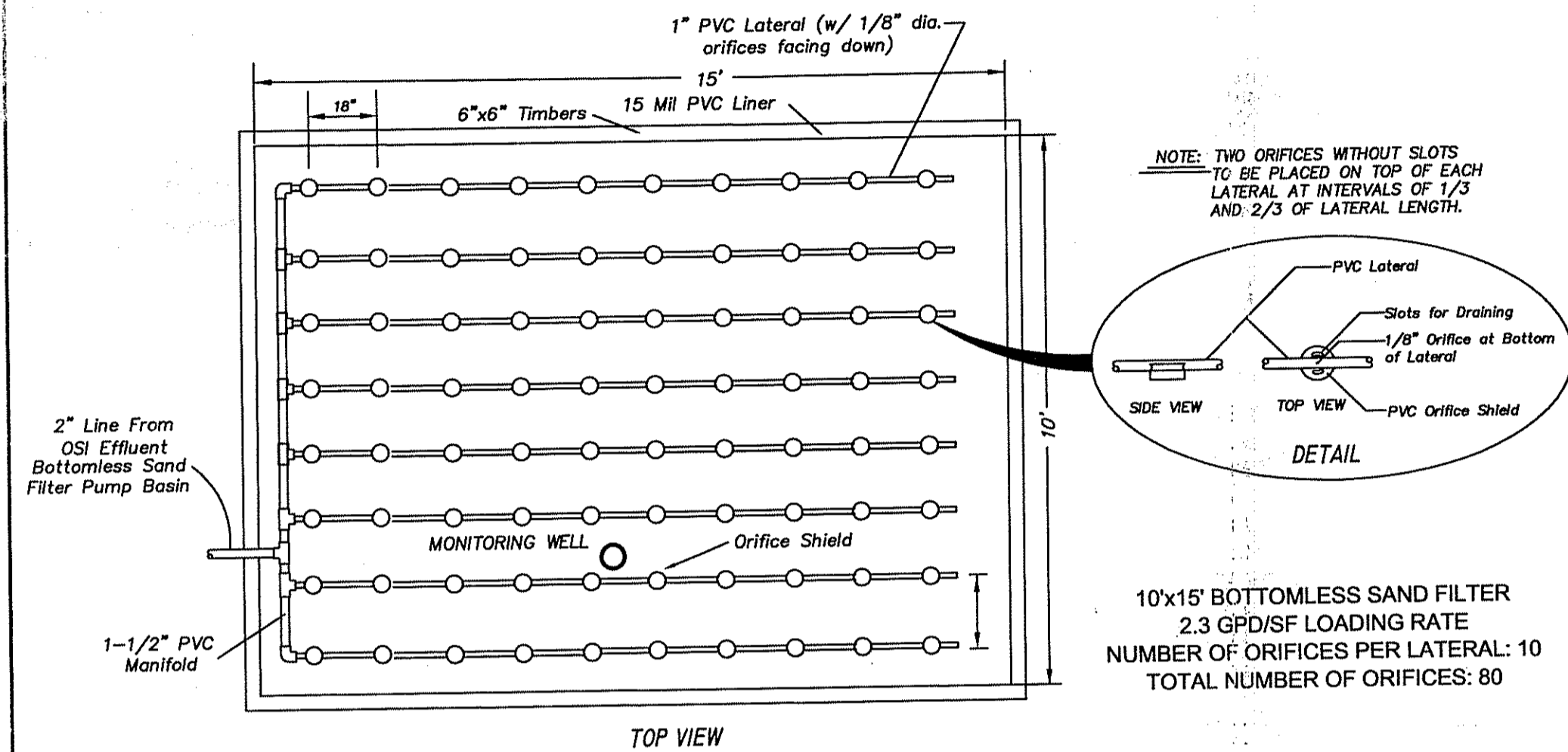
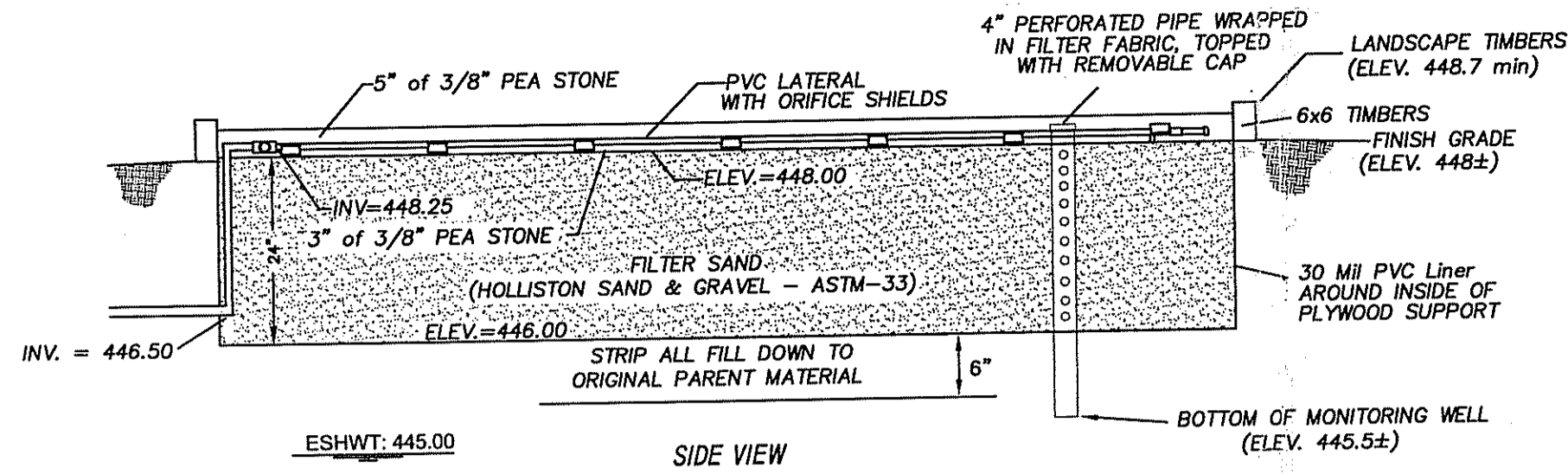
