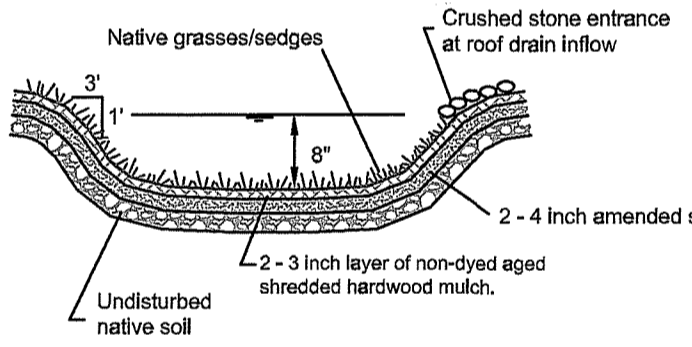


LOCUS MAP
SCALE: 1" = 200'

- NOTES FOR RESTORATION OF TEMPORARY ALTERATION**
1. EROSION CONTROLS SHALL BE INSTALLED PRIOR TO ANY WORK.
 2. ALL SLASH FROM TREE AND SHRUB CUTTING SHALL BE REMOVED AND PROPERLY DISPOSED OF OUTSIDE ANY REGULATED WETLAND.
 3. NO STUMPING OR GRUBBING SHALL OCCUR TO ALLOW FOR REGROWTH (EXCEPT FOR THE WATER LINE TRENCH).
 4. ALL SPOILS FROM THE WELL DRILLING SHALL BE REMOVED AND DISPOSED OF OUTSIDE ANY REGULATED WETLAND.
 5. UPON COMPLETION THE DISTURBED SOILS SHALL BE SEEDED WITH A NORTHERN WILDLIFE CONSERVATION MIX AND MULCHED WITH LOOSE STRAW.
 6. THE AREA SHALL BE ALLOWED TO REVEGETATE NATURALLY AND REVERT TO A WILD CONDITION.
 7. THE AREA SHALL BE PLANTED WITH THE FOLLOWING:
 3 RED MAPLE TREES (*Acer rubrum*) 5-6 FEET TALL; SPACED 15 FEET ON CENTER
 12 HIGHBUSH BLUEBERRY SHRUBS (*Vaccinium corymbosum*) 3-4 FEET TALL; SPACED 8 FEET ON CENTER
 12 ARROWWOOD VIBERNUM (*Viburnum dentatum*) 3-4 FEET TALL; SPACED 8 FEET ON CENTER

2' WIDE VEGETATED SWALE
96 SF
NOT TO SCALE

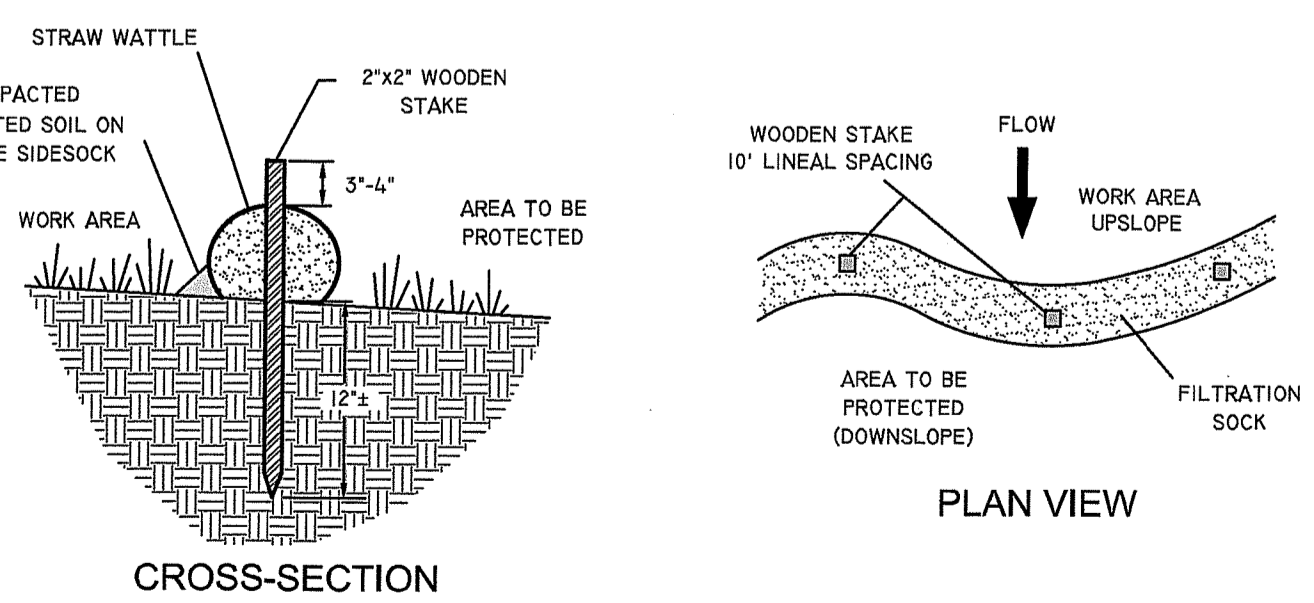


NOTE: VEGETATED SWALE SHALL BE INSPECTED ANNUALLY AND SHOULD BE INSPECTED AFTER LARGE STORM EVENTS.

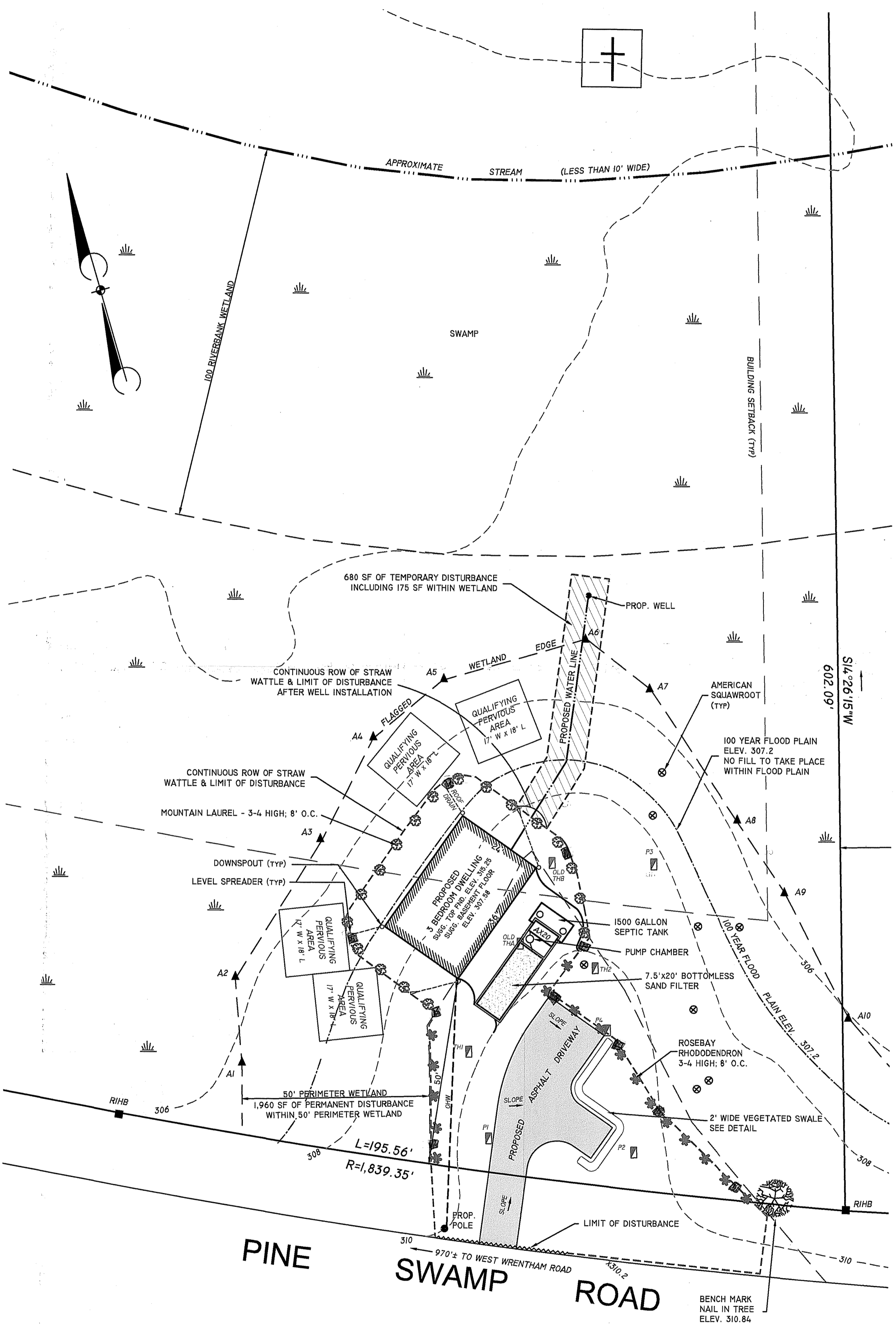
VEGETATIVE SWALE MAINTENANCE

1. The vegetated swale shall be inspected annually and after large storm events.
2. Eroded side slopes and channel bottom shall be stabilized as necessary.
3. If the surface of the dry swale becomes clogged to the point that standing water is observed on the surface 48 hours after precipitation events, the bottom shall be roto-filled or cultivated to break up any hand-packed sediment, and then reseeded.
4. Vegetation in dry swales shall be moved as required to maintain minimum grass heights in the 4-6 inch range.
5. Every five years, the channel bottom of dry swales should be scraped to remove sediment and to restore original cross section and infiltration rate, and should be seeded to restore ground cover, where necessary.

