

15340 JUNE WASHAM RD

00743114

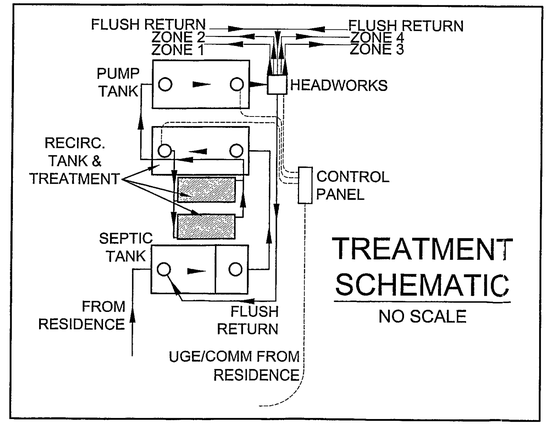
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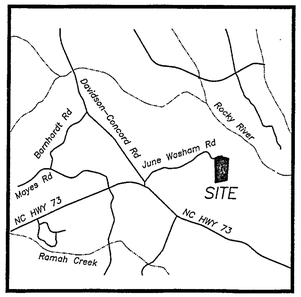
Groundwater and Wastewater Services File Imaging Project
May 2007
Barcode Font = IDAutomationHC39M

DESIGN NOTES:	
DESIGN FLOW:	720 G/D
LTAR:	0.10 G/D/SF
SEPTIC TANK SIZE:	2,000 GALLON (BAFFLED)
EFFLUENT FILTER:	OSI MODEL FTPS0444-28-NC
RECIRCULATION TANK SIZE:	2,000 GALLON (NON-BAFFLED)
ADVANCED TREATMENT:	(2) ORENCO ADVANTEX AX-20
RECIRCULATION PUMP:	ORENCO MODEL PF500511-30
DOSING TANK SIZE:	2,000 GALLON (NON-BAFFLED)
FIELD DOSING PUMP:	ORENCO MODEL PF100712-30
SUBSURFACE DISTRIBUTION:	GEOFLOW DRIP
NUMBER OF ZONES:	4
NO. OF LATERALS (Z-1):	5 LATERALS @ 900 LF TOTAL
NO. OF LATERALS (Z-2):	5 LATERALS @ 900 LF TOTAL
NO. OF LATERALS (Z-3):	6 LATERALS @ 900 LF TOTAL
NO. OF LATERALS (Z-4):	5 LATERALS @ 900 LF TOTAL

