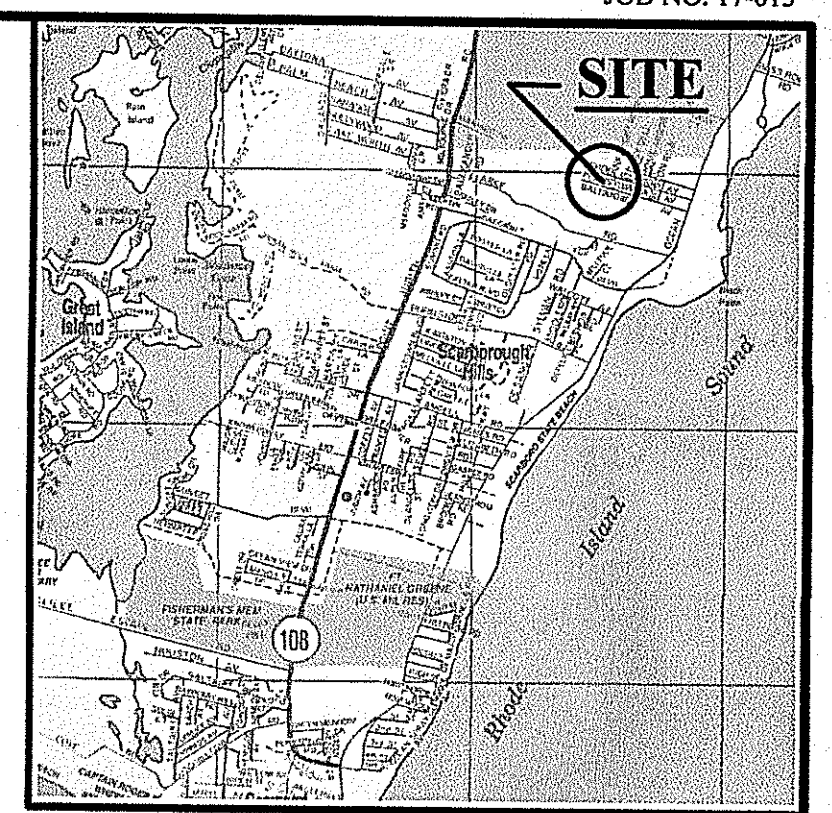
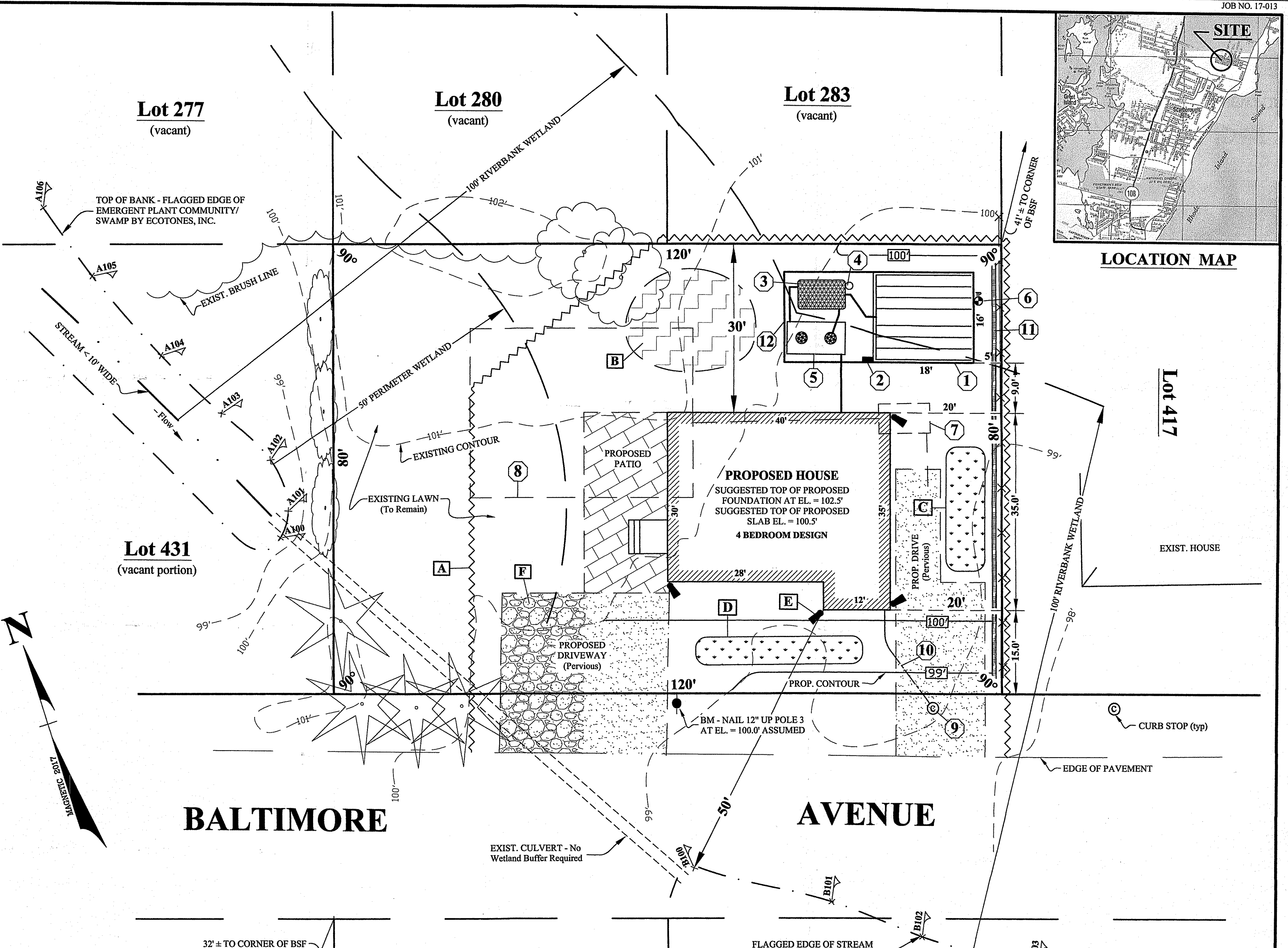




**EXISTING CONDITIONS**  
Scale" 1" = 20'

**DONALD W. JACKSON**  
No. 1689  
This survey has been conducted and the plan has been prepared pursuant to Section 9 of the Rules and Regulations adopted by the Rhode Island State Board of Registration for Professional Land Surveyors on Nov. 25, 2015 as follows:  
LIMITED CONTENT BOUNDARY SURVEY CLASS I  
Purpose: Set Title and/or Content  
Donald W. Jackson, PLS # 1689 COA# LS 000A255



