

SOUTHERN SOIL CONSULTANTS, LLC

DRAINFIELD & WELL CONSTRUCTION SPECIFICATIONS & CALCULATIONS

New Repair Expanded

Date: 10/28/07

Owner(s): Denis Osimo

Address: 226 Southwest Meadow,
Unit 40 East Falmouth, MA 02536

For a Type II Puraflo Treatment System
which is to be constructed on/at: Lot #4 Freeman Lane, Nottoway VA

GMP # 112

DRAINFIELD DESIGN INFORMATION:

Building Sewer: 4" I.D. PVC 40, or equivalent. Slope 1.25" per 10' (minimum).

Septic Tank: Capacity 1000 gals. (minimum).

Tank must meet the July 2000 Regs.

Inlet-Outlet structure: 4" tees PVC 40, or equivalent

Distribution Box: Precast concrete with 6 ports

Header Lines: 4" I.D. 1500 lb. Crush strength plastic or equivalent from distribution box to 2' into absorption trench.

Percolation lines: Gravity 4" plastic 1,000 lb. Per-foot bearing load or equivalent, Slope 2"-4" per 100' or as specified 2"

Effluent Filter: Zabel A 300 on outlet end

Pump station: 1000 gallon top seam tank.

Pump: Zoeller 137, 1/2 HP Pump or Equiv.

Force Mains: 2" I.D. PVC 40

Stilling Basin: N/A

Horizontal Pump Distance approx. (feet): 120

Vertical Pump Distance approx. (feet): 22

Anticipated Flow approx. (gpm): 30

Control Panel: Oreco Simplex Timed Dosing Panel or Equivalent

Set Timer 50.0 seconds 'ON' and 2.0 hours 'OFF'.

Control Panel/Timer settings must be verified in the field with a draw down test and adjusted as necessary.



Depth of aggregate: 10" of #5 stone Center to center spacing: 9'

Depth of trenches: 7" in.

Reserve drainfield required: Yes _____ No X; _____ % available.

Proposed reserve drainfield: _____

Soil percolation rate: _____ mpi

NOTES: A Sample Chamber Must be used

WELL DESIGN INFORMATION:

To be installed: IIC
Cased: 20'; 12" above grade
Grouted: 20'
Existing Class: _____

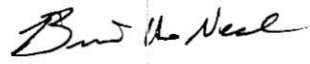
COMMENTS AND CONCERNS:

Due to the potential liability and/or responsibility of SSC for the installation and function of the drainfield, a representative of SSC must be present at an on-site preconstruction meeting with the builder and drainfield contractor. A representative of SSC must also be called for a final inspection, before the health department's final inspection. If there are any problems during installation SSC must be called immediately.

All utilities should be placed in a manor to avoid the primary and reserve area. Careful planning should be used when adding any driveway, detached garage, storage shed, swimming pool, large deck, or other permanent structures to be sure room is left available for the primary and reserve drainfield area.

If any changes to the Proposed Use, location of home site as shown on the attached sketch. Water Supply, or Proposed Installation are desired, please contact SSC as soon as possible. Also, if there are any questions concerning the Soil Information Summary, Design Information, Comments and Concerns, Detailed Soil Profile Descriptions, or Site Sketch please call SSC. Any desired changes will be considered; but not always possible. They may require a simple revision of this report, but could involve additional in-field evaluation and/or expense.

SIGNATURE:



Brian H. Neal
AOSE #208



NOTES

General

- 1 All construction materials and methods must conform to applicable Local and State Sewage Handling and Disposal Regulations
- 2 All pressure joints shall be primed and chemically fused
- 3 Pumps shall be a Zoeller 137, 1/2 HP effluent pump with a capacity of 30 gpm at 22.6' of TDH or its equivalent
- 4 Any deviation from this design must be approved by the designer prior to installation
- 5 The contractor shall contact the Bord na Mona prior to construction for a pre-construction conference
- 6 Electrical wiring to be installed under the direct supervision of a licensed electrical contractor, according to NEC, State and Local Electrical Codes, as applicable
- 7 Contractor is to install concrete tanks on uniformly firm and stable compacted ground, crushed stone is recommended to provide uniform support to tank bottom
- 8 Septic and pump tanks should be water-tight and conform to applicable Local and State Sewage Handling and Disposal Regulations
- 9 Contractor must contact the appropriate **UTILITY AUTHORITY** prior to any digging on site

Biofibrous Peat Specifications

- 1 Peat fiber is residue of Eriophorum (cotton grass) plants, carefully extracted from raised bog peats (other natural residues and peat fines are present in small quantities)
- 2 Moisture content on wet basis is 50-70%
- 3 Min. organic content on anhydrous basis is 95%
- 4 Water adsorption capacity, 72 hr. test, is 400-700%
- 5 Average air filled porosity(AFP) is 51%

Site Preparation Work:

- 1 Hand clear wooded sites
- 2 Machinery should not traverse the percolation area
- 3 Machinery must never traverse excavated/exposed percolation area
- 4 Contractor must provide adequate access for correct installation
- 5 Avoid installation under wet site conditions

Design:

- 1 Design = 45 MPI
- 2 Design flow = 300 gpd
- 3 Trench Installation Depth = 7" deep
Trench Width = 3' wide
Stone = 10" deep
- 4 Percolation area provided = 720 sqft
- 5 Number of treatment modules = 3
Module Support Pad= 8" deep

Percolation Area:

- 1 Install trenches level and along contour where applicable
- 2 Cover stone in trench/pad with filter fabric
- 3 Do not smear trench/pad base or sides during excavation



Site Restoration:

- 1 Min. cover of fill over stone is 4" (6" in NC)
- 2 Backfill with suitable loose material free of large or damaging objects
- 3 Straw and seed backfilled areas (or sod when required)
- 4 Provide erosion protection for backfill material in accordance with Local and County standards and maintain until permanent protection is established
- 5 Backfill should be graded to prevent the infiltration of surface water and divert storm water run-off away from the system

Percolation Area Design

Actual Percolation Rate	45	Texture group	II
Percolation rate used in design			100 mpi
Actual Loading Rate for Pad			0.74
Actual Loading Rate for Trenches			0.99
Loading Rate Used in Design			0.44
Percolation Area Required per loading rate			303.0 sqft

Number of Modules Required: 3

PAD

Pad 1 Dimensions:	
Length= N/A	
Width= N/A	
Installation Depth on Lower Corner	N/A
Installation Depth on Upper Corner	N/A
Percolation Area Provided	N/A
Gallons per Day provided by the pad	N/A gpd

TRENCHES

Percolation Area Required per loading rate	303 sqft
Number of Trenches	4
Length	60.0 ft
Width	3.0 ft
Installation Depth	6.0 in.
Percolation Area Provided	720.0 sqft
Gallons per Day provided by Trenches	373.3 sqft
Total Gallons Per Day Provided with both Pad and Trenches	373.3 gpd

Bulk Material Estimate

Stone Required		
Module Support Pad (where applic.)	Approx. 20 cu ft. per module	60.00 cubic feet
Percolation Pad		0.0 cubic feet
Trenches		149.4 cubic feet
Additional Drains		0.00 cubic feet
Total CY of Stone		5.5 CY
Total Tonnage (based on 1 CY=1.5 ton)		8.3 tons per ditch
Total Tonnage		33.2 tons



* Module Support Pad should be level w/ 8" of stone

TDH CALCULATIONS FOR SYSTEM CURVE

Assumes $f = 0.022$ for 2 inch pipe typical operating range

Static Head in Feet = Measured/Estimated

Friction Head in Feet = $(fLv^2)/(2gD) = (2.1355 \times 10^{-5})LQ^2$ (Q in gpm, L in feet)

Pressure Head in Feet = $0.10524(Q/\text{No. Mod.})^2$ (Q in gpm) from Orifice Equations

BOX 1.

Q (gpm)	No. Mod.	L (feet)	h_{stat} (feet)	h_f (feet)	h_p (feet)	TDH
0	3	238.00	7.50	4.30	0.00	11.80
10				0.51	1.17	9.18
20				2.03	4.68	14.21
30				4.57	10.52	22.60
40				0.00	18.71	26.21
50				12.71	29.23	49.44
60				18.30	42.10	67.89
70				24.90	57.30	89.70
80				32.53	74.84	114.87
90				41.17	94.72	143.38

Project Title

BOX 2.

EQUIVALENT LENGTH ESTIMATE			
Element	2" Flg. Eq. Length	Number	Eq. Length
Length	120.00	1.00	120.00
Reg. 90 deg	9.00	5.00	45.00
Reg. 45 deg	4.00	0.00	0.00
T (Diversion)	11.00	0.00	0.00
Coupling (Disconnect)	2.00	1.00	2.00
Check Valve	17.00	1.00	17.00
Ball Valve (fully open)	54.00	1.00	54.00
TOTAL EQ. LENGTH			238.00

BOX 3.