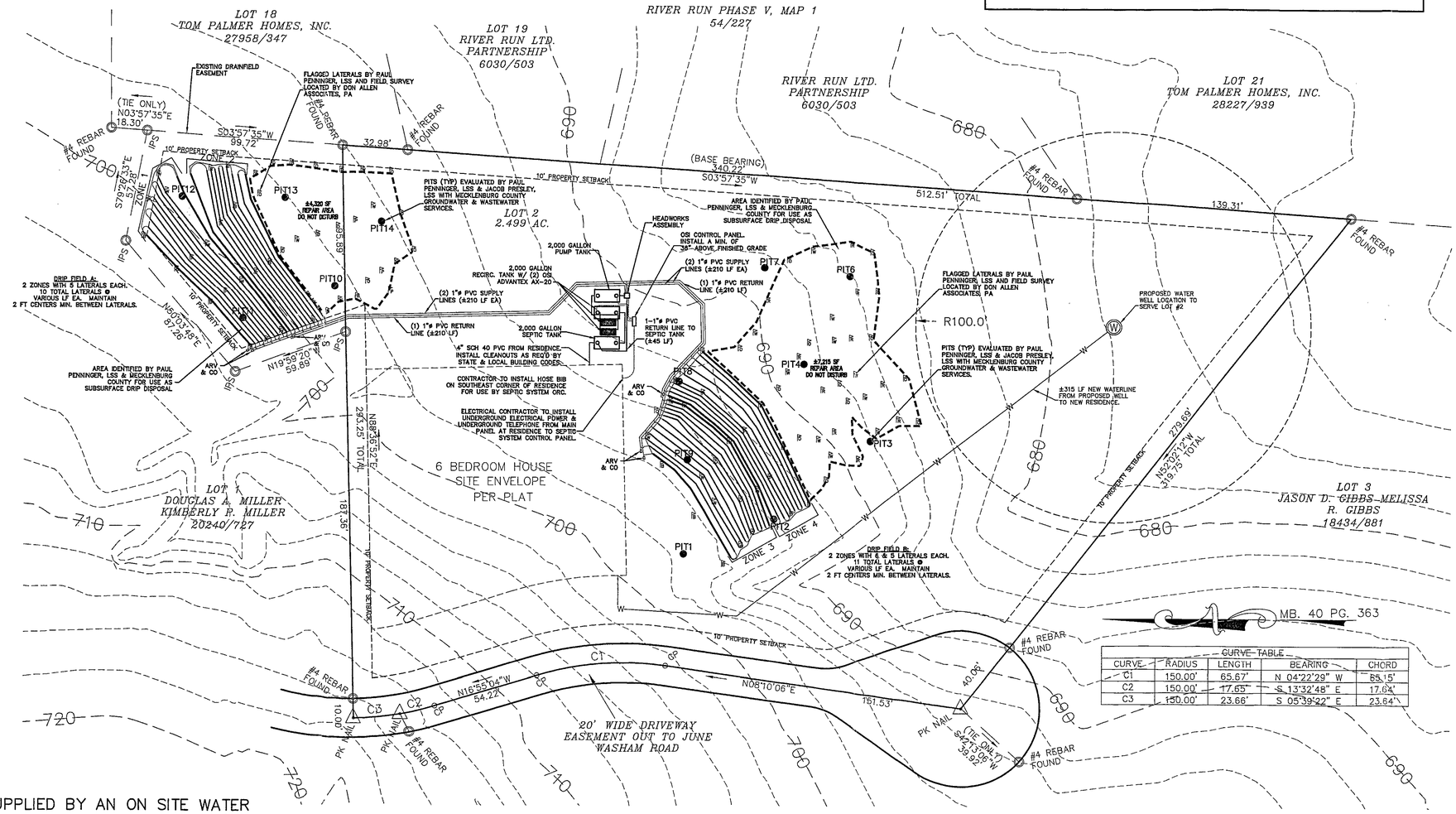
NOTES:
- REFER TO SHEET U-2 & U-3 FOR SYSTEM DETAILS & ELEVATIONS.
- PRIOR TO ANY CONSTRUCTION, BARRICADE ALL DISPOSAL AREAS FROM CONSTRUCTION TRAFFIC.
- HOSE BIB TO BE INSTALLED ON SIDE OF RESIDENCE IN VICINITY OF TANKS AND TREATMENT UNIT FOR USE BY ORC.
- CLEAR DRIP FIELD OF ALL DEBRIS, LIMBS, ETC.
- TANKS ARE TO BE INSTALLED UNDER DRIVEWAY OR IN POTENTIAL TRAFFIC AREAS, H-20 RATED TANKS SHALL BE USED. LIGHTLY HAND SMOOTH ANY IRREGULAR SURFACES. PRIOR TO INSTALLATION OF DRIPLINES, ENSURE THAT DISPOSAL AREA IS CAPABLE OF SHEDDING RAINWATER AND FREE OF ANY LOW AREAS
- SEED ALL DISPOSAL AREAS.
- MAINTAIN 2' MINIMUM SEPARATION ON ALL DRIP LINES
- OBSERVE ALL SETBACKS.
- AREA IS AVAILABLE FOR REPAIR AND SHALL REMAIN UNDISTURBED
- BOUNDARY SURVEY & LATERAL LOCATIONS PROVIDED BY DON ALLEN & ASSOCIATES, PA. TOPOGRAPHIC DATA PROVIDED BY MECKLENBURG COUNTY GIS DATA.