STRAW WATTLE DETAIL
NOT TO SCALE

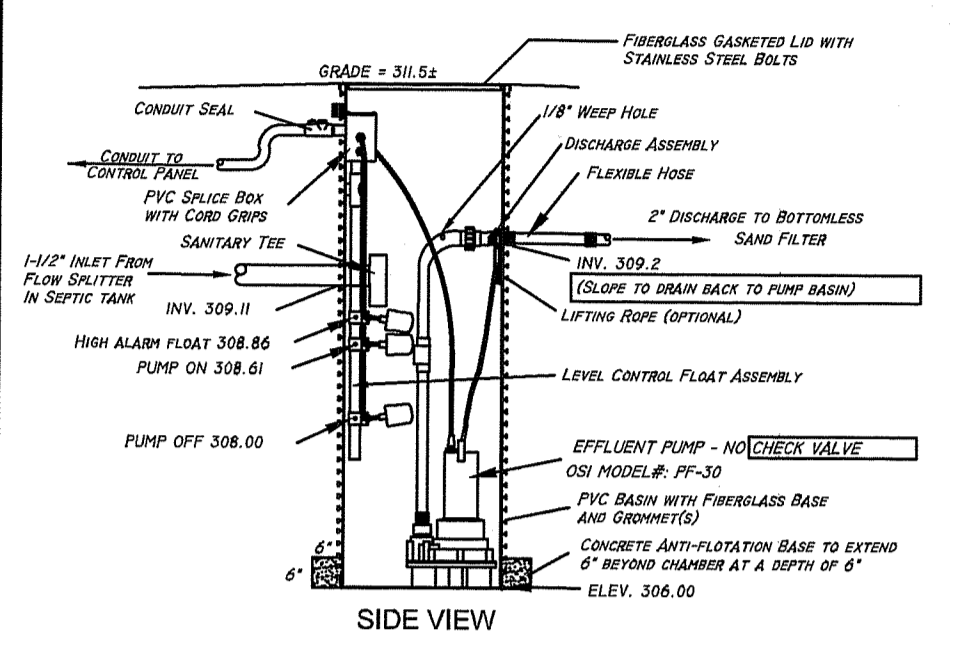


ZONING DISTRICT: A-2
(NO WATER, NO SEWER)
FRONT - 75'
REAR - 30'
SIDE - 20'



- SYSTEM COMPONENTS**
1. 1,500 GALLON 2-COMPARTMENT CONCRETE SEPTIC TANK WITH PUMP VAULT AND RECIRCULATING SPLITTER VALVE AND P3005 PUMP.
 2. 5' DEEP - 24" DIAMETER PUMP BASIN.
 3. AX-20 ADVANTEX TEXTILE FILTER.
 4. 20' LONG x 7.5' WIDE BOTTOMLESS SAND FILTER.
 5. ORENCO SYSTEMS, INC. CONTROL PANEL.

24" DIA. BOTTOMLESS SAND FILTER PUMP WITH EFFLUENT SCALE ASSEMBLY
NOT TO SCALE



- LEGEND**
- 100' --- 200' --- 300' --- 400' --- 500' --- 600' --- 700' --- 800' --- 900' --- 1000'
 - EXISTING CONTOURS
 - PROPOSED CONTOURS
 - THI TEST HOLE
 - ▲ WETLAND FLAG
 - ▲ MOUNTAIN LAUREL
 - ▲ ROSEBAY RHODODENDRON
 - ▲ STRAW WATTLE
 - ▲ AMERICAN SQUAWROOT

TEST HOLE DATA
DATE: 12-14-05

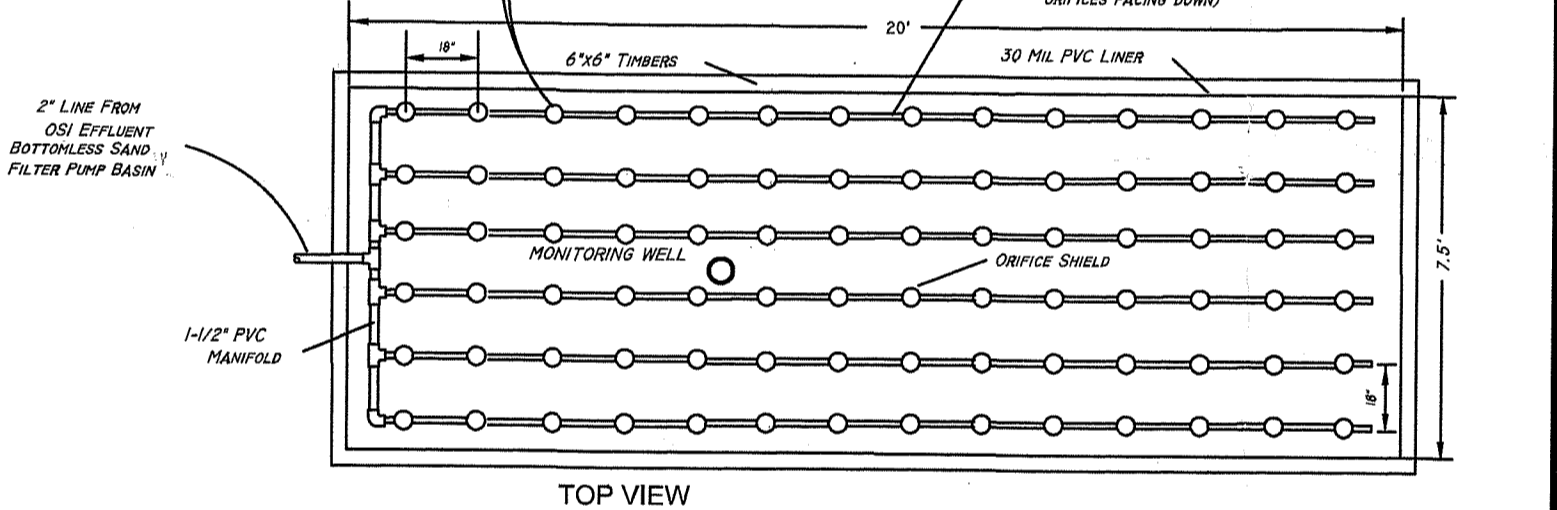
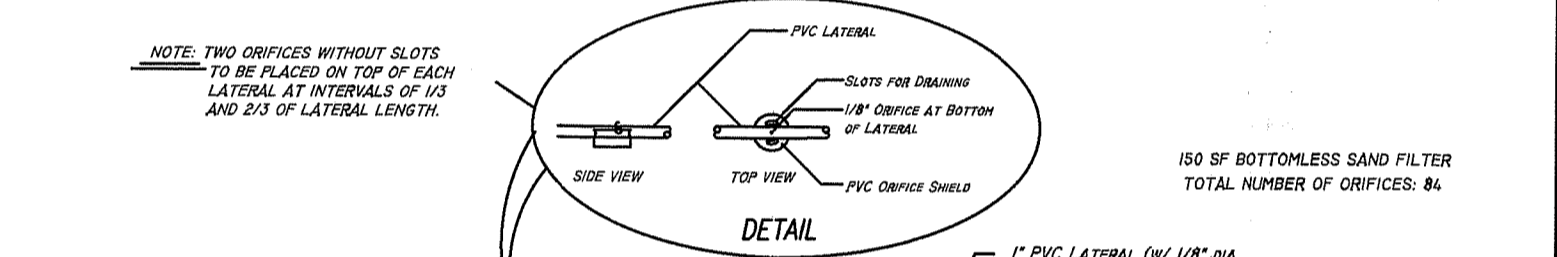
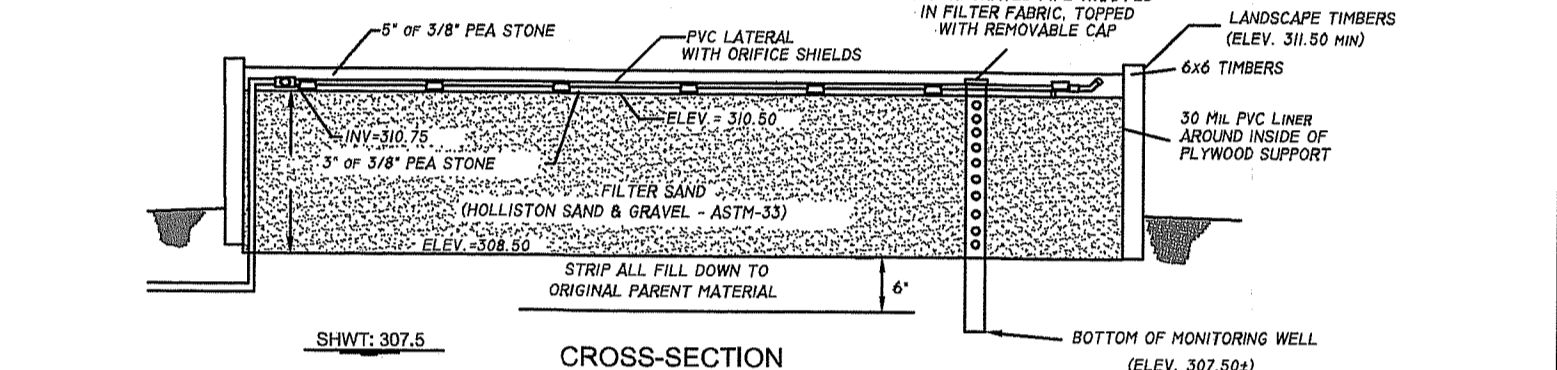
TH1
0'-10" A. SL. 10YR 3/3
10'-34" BW. SL. 10YR 4/6
36'-47" C. ST. CB. G. SL. 10YR 5/4
47'-90" C2. ST. CB. G. LS. 5YR 3/3
DESIGN WATER AT 30"
LEDGE AT 90"