Programmable Timer Settings

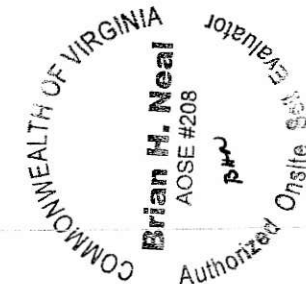
Anticipated Flow	30 gpm
Design Flow	300 gpd
Dosing Interval (Pump Rest Time)	2.00 hrs.
Number of Doses	12 d ⁻¹
Approx. Volume per Dose	25.00 gal.
Pump Run Time per Dose	0.83 min.
Pump Run Time per Dose	50.00 sec.
Tank Volume (gal. per inch) ESTIMATE	21 gal. in. ⁻¹
Draw Down per Dose	1.2 in.

From Zoeller 137 pump vrs. system curve plot

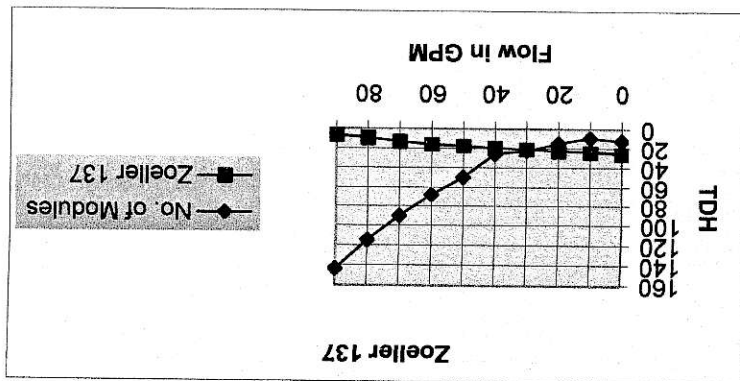
From design flow for facility

Standard for single pass

From tank dimensions or tank manufacturers' data



COMMONWEALTH OF VIRGINIA
 Brian H. Neal
 AOSE #208
 Authorized Onsite Evaluator
 BHN



17 of 20

1 of 2

Property Line

Cul-de-sac

Freeman Lane

8" of stone
for mod. support

2 white modules and 1 green
to sample chamber

4 Orange
Ribbons

2 Orange
Ribbons

3 Orange
Ribbons

Drainway

Sample Chamber

#2

#4

#1

#3

30.0

27.0

18.0

27.0

Approx.
120'
of 2"
forcemain

Property Line

Lot # 4

Lot # 5

Proposed
Driveway

IIC Well

P
S
T

2 Bedroom

Small Ridge



Denis Osimo
 Lot # 4
 Construction Drawing
 Scale 1"=50'

Date: 10/29/07Location: Lot # 4 Freeman Lane, Nottoway County**DETAILED SOIL PROFILE DESCRIPTIONS:**

HOLE #	HORIZON	DEPTH (INCHES)	DESCRIPTION OF SOIL CHARACTERISTICS	TEXTURE GROUP
1	A	0-8	2.5Y 5/6 Sandy loam	II
	E	8-18	10YR 6/6 Sandy Clay Loam with 7.5YR 5/8 mottles @ 18"	II
	B	18-26	10YR 5/8 to 7.5YR 5/8 Clay Loam with 10YR 7/2 and 10YR 7/6 mottles @ 23" deep	IV
2	A	0-8	2.5Y 5/4 Sandy loam	II
	E	8-18	10YR 6/6 Sandy Clay Loam with 7.5YR 5/8 mottles @ 18"	II
	B	18-26	10YR 5/8 to 7.5YR 5/8 Clay with 10YR 7/2 and 10YR 7/6 mottles @ 20" deep	IV
3	A	0-10	2.5Y 5/4 Sandy loam	II
	Bt1	10-14	10YR 5/8 Sandy Clay Loam with 10YR 6/8 and 7/6 mottles	II
	Bt2	14-21	10YR 5/8 Clay Loam with 10YR 6/8 and 7/8 mottles	III
	Bt3	21-26	10YR 5/8 Heavy Sandy Clay Loam with 10YR 6/8, 7/8, 8/4 and 7/1 mottles @ 25" deep	III
4	A	0-10	2.5Y 5/4 Sandy loam	II
	Bt1	10-14	10YR 5/8 Sandy Clay Loam with 10YR 6/8 and 7/6 mottles	II
	Bt2	14-21	10YR 5/8 Clay Loam with 10YR 6/8 and 7/8 mottles	III
	Bt3	21-26	10YR 5/8 Heavy Sandy Clay Loam with 10YR 6/8, 7/8, 8/4 and 7/1 mottles @ 25" deep	III

SOIL INFORMATION SUMMARY:Position in landscape satisfactory: Yes No Description of Landscape: Up-Land Convex Side slopeSlope: +/- 4% Depth to Cr or Rock: Max. Min. None Depth to Impervious Strata: (): Max. Min. None Depth to Redox Mottles: 18" in. Depth to Chroma 2 Mottles: 20" in.Free Water Present: Yes , No , Range in.Soil Percolation Rate: 45 min/in. (Estimated). Texture Group: IISoil Percolation Rate used in design: 100 min/in. (Estimated).

CERTIFICATION STATEMENT:

This is to certify according to Section 32.1-163.5 of the Code of Virginia that work submitted for the referred property is in accordance to and complies with the Sewage Handling and Disposal Regulations of the Virginia Department of Health. I recommend that a permit be issued.

SIGNATURE:

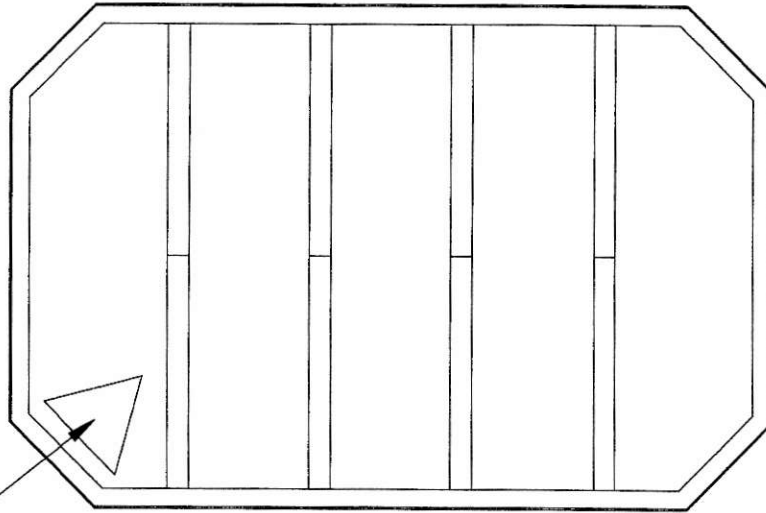


Brian H. Neal
Authorized Onsite Soil Evaluator #208

Note: By accepting this report the customer acknowledges that soil descriptions are an inexact science and septic systems are prone to failure from several different sources beyond our control and that liability does not necessarily follow such failure. The customer also acknowledges by acceptance of this report that the maximum liability of Southern Soil Consultants, LLC is the amount of the payment for our services.



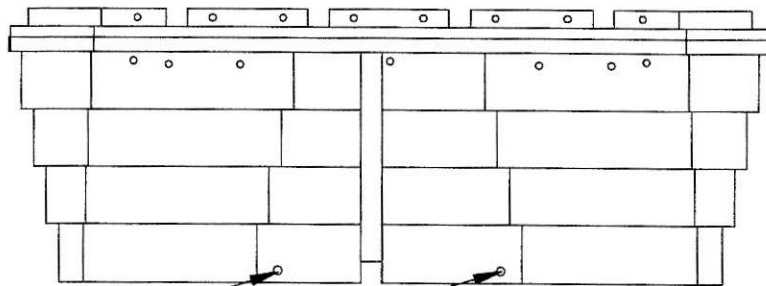
11 6 5 52



White Triangle

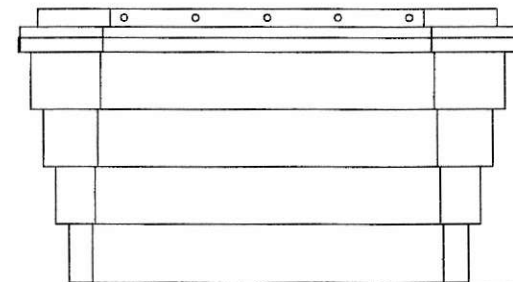
Plan View

Color coded: White, effluent piped to dispersal field



4 - 1"
Threaded
Inserts

Elevational View



End View

JAN. 15, 1998
DWG. BY: GMO'D

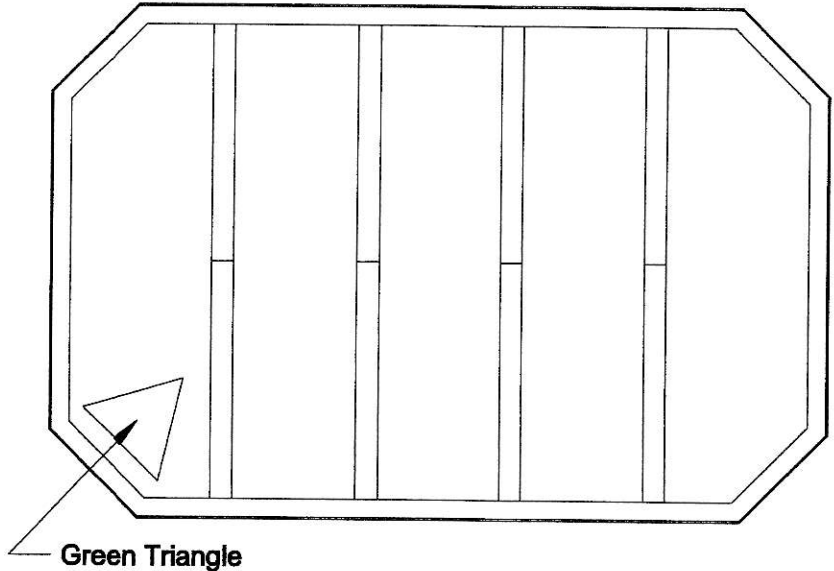
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Drawing Title: **COLOR CODED WHITE
ASSEMBLED MODULE DETAIL**