TREATMENT SCHEMATIC
NO SCALE



VICINITY MAP
NO SCALE



Field A		Field B	
156		136	
170		148	
182	Zone 1	150	Zone 3
194		150	
198		158	
900	Zone 1 Total	158	
182		900	Zone 3 Total
182		172	
182	Zone 2	180	Zone 4
182		180	
172		184	
900	Zone 2 Total	184	
		900	Zone 4 Total

NOTE:
LATERAL LENGTHS ARE FROM HIGHER ELEVATION TO LOWER ELEVATION

CURVE TABLE				
CURVE	RADIUS	LENGTH	BEARING	CHORD
C1	150.00'	65.67'	N 04°22'29" W	65.15'
C2	150.00'	17.65'	S 13°32'48" E	17.64'
C3	150.00'	23.66'	S 05°39'22" E	23.64'

NOTE:
WATER IS SUPPLIED BY AN ON SITE WATER SUPPLY WELL LOCATED MORE THAN 100' FROM ANY SEPTIC SYSTEM COMPONENT.

-REFER TO SPECIFICATION PACKAGE FOR MATERIALS SELECTION AND INSTALLATION REQUIREMENTS
-REFER TO SHEET U-2 & U-3 FOR TREATMENT PLAN/PROFILE, INSTALLATION DETAILS & ELEVATIONS

Know what's below. Call before you dig.

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

PUBLICATION OR REUSE OF THESE DRAWINGS OR ANY DETAILS WITHIN MUST BE WITH THE WRITTEN CONSENT OF PIEDMONT DESIGN ASSOCIATES, P.A.

Location: Owner: Approved: Date of Issue:

PIEDMONT DESIGN
ENGINEERING/SURVEYING/PLANNING
Associates, P.A.
Suite 101 Westfield Center, 125 East Plaza Drive
Mooresville, North Carolina 28115
Phone:(704) 664-7888 Fax:(704) 664-1778 www.pdapa.com
NCBELS License #: C-1007

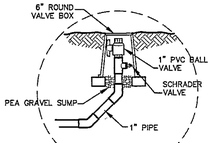
PREPARED FOR:
PLATTNER CUSTOM BUILDERS, LLC
PO BOX 2603
DAVIDSON, NC 28036
(704) 363-6005

SUBSURFACE DRIP SEPTIC SYSTEM SITE PLAN
6 BEDROOM RESIDENCE
LOT 2 COMBRAY WOODS SUBDIVISION
HUNTERSVILLE, MECKLENBURG Co., NORTH CAROLINA

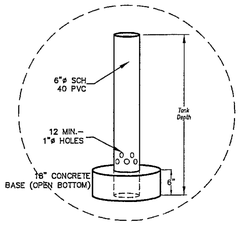
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 036362 DONALD L. MARTIN

REVISIONS	BY

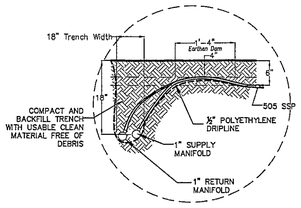
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Checked: DLM
Project: 2013-06-03
Job: 2013-06-03
Sheet U-1
of 3 Sheets



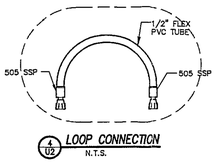
1/U2 CLEAN OUT DETAIL
N.T.S.



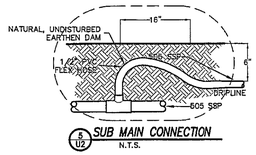
3/U2 PUMP VAULT DETAIL
N.T.S.



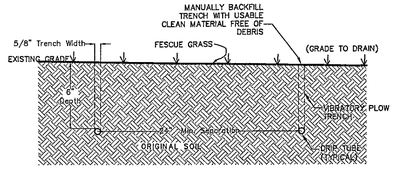
2/U2 DRIP FIELD MANIFOLD DETAIL
N.T.S.



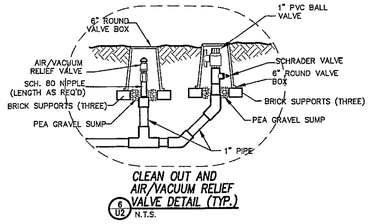
4/U2 LOOP CONNECTION
N.T.S.



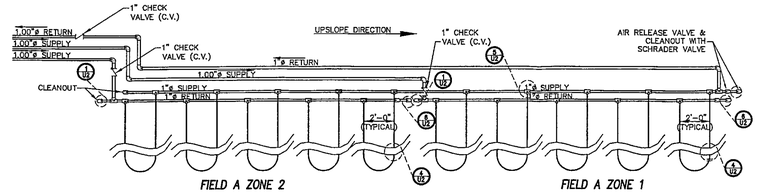
5/U2 SUB MAIN CONNECTION
N.T.S.