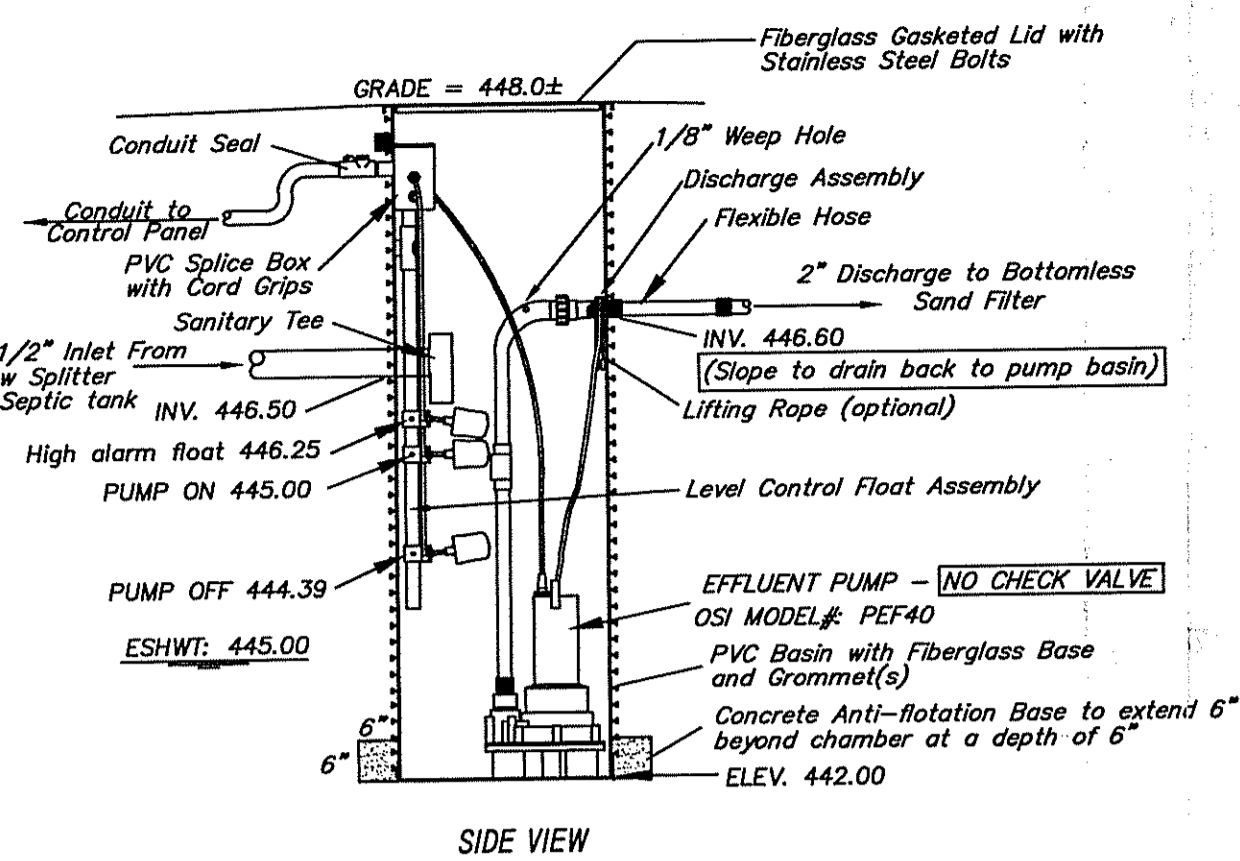