Project Reference:

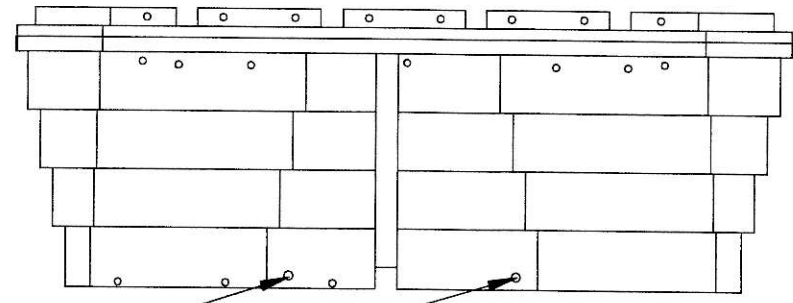
PURAFLO PEAT BIOFILTER

12 0 5 40

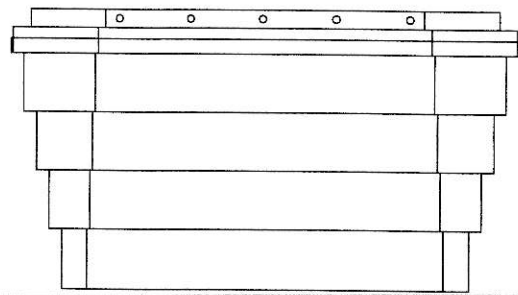


Plan View

Color coded: Green, half effluent
piped to sample chamber



Elevational View



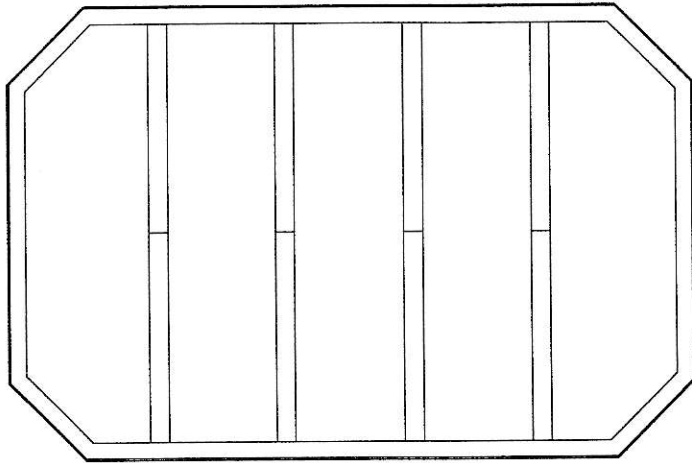
End View

JAN. 15, 1998
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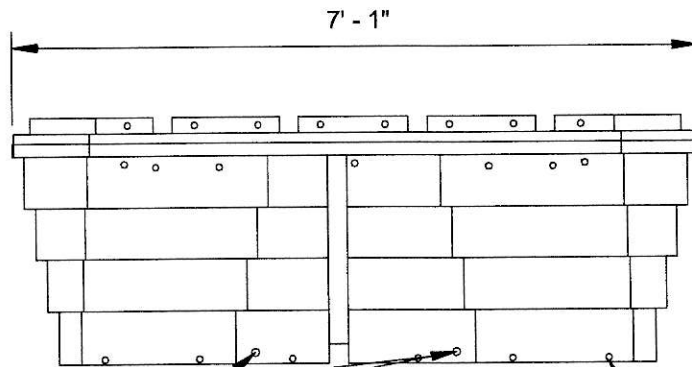
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Drawing Title: COLOR CODED GREEN
ASSEMBLED MODULE DETAIL

Project Reference:
PURAFLO PEAT BIOFILTER



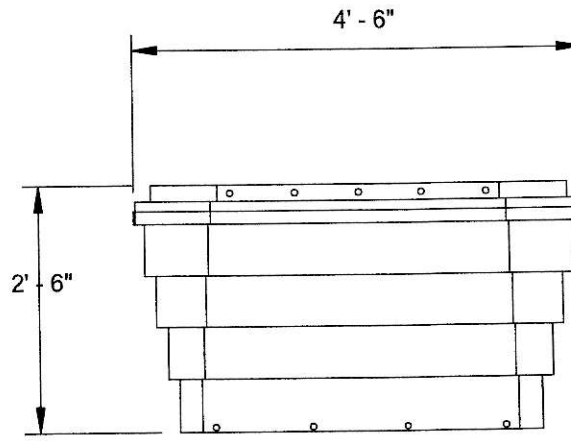
Plan View



Elevational View

4 - 1" Threaded Inserts

Sealed Modules are without Weep-holes

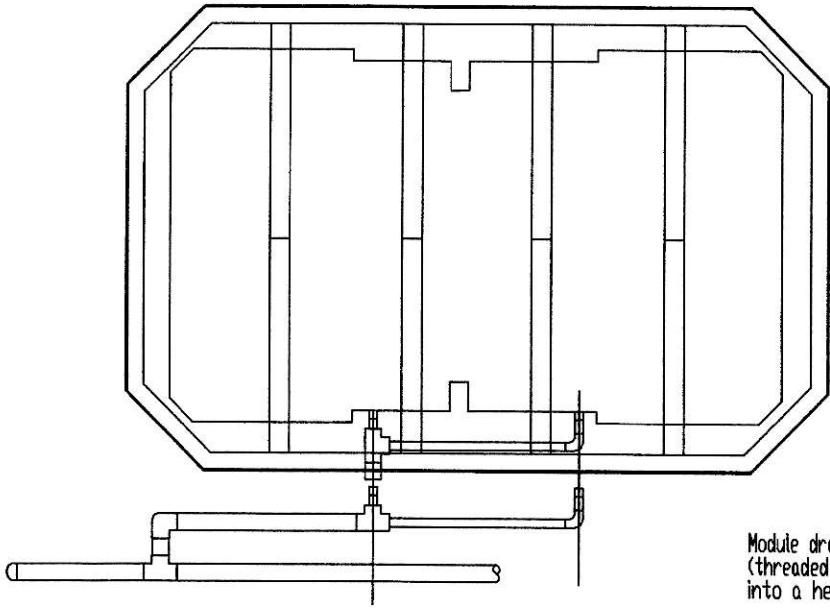


End View

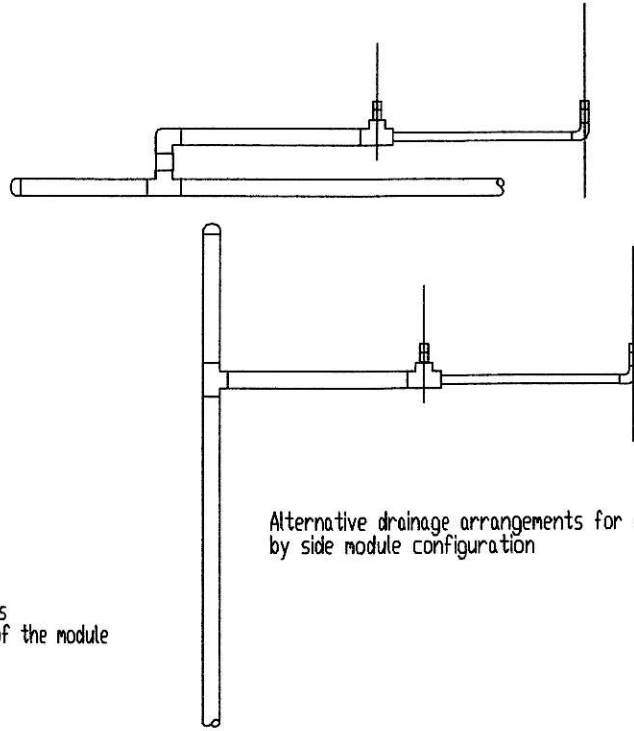
<p>JAN. 15, 1998 DWG. BY: GMD</p>	<p>Scale 1:20</p>	<p>Drawing Title: ASSEMBLED MODULE DETAIL</p>	<p>Project Reference: PURAFLO PEAT BIOFILTER</p>
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2
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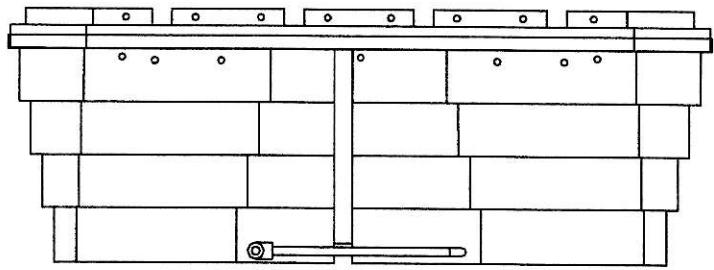
Threaded inserts not used for drainage
(opposite those in use) should be plugged