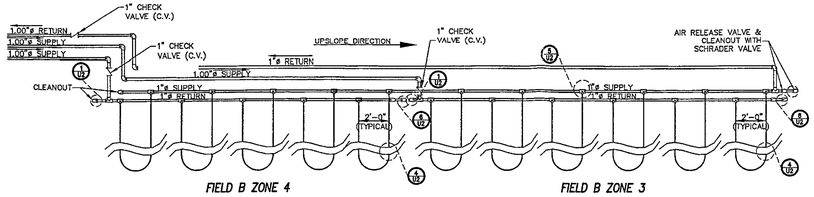


SECTION THRU DRIP LINES



CLEAN OUT AND AIR/VACUUM RELIEF VALVE DETAIL (TYP.)
6/U2 N.T.S.

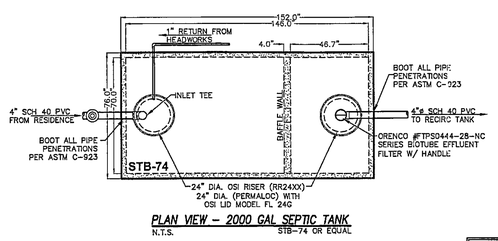




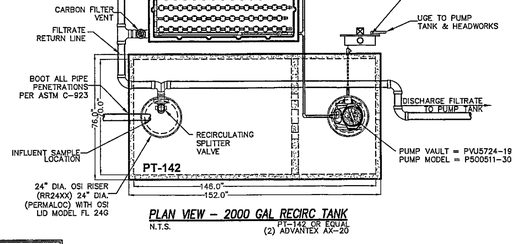
DRIP FIELD
FOUR ZONE DRIP FIELD (5 LATERALS EA, ONE WITH 8) WITH A TOTAL OF 3,600 LF OF TUBING W/ EMITTERS SPACED @ 24" CTS. EACH WAY. SEE SITE PLAN FOR DRIP FIELD LAYOUT

DRIP FIELD LAYOUT
N.T.S.

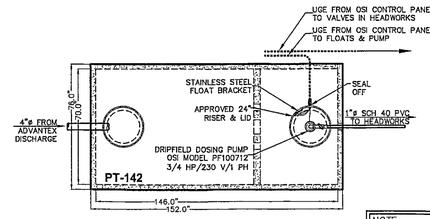
SEE SHEET U–1
FOR SYSTEM LAYOUT



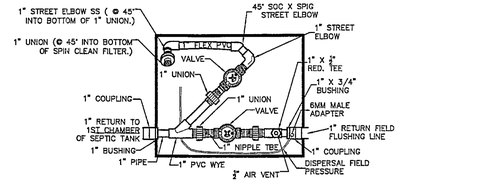
PLAN VIEW – 2000 GAL SEPTIC TANK
N.T.S. STB-74 OR EQUAL



PLAN VIEW – 2000 GAL RECIRC TANK
N.T.S. PT-142 OR EQUAL (2) ADVANTEX AX–20



PLAN VIEW – 2000 GAL PUMP TANK
N.T.S. PT-142 OR EQUAL



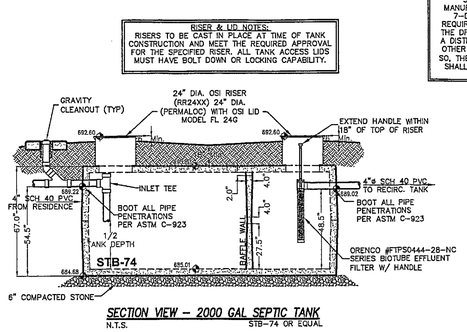
PLAN VIEW – HEADWORKS
N.T.S. BOTTOM LAYER

NOTE:
MINIMUM DEPTH OF VALVES IN PROTECTIVE VAULTS OR BOXES SHALL BE AT LEAST 18 INCHES BELOW GRADE.