BOTTOMLESS SAND FILTER NOT TO SCALE



24" DIA. BOTTOMLESS SAND FILTER PUMP BASIN

WITH EFFLUENT PUMP ASSEMBLY NOT TO SCALE



SYSTEM COMPONENTS	
1.	1,500 GALLON 2-COMPARTMENT CONCRETE SEPTIC TANK WITH PUMP VAULT AND RECIRCULATING SPLITTER VALVE AND WOSIP3005 (6 STAGE) PUMP TANK.
2.	6" DEEP - 24" DIAMETER PUMP BASIN.
3.	AX-20 ADVANTEX TEXTILE FILTER.
4.	15' LONG x 10' WIDE BOTTOMLESS SANDFILTER
5.	ORENCO SYSTEMS, INC. CONTROL PANEL.

TEST HOLE DATA	
DATE:	3-25-16
TH 1 ELEV.	446.7
0'-6" A, SL.	10YR 3/3
6'-24" Bw, G, SL.	10YR 5/6
24'-102" C, G, CB, SL.	5YR 5/2
ESHWT:	24"
NO LEDGE AT:	102"
SOIL CATEGORY:	6
TH 2 ELEV.	446.9
0'-6" A, SL.	10YR 3/3
6'-24" Bw, SL.	10YR 5/6
24'-54" C, L.S.	2.5YR 5/4
54'-102" C2, G, CB, SL.	5YR 5/2
ESHWT:	24"
NO LEDGE AT:	102"

LEGEND	
100- - - - - 100	EXISTING CONTOURS
1000	PROPOSED CONTOURS
TH 1	TEST HOLE
▲ A6	WETLAND FLAG
- - - - -	STRAW WATTLE AND LIMIT OF DISTURBANCE