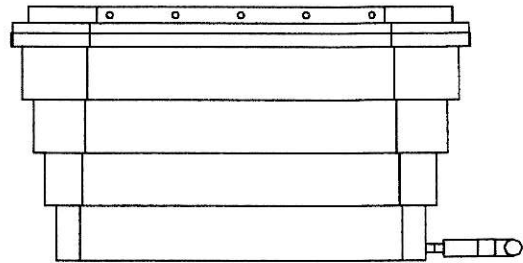
Module drained through 2 openings
(threaded inserts) at the base of the module
into a header/collection line



Alternative drainage arrangements for side
by side module configuration



Sealed module has no weep-holes
around the base, all effluent exits the
module through drain-pipe assembly
as shown

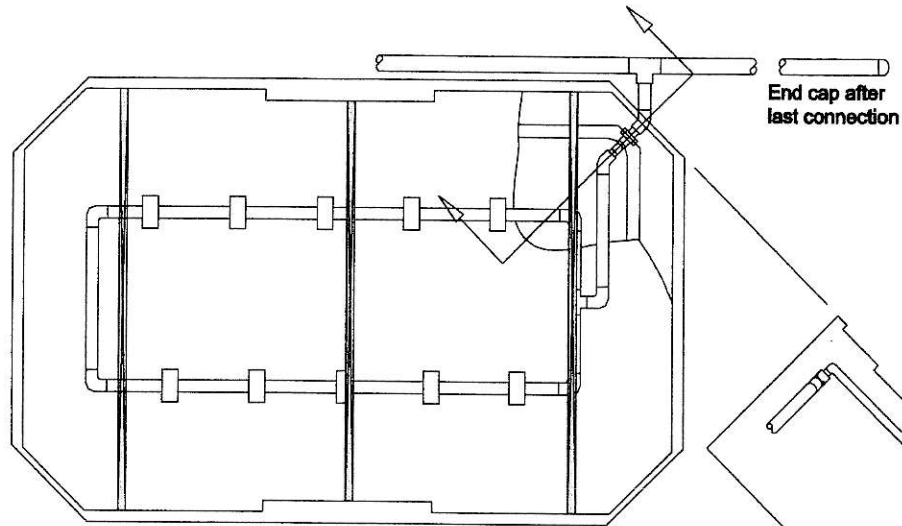


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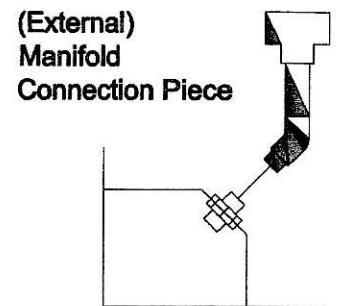
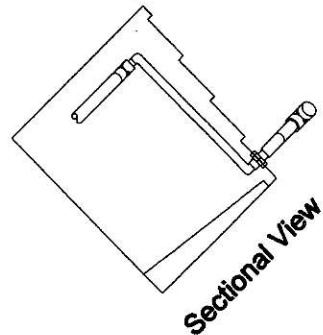
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DRAIN PIPE DETAIL

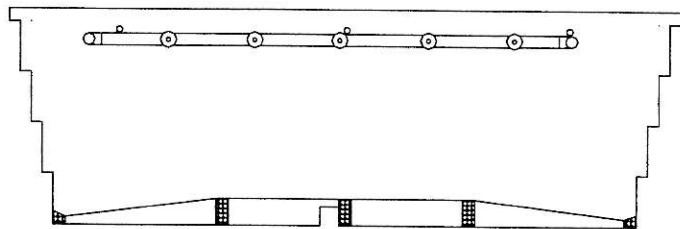
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PURAFL0 PEAT BIOFILTER



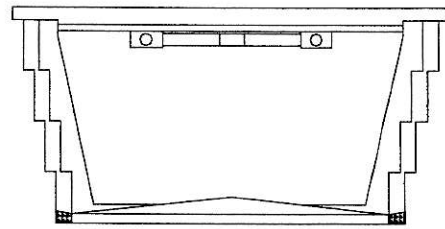
Plan View



Connection Detail



Sectional Elevation View



Sectional End View

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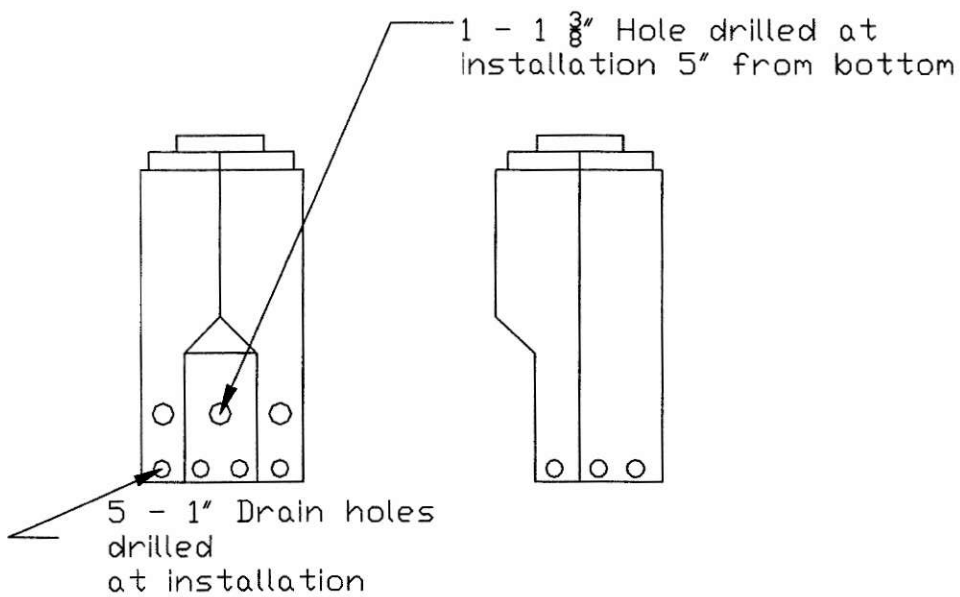
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MODULE GRID DETAIL

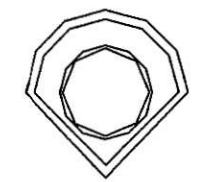
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PURAFLO PEAT BIOFILTER

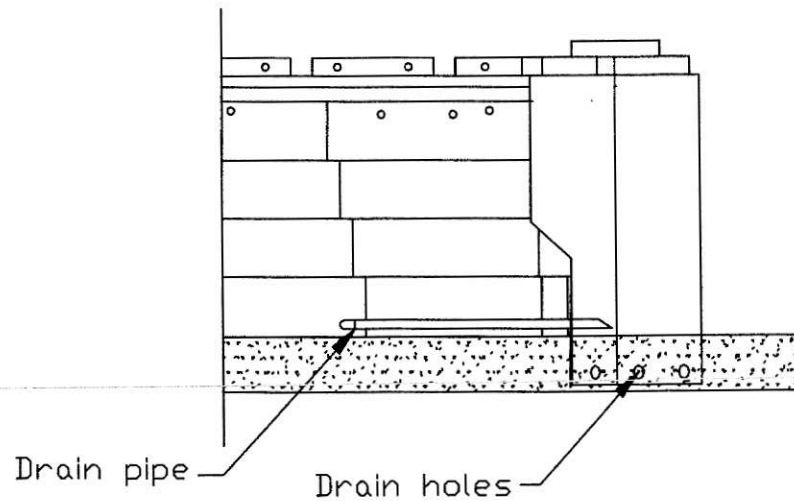
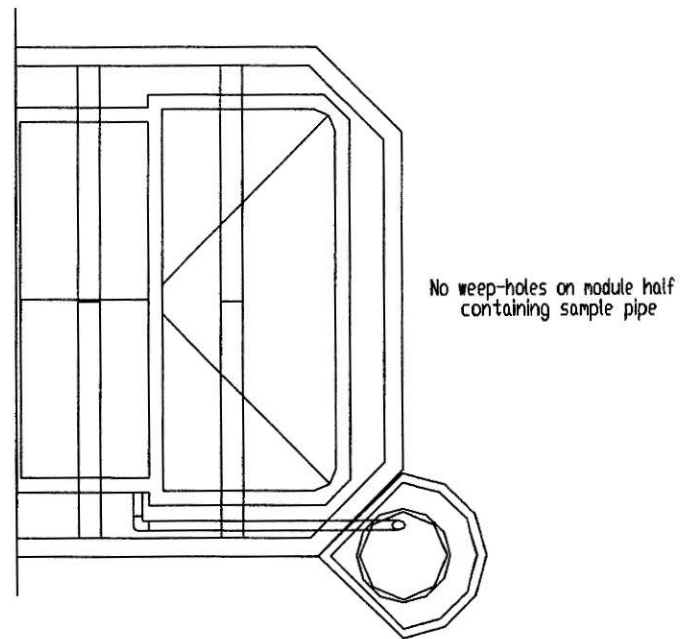


