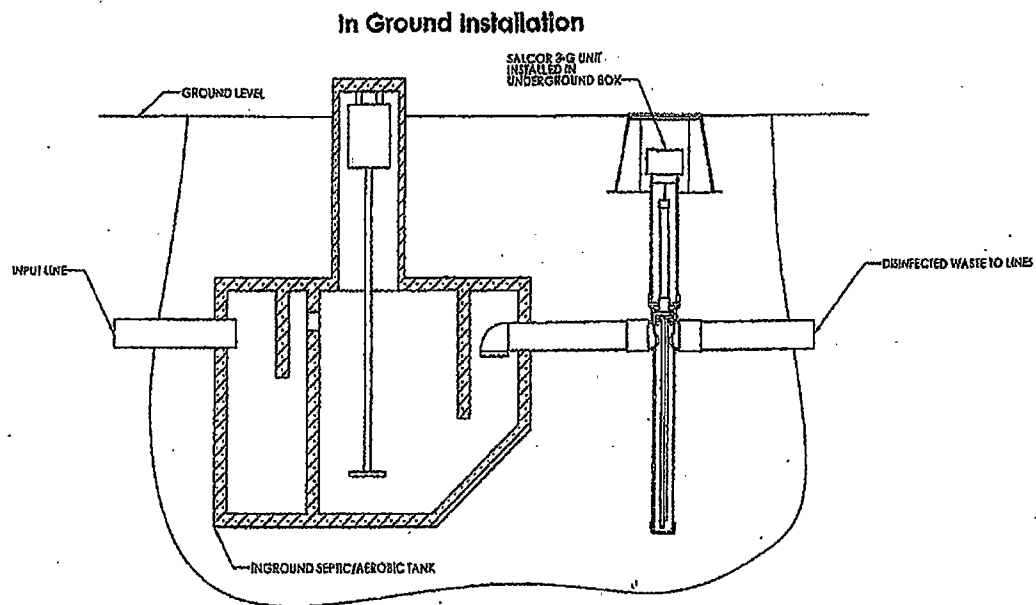


Figure 2

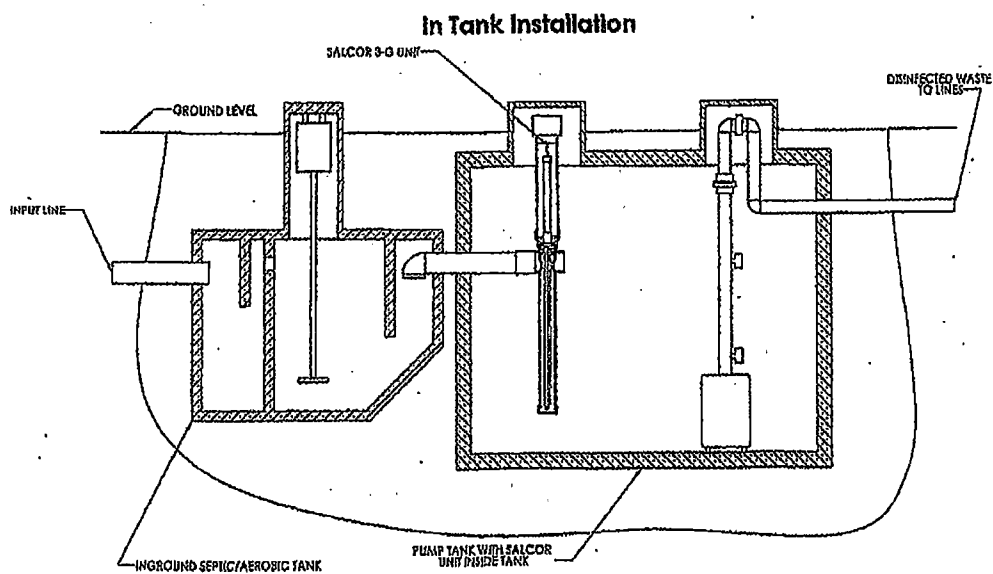


Figure 3

**Castleberry Septic Systems**  
**SEPTIC SYSTEM MONITORING AND SERVICE AGREEMENT**

# 2 3 4 6 0 5 6 9 #

\*Linley Bellomy ("Customer") agrees to contract with Castleberry Septic Systems ("Company"), who will provide specific management and related services that are defined within the scope of services for the septic and/or onsite wastewater treatment system owned by \*Linley Bellomy and located at 515 Grant 13 Sheridan AR 72150 ("Property").