**LOCATION MAP**

- OWTS NOTES**
- ASSESSOR'S MAP T, LOT 420, 75 BALTIMORE AVE., NARRAGANSETT, RI
  - LOT AREA = 9,600 SQ. FT.
  - EXISTING 5 BEDROOM TWO FAMILY HOUSE TO BE DEMOLISHED AND REPLACED WITH A 4 BEDROOM SINGLE FAMILY DWELLING.
  - 1500 GAL. TWO COMPARTMENT SEPTIC TANK WITH EFFLUENT FILTER FOLLOWED BY AN ADVANTEX AX20RT MODE 3B
  - THE PARCEL IS NOT LOCATED WITHIN ANY FLOOD ZONES AS DEPICTED ON THE FEMA FLOOD INSURANCE RATE MAPS.
  - THIS PARCEL IS NOT LOCATED WITHIN RI CRMC JURISDICTION.
  - THIS PARCEL IS NOT LOCATED IN A CRITICAL RESOURCE AREA AS DEFINED BY THE OWTS SECTION RULES AND REGULATIONS.
  - THERE ARE NO TRIBUTARIES, STORMWATER STRUCTURES, OR SUB-SURFACE DRAINS WITHIN 200 FT. OF THE PROPOSED OWTS OTHER THAN THOSE SHOWN HEREON.
  - THERE ARE NO OTHER EXISTING PRIVATE DRINKING WELLS OR KNOWN PROPOSED PRIVATE DRINKING WELLS WITHIN 200 FT. OF THE PROPOSED LEACHFIELD ON THE DATE OF SUBMITTAL OF THIS APPLICATION.
  - THERE ARE NO OTHER EXISTING OR KNOWN PROPOSED NON-POTABLE WELLS WITHIN 100 FEET OF THE PROPOSED LEACHFIELD ON THE DATE OF SUBMITTAL OF THIS APPLICATION.
  - THERE ARE NO EXISTING OR PROPOSED PUBLIC WELLS WITHIN 500' OF THE PROPOSED OWTS OTHER THAN THOSE SHOWN HEREON ON THE DATE OF SUBMITTAL OF THIS APPLICATION.
  - THE DWELLING SHALL BE SERVICED WITH MUNICIPAL WATER.
  - THERE ARE NO DRINKING WATER LINES WITHIN 50 FT. OF THE PROPOSED OWTS OTHER THAN THOSE SHOWN HEREON
  - THERE ARE NO SUB-DRAINS WITHIN 50 FT. OF THE PROPOSED LEACHING AREA.
  - THERE ARE NO WATERCOURSES OR WETLANDS WITHIN 200 FT. OF THE PROPOSED OWTS OTHER THAN THOSE SHOWN HEREON.
  - THERE ARE NO EXISTING OR KNOWN PROPOSED PUBLIC WASTEWATER SYSTEM LINES WITHIN 200 FT. OF THE AS SHOWN PROPERTY LINES ON THE DATE OF SUBMITTAL OF THIS APPLICATION.
  - THERE ARE NO STRUCTURES, EXISTING OWTS OR WATER SUPPLIES WITHIN 100 FT. OF THE ADJACENT PROPERTY LINES OTHER THAN THOSE SHOWN HEREON.
  - CLEAR AND REMOVE ALL TREES AND BRUSH TO A 10 FT. PERIMETER OF THE LEACHING AREA.
  - PROPER EROSION AND SEDIMENT CONTROL PRACTICES MUST BE IMPLEMENTED DURING ALL PHASES OF CONSTRUCTION AND UNTIL THE SITE IS SATISFACTORILY STABILIZED. ALL CONTROL PRACTICES SHOULD BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE RI SOIL EROSION AND SEDIMENT CONTROL HANDBOOK.
  - A COPY OF THE APPROVED OWTS PERMIT ALONG WITH THE OPERATION AND MAINTENANCE PRACTICES FOR THE SYSTEM COMPONENTS MUST BE RECORDED IN THE NARRAGANSETT TOWN HALL PRIOR TO THE ISSUANCE OF ANY FINAL CONFORMANCE.

- ZONING NOTES:**
- ZONING CLASSIFICATION IS A R-80 RESIDENTIAL ZONE.
  - NON-CONFORMING BUILDING SETBACKS ARE: FRONT = 35', SIDE = 20', REAR = 30'
  - THIS PARCEL IS NOT LOCATED WITHIN A FLOOD ZONE AS DESIGNATED ON THE FEMA FLOOD INSURANCE RATE MAPS.
  - THIS PARCEL IS LOCATED WITHIN THE HIGH WATER TABLE OVERLAY DISTRICT. THE SOIL CLASS IS "A" BASED ON RI SOIL SURVEY CLASSIFICATION Sc - Stissing Silt Loam.
  - THIS PARCEL IS LOCATED WITHIN THE WETLAND OVERLAY DISTRICT. A SPECIAL USE PERMIT IS REQUIRED FOR THIS PROJECT.
  - NON-CONFORMING SITE COVERAGE ALLOWED IS 25%. (25% x 9600 sq. ft. = 2,400 sq. ft.)
- | Existing Site Coverage |                                |
|------------------------|--------------------------------|
| House                  | = 789 sq. ft.                  |
| Shed                   | = 445 sq. ft.                  |
| Deck & Stairs          | = 147 sq. ft.                  |
| Patio                  | = 232 sq. ft.                  |
| <b>TOTAL</b>           | <b>= 1,613 sq. ft. (16.8%)</b> |
- | Proposed Site Coverage |                                |
|------------------------|--------------------------------|
| House                  | = 1,250 sq. ft.                |
| Deck & Stairs          | = 42 sq. ft.                   |
| Patio                  | = 450 sq. ft.                  |
| <b>TOTAL</b>           | <b>= 1,742 sq. ft. (18.1%)</b> |
- NON-CONFORMING BUILDING COVERAGE ALLOWED IS 20%. (20% x 9600 sq. ft. = 1,920 sq. ft.)
- | Existing Building Coverage |                                |
|----------------------------|--------------------------------|
| House                      | = 789 sq. ft.                  |
| Shed                       | = 445 sq. ft.                  |
| Deck & Stairs              | = 147 sq. ft.                  |
| <b>TOTAL</b>               | <b>= 1,381 sq. ft. (14.4%)</b> |
- | Proposed Building Coverage |                                |
|----------------------------|--------------------------------|
| House                      | = 1,250 sq. ft.                |
| Deck & Stairs              | = 42 sq. ft.                   |
| <b>TOTAL</b>               | <b>= 1,292 sq. ft. (13.4%)</b> |

- OWTS VARIANCES**
- RULE 32.4 Depth to Groundwater From Original Ground Surface**  
Required Depth = 24 inches  
Existing Depth = 6 inches
  - RULE 22 Minimum Setback Distance - Property Line to Leachfield**  
Required Setback = 10 feet  
Proposed Setback = 5 feet

- OWTS LEGEND**
- PROPOSED 16' x 18' BOTTOMLESS SAND FILTER
  - PROPOSED ALARM AND CONTROL PANEL
  - ADVANTEX AX20RT MODE 3B UNIT
  - PROPOSED AIR VENT
  - PROPOSED 1500 GAL. TWO COMPARTMENT SEPTIC TANK WITH EFFLUENT FILTER
  - SOIL EVALUATION TEST PIT
  - EXISTING SEPTIC TANK TO BE PUMPED AND REMOVED TO A SUITABLE OFFSITE FACILITY
  - EXISTING LEACH FIELD TO BE ABANDONED AND/OR REMOVED - All unsuitable material and leachfield components for a 10' Perimeter from the proposed foundation in the vicinity of the existing leachfield shall be removed and disposed of at a suitable offsite facility
  - EXISTING CURB STOP
  - MUNICIPAL WATER SUPPLY LINE TO BE RE-LOCATED
  - PROPOSED RETAINING WALL
  - SUPPORT STRUCTURE