OWTS NOTES

- 1) SYSTEM INSTALLATION TO BE SUPERVISED BY THE DESIGNER.
- 2) ALL TREES AND/OR STUMPS WITHIN 100 FEET OF PROPOSED SYSTEM TO BE CLEARED.
- 3) NO WELL EXISTS WITHIN 100' OF THE PROPOSED LEACHING SYSTEM.
- 4) 5 FEET FROM SAND FILTER NOT TO BE LOWER THAN ELEVATION 354.00.
- 5) ANY PRIVATE WELLS, EXISTING & PROPOSED, WITHIN 200' OF ISDS ARE SHOWN.
- 6) ANY PUBLIC WELLS, EXISTING AND PROPOSED, WITHIN 500' OF ISDS ARE SHOWN.
- 7) SEPTIC TANK TO BE A MINIMUM OF 75' FROM ALL WELLS.
- 8) NO DRAINS OF ANY KIND SHALL BE WITHIN 25' UPGRADIENT OR 50' DOWNGRADIENT OR SIDE GRADIENT OF THE PROPOSED LEACHING SYSTEM.
- 9) ALL SOIL AT LEAST 6"± BELOW EXISTING GRADE AT BOTTOMLESS SAND FILTER SHALL BE STRIPPED AND BACKFILLED WITH FILTER SAND.
- 10) THE SEPTIC TANK SHALL BE A WATERTIGHT, 1,500 GALLON 2-COMPARTMENT TANK WITH 24" DIAMETER INLET AND OUTLET ACCESS RISERS. RISERS SHALL BE PVC WITH SECURE FIBERGLASS LIDS. IF CONCRETE TANK IS USED, ABS TANK ADAPTER SHALL BE CAST IN PLACE. TANK SHALL BE VACUUM TESTED WHEN CONSTRUCTED (W/CERTIFICATE) OR WATER TESTED/VACUUM TESTED ON SITE PRIOR TO ACCEPTANCE FROM THE ENGINEER.
- 11) THE ADVANTEX-AX TREATMENT SYSTEM CONTAINS A PACKED BED FILTER THAT USES SPECIALLY DESIGNED TEXTILE MATERIALS WITHIN A PRE-ASSEMBLED FILTER UNIT.
- 12) ALL PUMPS SHALL BE EQUIPPED WITH A HIGH WATER LEVEL VISIBLE AND AUDIBLE ALARM POWERED BY A CIRCUIT SEPARATE FROM THE PUMP POWER. THE ALARM SHALL BE LOCATED IN A NORMALLY OCCUPIED AREA OF THE DWELLING OR SHALL BE INSTALLED AT A LOCATION TO BE DESIGNATED BY THE HOMEOWNER.
- 13) THE SEPTIC TANK SHALL BE PROVIDED WITH A PVC INLET TEE AND SCREENING PUMP VAULT IN THE OUTLET END. AN ACCESS RISER SHALL BE INSTALLED DIRECTLY ABOVE THE SCREENED PUMP VAULT AND INLET TEE.
- 14) BOTTOMLESS SAND FILTER MEDIA: HOLLISTON SAND & GRAVEL ASTM-33 SAND, LESS THAN 1% PASSING THE SIEVE WITH AN EFFECTIVE SIZE OF .25mm-.45mm AND WITH A UNIFORMITY COEFFICIENT OF 2.0±.
- 15) IF CONTRACTOR ENCOUNTERS ANY CONDITIONS DURING CONSTRUCTION WHICH INDICATE THE SYSTEM CANNOT BE INSTALLED IN ACCORDANCE WITH THE APPROVED DESIGN, OR FIND CONFLICTING INFORMATION ON THE PLAN, CONSTRUCTION SHALL CEASE AND DESIGNER BE NOTIFIED.
- 16) THE DESIGNER IS NOT RESPONSIBLE FOR ANY NEGLIGENT ACT OF OMISSION OF AN ISDS USER, INCLUDING BUT NOT LIMITED TO, FAILURE TO PROPERLY USE AND MAINTAIN THE SYSTEM, WHICH CAUSES DAMAGE TO THE SYSTEM.
- 17) LOCAL SUPPLIER OF OSI EQUIPMENT: ATLANTIC SOLUTIONS, 2417 EAST MAIN ROAD, PORTSMOUTH, RI 02871 TEL (401) 293-0176
- 18) 5 FEET FROM SAND FILTER NOT TO BE LOWER THAN ELEVATION 446.00.