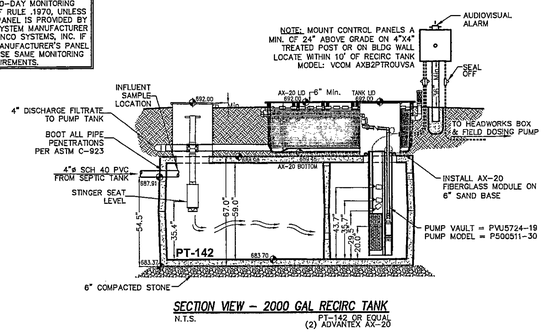
NOTE:
ALL METAL INSTALLED IN TANKS SHALL BE STAINLESS STEEL

RISER & LID NOTES:
RISERS TO BE CAST IN PLACE AT TIME OF TANK CONSTRUCTION AND MEET THE REQUIRED APPROVAL FOR THE SPECIFIED RISER. ALL TANK ACCESS LIDS MUST HAVE BOLT DOWN OR LOCKING CAPABILITY.

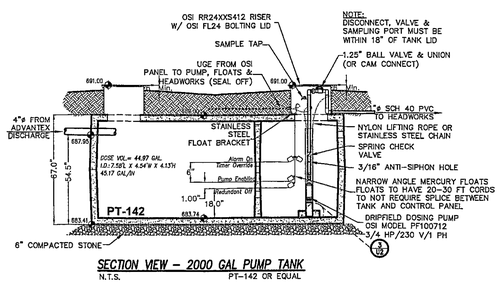
ORENCO SYSTEMS, INC. CONTROL PANEL SHALL BE PROVIDED BY THE MANUFACTURER AND MEET THE DAILY, 7–DAY AND 30–DAY MONITORING REQUIREMENTS OF RULE .1970, UNLESS THE DRAINFIELD PANEL IS PROVIDED BY A DISTRIBUTION SYSTEM MANUFACTURER OTHER THAN ORENCO SYSTEMS, INC. IF SO, THE OTHER MANUFACTURER'S PANEL SHALL MEET THESE SAME MONITORING REQUIREMENTS.



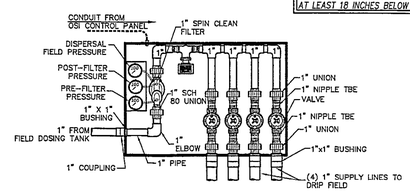
SECTION VIEW – 2000 GAL SEPTIC TANK
N.T.S. STB-74 OR EQUAL



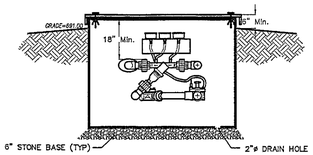
SECTION VIEW – 2000 GAL RECIRC TANK
N.T.S. PT-142 OR EQUAL (2) ADVANTEX AX–20



SECTION VIEW – 2000 GAL PUMP TANK
N.T.S. PT-142 OR EQUAL



PLAN VIEW – HEADWORKS
N.T.S. MODEL NO. WHWS–V–1F–A



SECTION VIEW – HEADWORKS
N.T.S. MODEL NO. WHWS–V–1F–A

TANK ELEVATIONS

NOTE: TANK DIMENSIONS & ELEVATIONS BASED ON DELLINGER PRECAST COMPANY, INC. (704–463–2868). OTHER STATE APPROVED TANKS MAY BE SUBSTITUTED BUT NOT WITHOUT PRIOR APPROVAL FROM THE ENGINEER. CONTRACTOR SHALL VERIFY DIMENSIONS AND ADJUST GRADES AND FLOAT SETTINGS AS REQUIRED TO CAUSE FLOW AND DOSING AS CALLED FOR. TANKS SHALL NOT BE PUMPED DURING EXTREMELY WET CONDITIONS.