This agreement is for a period of two (2) years, beginning on TBD and ending on TBD with the option to extend at the end of this agreement.

1. It is understood, and agreed to by both parties, that any other services or obligations that are not expressly stated within either of these documents are excluded from the stated terms of this Agreement.
2. Additional services not identified or defined within this Agreement or the Scope of Services, to be performed by the "Company," will be produced in an amended document to the original Scope of Services by the "Company," reviewed, and signed by both parties.
3. The "Customer" agrees to pay the "Company" Castleberry for septic system service and maintenance, specifically work performed every 6 months and described more specifically below.
4. If another agreement exists in writing between "Company" and "Customer" covering such services at the time in which the new agreement is prepared, then the most recent agreement shall be considered the valid document.
5. **Validation of Property Ownership.**
  - a. In signing this Agreement, the "Customer" does validate ownership to the Property, or responsibility for the management of the Property, as well as the septic or onsite wastewater treatment system that is subject of this Agreement.
  - b. Further, the "Customer" agrees to defend, indemnify and hold the "Company" harmless from and against any and all demands, actions, claims and damages, including without limitation the reimbursement of the Company's reasonable attorneys' fees, arising out of or relating to Customer's breach of its representation and warranty of ownership of the Property.
6. **Term and Termination.**
  - a. The term of this Agreement shall commence on the date of the Initial Inspection, and continue in full force and effect for a period of 2 year(s) (the "Initial Term").
  - b. The Agreement shall renew automatically for successive    year periods without further action by the parties ("Renewal Term"), unless either party sends written notice to the other party not less than 90 days prior to the expiration of the Initial Term or any Renewal Term.
  - c. The "Company" may also terminate this Agreement for any of the following reasons.
    - (i) The "Customer" fails to pay any service fees or other charges due identified within this Agreement in a timely manner.
    - (ii) Any breach by the "Customer" of any of the provisions contained in this Agreement and the Contract Documents.
    - (iii) The "Customer" fails to follow any of the recommendations made by the "Company" regarding the management, repair, maintenance, or replacement of the septic or onsite wastewater treatment system, or its components.
  - d. In the event either the "Customer" or the "Company" terminates this Agreement, the "Company" has the right to remove any and all equipment or other materials then located at the Property owned by the Company.
  - e. Within a reasonable time after receipt or delivery of the notice of termination, the "Customer" agrees to provide the "Company" with access to the Property to remove such equipment or other materials.

**Excluded Services.**

- a. The services contained in this agreement shall **NOT** include:
  - i. an initial inspection, review or analysis of the physical or structural condition of the septic or onsite wastewater treatment system or its component parts; and/or
  - ii. any inspection, analysis, review, recommendation, or opinion relative to, or in connection with, the sale or transfer of the Property to any third party to this Agreement.
- b. The Customer recognizes and agrees that any third party has no right or obligation to rely upon the services performed by the Company pursuant to this Agreement.

**Customer Obligation and Responsibility.**

In signing this Agreement, the "Customer" acknowledges that they are obligated to responsibly operate the system according to instructions,

The "Customer" agrees to have the "Company" provide the services as agreed upon and in conjunction with the Scope of Services: a.  
To have the system serviced on a regular schedule,



- d. to perform all maintenance, repairs, replacements,
- c. To obtain other services deemed necessary for the proper operation and management of the septic or onsite wastewater treatment system.

Specifically, and without limitation, the "Customer" understands and agrees that the septic or onsite wastewater treatment system is designed and constructed to treat only a specified volume of water per day, and that an increase in the volume of water used by the system can cause damage to or failure of the system.

The "Customer" must operate and maintain the system in a manner consistent with the recommendations of the manufacturer, the original designer/contractor, and/or the "Company," including not to exceed the design specifications of the system as directed by these entities.

The "Customer" also understands that the discharging of chemicals (drain cleaners, anti-bacterial soaps, bleach, etc.) or other foreign material (tampons, feminine napkins, paper towels, plastics, or other non-biodegradable material) into the system which kill bacteria and cause premature system failure, will be paid for on a time and material basis.