- SERSC LEGEND**
- STRAW WATTLE & LIMIT OF DISTURBANCE - The actual location of the LOD is along the property lines. The line as shown hereon is pictorial. Place before and during construction for a sediment and construction barrier. Remove when all disturbed areas have been stabilized, loamed and seeded.
  - TEMPORARY STOCKPILE AREA - A temporary stock pile area has been designated on the lot in a level area. Straw Wattles will be placed around each zone before any stock piling occurs as shown on the design plans and details. If the stock piles are to remain undisturbed for a period of 3 months or more, then a temporary vegetative cover should be planted. Once all stock piles have been removed the area disturbed will be loamed and seeded.
  - PROPOSED RAIN GARDEN # 1

- PROPOSED RAIN GARDEN # 2
- DOWNSPOUT WITH SPLASH PAD (Typ.) - The proposed house shall have roof rain water collected by gutters and downspouts to direct stormwater to splash pads at all outlets.
- CONSTRUCTION ENTRANCE - A stone construction access pad will be installed off the existing curb cut to act as a wheel cleaning blanket for the construction vehicles. This construction pad shall be placed prior to the start of any excavation and shall remain in place until the construction site has been stabilized. All road surfaces shall be cleaned of sediment at the end of each day.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESH WATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED FEB 5 2018 FILE # R-D004  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

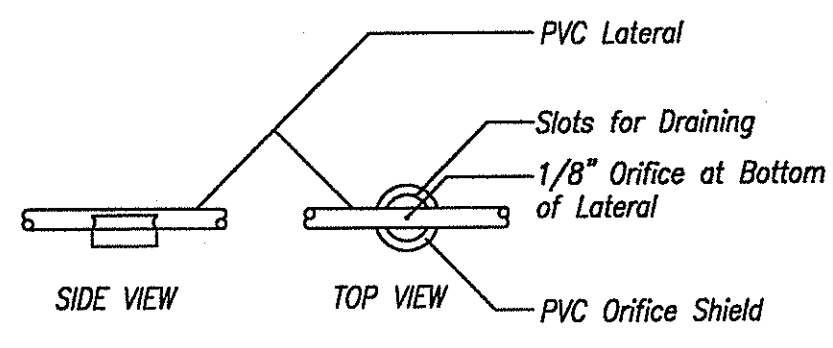
**PROPOSED SITE PLAN FOR  
ONSITE WASTEWATER TREATMENT SYSTEM &  
WETLAND PRELIMINARY DETERMINATION  
LOT 420 of APT  
IN THE TOWN OF  
NARRAGANSETT, RI  
PROPERTY OF  
STEPHEN & PATRICIA BEAUCHEMIN  
75 BALTIMORE AVENUE  
DECEMBER 2017  
SCALE: 1" = 10'**