TH2
0'-10" A. SL. 10YR 3/3
10'-33" BW. SL. 10YR 5/6
33'-88" C. ST. CB. G. LS. 2.5YR 5/3
DESIGN WATER AT 33"
LEDGE AT 88"

SOIL CATEGORY: 6
OLD THA DESIGN WATER 6'0" LEDGE 73"
OLD THB DESIGN WATER 6'0" LEDGE 95"

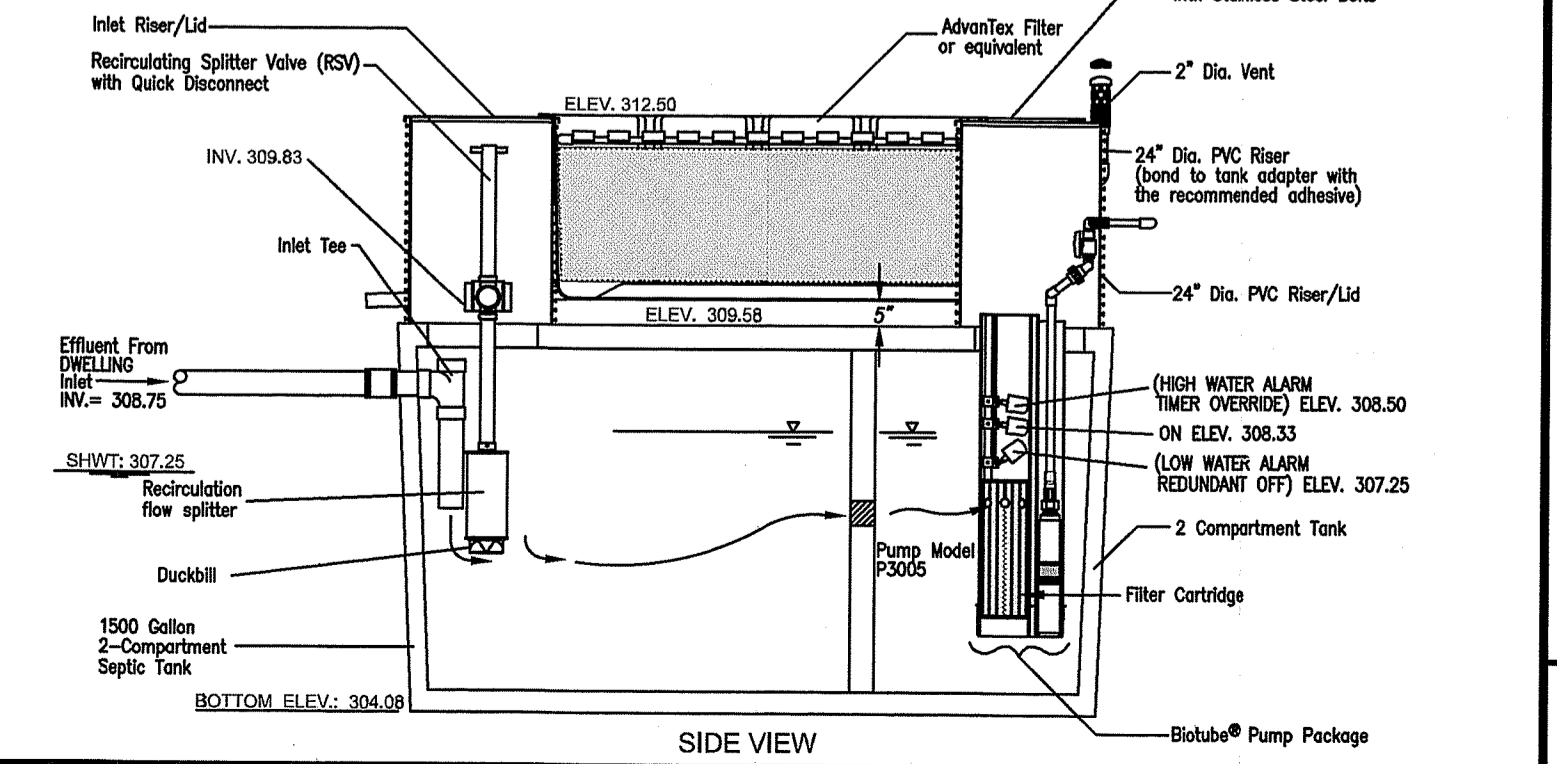
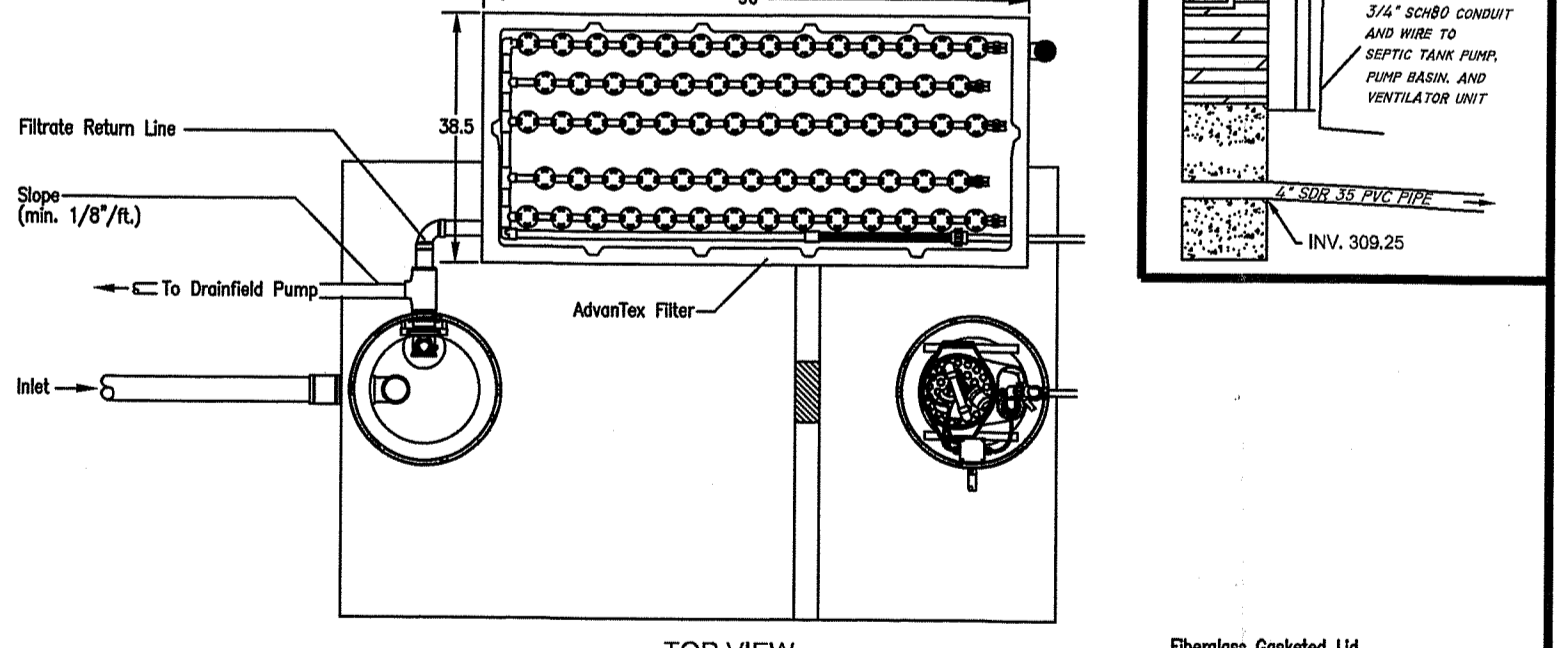
LEDGE PROBES
P1 SURFACE P3 50"
P2 104" P4 74"

BOTTOMLESS SAND FILTER
NOT TO SCALE



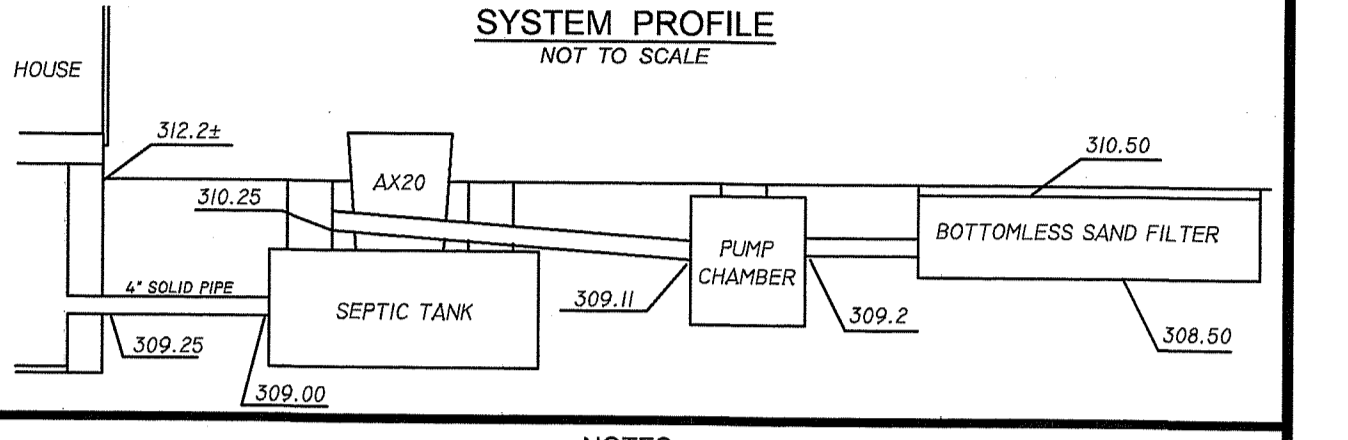
RECIRCULATING EFFLUENT PUMP SYSTEM (REPS)
(2 COMPARTMENT 1,500 GALLON SEPTIC TANK and AX 20 ADVANTEX TEXTILE FILTER)
NOT TO SCALE