**Company Obligation and Responsibility.**

- a) Service calls meet Bio Microbes specifications and regulations.
- b) Completion of onsite maintenance program profile form EHP-71, where applicable.
- c) All samples will be retrieved and tested by an approved lab as a part of this agreement. In such event, "Company" shall submit to "Customer" a laboratory fee of TBD which the "Customer" will promptly pay.
- d) Sludge build up in the treatment plant will be monitored during the service calls. Homeowner will be advised when sludge reaches maximum levels for safe and/or efficient operation of the system. (See part (a) under Customer Obligations and Responsibilities)
- e) Customer will be advised if there are any parts of the system that need to be replaced/repared and the cost of said parts/labor prior to the replacement/repair of the parts. Any repairs outside of the regular maintenance or warranty will be billed to the end user. \*note: warranties do not cover labor charges outside of one year from date of installation (if installed by Custom Septic Installation Services LLC)

This Agreement does not require the "Company," to, and expressly excludes, any repair and/or replacement of any component part of the septic or onsite wastewater treatment system that is under guarantee by the manufacturer. In the event the "Company" identifies a defect or other problem in the septic, or onsite wastewater treatment system, or otherwise recommends the performance of repairs, maintenance or any other work associated with the septic or onsite wastewater treatment system, the "Company" shall not be required to perform any such additional work, repair or maintenance unless, and until a separate written agreement is prepared.

The separate agreement will identify the specific work tasks to be completed, and additional compensation to be paid to the "Company," and signed by authorized representatives of the "Customer" and the "Company."

**Disclaimer of Warranties and Limitation of Liability.** CUSTOMER UNDERSTANDS AND AGREES THAT NEITHER THIS AGREEMENT, NOR ANY INSPECTIONS, REPORTS, OR RECOMMENDATIONS PROVIDED BY THE COMPANY, ARE A GUARANTEE OR WARRANTY OF ANY KIND REGARDING THE SEPTIC SYSTEM, ONSITE WASTEWATER SYSTEM, OR THEIR COMPONENTS, AND ANY SUCH WARRANTIES, EXPRESS OR IMPLIED, ARE HEREBY DISCLAIMED BY THE COMPANY.

THE CUSTOMER UNDERSTANDS AND AGREES THAT TRUCKS AND EQUIPMENT HAVE TO ACCESS THE PROPERTY TO MAINTAIN THE ONSITE WASTEWATER TREATMENT SYSTEM. THE COMPANY WILL NOT BE HELD RESPONSIBLE FOR THE DRIVEWAY OR APRON SHOULD ANY DAMAGE OCCUR.

CUSTOMER SPECIFICALLY UNDERSTANDS AND AGREES THAT THE COMPANY WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR REPAIR, MAINTENANCE, OR REPLACEMENT OF THE SEPTIC OR ONSITE WASTEWATER TREATMENT SYSTEM, OR ANY OF ITS COMPONENTS, DIMINUTION IN VALUE OF THE PROPERTY, OR ANY OTHER CONSEQUENTIAL, INCIDENTAL, PROPERTY OR ECONOMIC DAMAGES ARISING OUT OF OR RELATING TO ANY SERVICES PERFORMED BY THE COMPANY PURSUANT TO THIS AGREEMENT, INCLUDING WITHOUT LIMITATION, THE COMPANY'S FAILURE TO INSPECT, IMPROPER INSPECTION, FAILURE TO REPORT, OR

IMPROPER REPORTING. THE DAMAGES AND CLAIMS FOR WHICH THE COMPANY SHALL NOT BE LIABLE INCLUDE, BUT ARE NOT LIMITED TO, FAILURE OF THE SEPTIC OR ONSITE WASTEWATER TREATMENT SYSTEM OF ANY KIND.

CUSTOMER AGREES TO DEFEND, INDEMNIFY AND HOLD THE COMPANY HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS, DAMAGES, LOSSES, COSTS, LIABILITIES OR EXPENSES ASSERTED BY ANY THIRD PARTIES TO THIS AGREEMENT RELATING TO ANY WORK, RECOMMENDATIONS OR OTHER SERVICES FURNISHED BY THE COMPANY PURSUANT TO THIS AGREEMENT.

CUSTOMER FURTHER AGREES THAT THE MAXIMUM LIABILITY OF THE COMPANY ARISING OUT OF THIS AGREEMENT, THE SERVICES PERFORMED BY THE COMPANY, OR THE RECOMMENDATIONS MADE BY THE COMPANY, SHALL BE EQUAL TO THE ANNUAL FEE SET FORTH IN THE CONTRACT DOCUMENTS, OR \$500, WHICHEVER IS GREATER. A HIGHER LIMIT OF LIABILITY IS AVAILABLE ONLY WITH AN EXPRESS AGREEMENT IN WRITING AND THE PAYMENT OF AN ADDITIONAL FEE BY THE CUSTOMER.