**CHAREE M. JACKSON**  
No. 9600  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL

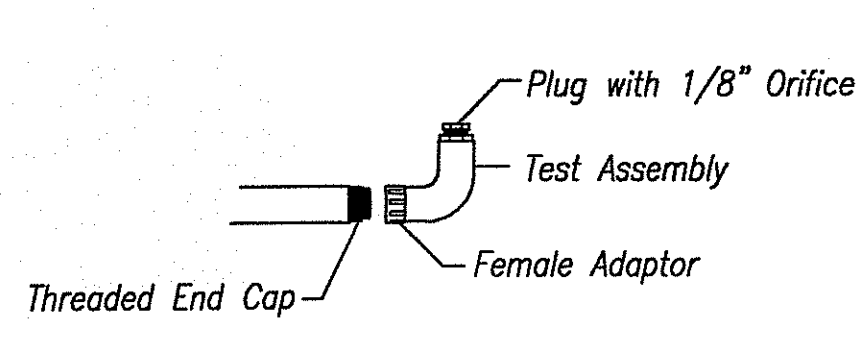
**SHEET 1 OF 2**

**JACKSON SURVEYING, Inc.**  
SURVEYING & ENGINEERING  
P.O. BOX 454 CHARLESTOWN, RI 02813 PH. (401) 364-3130

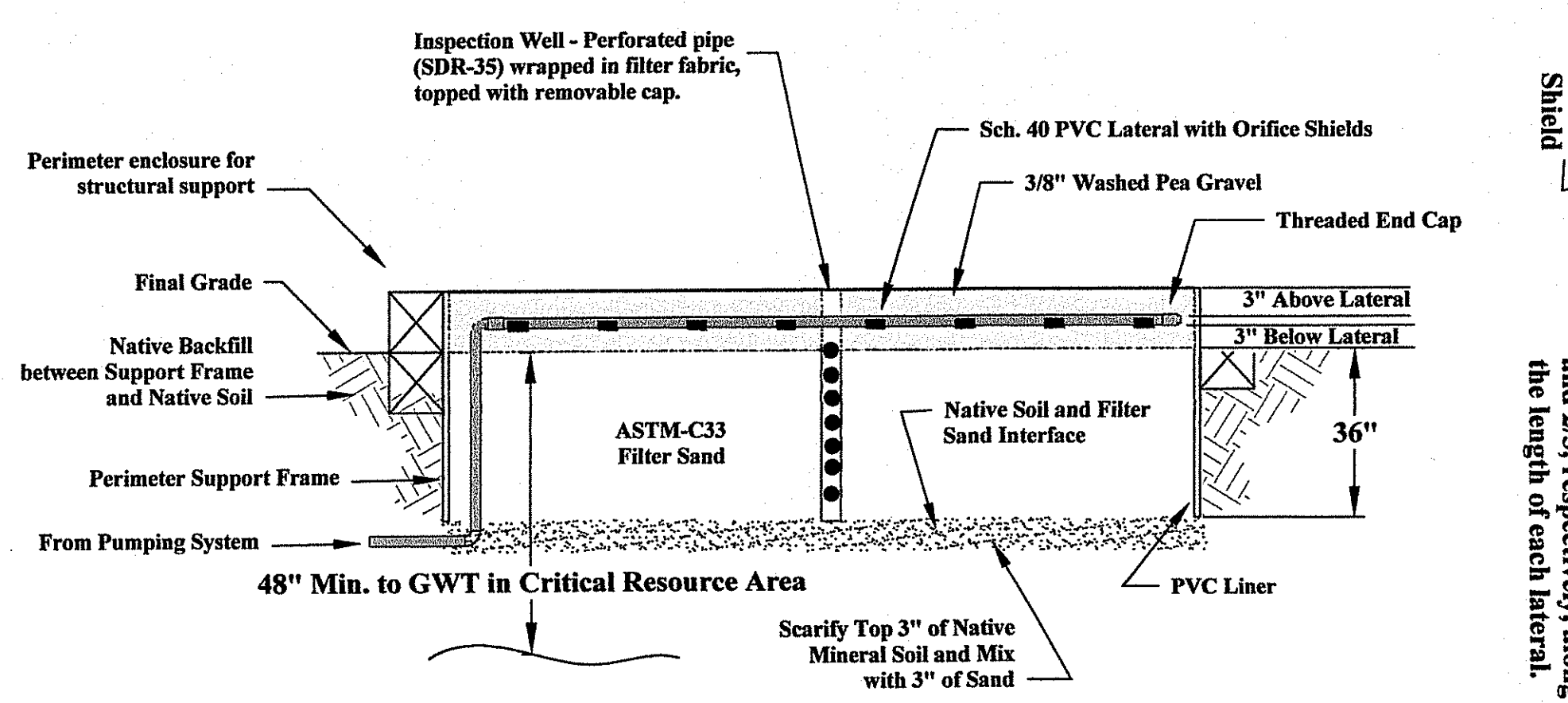
**COLD WEATHER ORIFICE SHIELD**



**THREADED END CAP DETAIL**

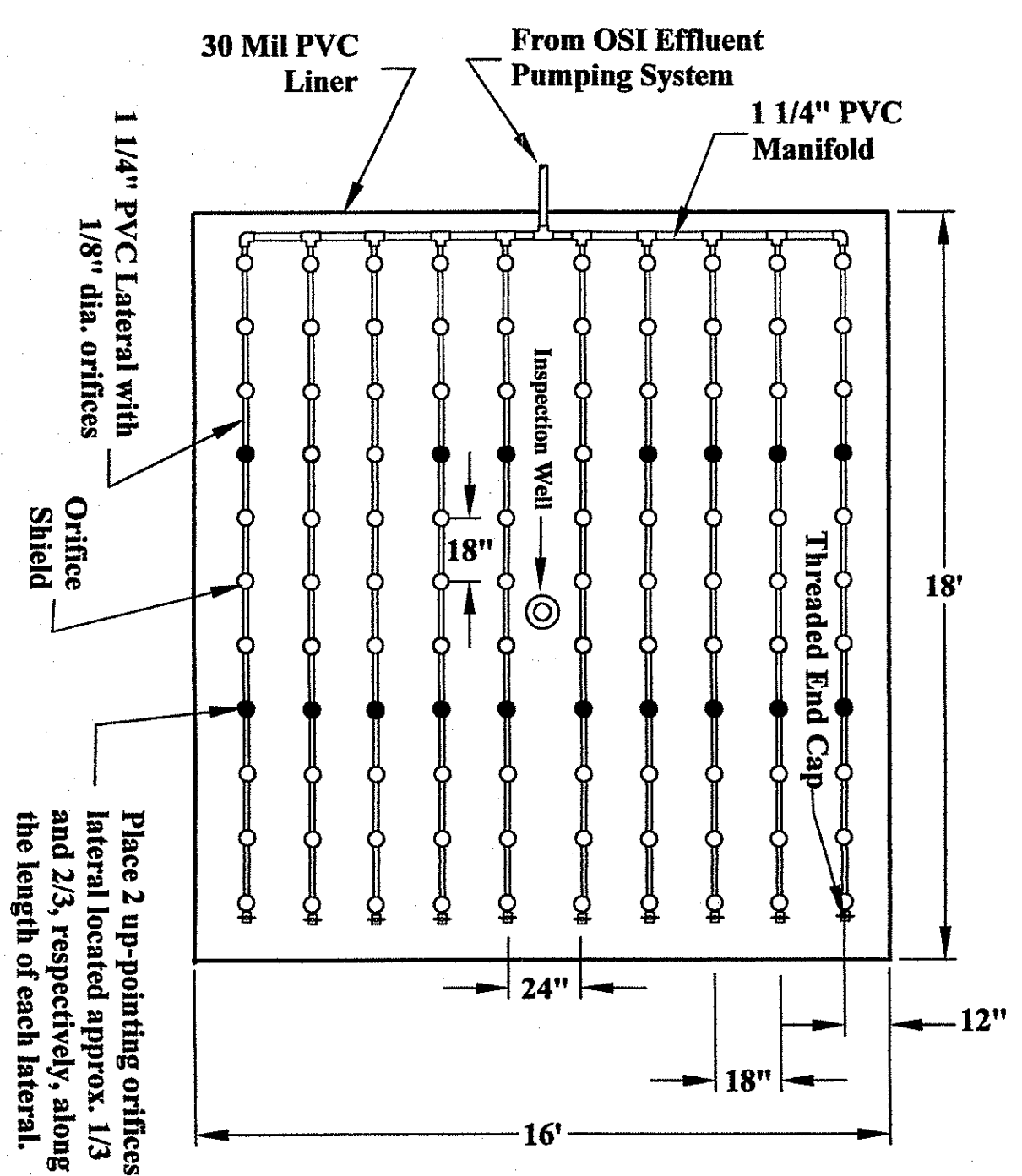