AdvanTex Treatment System
AX 20 Series - Mode 3b



RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF ENVIRONMENTAL RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL
DATED: DEC 8 2024 FILE # 21-0095
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

SITE
APPENDIX 'B'
LOCUS MAP
NOT TO SCALE



- NOTES**
- 1) SYSTEM INSTALLATION TO BE SUPERVISED BY THE DESIGNER.
 - 2) ALL TREES AND/OR STUMPS WITHIN 10 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 308.80.
 - 5) ANY PRIVATE WELLS, EXISTING OR PROPOSED, WITHIN 200' OF ISSS ARE SHOWN.
 - 6) ANY PUBLIC WELLS, EXISTING AND PROPOSED, WITHIN 500' OF ISSS 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 SIDE GRADIENT OR 50' DOWNGRADIENT OF THE LEACHING SYSTEM.
 - 9) ALL SSI AT LEAST 8" BELOW EXISTING GRADE AT BOTTOMLESS SAND FILTER SHALL BE STRIPPED AND BACKFILLED WITH FILTER SAND.
 - 10) THE SEPTIC TANK SHALL BE A WATER-TIGHT, 1500 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) ALL MEDIA WITHIN THE ENCLOSURE AND BELOW THE COVER STONE SHALL HAVE AN EFFECTIVE SIZE (D) OF 0.33 mm (φ-1) AND UNIFORMITY COEFFICIENT (U) SHALL BE 2.0 TO 4.0. THE MEDIUM ALLOWABLE PERCENTAGE OF FINES PASSING THROUGH A NUMBER 200 SIEVE SHALL BE 1% OTHER THAN THE GRADATION AND FINE CONTENT SPECIFIED ABOVE. THE SAND MEDIA SHALL MEET OTHER ASTM C-33 SAND SPECIFICATIONS.
 - 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 ISSS 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, 2412 EAST MAIN ROAD, PORTSMOUTH, RI 02871. TEL: (401) 293-0716
 - 18) NO STRUCTURES, PERMANENT FEATURES, OR LARGE, HEAVY OR NUMEROUS DECORATIONS SHALL BE PLACED ON TOP OF THE BOTTOMLESS SAND FILTER THAT WOULD OBSTRUCT, PREVENT OR HINDER OPERATION AND MAINTENANCE OR ACCESS TO THE BOTTOMLESS SAND FILTER.
 - 19) ACCESS PORTS OR MANHOLES SHALL BE REQUIRED FOR REQUIREMENTS VALVES AND SHALL BE SUFFICIENTLY SIZED TO FACILITATE 20) TIGHT SETTINGS SHALL BE CHECKED AT EVERY ESTABLISHED MAINTENANCE AND INSPECTION VISIT AND WHEN HOME OCCUPANCY CHANGES AND ADJUSTED AS NEEDED.
 - 21) THE PANEL BOX MUST BE WITHIN VIEW OF THE SYSTEM LOCATION TO HELP FACILITATE OPERATION AND MAINTENANCE.
 - 22) THE SPACE FROM THE ENDS OF THE LATERALS TO THE LINER SHALL BE CLOSE TO HALF THE ORIFICE SPACING AND BE ABLE TO ACCOMMODATE THE FITTINGS AND HAVE SUFFICIENT SPACE FOR MAINTENANCE ACTIVITIES.
 - 23) SNEED BLOBS SHALL BE ATTACHED TO THE DISTAL END OF EACH LATERAL TO FACILITATE MAINTENANCE AND INSPECTION.
 - 24) REFER TO OPERATION & MAINTENANCE AGREEMENT FOR PROPER MAINTENANCE OF ALL SYSTEM COMPONENTS.

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: 7.5' x 20' = 150 SF

DOSING RATE:
14.38 GAL/DOSE
PUMP CHAMBER CAPACITY = 23.5 GAL./FT OR 1.96 GAL./INCH
PUMP CHAMBER DEPTH @ 14.38 GAL. = 51 FEET
DOSE PER ORIFICE: 34.5 GPD/(24 DOSES/DAY)/84 ORIFICES = .17 GAL/ORIFICE/DOSE

TIMER INFO:
SET ADVANTEX TIMER TO 24 DOSES/DAY
34.5 GPD/24 DOSES/DAY = 14.38 GAL/DOSE
14.38/52.6 GPM = .44 MIN.
TOTAL PUMP RUN TIME = 10.56 MIN./DAY
TOTAL PUMP OFF TIME = 1430.04 MIN./DAY
TIME OFF PER CYCLE = 59.56 MIN.
TIME ON PER CYCLE = 0.44 MIN.

ONSITE WASTEWATER TREATMENT SYSTEM and WETLANDS PLAN
FOR
JOSEPH & DEBRA LEPORE
PLAT 49, LOT 149
PINE SWAMP ROAD, CUMBERLAND, RHODE ISLAND
DATE: FEBRUARY, 2021
SCALE: 1" = 20'
REVISED: 1-14-22
11-21-23
5-14-24

GRAPHIC SCALE
0' 20' 40' 60'

CERTIFICATION
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 NOVEMBER 25, 2015, AS FOLLOWS:
LIMITED CONTENT BOUNDARY SURVEY: CLASS IV
STATEMENT OF PURPOSE
THE PURPOSE FOR THE CONDUCT OF THIS SURVEY IS THE PREPARATION OF THE PLAN IS AS FOLLOWS: PROPOSED HOUSE
By: Marc N. Nyberg License No. 1797 MAY 20 2024
MARC N. NYBERG License No. 1797 COA No.: A52
Office of Water Resources

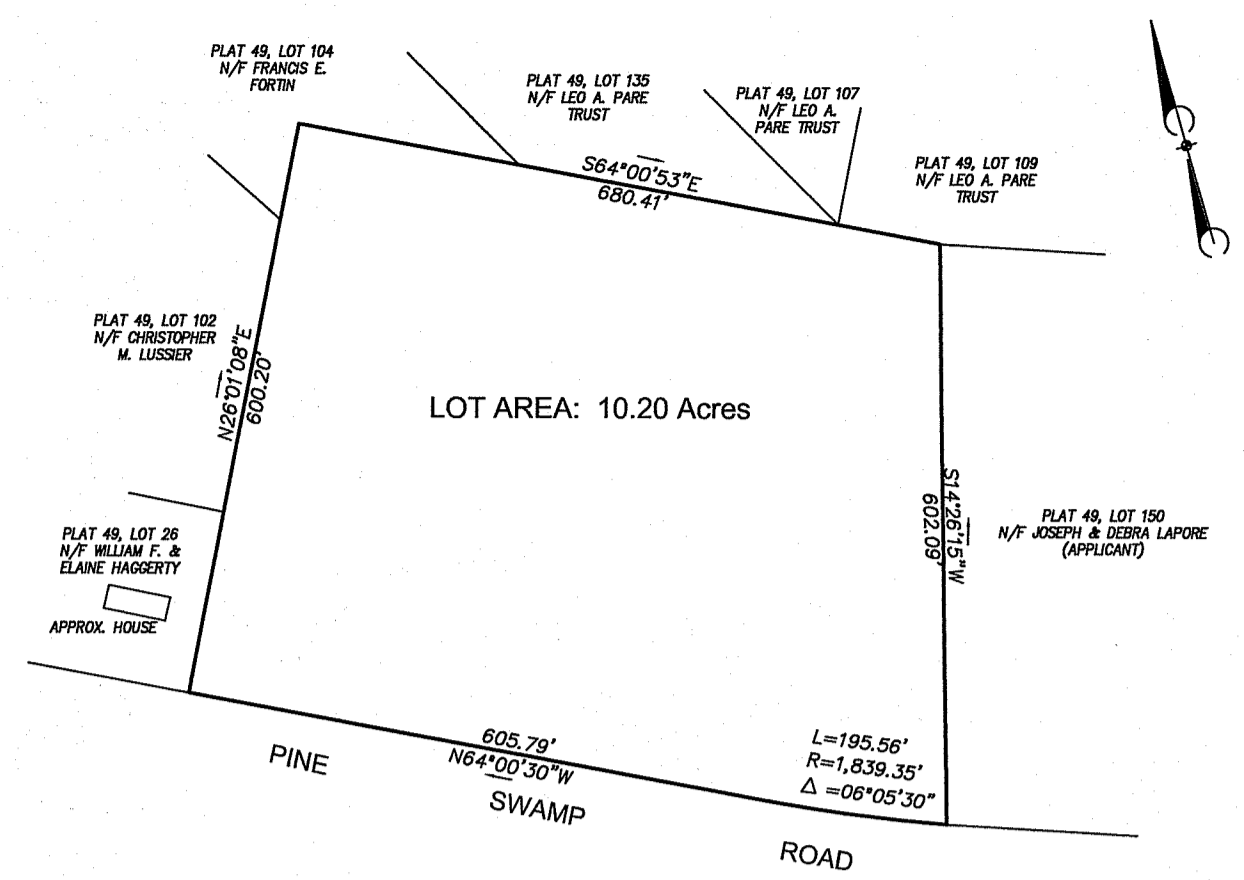
MARC N. NYBERG
No. 1797
PROFESSIONAL LAND SURVEYOR