ELEVATIONAL VIEW

END VIEW



PLAN VIEW



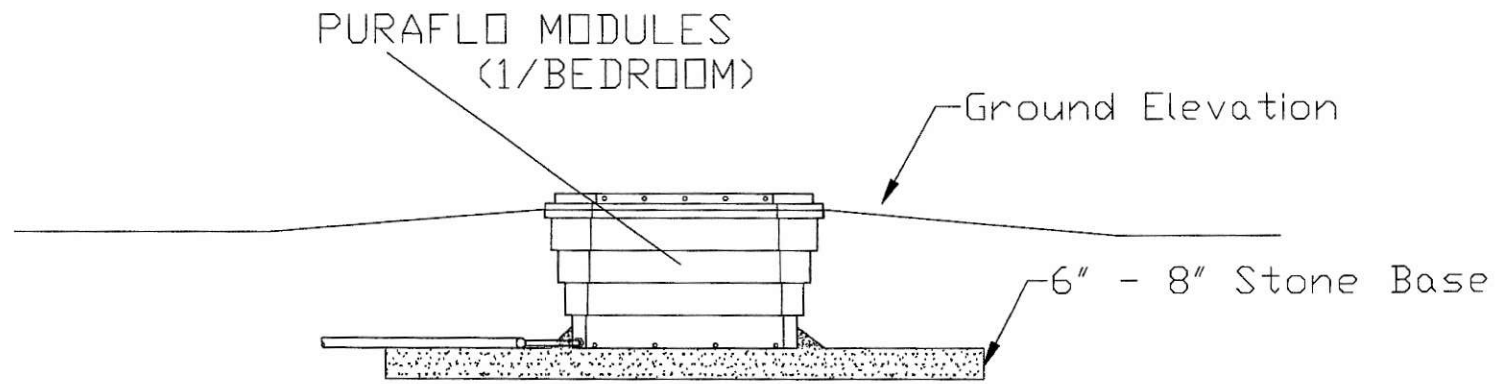
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Drawing Title:
SAMPLE CHAMBER DETAIL

Project Reference:
PURAFLU PEAT BIOFILTER

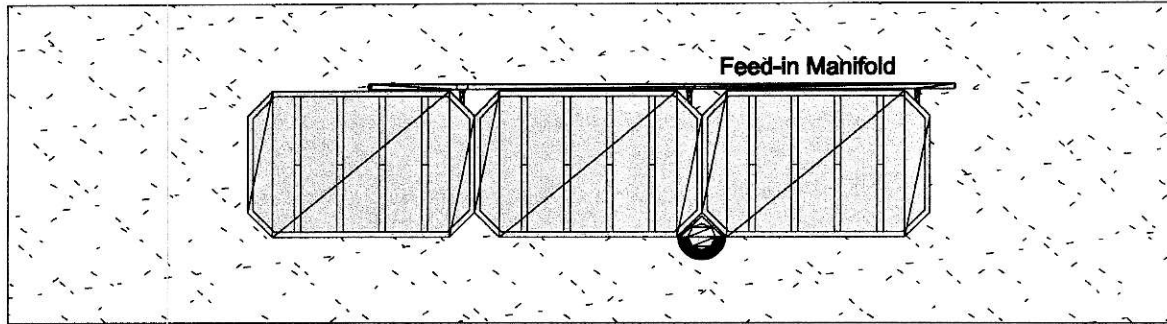
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TREATED EFFLUENT CAN PERCOLATE
TO SOIL OR DISCHARGE TO DRAIN
OR OTHER DISPERSAL METHOD

Puraflo Sectional View

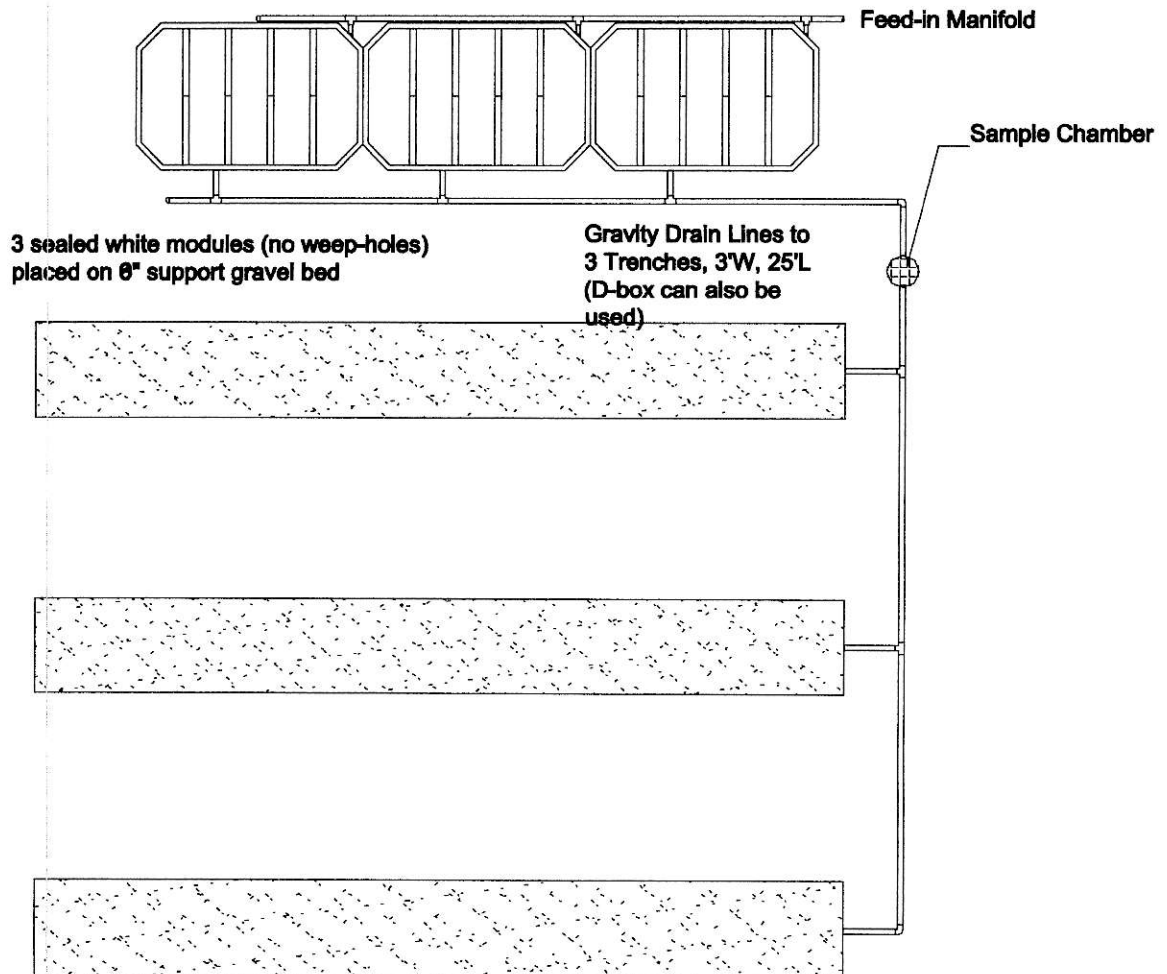
PAD DISPOSAL METHOD - TYPE A



3 Treatment Modules, two blue modules with weep holes and one green sampling module, drain into a 10' by 36' Pad

Pad dimensions can be selected to match site conditions and modules can be installed side by side as well as end to end (as shown above)

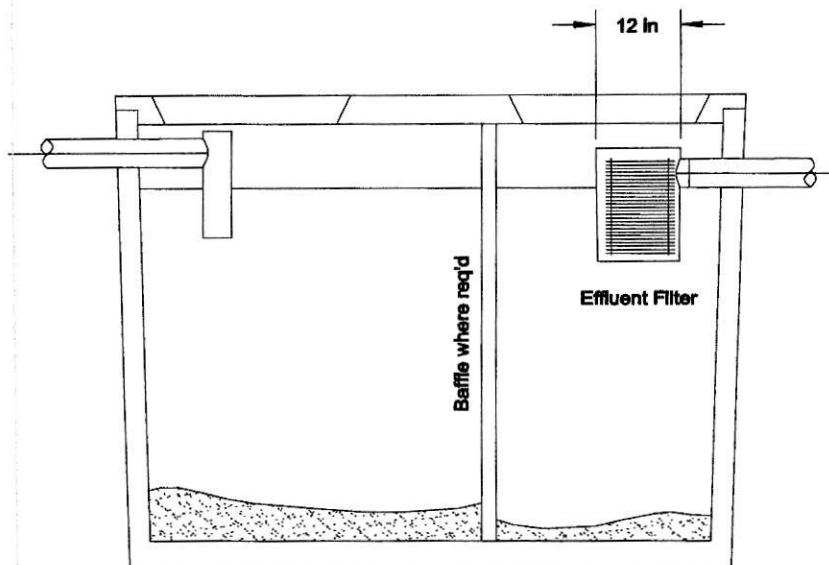
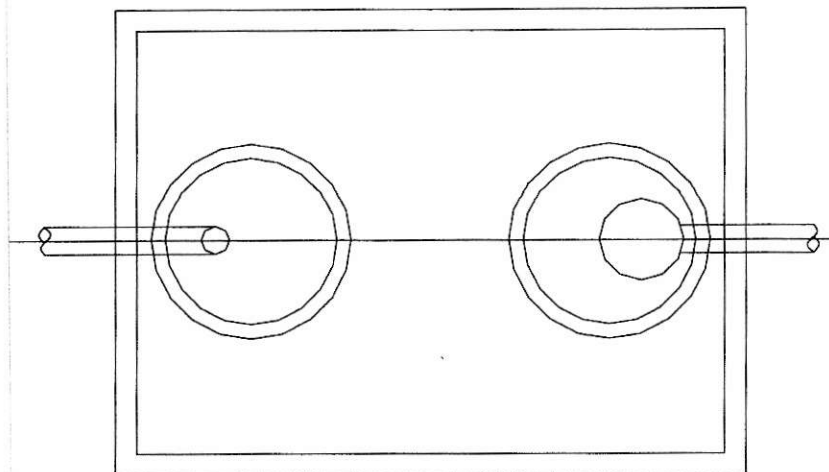
TRENCH DISPOSAL METHOD - TYPE B