**TYPICAL BOTTOMLESS SAND FILTER PROFILE**

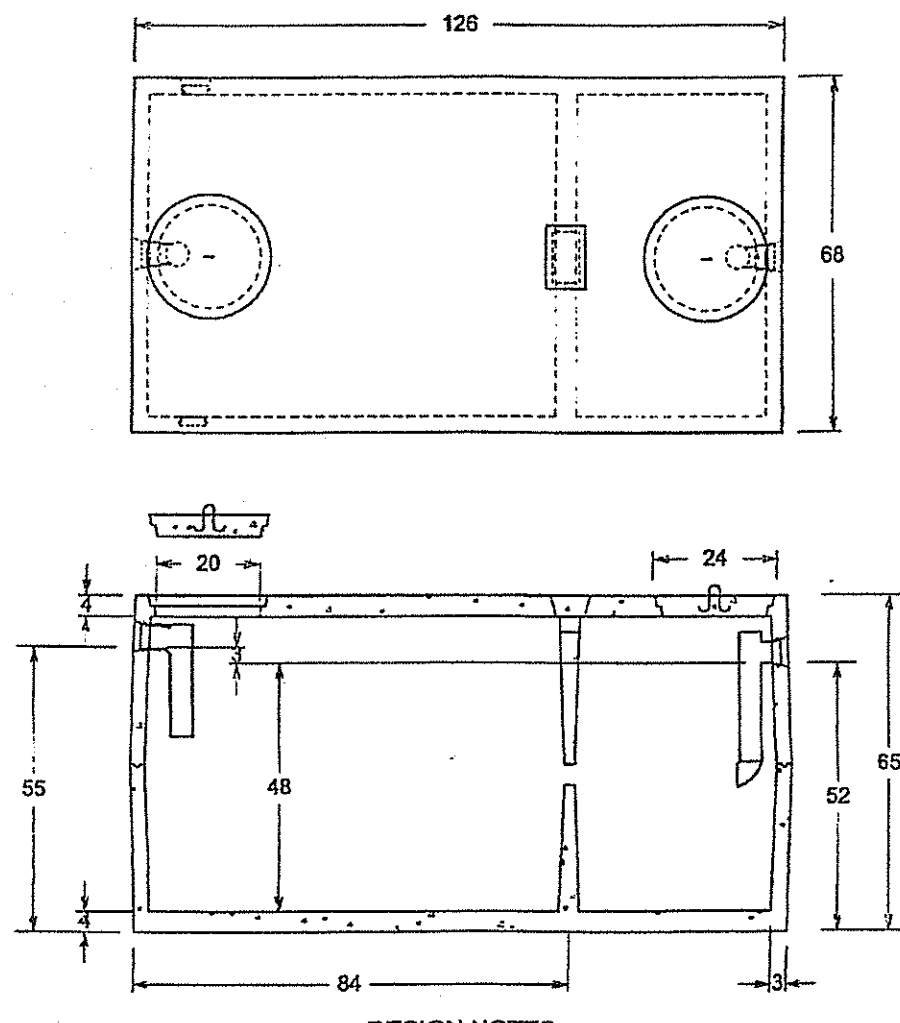


**TYPICAL BOTTOMLESS SAND FILTER TOP VIEW**

Category 1 BSF loaded at 2.1 gpd/sf will treat up to 605 gallons per day.

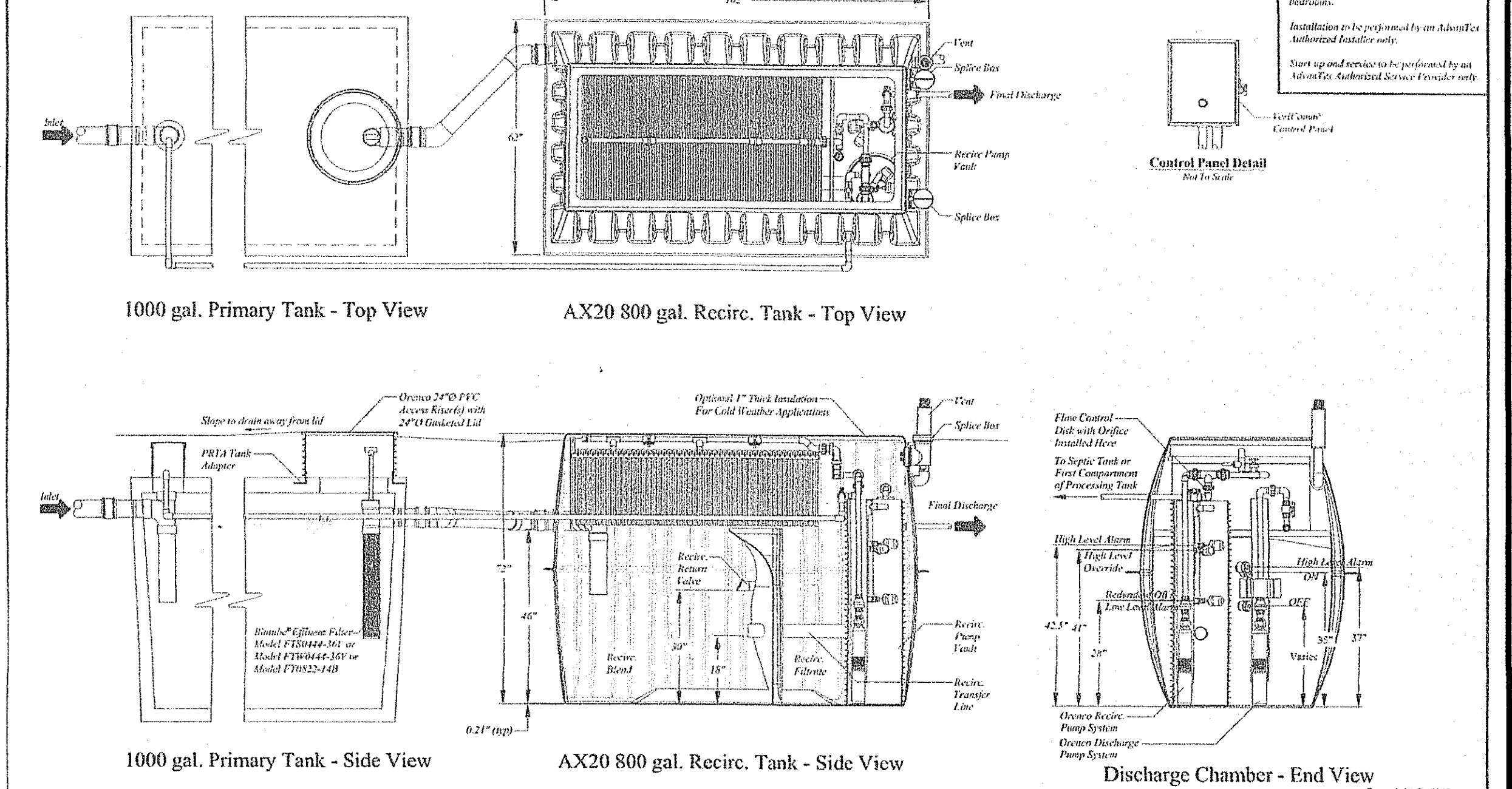


**1500 GALLON TWO COMPARTMENT SEPTIC TANK**



- DESIGN NOTES**
- 1) ALL JOINTS SEALED WITH BUTYL RUBBER SEALANT.
  - 2) ALL INLETS AND OUTLETS HAVE STATE-APPROVED SEALS.
  - 3) AVAILABLE WITH 6\"/>