PAUL D. CARLSON
No. 7142
REGISTERED PROFESSIONAL ENGINEER - CIVIL

INSITE Engineering Services, LLC
PROFESSIONAL ENGINEERS & LAND SURVEYORS
Precision. Clarity. Certainty.
501 Great Road, Unit 104
North Smithfield, Rhode Island 02896
Phone: (401) 762-2870 Fax: (401) 401-762-2871
Web Address: InsiteEngineers.com

SHEET NUMBER
1 of 1

JOB NUMBER
05-225

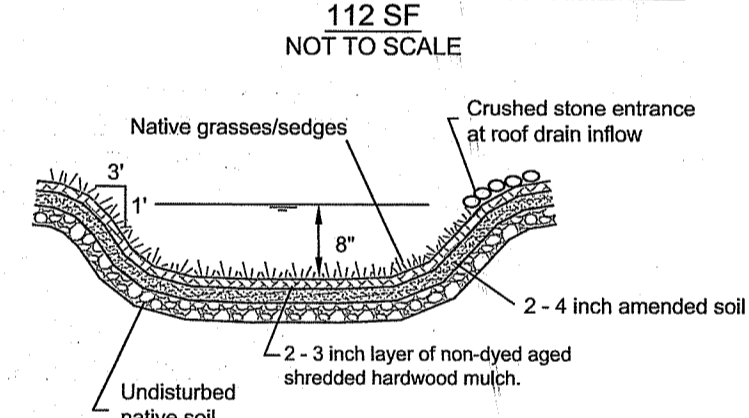


LOCUS MAP
SCALE: 1" = 200'

NOTES FOR RESTORATION OF TEMPORARY ALTERATION

1. EROSION CONTROLS SHALL BE INSTALLED PRIOR TO ANY WORK.
2. ALL SLASH FROM TREE AND SHRUB CUTTING SHALL BE REMOVED AND PROPERLY DISPOSED OF OUTSIDE ANY REGULATED WETLAND.
3. NO STUMPING OR GRUBBING SHALL OCCUR TO ALLOW FOR REGROWTH (EXCEPT FOR THE WATER LINE TRENCH).
4. ALL SPOILS FROM THE WELL DRILLING SHALL BE REMOVED AND DISPOSED OF OUTSIDE ANY REGULATED WETLAND.
5. UPON COMPLETION THE DISTURBED SOILS SHALL BE SEEDED WITH A NORTHERN WILDLIFE CONSERVATION MIX AND MULCHED WITH LOOSE STRAW.
6. THE AREA SHALL BE ALLOWED TO REVEGETATE NATURALLY AND REVERT TO A WILD CONDITION.
7. THE AREA SHALL BE PLANTED WITH THE FOLLOWING:
 3 RED MAPLE TREES (*Acer rubrum*) 5-6 FEET TALL; SPACED 15 FEET ON CENTER
 12 Highbush Blueberry Shrubs (*Vaccinium corymbosum*) 3-4 FEET TALL; SPACED 8 FEET ON CENTER
 12 Arrowwood Vibernum (*Viburnum dentatum*) 3-4 FEET TALL; SPACED 8 FEET ON CENTER

2' WIDE VEGETATED SWALE
112 SF
NOT TO SCALE

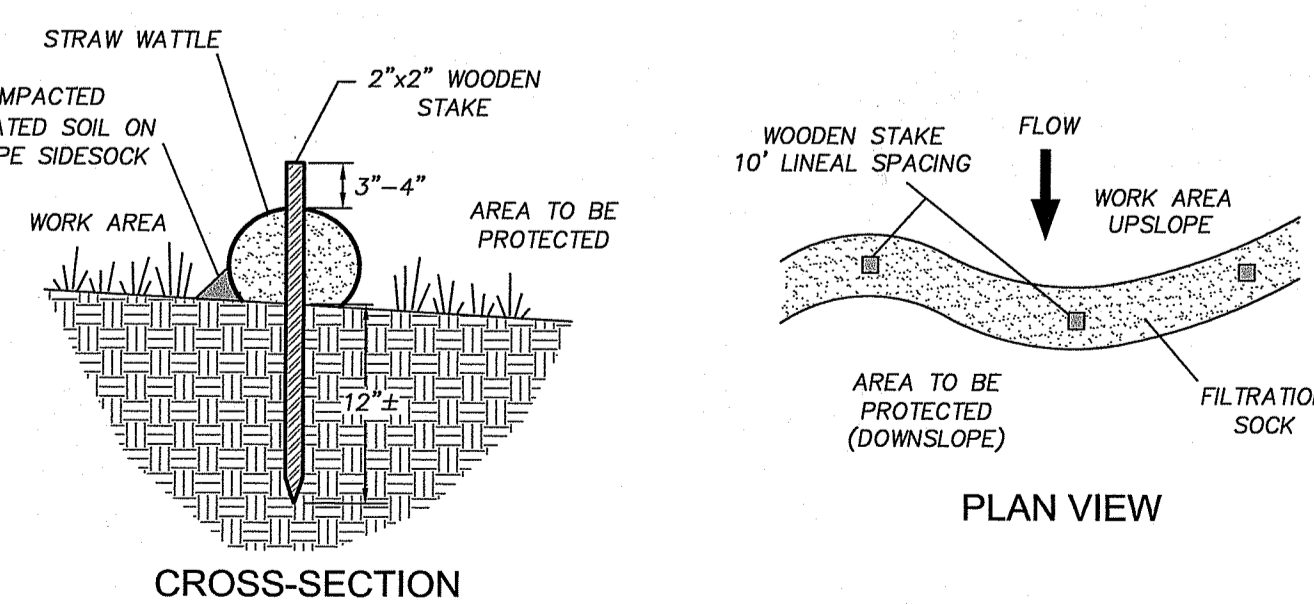


NOTE: VEGETATED SWALE SHALL BE INSPECTED ANNUALLY AND SHOULD BE INSPECTED AFTER LARGE STORM EVENTS.