3 sealed white modules (no weep-holes) placed on 0" support gravel bed

Gravity Drain Lines to 3 Trenches, 3'W, 25'L (D-box can also be used)

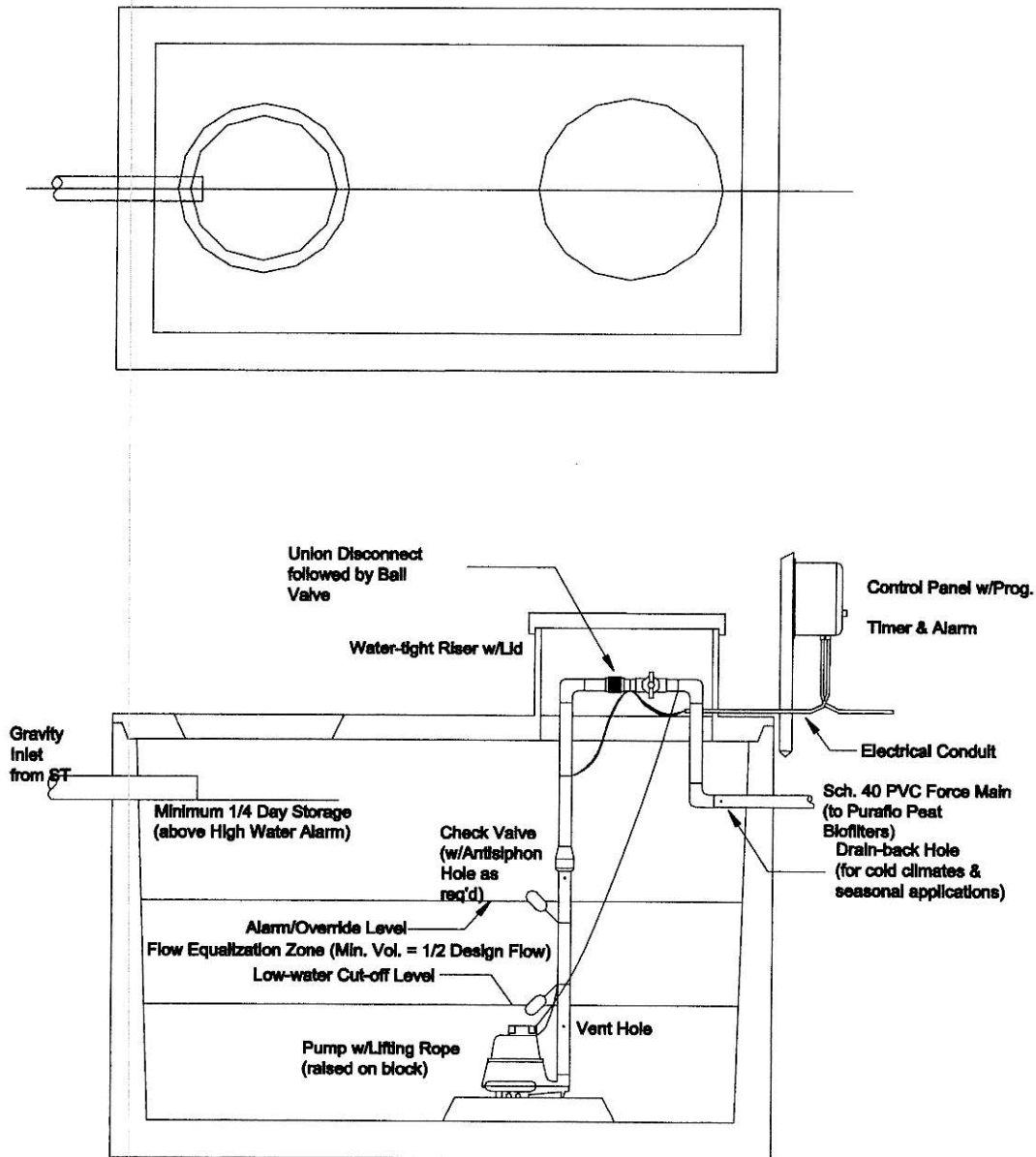
Sample Chamber



PURAFLO PEAT BIOFILTER

TYPICAL SEPTIC TANK DETAIL
(dimensions, construction and installation should conform to applicable local and state regulations)

PURAFLO PEAT BIOFILTER



TYPICAL PUMP TANK DETAIL
(dimensions, construction and installation should conform to applicable local and state regulations)

"QUALITY PUMPS SINCE 1939"



SECTION: 2.20.040
FM0411
0807
Supersedes
1204

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

MAIL TO: P.O. BOX 16347 • Louisville, KY 40256-0347
SHIP TO: 3649 Cane Run Road • Louisville, KY 40211-1961
(502) 778-2731 • 1 (800) 928-PUMP • FAX (502) 774-3624

visit our web site:
www.zoeller.com

COMPARE THESE FEATURES

- Castings - Model 137, all cast iron ASTM class 25, 25000# tensile strength. Model 139, all bronze.
- Non-Clogging vortex impeller design.
- Corrosion resistant powder coated epoxy finish.
- Float operated 2-pole mechanical switch. (Automatic units only)
- Durable cast construction. Cast switch case, motor and pump housing, base and impeller. No sheet metal parts to rust or corrode.
- Motor - 60 Hz, 1725 RPM, oil-filled, hermetically sealed, automatic reset thermal overload protected (1 Ph).
- Upper and lower sleeve bearings running in bath of oil.
- Carbon and ceramic shaft seal.
- Stainless steel screws, bolts, handle, guard, and arm and seal assembly.
- UL Listed 3-wire neoprene cord and plug. 10 ft. standard for automatic. 15 ft. standard for nonautomatic.
- Maximum temperature for effluent or dewatering—130°F - 54°C (Extra Duty 140°F - 60°C).
- Passes 5/8 inch spherical solids.
- No screens to clog.
- 1½" NPT Discharge. (1½" x 2" PVC adapter fitting included with BN and BE models).
- On point—10". Off point—2¾".

AVAILABLE SYSTEMS:
SIMPLEX AND DUPLEX SYSTEMS
PACKAGED SYSTEMS
VARIABLE LEVEL CONTROL SYSTEMS
DESIGNED FOR HEAVY DUTY EFFLUENT APPLICATIONS

Note: The sizing of effluent systems normally requires variable level float(s) controls and properly sized basins to achieve reliable pumping cycles or dosing timers with nonautomatic pumps.


COMMONWEALTH OF VIRGINIA
Authorized Onsite Sew Evaluator


137 Cast Iron Series
139 Bronze Series

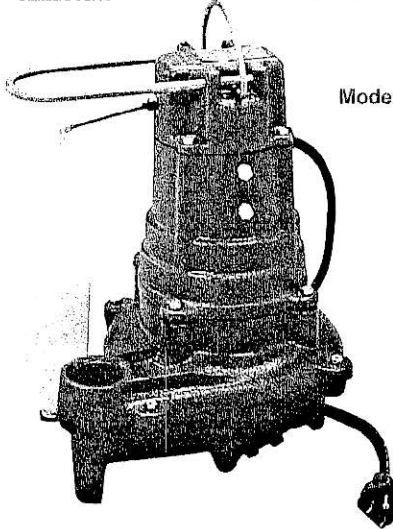
(For Pump Prefix Identification see News & Views 0052)