REFER TO SPECIFICATION PACKAGE FOR MATERIALS SELECTION AND INSTALLATION REQUIREMENTS

Location: PUBLICATION OR REUSE OF THESE DRAWINGS OR ANY DETAILS WITHIN MUST BE WITH THE WRITTEN CONSENT OF PIEDMONT DESIGN ASSOCIATES, P.A. Owner: _____ Approved: _____ Date of Issue: _____

PIEDMONT DESIGN
ENGINEERING/SURVEYING/PLANNING
Associates, P.A.
Suite 101 Westfield Center, 125 East Plaza Drive
Mooresville, North Carolina 28115
Phone:(704) 664-7888 Fax:(704) 664-1778 www.pdapa.com
NCBELS License #: C-1007

PREPARED FOR:
PLATTNER CUSTOM BUILDERS, LLC
PO BOX 1838
DAVIDSON, NC 28036
(704) 363–6005

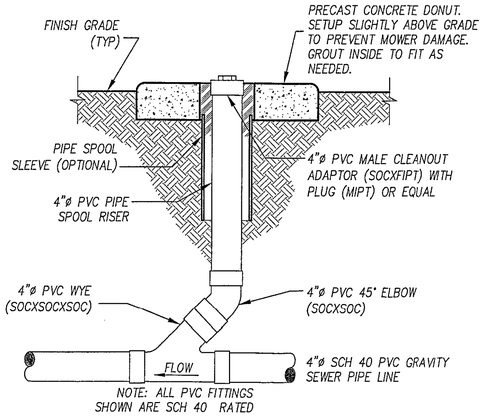
SUBSURFACE DRIP SEPTIC SYSTEM DETAILS
6 BEDROOM RESIDENCE
LOT 2 COMBRAY WOODS SUBDIVISION
DENVER, LINCOLN COUNTY, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 17221 DONALD L. MARTIN

REVISIONS	BY

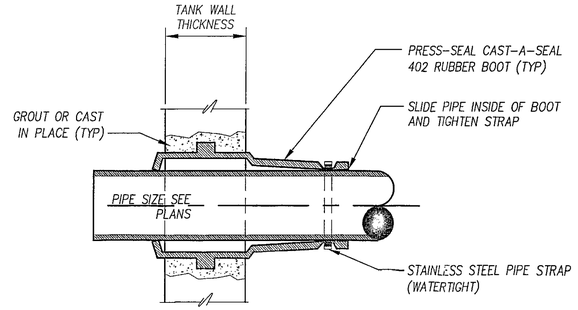
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AS SHOWN
Drawn: DMD
Checked: DLM
Project: 2013–06–03
Job: 2013–06–03
Sheet U–2
of 3 Sheets

I:\Projects\2013\3 Sites Studio\2013-06-03 Plattner Dwelling Style\Acad\U-2.dwg, Layout1, 6/14/2013 1:54:07 PM, Donald Martin, \\PIEDMONTSERVER\HP Photosmart Premium C309a-m (Network)



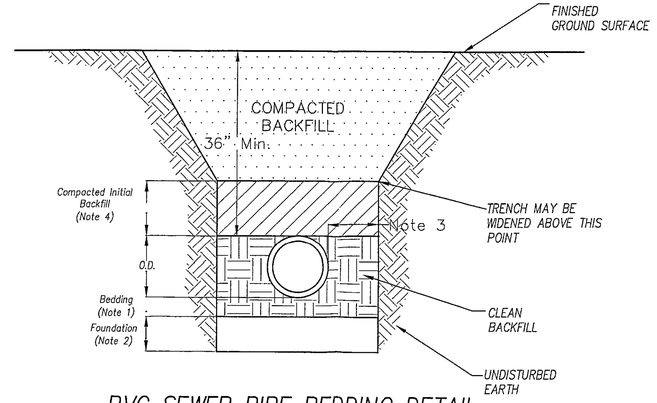
GRAVITY CLEANOUT

SCALE: NTS



STANDARD PIPE PENETRATIONS

SCALE: NTS



PVC SEWER PIPE BEDDING DETAIL

N.T.S.

TRENCH NOTES:

1. 4" TYPICAL, 6" DEPTH IF IN ROCK
2. FOUNDATION STONE REQUIRED WHEN SOIL CONDITIONS ARE UNSTABLE
3. CLEAR DISTANCE NOT LESS THAN 6" OR MORE THAN 12" ON EITHER SIDE
4. INITIAL BACKFILL SHALL BE PLACED IN 6" LIFTS AND COMPACTED. INITAL BACKFILL SHALL CONTAIN NO BACKFILL OVER 1.5" , FROZEN LUMPS OR DEBRIS.
5. BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY
6. PVC PIPE SHALL BE SCH 40 PVC
7. DETAIL SHALL BE USED FOR ALL TRANSPORT PIPING TO AND FROM DISPOSAL AREA

Submittal Data Sheet

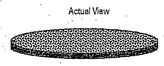
Fiberglass Access Lids

Orenco Systems® Incorporated 1-800-348-9843

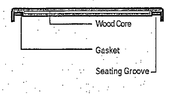
Applications

Orenco Fiberglass Access Lids are used as riser covers, pump basin covers, and access port covers. Lids fit "Perma-Loc," "Ultra-Rib," and KOR FLO type pipe.