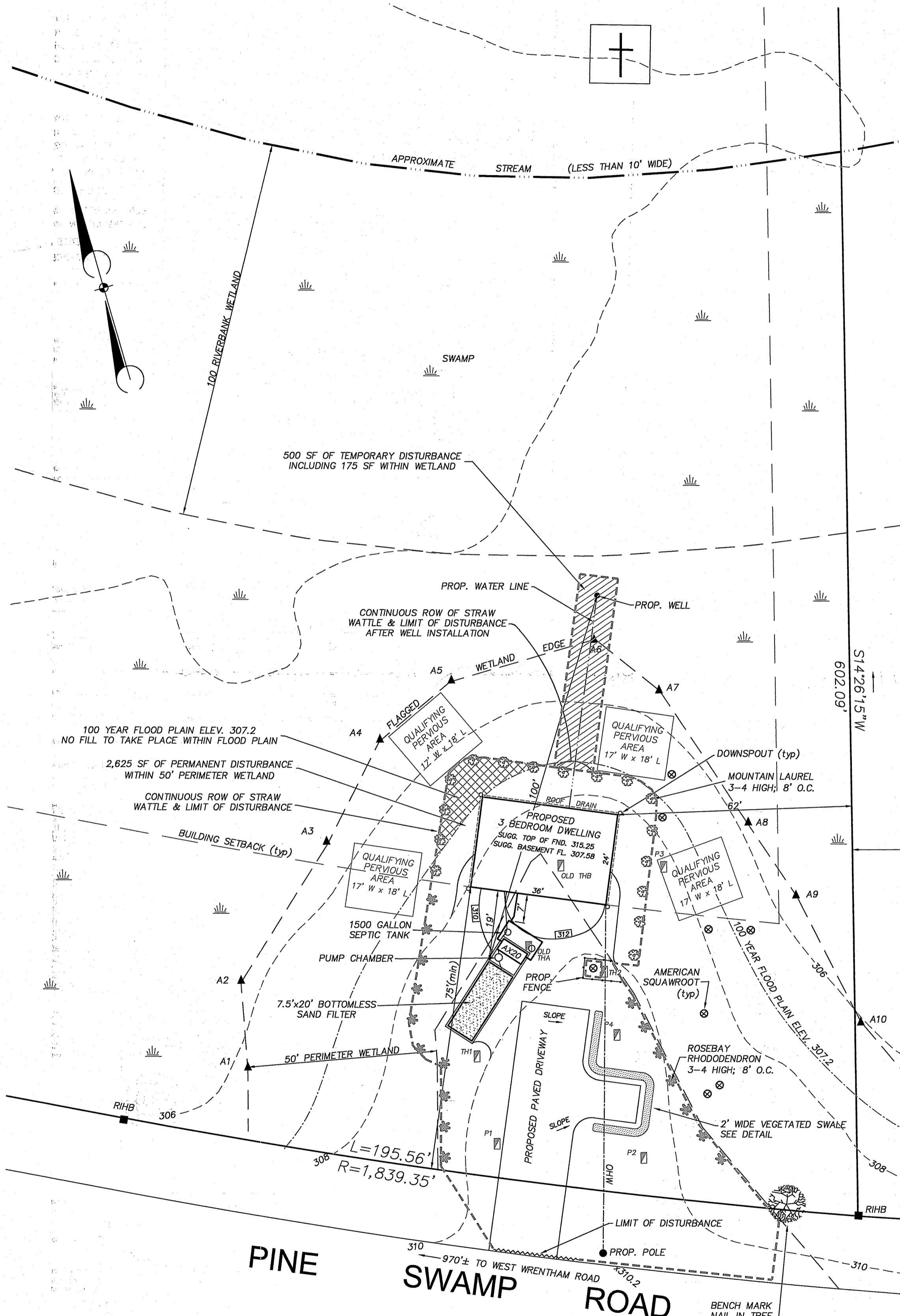
VEGETATIVE SWALE MAINTENANCE

1. The vegetated swale shall be inspected annually and after large storm events.
2. Eroded side slopes and channel bottom shall be stabilized as necessary.
3. If the surface of the dry swale becomes clogged to the point that standing water is observed on the surface 48 hours after precipitation events, the bottom shall be rototilled or cultivated to break up any hard-packed sediment, and then reseeded.
4. Vegetation in dry swales shall be mowed as required to maintain minimum grass heights in the 4-6 inch range.
5. Every five years, the channel bottom of dry swales should be scraped to remove sediment and to restore original cross section and infiltration rate, and should be seeded to restore ground cover, where necessary.

STRAW WATTLE DETAIL
NOT TO SCALE



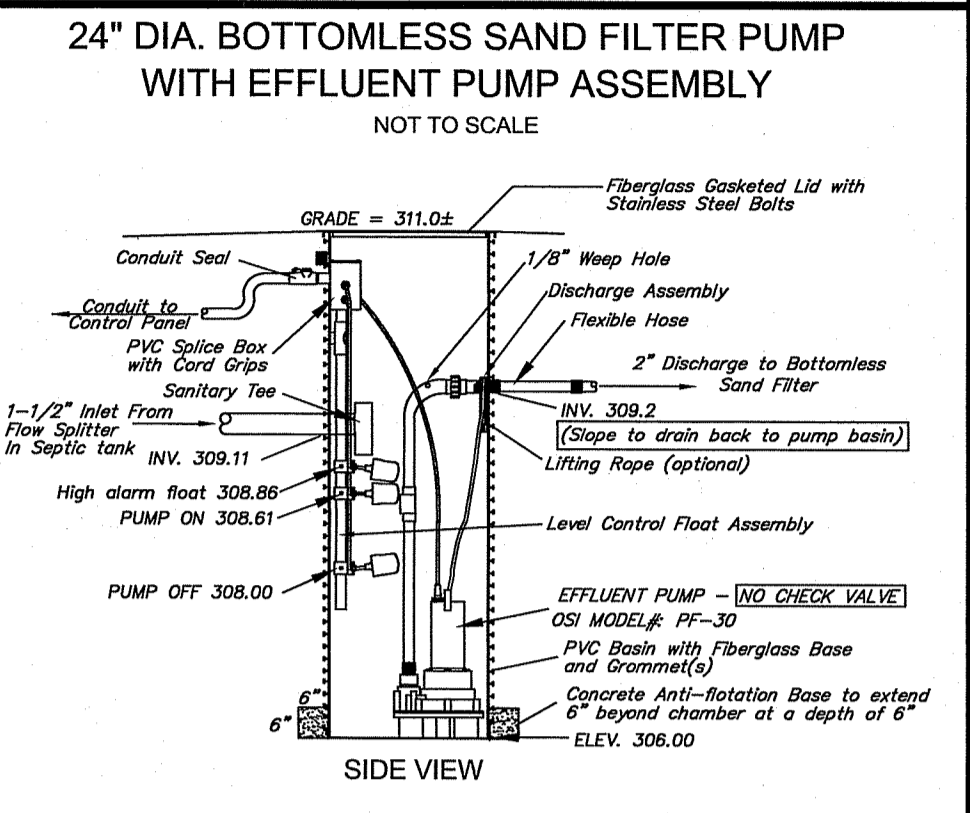
ZONING DISTRICT: A-2
(NO WATER, NO SEWER)
FRONT - 75'
REAR - 30'
SIDE - 20'



- SYSTEM COMPONENTS**
1. 1,500 GALLON 2-COMPARTMENT CONCRETE SEPTIC TANK WITH PUMP VAULT AND RECIRCULATING SPLITTER VALVE AND P3005 PUMP.
 2. 5' DEEP - 24" DIAMETER PUMP BASIN.
 3. AX-20 ADVANTEX TEXTILE FILTER.
 4. 20' LONG x 7.5' WIDE BOTTOMLESS SANDFILTER.
 5. ORENCO SYSTEMS, INC. CONTROL PANEL.

LEGEND

| | |
|------|----------------------|
| 100 | EXISTING CONTOURS |
| 1001 | PROPOSED CONTOURS |
| TH1 | TEST HOLE |
| ▲ | WETLAND FLAG |
| ▲ | MOUNTAIN LAUREL |
| ▲ | ROSEBAY RHODODENDRON |
| --- | STRAW WATTLE |

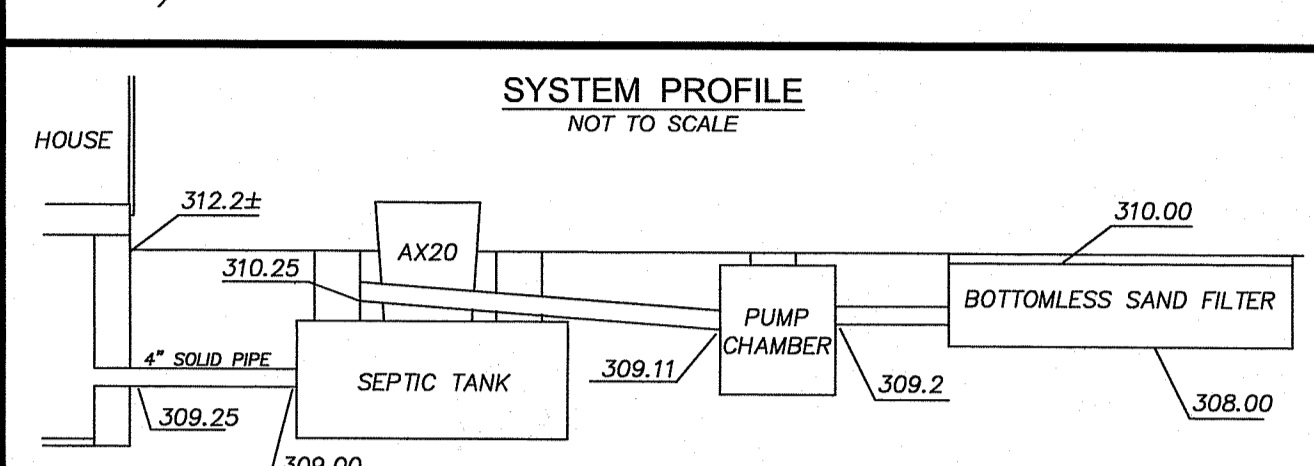
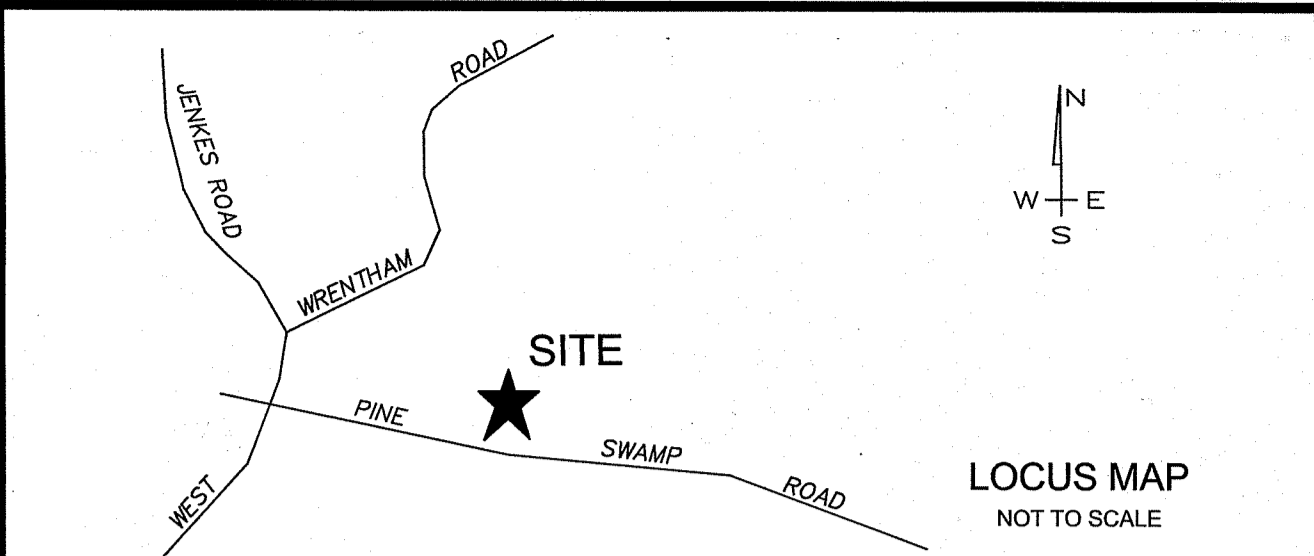