"FLOW-MATE"
FOR SEPTIC TANK - LOW PRESSURE PIPE (LPP)
AND ENHANCED FLOW STEP SYSTEMS

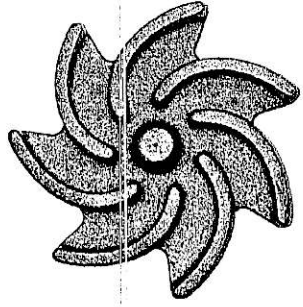
EFFLUENT
OR DEWATERING PUMPS
SUBMERSIBLE
1½" NPT DISCHARGE


Tested to UL Standard UL778



SSPMA Specification Number 137 Series SC2225 139 Series SB1115

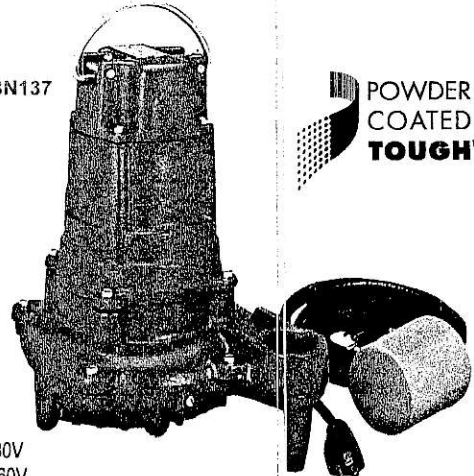


Model M137




Vortex Type Impeller


Certified to CSA Standard C22.2 No.108



Model BN137

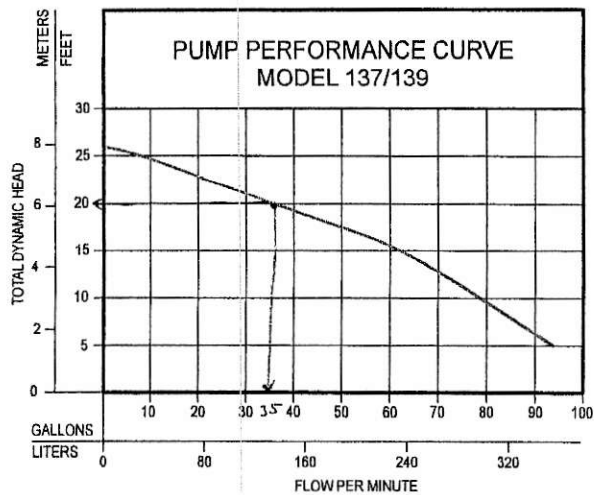


MODELS AVAILABLE

- Automatic
- Nonautomatic
- ½ HP, 1 Ph, 115V, 200-208V or 230V
- ½ HP, 3 Ph, 200-208V, 230V, or 460V

* NOTE: See back page for UL & CSA Listings.

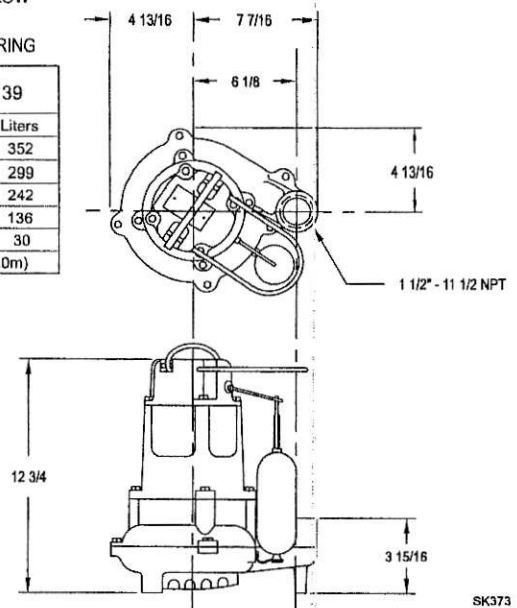
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TOTAL DYNAMIC HEAD/FLOW PER MINUTE EFFLUENT AND DEWATERING

MODEL		137/139	
Feet	Meters	Gal.	Liters
5	1.5	93	352
10	3.0	79	299
15	4.6	64	242
20	6.1	36	136
25	7.6	8	30
Shut-off Head:		26 ft.(8.0m)	

009921



SK373

CONSULT FACTORY FOR SPECIAL APPLICATIONS

- Three phase pumps are available in 200/208V, 230V or 460V.
- Electrical alternators, for duplex systems, are available and supplied with an alarm.
- Mechanical alternators, for duplex systems, are available with or without alarm switches.
- Simplex Panels are available for 3 phase pumps.
- Control alarm systems are available for 1 phase pumps.

- Variable level control switches are available for controlling single and three phase systems.
- Double piggyback variable level float switches are available for variable level long cycle controls.
- Over 130°F (54°C) special quotation required.
- Refer to FM1922 and FM0806 for temperatures over 130°F.

137 Series - 47 lbs. 139 Series - 51 lbs.

Single Seal Model	Control Selection					Listings	
	Volts-Ph	Mode	Amps	Simplex	Duplex	CSA	UL
M137/139	115	1	Auto	10.7	1	4	Y Y
N137/139	115	1	Non	10.7	2 or 3	2 or 4	Y Y
** BN137	115	1	Auto	10.7	**	4	Y Y
D137/139	230	1	Auto	5.8	1	4	Y Y
E137/139	230	1	Non	5.8	2 or 3	4	Y Y
* H137/139	200-208	1	Auto	6.2	3	4	Y N
* I137/139	200-208	1	Non	6.2	3	4	Y N
* J137/139	200-208	3	Non	2.6	3	4	Y Y
* F137/139	230	3	Non	2.6	3	4	Y Y
* G137	460	3	Non	1.4	3	4	N N
* G139	460	3	Non	1.4	3	4	N N

* No molded plug **Single piggyback switch included.

Pumps must be operated in upright position.

Three phase units require a control switch to operate an external magnetic contactor.

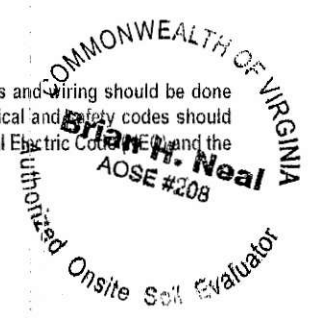
For information on additional Zoeller products refer to catalog on Piggyback Variable Level Float Switches, FM0477; Electrical Alternator, FM0486; Mechanical Alternator, FM0495; Alarm Package, FM0732; and Sump/Sewage Basins, FM0487.

SELECTION GUIDE

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

CAUTION

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



RESERVE POWERED DESIGN

For unusual conditions a reserve safety factor is engineered into the design of every Zoeller pump.



www.zoeller.com



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Louisville, KY 40256-0347
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Louisville, KY 40211-1961
(502) 778-2731 • 1 (800) 928-PUMP
FAX (502) 774-3624

Manufacturers of..

"QUALITY PUMPS SINCE 1939"

Panel Wiring Diagram

Model S10PT

ONLINE WEALTH OF VIRGINIA
 Brian H. Neal
 AOSE #208
 Onsite Soil Evaluator



Orenco Systems
 Incorporated

814 AIRWAY AVENUE
 SUTHERLIN, OREGON
 97479 9012

TELEPHONE:

(541) 459-4449

FACSIMILE:

(541) 459-2884

Simplex Operation

High Level Alarm: This float activates the alarm light and audible alarm when lifted. The audible alarm may be silenced by pressing the illuminated PUSH TO SILENCE button on the front of the control panel. The alarm light will remain on until the float is lowered.