***Integrated Agreement.***

This Agreement constitutes the entire arrangement between the parties, and there are no Agreements, understandings, restrictions, warranties or representations between the parties other than those set forth herein or herein provided for. All prior or contemporaneous negotiations, Agreements, understandings, statements, representations and warranties are merged into the terms hereof and are superseded hereby.

***Choice of Law.***

The interpretation and enforcement of this Agreement shall be governed by the laws within the State of AK

***Amendment, Modification and Waiver.***

This Agreement may be modified or amended only in writing signed by the "Company" and the "Customer."

***Third Party Beneficiaries.***

The rights, responsibilities, and obligations of this Agreement are personal and specific to each of the parties, and shall not be binding upon or inure to the benefit of any third party. The "Customer" and "Company" agree that they do not intend, by their performance of this Agreement, to confer any benefit, right, or entitlement upon any third party. The "Company" assumes no responsibility for any third party's reliance on any of the services, analysis, review, or recommendations provided by the "Company" pursuant to this Agreement.

***Mediation and Arbitration.*** The "Customer" and "Company" agree that, at the sole option of the "Company" any claims or controversies, demands or causes of action of any kind or description arising under or relating to this Agreement, or relating to the interpretation of this Agreement, shall be resolved through mediation and then, if necessary, binding arbitration in accordance with the Construction Industry Rules of the American Arbitration Association.

Upon signing this agreement, the parties hereto have caused this instrument to be signed and sealed on the day and date written below and at the address first written above:

Date 3/18/20

By: [Signature]  
Company

Date \* 3/10/2020

By: \* [Signature]  
Customer



Arkansas Department of Health  
4815 West Markham, Slot 46  
Little Rock, Arkansas 72205-3867

№ 2 3 4 6 0 5 6 9 №

# MEMORANDUM OF AGREEMENT

## SUBJECT: ONSITE WASTEWATER SYSTEM APPLICATION

This is an agreement that the onsite wastewater system installed on this property has been permitted under authority of Act 402 of 1977 and by the Arkansas Department of Health with the understanding that the following provisions are met:

1. Onsite Wastewater Systems requiring a Monitoring Contract with a Certified Monitoring Personnel are Holding Tanks, Experimental Systems (i.e. Reduced Absorption Areas, \*ABGs), and Drip Dispersal Systems. \*Aerobic Biological Generators – Commercial applications only, residential applications must follow manufacturers' service contract requirements.
2. The property owner assumes all responsibility for the proper operation of the onsite wastewater system.
3. The property owner must maintain a monitoring contract with a licensed Certified Monitoring Personnel for the life of the system and retain Onsite Wastewater System Assessments (EHP-71), on file, for at least five (5) years.
4. The Arkansas Department of Health has no responsibility in the operation and maintenance of such systems.
5. That the Arkansas Department of Health may monitor the system as to its operation capabilities.
6. That the Arkansas Department of Health is granted permission to make such inspections as deemed necessary.
7. Subsurface systems with flows  $\geq 3000$  gpd and all surface discharging systems require the owner to file an additional permit application with the Arkansas Department of Environmental Quality (ADEQ).
8. That, on the sale of the property, the owner of the property must disclose to the perspective buyer notice of this agreement and any permit requirements. The buyer is to sign memoranda, contracts or permit name change forms and submit these documents to the appropriate regulatory agency.