TEST HOLE DATA
DATE: 12-14-05

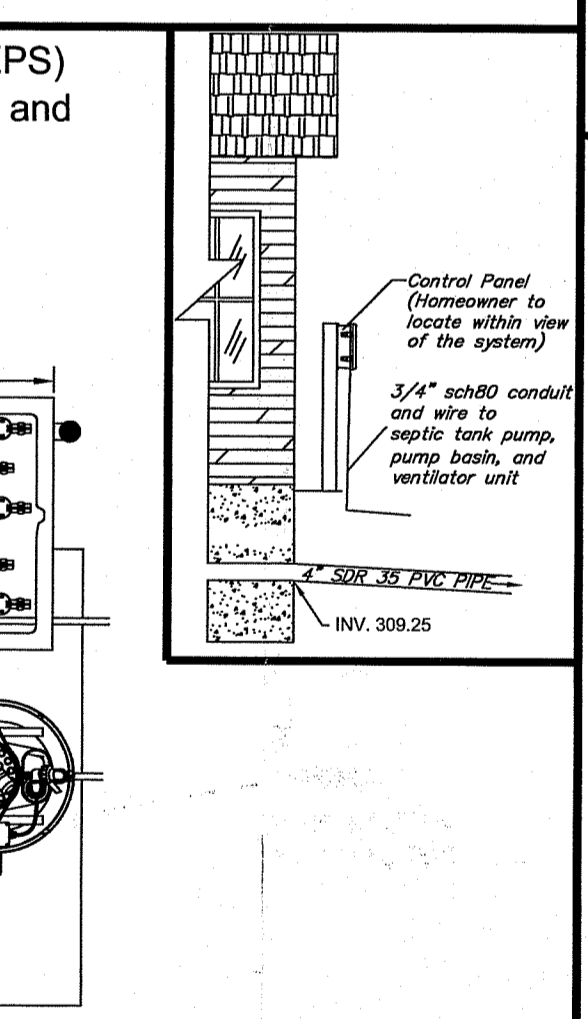
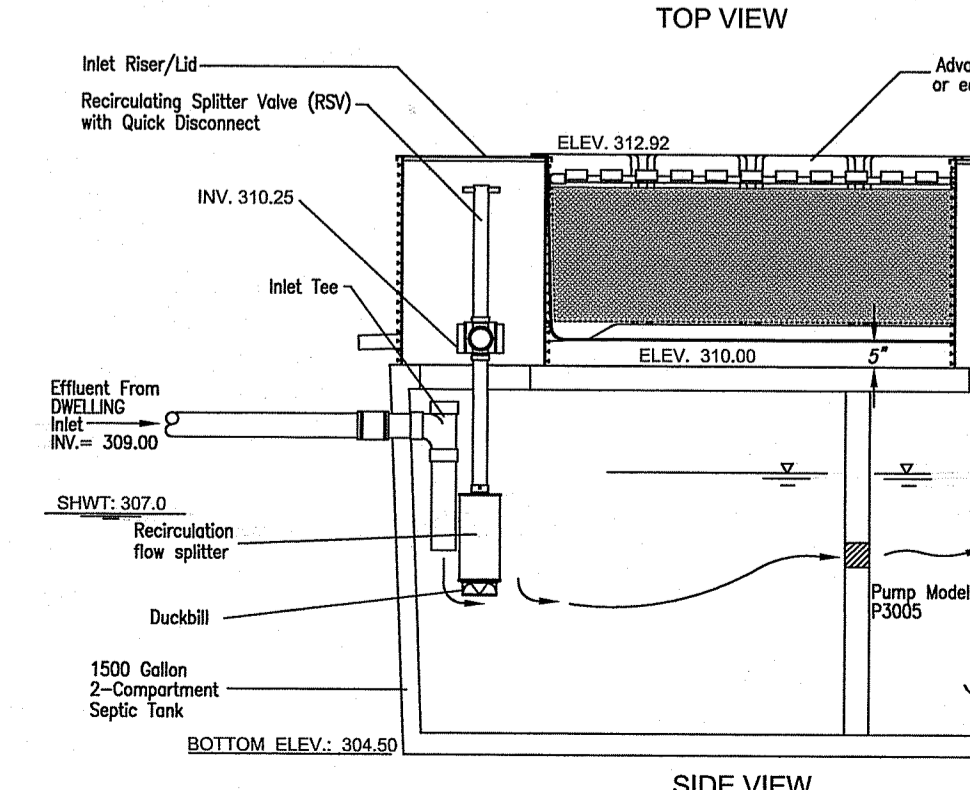
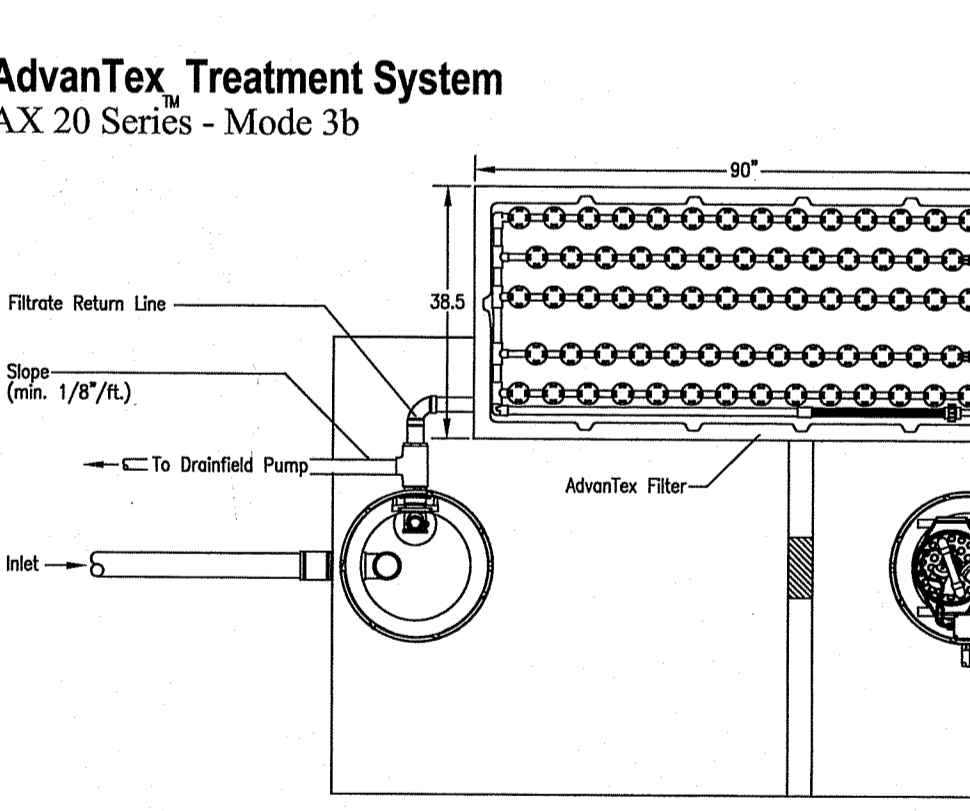
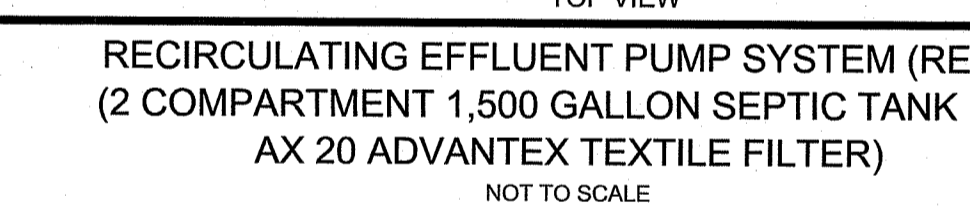
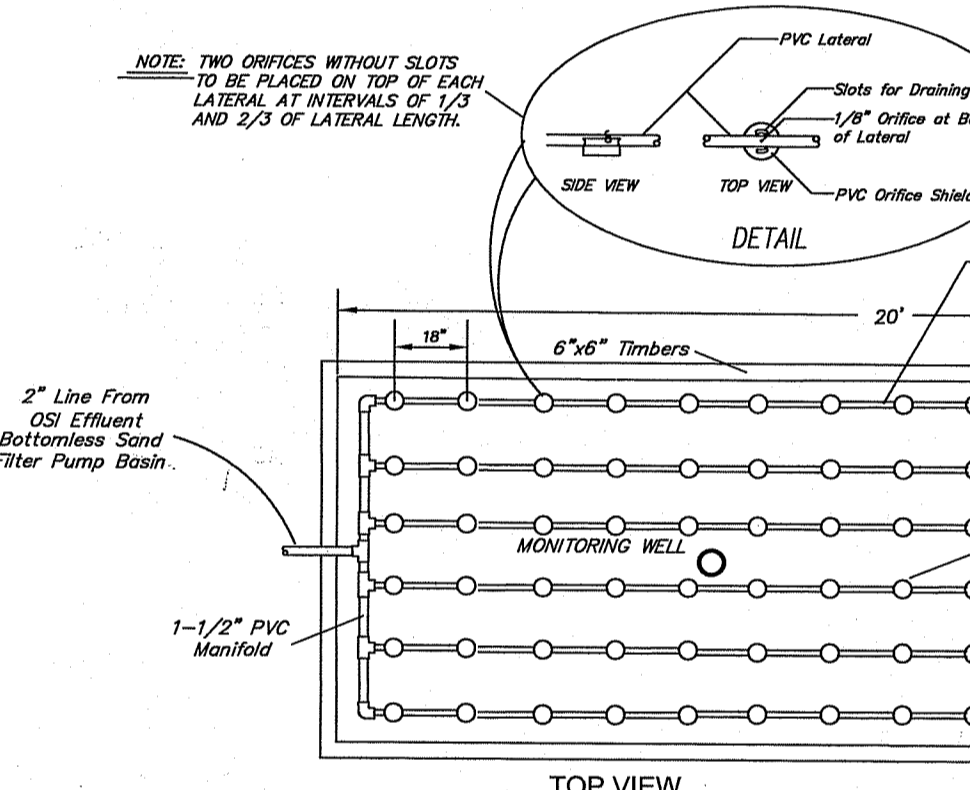
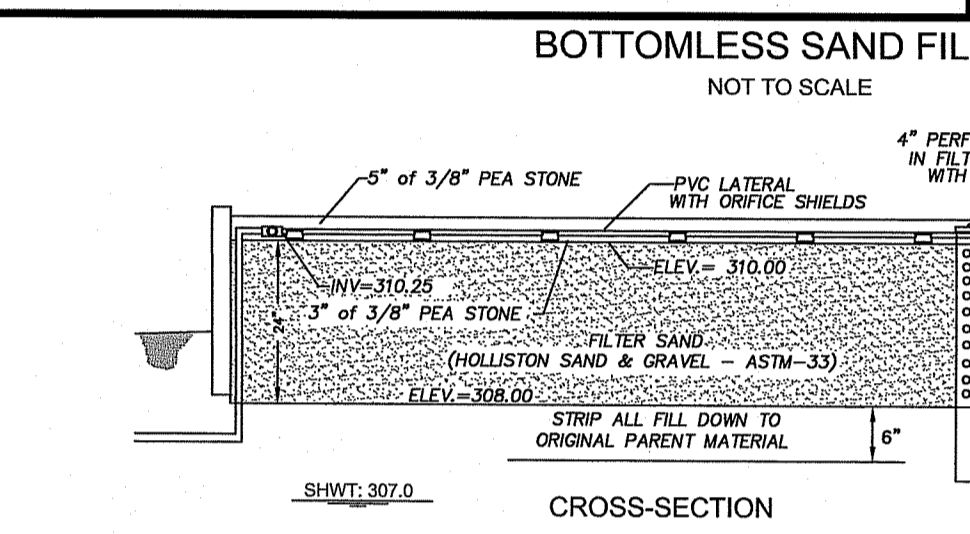
| | |
|-----|-------------------------------------|
| TH1 | 0'-10" A, SIL, 10YR 3/3 |
| | 10'-36" Bw, SL, 10YR 4/6 |
| | 36'-47" C, ST, CB, G, SL, 10YR 5/4 |
| | 47'-90" C2, ST, CB, G, LS, 5YR 3/3 |
| | DESIGN WATER AT 30" |
| | LEDGE AT 90" |
| TH2 | 0'-10" A, SIL, 10YR 3/3 |
| | 10'-33" Bw, SL, 10YR 5/6 |
| | 33'-88" C, st, CB, G, IS, 2.5YR 5/3 |
| | DESIGN WATER AT 33" |
| | LEDGE AT 88" |