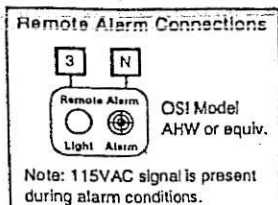
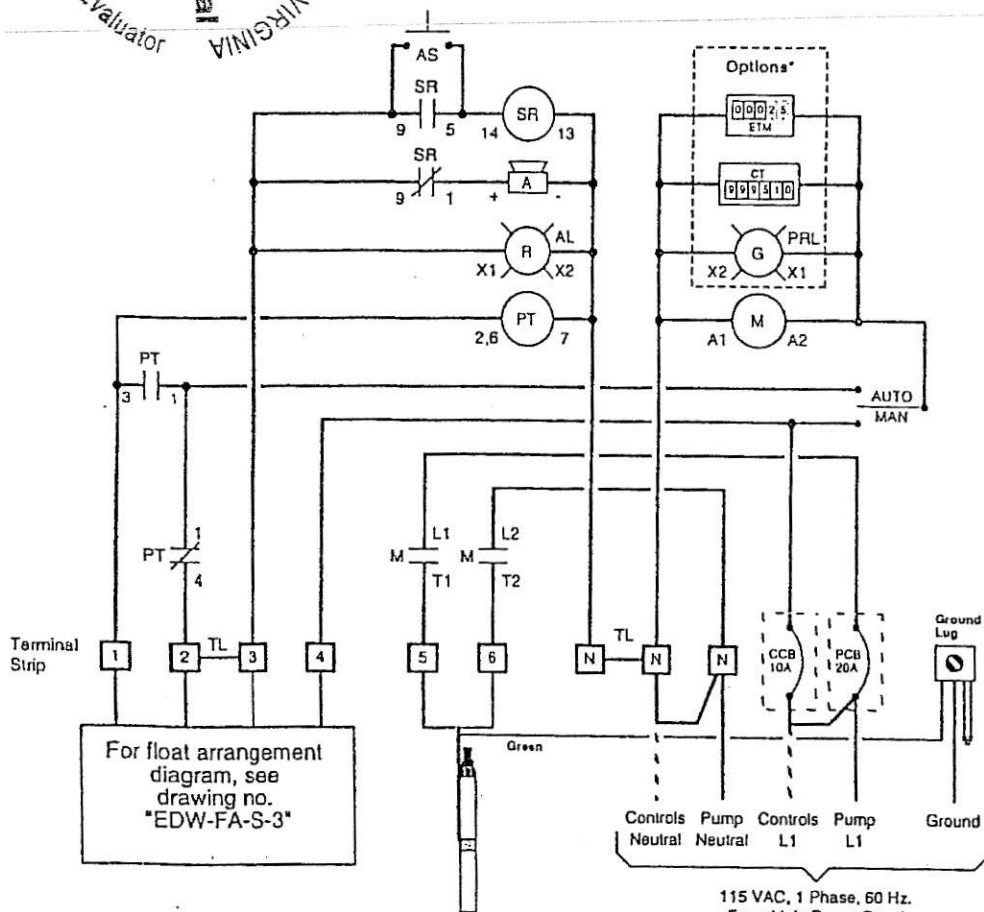
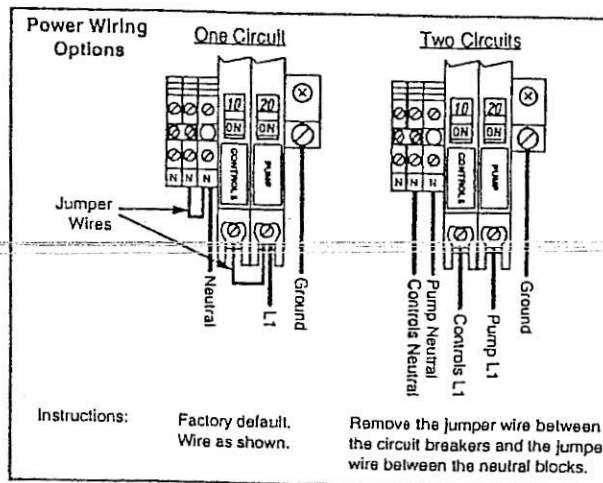
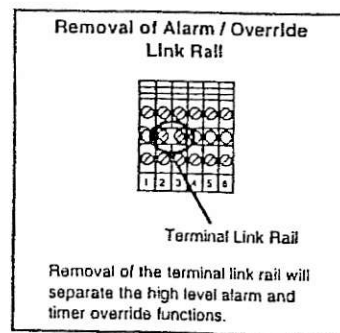
Timer Override On & Off: This float turns on the pump when lifted and off when lowered.

Timer On & Off: This float turns off the programmable timer when lowered. When this float is lifted the timer will be restarted. Note: The timer will start with its off cycle.

Programmable Timer: The timer turns the pump on and off in a pre-set cycle. Note: The timer will start with its off cycle.

Key.

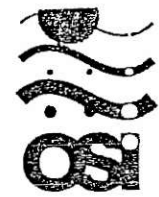
- = Factory Wire
 - - - = Field Wire
 - - - = Alternate Field Wire
 - A = Audio Alarm, 115 VAC
 - AL = Alarm Light
 - AS = Audio Silence Switch
 - CCB = Controls Circuit Breaker
 - M = Motor Contactor
 - PCB = Pump Circuit Breaker
 - PT = Programmable Timer
 - SR = Silence Control Relay (1P)
 - TL = Terminal Link
- *Options**
- ETM = Elapsed Time Meter
 - CT = Cycle Counter
 - PRL = Pump Run Light



Pump
 115 VAC / 3/4 Hp.
 1 Phase / 60 Hz.
 NOTE: Motors must have internal overload protection

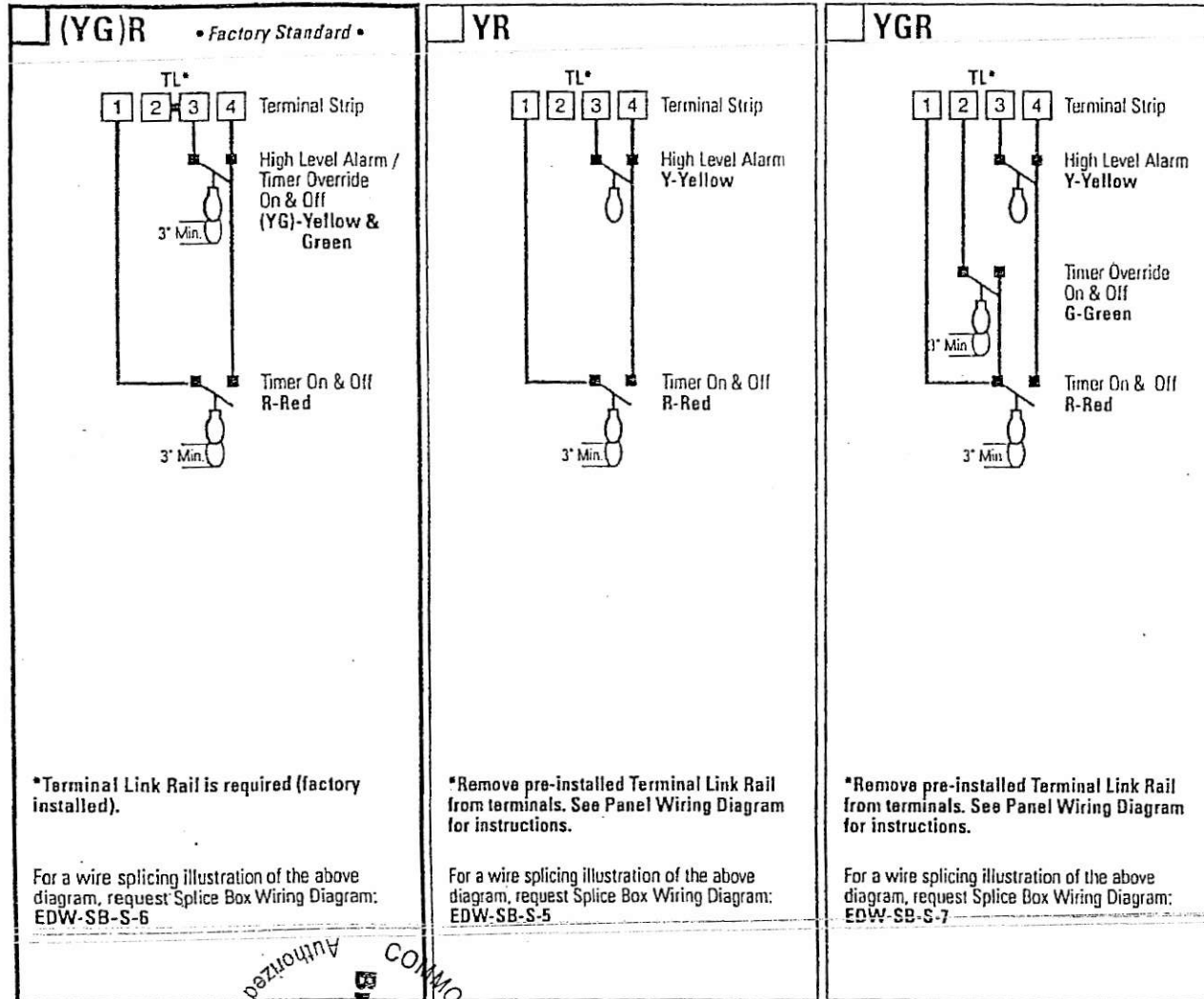
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Float Arrangement Diagram



Orenco Systems*
Incorporated

Check the appropriate box for the float function (color code) used in your system.



Float Types



■ Typical OSI float model: A
Specs: contact - normally open differential - no minimum power rating - signal
Possible substitutions: B,C,D



■ Typical OSI float model: B
Specs: contact - normally open differential - 3" min. power rating - signal
Possible substitutions: C,D



■ Typical OSI float model: T
Specs: contact - normally closed differential - no minimum power rating - signal

814 AIRWAY AVENUE
SUTHERLIN, OREGON
97479-9012

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FACSIMILE:
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Control Panel Series

S PT

Authorized Onsite
Evaluator
Brian H. Neal
AOSE #208
COMMONWEALTH OF VIRGINIA

Drawing No.

EDW-FA-S-3

EDW-FA-S-3
Rev 2.2 ©04/12/99

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**Addendum to AOSE/PE Certification Statement
For Private Well Construction Permit**

Instructions: Please check one box in 1-3 below. Statement templates for item #2 and #3 are on the following pages.

The proposed well site shown herein,

- 1. Is located a minimum of 50 feet from all property lines.
- 2. Is located within 50 feet of the adjacent property line(s) but I have determined that the adjacent property is not used for an agricultural operation.
 - i. Written affirmation from the adjacent property owner(s) that their property is not used for an agricultural operation.
 - ii. Other confirmation that land use is not an agricultural operation, please describe:
- 3. Is located within 50 feet of an adjacent property line where the property is used for an agricultural operation. For confirmation, I have attached the appropriate documentation pursuant to § 32.1-176.5:2 of the *Code of Virginia*. (check one below)
 - i. Written permission from the adjacent property owner(s) for the well construction.
 - ii. I certify that no other site on the property complies with the Board's Regulations for the construction of a private well.