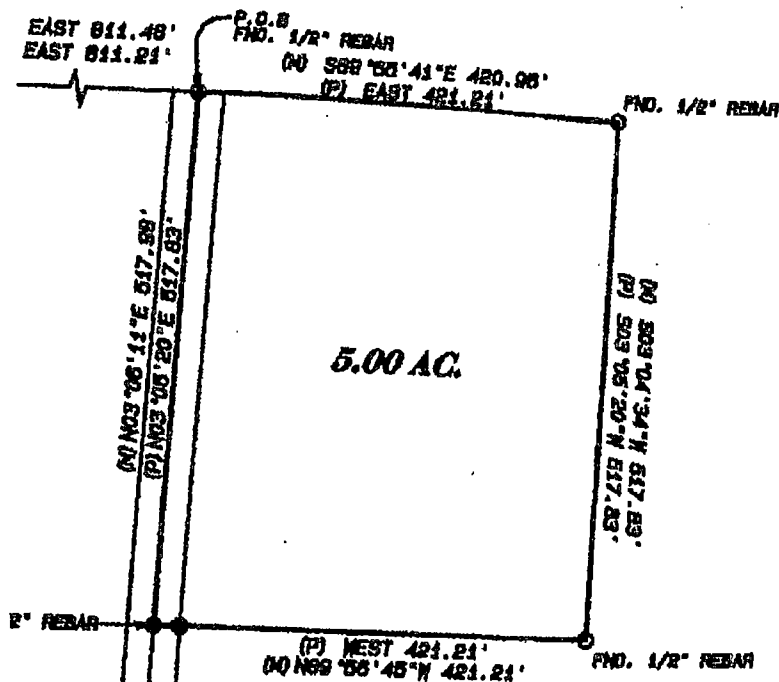
SIGNED: [Signature]  
(Property Owner)

SIGNED: [Signature]  
(Health Department)

DATE: 3/12/2020

DATE: 4-3-2020

No 23460560



**LEGAL DESCRIPTION:** A part of the Northwest Quarter (NW1/4) of the Northeast Quarter (NE1/4) of Section 16, Township 8 South, Range 19 West, Grant County, Arkansas, more particularly described as follows: Commencing at the Northwest corner of said NW1/4 NE1/4; thence East along the North line thereof a distance of 811.21 feet to the Point of Beginning; thence continue East along the North line of said NW1/4 NE1/4 a distance of 421.21 feet; thence South 03 degrees 05 minutes 20 seconds West a distance of 517.83 feet; thence West a distance of 421.21 feet; thence North 03 degrees 05 minutes 20 seconds East a distance of 517.83 feet to the Point of Beginning, containing 5.00 acres, more or less. **TOGETHER WITH AND SUBJECT TO:** A 50 foot easement for ingress, egress, and utilities, the centerline more particularly described as follows: Commencing at the Northwest corner of the Northwest Quarter (NW1/4) of the Northeast Quarter (NE1/4) of Section 16, Township 8 South, Range 19 West, thence East along the North line thereof a distance of 811.21 feet to the Point of Beginning; thence South 03 degrees 05 minutes 20 seconds West a distance of 1763.88 feet to the center of Grant County Road #13 and the Point of Terminus.

Symbol	Description
Δ	computed corner
○	found monument
●	set 1/2" rebar

Bearings based on the North line of the NW1/4 NE1/4 being considered East-West between found monuments.  
 Survey Reference:  
 An unrecorded subdivision



3/17/2020

34°12'06.9"N 92°25'01.0"W - Google Maps

Google Maps

34°12'06.9"N 92°25'01.0"W

Nº 2 3 4 6 0 5 6 9 Nº

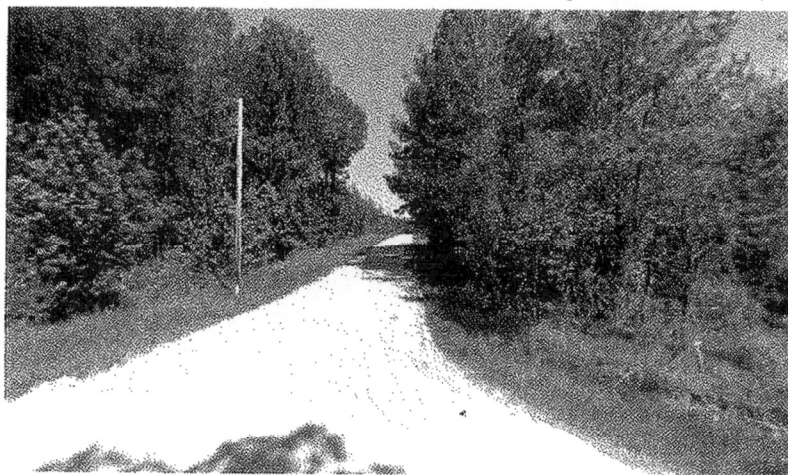
Take hwy 167 south to grant 13

Turn right and follow to the 2nd gravel road on the right

This is the last lot on this road. Pine tree covered lot minimal clearing been done in the last few weeks.



Imagery ©2020 Maxar Technologies, State of Arkansas, USDA Farm Service Agency, Map data ©2020 500 ft



34°12'06.9"N 92°25'01.0"W

34.201924, -92.416941



Directions



Save



Nearby



Share