**AX20RT Treatment System - Pump Discharge**



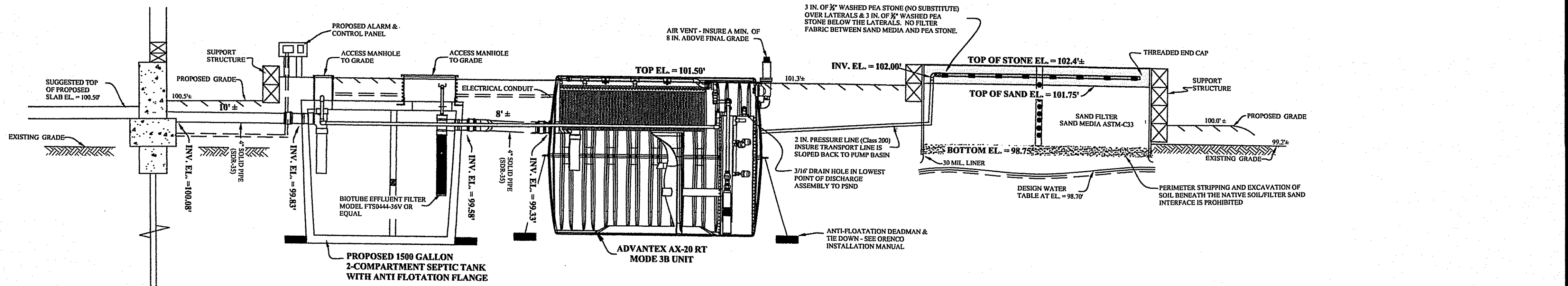
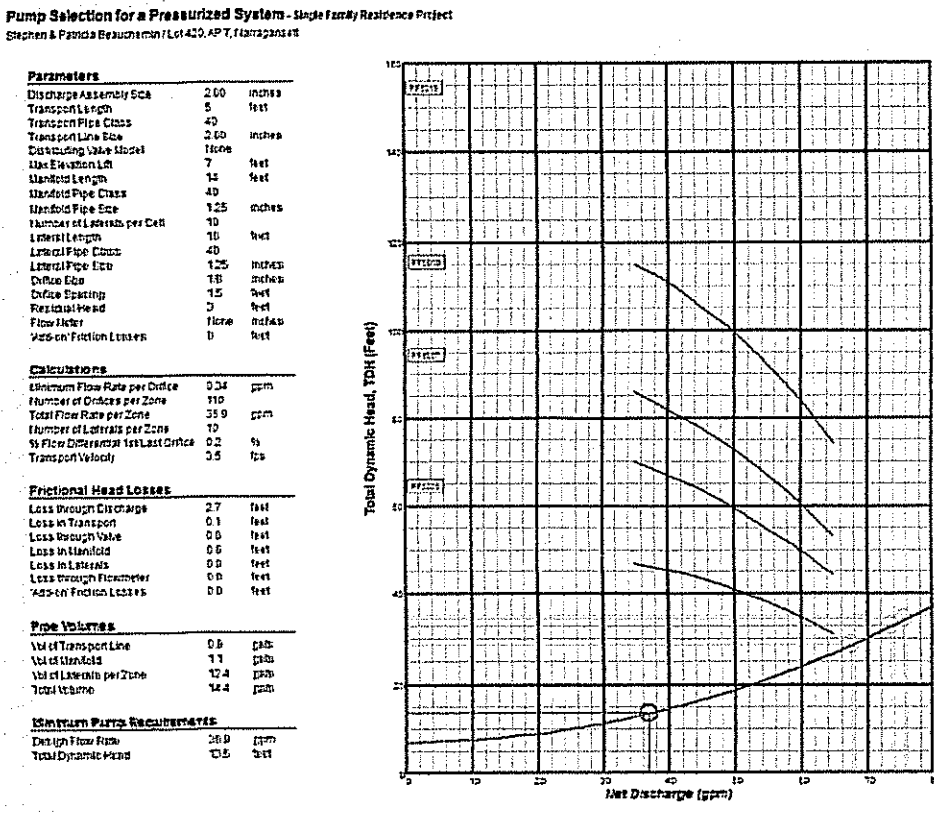
**Copyright © 2013 Oresco Systems, Inc.**  
 Project: AX20RT Mode 3B  
 Scale: 1\"/>

**SYSTEM COMPUTATIONS:**

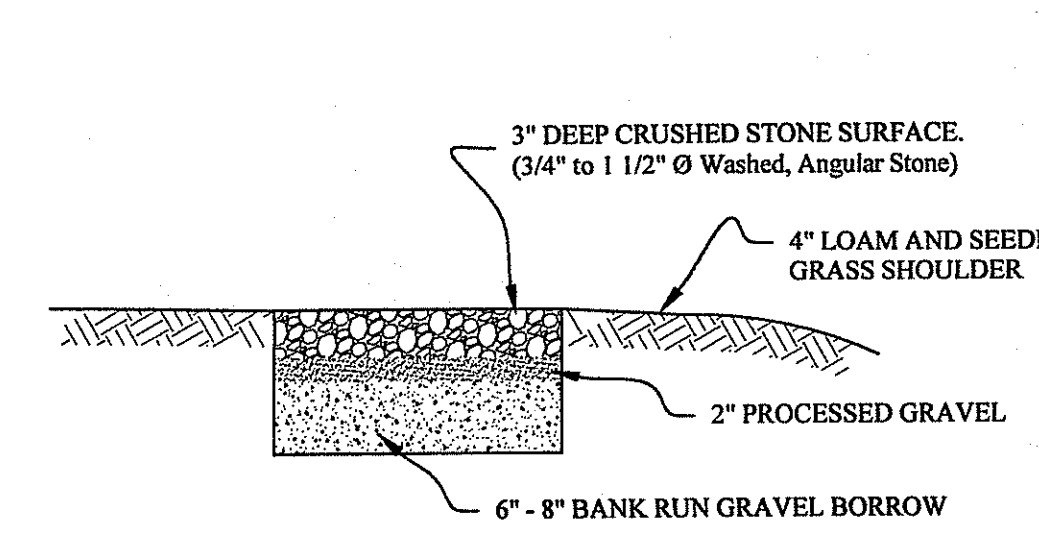
**TOTAL DAILY FLOW**  
 House - 4 BEDROOM x 115 Gal/Day = 460 Gal/Day

**REQUIRED LEACHING AREA**  
 Use Class 7 Soil Rate = 2.1 Gal/Sq.Ft./Day  
 460 Gal/Day / 2.1 Gal/Sq.Ft./Day = 220 Sq.Ft.  
 Use 16' x 18' BSF = 288 sq. ft.  
 Reduced Application Rate = 1.5 Gal/Sq.Ft./Day

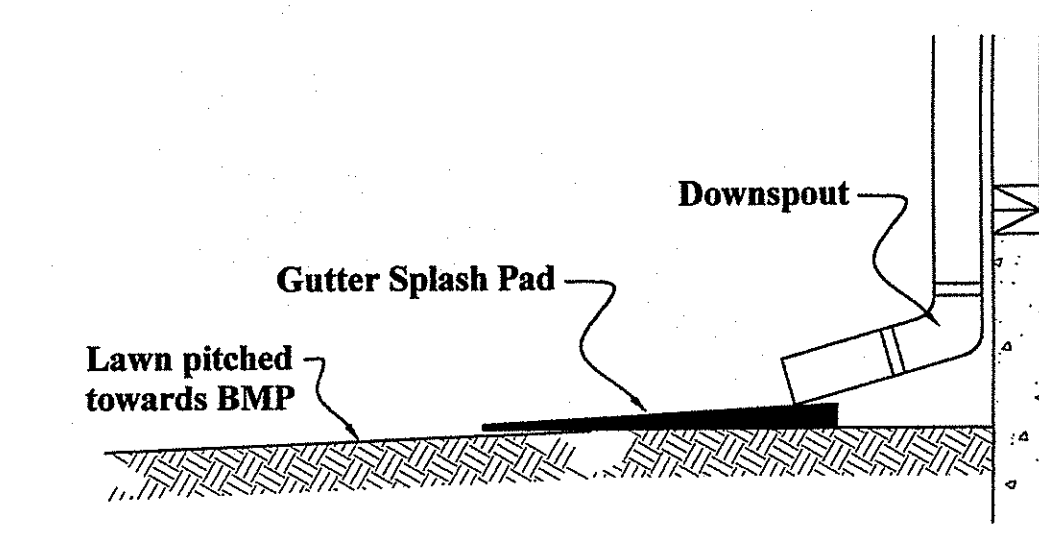
**PUMP SPECS FOR BSF**  
 Need to pump 460 gal/day  
 Use 20 gallons/dose into BSF - Demand Dosed  
 Use O.S.I. pump model PF5003 single phase  
 See pump curve  
 Pump is sized for flow rate of 36.9 g.p.m.  
 On time = 20 gal/dose ÷ 36.9 g.p.m. = 0.5 min. on.  
 On/Off Pump Differential  
 AX20-RT Storage is 8 gal/in  
 20 gal/dose ÷ 8 gal/in = 2.5 inches  
 OFF SWITCH set at 32.50 inches from bottom of AdvanTex Unit