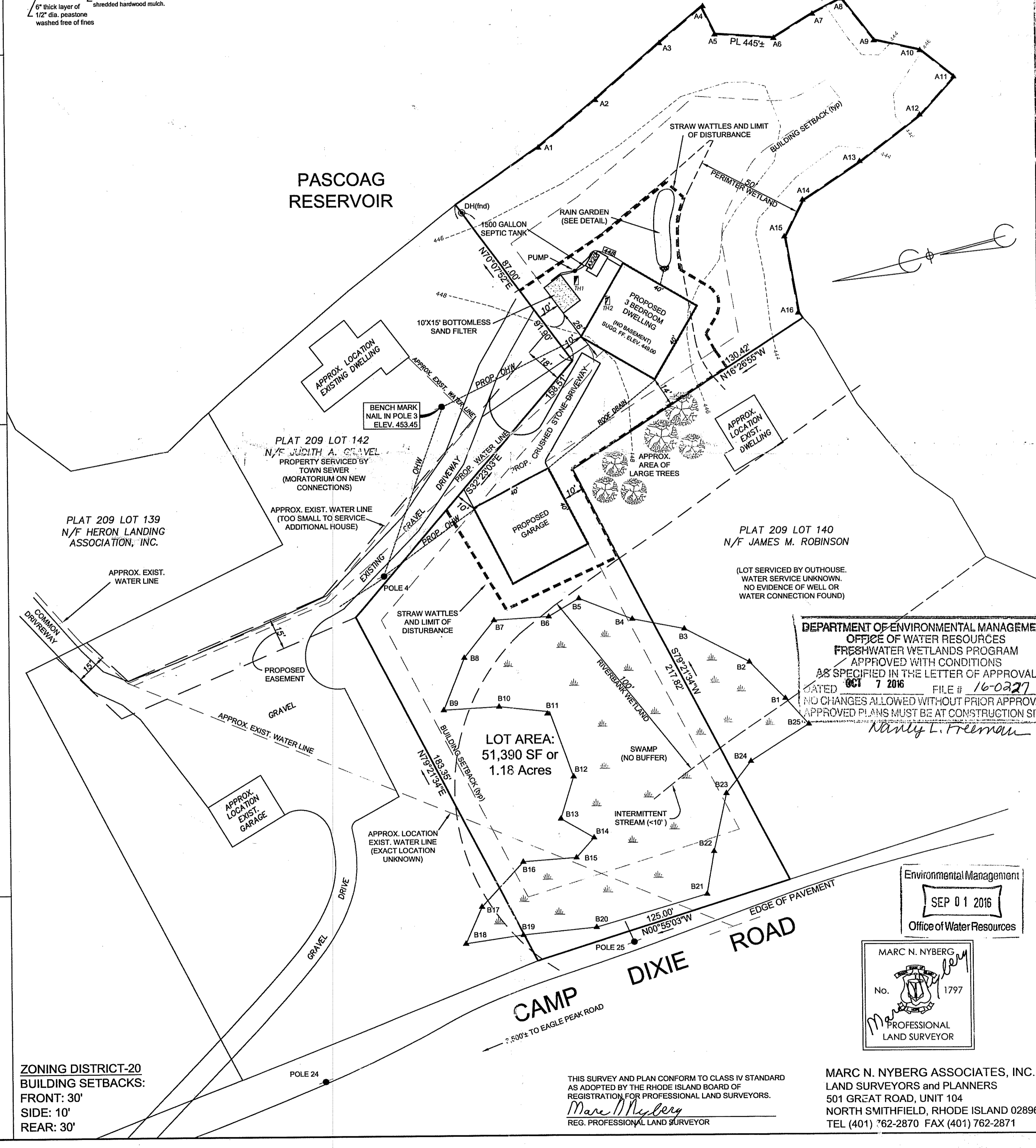
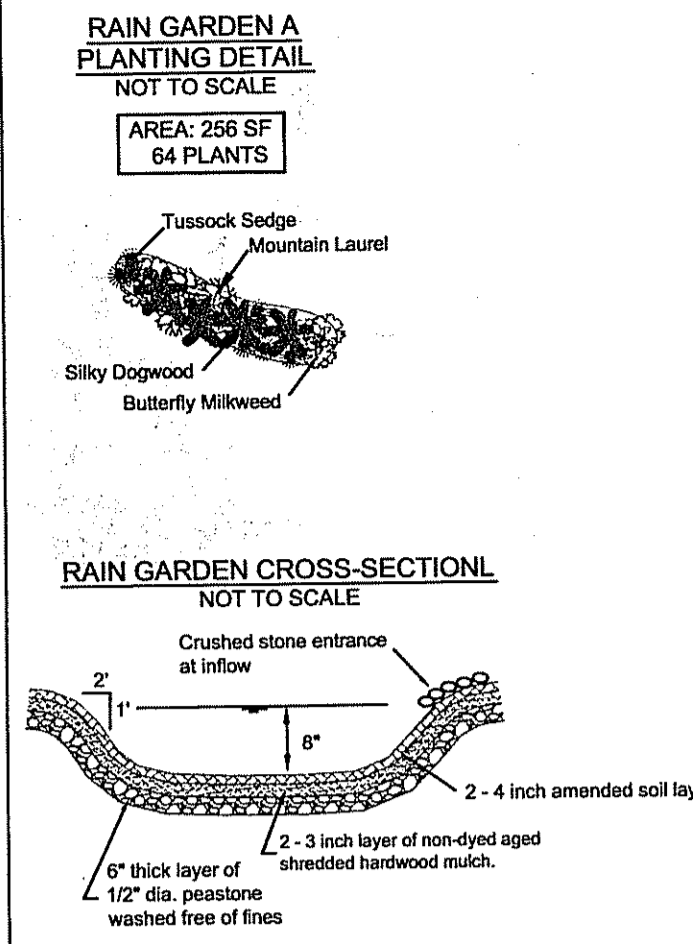
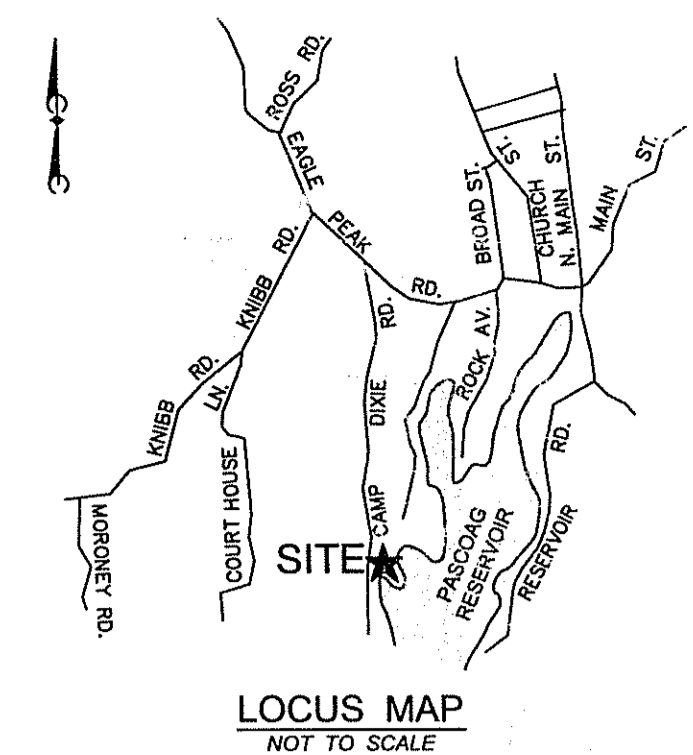
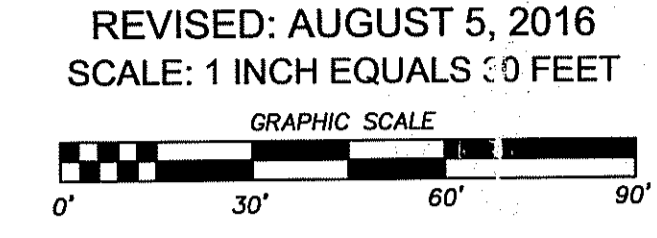
SYSTEM SIZING:
 3 BEDROOMS: 115 GPD x 3 = 345 GPD
 SOIL CATEGORY: 6
 APPLICATION RATE: 2.3 GPD/SF
 AREA REQUIRED: 345/2.3 = 150 SF
 AREA PROVIDED: 10'x15' = 150 SF