Actual View



Cutaway View



General

Orenco Fiberglass Access Lids are molded using fiberglass reinforced polyester resin encapsulating a wood core. The finish is green and the top surface is textured to provide a nonskid surface. (Gasketed lids include a polyurethane gasket or EPDM o-ring, which is cast-in). Lid comes with either two or four 1/4" stainless steel flathead socket cap screws and a hex key wrench. Orenco Fiberglass Access Lids are capable of supporting a 2500 lb. wheel load; however, they are not designed or recommended for vehicular traffic.

Standard Models

FL18G-4BU, FL21G, FL24G, FL24-4B, FL24G-4BK, FL30G, FL48G

Nomenclature

FL 24 G4BU

- FL = Fiberglass lid
- 18 = Diameter: 18", 21", 24", 30", 48"
- G = gasket
- V = vent
- CF = carbon filter
- I2 = 2" insulation
- I4 = 4" insulation
- 4B = 4 bolt hole lid for Perma-Loc/Ultra-Rib pipe (24" only)
- 4BU = 4 bolt hole lid for Ultra-Rib pipe (18" only)
- 4BK = 4 bolt hole lid for KOR FLO pipe

Indicates options:

Specifications

Dimensions	Model FL18	Model FL21	Model FL24	Model FL30	Model FL48
O.D. (in.)	20.0	22.5	26.25	32.0	53.875
Groove I.D. (in.)	17.5	20.75	23.5	29.5	47.5
Avg. Thickness (in.)	0.625	1.0	0.75	1.25	1.5

Options Available

Feature	Model Code Adder	Optional/Standard
Air Vent	V	Optional
Carbon Filter*	CF	Optional
Lid Insulation†	I2 or I4	Optional

*For more information on this option, refer to the Carbon Filters submittal data sheet, NSU-RLA-CF-1.

†Blue styrofoam; R-value per 2" increment is 10.

Materials of Construction

Fiberglass Reinforced Polyester
Wood Core
EPDM or Polyurethane Gasket

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NSU-RLA-FL-1
Rev. 5.1, 8-11-09
Page 1 of 1

Technical Data Sheet

Access Risers – Ultra-Rib™

Orenco Systems® Incorporated 1-800-348-9843

Applications

Orenco's Access Risers provide access to septic tank openings and can be cast into the tops of concrete tanks, bonded in place, or bolted down using a riser tank adaptor. They can also be used as valve enclosures



General

Orenco Ultra-Rib™ Access Risers are constructed of ribbed PVC pipe and are available in 12", 18", 21", and 24" diameters. They can be ordered in 9-inch increments in lengths up to 13 ft for 12" and 18" diameter risers, and up to 14 ft for 21" and 24" diameter risers

Standard Models

RR12XX, RU18XX, RR21XX, RR24XX

Nomenclature

R R 24 □ + □ + □

- Riser
- Bottom end: U = Ultra-Rib™ 18"; R = Ultra-Rib™ 18", 21", 24"
- Riser height (inches)
- Riser diameter: 12", 18", 21", 24"
- Splice Req.: S = 1" grommet installed (for Orenco SDR 35 – ST04 splice joints); L = 1-1/4" grommet installed (for Orenco SDR, ST04 splice joints); 01 = ST01 attached; 02 = ST02 attached; 03 = ST03 attached; 04 = ST04 attached; 05 = ST05 attached; 06 = ST06 attached; 07X = Predrilled hole for external splice box*; 07S = Explosion-proof splice box for simplex pumps†; 07D = Explosion-proof splice box for duplex pumps†; 07T = Explosion-proof splice box for triplex pumps†
- Discharge grommet: 10 = 1"; 12 = 1-1/4"; 15 = 1-1/2"; 20 = 2"