**SECTION THRU CENTERLINE OF SYSTEM**

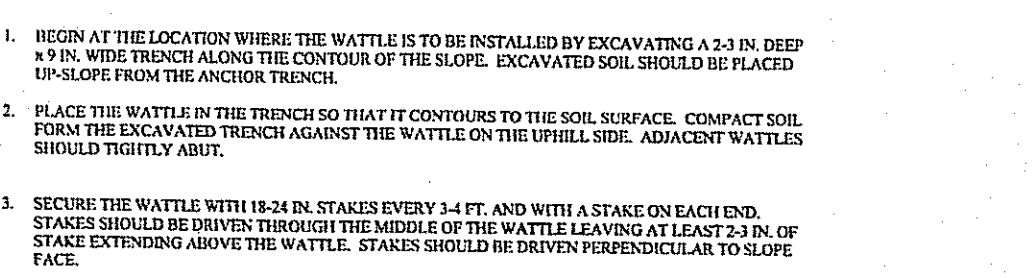
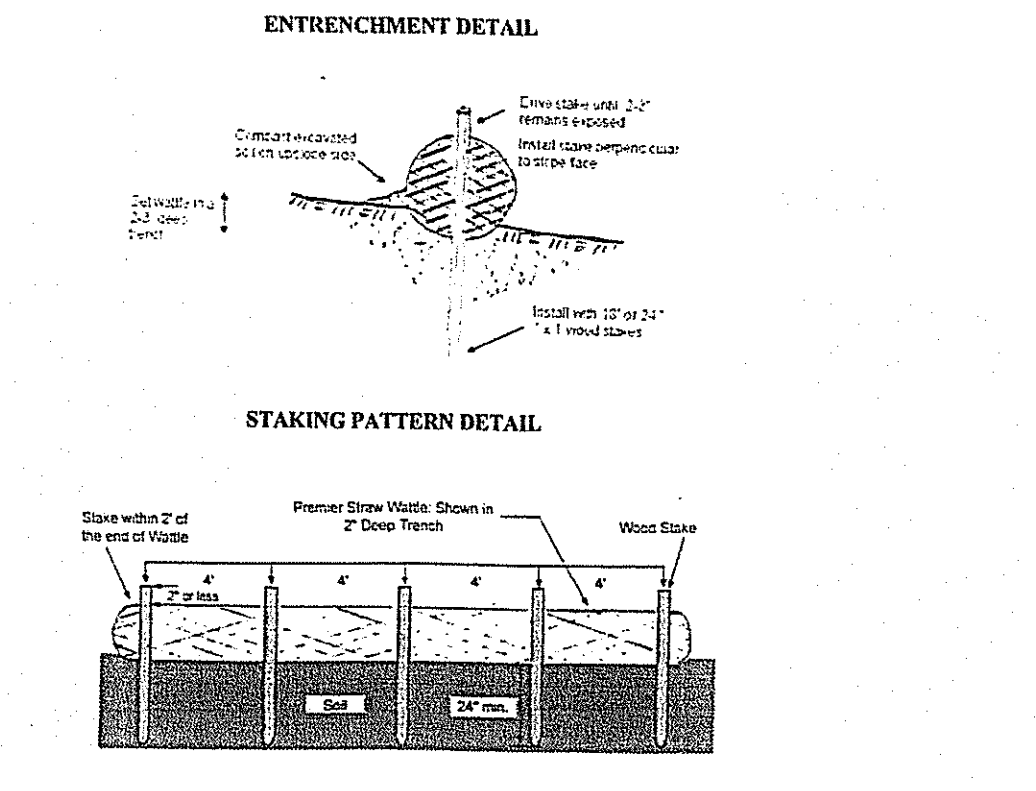