TIMER INFO:
 SET ADVANTEX TIMER TO 24 DOSES/DAY
 345 GPD/24 DOSES/DAY = 14.38 GAL/DOSE
 14.38/34.7 GPM = .41 MIN.
 TOTAL PUMP RUN TIME = 9.84 MIN./DAY
 TOTAL PUMP OFF TIME = 1430.16 MIN./DAY
 TIME OFF PER CYCLE = 59.19 MIN.
 TIME ON PER CYCLE = 0.41 MIN.

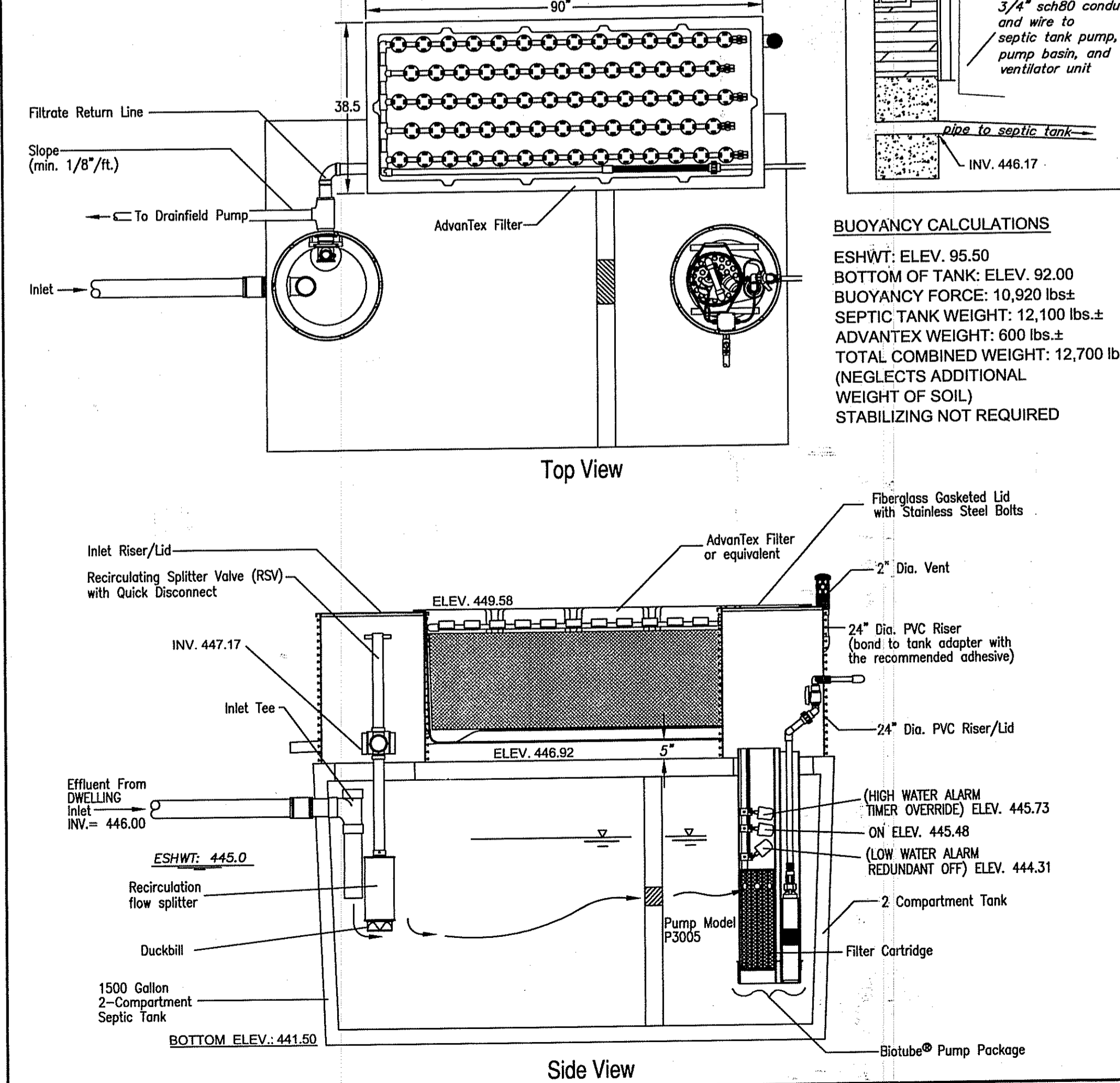
DOSING RATE:
 14.38 GAL/DOSE
 PUMP CHAMBER CAPACITY = 23.5 GAL./FT OR 1.96 GAL./INCH
 PUMP CHAMBER DEPTH @ 14.38 GAL = .61 FEET
 DOSE PER ORIFICE: 345 GPD/(24 DOSES/DAY)/80 ORIFICES = .18 GAL/ORIFICE/DOSE

ONSITE WASTEWATER TREATMENT SYSTEM & WETLANDS PLAN

for
ERIC GRAVEL
 PLAT 209, LOT 141
 CAMP DIXIE ROAD
 BURRILLVILLE, RHODE ISLAND
 MAY, 2016
 REVISED: AUGUST 5, 2016
 SCALE: 1 INCH EQUALS 30 FEET



AdvanTex Treatment System
 AX 20 Series - Mode 3b



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED OCT 7 2016 FILE # 16-0227
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE
 Nancy L. Freeman

Environmental Management
 SEP 01 2016
 Office of Water Resources

MARC N. NYBERG
 No. 1797
 PROFESSIONAL LAND SURVEYOR

MARC N. NYBERG ASSOCIATES, INC.
 LAND SURVEYORS and PLANNERS
 501 GREAT ROAD, UNIT 104
 NORTH SMITHFIELD, RHODE ISLAND 02896
 TEL (401) 762-2870 FAX (401) 762-2871

ZONING DISTRICT-20
 BUILDING SETBACKS:
 FRONT: 30'
 SIDE: 10'
 REAR: 30'

THIS SURVEY AND PLAN CONFORM TO CLASS IV STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.
 Marc N. Nyberg
 REG. PROFESSIONAL LAND SURVEYOR