* Minimum riser height 18"
† Used in Quad 7 Division 5 environments
‡ Not intended for use over pump vaults

Materials of Construction

Ultra-Rib™ PVC Pipe:	PVC

Specifications

Model	RR12XX	RU18XX	RR21XX	RR24XX
I.D.	11.74 in. (298 mm)	17.65 in. (448 mm)	20.5 in. (521 mm)	23.59 in. (567 mm)
Wall Thickness - excluding ribs	0.10 in. (3 mm)	0.19 in. (5 mm)	0.25 in. (6 mm)	0.20 in. (5 mm)
O.D. - including ribs	14.60 in. (371 mm)	19.44 in. (494 mm)	22.82 in. (575 mm)	28.59 in. (724 mm)
Weight per foot (meter)	5 lb (7.4 kg)	11 lb (16.4 kg)	15 lb (22.3 kg)	19 lb (28.3 kg)

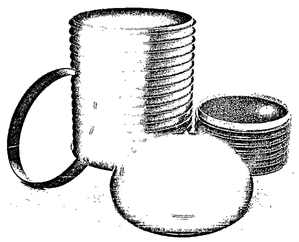
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RTD-RLA-RR 2
Rev. 5.0, 4-08
Page 1 of 1

Access Risers, Lids, & Accessories

Applications

Our fiberglass access lids, PVC risers, and other tank accessories allow tank access without excavation. They're adaptable to virtually any tank, both new and existing. Lids and accessories fit most types of ribbed PVC pipe, including Ultra-Rib, Ultra-Core, KOR FLO, and Perma-Loc. Preassembled risers and stock pipe lengths can be purchased from Orenco. Or stock lengths can be purchased locally and cut as needed. All components are designed to work well together.



Orenco's fiberglass access lids, risers, and other accessories are superior in quality, watertight, non-corroding, and lightweight yet strong. Custom imprinting is available on quantity orders of 24- and 30-in. diameter lids (610 and 760 mm).

To Order

Call your nearest Orenco Systems®, Inc. Distributor. For nearest Distributor, call Orenco at 800-348-9843, or visit www.orenco.com and click on "Distributor Locator."

APS-RLA-1
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Standard Features & Benefits

Fiberglass Lids

- Lids withstand 2500-lb wheel loads (1100 kg), stronger than any other lid on the market.
- While not designed for vehicular traffic, our lids have a breaking point greater than 8000 lb (3600 kg).
- Lids are fastened with stainless steel, tamper-resistant bolts (wrench included) to prevent accidental entry.
- Lids are an attractive green and blend in with landscaping. Custom colors and custom lid imprinting are available on quantity orders.
- Lids are flat to allow placement of backyard furnishings. No unsightly domes, no tripping.
- Lids are lightweight, watertight, non-skid, and non-corroding. Lid insulation and carbon filter vents are available options.
- Lids come in multiple diameters and are easy to install.

Risers & Accessories

- Risers come in various diameters and can be cast into a concrete tank, or bolted down with adapters.
- Adapter rings can also be cast right into a concrete tank.
- Risers and adapters can be easily bonded to fiberglass tanks with a structural adhesive.
- Grade rings allow installers to stack extensions onto risers in the field.
- Standard lengths in 6-in. (152-mm) increments are available, or custom risers can be cut in increments of 1-3 in. (25-76 mm), depending on diameter.
- Accessories such as adhesive, pipe grommets, cord grips, splice boxes, pipe cutting and drilling tools, insulation, vents, and fiberglass brackets are available.

Orenco Systems® Incorporated

Changing the Way the World Does Wastewater®

www.orenco.com

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SUBSURFACE DRIP SEPTIC SYSTEM DETAILS
6 BEDROOM RESIDENCE
LOT 2 COMBRAY WOODS SUBDIVISION
DENVER, LINCOLN COUNTY, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 036681 DONALD L. MCKENZIE

REVISIONS	BY

Date: 6/14/2013
Scale: 1"=30 FT AS SHOWN
Drawn: DMD
Checked: DLM
Project: 2013-06-03
Job: 2013-06-03
Sheet U-3
of 3 Sheets

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