**DRIVEWAY TYPICAL**

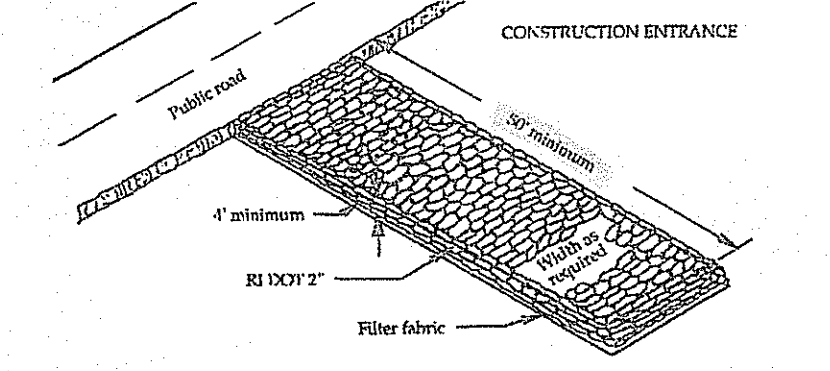


**DOWNSPOUT TYPICAL**

**JACKSON SURVEYING, Inc.**  
 SURVEYING & ENGINEERING  
 P.O. BOX 454 CHARLESTOWN, RI 02813 PH. (401) 364-3130



**STRAW WATTLE**



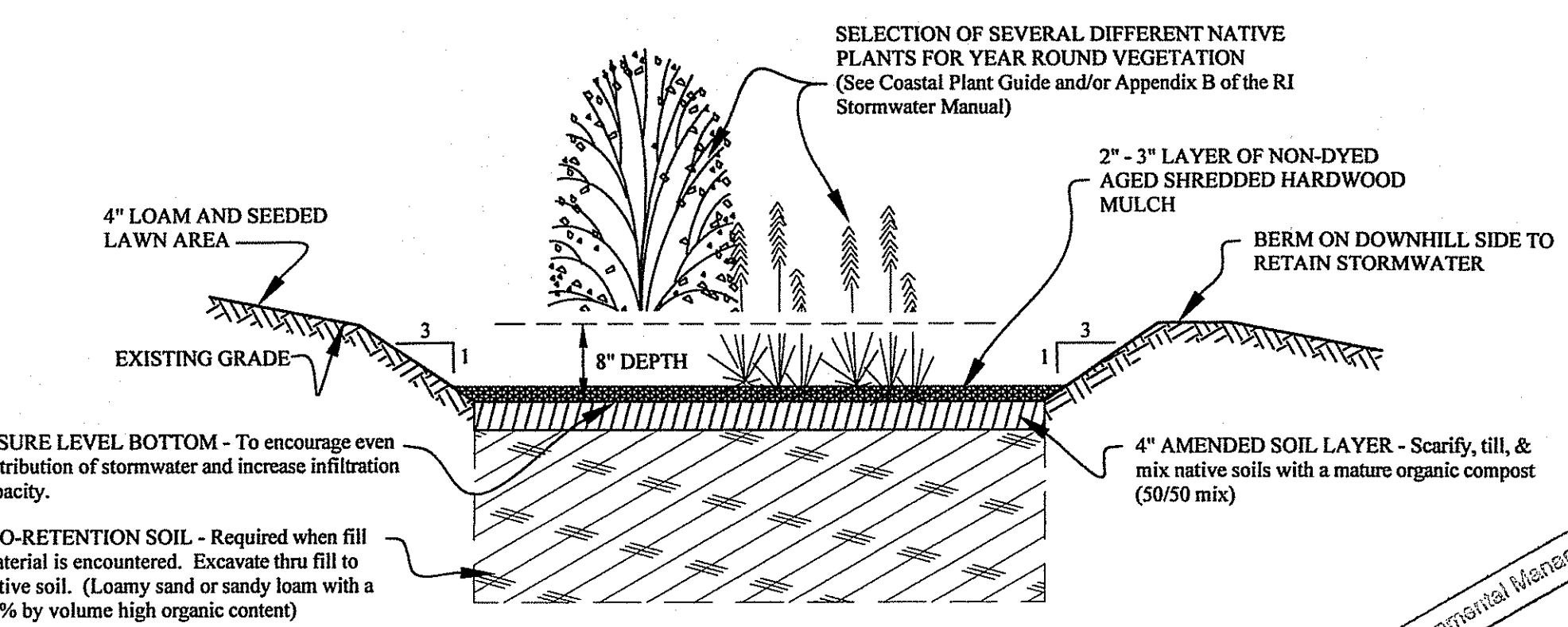
**CONSTRUCTION ENTRANCE**

**RAIN GARDEN REQUIREMENTS**

Item	Requirement
Location	Table 6. Required Elements for Rain Gardens on Single-Family Residential Lots
Location	Rain gardens should be located in areas with a 2% slope (i.e. a 12 foot drop over a horizontal distance of 100 feet) or a 6 foot drop over a distance of 50 feet.
Location	Rain gardens should be located at least 10 ft from foundations to avoid basement seepage.
Location	Rain gardens should be located at least 15 ft from outside wastewater treatment systems and at least 25 ft from private drinking water wells (see Table 5 for additional setbacks).
Construction	The bottom of a rain garden should be level to encourage the even distribution of stormwater and increase infiltration capacity.
Construction	Rain gardens should be 4 to 8 feet deep with a 2 - 4 inch amended soil layer or a 2 - 3 inch layer of non-dyed aged shredded hardwood mulch.
Construction	The amended soil layer of a rain garden should be a 50/50 mixture of the excavated native soils and native organic compost.
Construction	Select native plants for rain gardens using the Coastal Plant Guide.
Construction	Be sure that the soil within the rain garden area does not become compacted by construction activities (i.e. heavy machinery). If soil becomes severely compacted it may need to be filled and amended to maintain proper drainage.
Maintenance	Rain gardens should be inspected following any freeze-free precipitation events of at least 1.0 inch to ensure that the system is functioning properly. Thereafter, the rain garden shall be maintained and monitored to assure proper functioning, plant growth and survival. Plants shall be replaced on an as-needed basis during the growing season.
Maintenance	Subsidence shall be removed from the rain garden when the accumulation exceeds one inch or when water ponds on the surface of the rain garden for more than 48 hours. The top few inches of material shall be removed and shall be replaced with fresh soil and mulch.
Maintenance	Pruning or replacement of woody vegetation shall occur when dead or dying vegetation is observed.
Maintenance	Soil erosion gullies shall be replaced when they occur.
Maintenance	Fertilizer or pesticides shall not be applied to plants within rain gardens.
Maintenance	Potential plants and ground covers shall be replaced as necessary to maintain an adequate vegetated ground cover. Annual photos may also be used to maintain ground cover.

**SEDIMENT & EROSION CONTROL:**

1. PROPER EROSION & SEDIMENT CONTROL PRACTICES MUST BE IMPLEMENTED DURING ALL PHASES OF CONSTRUCTION AND UNTIL THE SITE IS SATISFACTORILY STABILIZED.
2. ALL CONTROL PRACTICES SHOULD BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE SOIL EROSION AND SEDIMENT CONTROL HANDBOOK.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL. THE STRAW WATTLE BARRIERS SHALL BE CHECKED REGULARLY AND MAINTAINED THROUGHOUT ALL CONSTRUCTION PHASES.
4. ALL DISTURBED AREAS SHALL BE LOAMED, SEEDED, AND STABILIZED PRIOR TO THE REMOVAL OF THE STRAW WATTLE.
5. ALL STUMPS, BRUSH, WOOD FROM TREE CLEARING, RUBBLE, AND SPOIL MATERIAL SHALL BE REMOVED OFF-SITE AND DISPOSED OF AT A PROPER DISPOSAL SITE.
6. STEPHEN BEAUCHEMIN, OWNER OF LOT 420, AP T, IS ASSIGNED THE RESPONSIBILITY FOR THE EROSION AND SEDIMENT CONTROL MEASURES AND INFORMING ALL PARTIES WORKING ON THE CONSTRUCTION SITE OF THE EROSION AND SEDIMENT CONTROL REQUIREMENTS AND OBJECTIVES. THE ABOVE NAMED PERSON SHALL NOTIFY RI DEM & THE TOWN OF NARRAGANSETT OF ANY TRANSFER OF THIS RESPONSIBILITY.



**RAIN GARDEN TYPICAL**

**RAIN GARDEN SIZE CRITERIA:**

LOCATION	BOTTOM WIDTH	TOTAL LENGTH	REQUIRED BOTTOM AREA
# 1	7.5 ft.	20 ft.	128 sq. ft.
# 2	5 ft.	30 ft.	96 sq. ft.

Computation Method Used:  
 Prescriptive, Table 7 of Single-Family Lot Development Guidance Document  
 Soil Evaluation Texture: SILT LOAMS  
 Garden Depth = 8 inches

**NOTE:**  
 THE CONSTRUCTION OF THE RAIN GARDEN SHALL FOLLOW THE STANDARDS IN THE RI STORMWATER MANAGEMENT GUIDANCE FOR INDIVIDUAL SINGLE FAMILY RESIDENTIAL LOT DEVELOPMENT & THE UNIVERSITY OF WISCONSIN PUBLICATION "RAIN GARDENS: A HOW-TO MANUAL FOR HOMEOWNERS".

Environmental Management  
 JAN - 3 2018  
 Office of Water Resources

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED FEB 5 2018 FILE # 18-0001  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

**DETAILS & TYPICALS FOR ONSITE WASTEWATER TREATMENT SYSTEM & WETLAND PRELIMINARY DETERMINATION LOT 420 of APT**

IN THE TOWN OF NARRAGANSETT, RI  
 PROPERTY OF **STEPHEN & PATRICIA BEAUCHEMIN**  
 75 BALTIMORE AVENUE NARRAGANSETT, RI 02882  
 DECEMBER 2017  
 NO SCALE  
 SHEET 2 OF 2

CHAREE M. JACKSON  
 No. 9600  
 Charee M. Jackson  
 REGISTERED PROFESSIONAL ENGINEER  
 CIVIL