SOIL CATEGORY: 6
 OLD THA DESIGN WATER 6'0" LEDGE 73"
 OLD THB DESIGN WATER 6'0" LEDGE 95"

LEDGE PROBES
 P1 SURFACE P3 50"
 P2 104" P4 74"



- 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 308.00.
 - 5) ANY PRIVATE WELLS, EXISTING & PROPOSED, WITHIN 200' OF ISSS ARE SHOWN.
 - 6) ANY PUBLIC WELLS, EXISTING AND PROPOSED, WITHIN 500' OF ISSS ARE SHOWN.
 - 7) SEPTIC TANK TO BE A MINIMUM OF 2' FROM ALL WELLS.
 - 8) NO DRAINS OF ANY KIND SHALL BE WITHIN 25' UPGRADIENT OR SIDE GRADIENT OR 50' DOWNGRADIENT OF THE 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 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 (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) ALL MEDIA WITHIN THE ENCLOSURE AND BELOW THE COVER STONE SHALL HAVE AN EFFECTIVE SIZE (D₅₀) OF 0.33 mm (+/-) AND UNIFORMITY COEFFICIENT (D₆₀/D₁₀) OF 3.0 TO 4.0. THE MAXIMUM ALLOWABLE PERCENTAGE OF FINES PASSING THROUGH A NUMBER 200 SIEVE SHALL BE 1% OTHER THAN THE GRADATION AND FINE CONTENT SPECIFIED ABOVE. THE SAND MEDIA SHALL MEET OTHER ASTM C-33 SAND SPECIFICATIONS.
 - 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 ISSS USER, INCLUDING BUT NOT LIMITED TO, FAILURE TO PROPERLY USE AND MAINTAIN THE SYSTEM, WHICH CAUSES DAMAGE TO THE SYSTEM.
 - 17) LOCAL SUPPLIER OF OS EQUIPMENT: ATLANTIC SOLUTIONS, 2417 EAST MAIN ROAD, PORTSMOUTH, RI 02871 TEL: (401) 983-0178
 - 18) NO STRUCTURES, PERMANENT FEATURES, OR LARGE, HEAVY OR NUMEROUS DECORATIONS SHALL BE PLACED ON TOP OF THE BOTTOMLESS SAND FILTER THAT WOULD OBSTRUCT, PREVENT OR HINDER OPERATION AND MAINTENANCE OR ACCESS TO THE ACCESS PORTS OR MANHOLES SHALL BE REQUIRED FOR SEQUENCING VALVES AND SHALL BE SUFFICIENTLY SIZED TO FACILITATE 20 TONER SETTINGS SHALL BE CHECKED AT EVERY ESTABLISHED MAINTENANCE AND INSPECTION VISIT AND WHEN HOME OCCUPANCY CHANGES AND ADJUSTED AS NEEDED.
 - 19) THE PANEL BOX MUST BE WITHIN VIEW OF THE SYSTEM LOCATION TO HELP FACILITATE OPERATION AND MAINTENANCE.
 - 20) THE SPACE FROM THE ENDS OF THE LATERALS TO THE LINER SHALL BE CLOSE TO HALF THE ORIFICE SPACING AND BE ABLE TO ACCOMMODATE THE FITTINGS AND HAVE SUFFICIENT SPACE FOR MAINTENANCE ACTIVITIES.
 - 21) SWEEP ELBOWS SHALL BE ATTACHED TO THE DISTAL END OF EACH LATERAL TO FACILITATE MAINTENANCE AND INSPECTION.
 - 22) REFER TO OPERATION & MAINTENANCE AGREEMENT FOR PROPER MAINTENANCE OF ALL SYSTEM COMPONENTS.



SYSTEM SIZING:

| | |
|----------------------|-----------------------|
| 3 BEDROOMS: | 115 GPD x 3 = 345 GPD |
| SOIL CATEGORY: | 6 |
| APPLICATION RATE: | 2.3 GPD/SF |
| TOTAL AREA REQUIRED: | 345/2.3 = 150 SF |
| AREA PROVIDED: | 7.5' x 20' = 150 SF |

SETTING INFO:

| | |
|---|--|
| 14.38 GAL/DOSE | SET ADVANTEX TIMER TO 24 DOSES/DAY |
| PUMP CHAMBER CAPACITY = 23.5 GAL/FT OR 1.96 GAL/INCH | 345 GPD/24 DOSES/DAY = 14.38 GAL/DOSE |
| PUMP CHAMBER DEPTH @ 14.38 GAL = 61 FEET | APPLICATION RATE: 2.3 GPD/SF |
| DOSE PER ORIFICE: 345 GPD/(24 DOSES/DAY)/84 ORIFICES = .17 GAL/ORIFICE/DOSE | 14.38/32.6 GPM = .44 MIN. |
| | TOTAL PUMP RUN TIME = 10.56 MIN./DAY |
| | TOTAL PUMP OFF TIME = 1430.04 MIN./DAY |
| | TIME OFF PER CYCLE = 59.56 MIN. |
| | TIME ON PER CYCLE = 0.44 MIN. |

ONSITE WASTEWATER TREATMENT SYSTEM and WETLANDS PLAN
FOR
JOSEPH & DEBRA LEPORE
PLAT 49, LOT 149
PINE SWAMP ROAD, CUMBERLAND, RHODE ISLAND
DATE: FEBRUARY, 2021
SCALE: 1" = 20'
REVISED: 1-14-22

CERTIFICATION
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 NOVEMBER 25, 2015, AS FOLLOWS:
LIMITED CONTENT BOUNDARY SURVEY: CLASS IV
TOPOGRAPHIC ACCURACY: 1/4"
STATEMENT OF PURPOSE:
THE PURPOSE FOR THE CONDUCT OF THE SURVEY AND THE PREPARATION OF THE PLAN IS, AS FOLLOWS: PROPOSED HOUSE
BY: *Marc N. Nyberg*
MARC N. NYBERG License No. 1797 COA No.: A52

PAUL D. CARLSON
No. 7142
REGISTERED PROFESSIONAL ENGINEER
CIVIL

INSITE Engineering Services, LLC
PROFESSIONAL ENGINEERS | LAND SURVEYORS
Precision. Clarity. Certainty.
MAR 29 2022
Office of Water Resources
501 Great Road, Unit 104
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(401) 762-2870 Fax: (401) 401-762-2871
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SHEET NUMBER 1 of 1
JOB NUMBER 05-225