

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATE: OCT - 8 2009 FILE # 09-0148  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

*W. Joseph Casey*  
 LEGEND

- 124 --- EXISTING CONTOUR
- A29- A30- WETLAND EDGE
- PW- 50' PERIMETER WETLAND
- RBW- 100' RIVERBANK WETLAND
- ⊙ GROUNDWATER TEST HOLE
- W- EXIST. WATER
- D- EXIST. DRAIN
- ~ EXIST. TREE LINE
- - - SOILS LINE

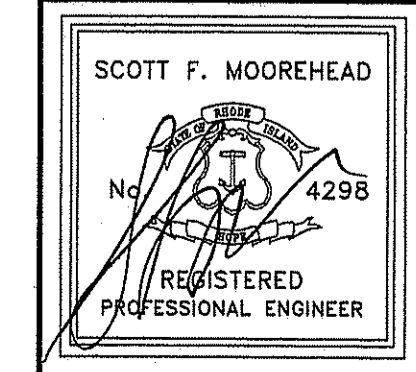
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

**NOTES**

1. PERIMETER PROPERTY LINE FROM "HIGHLAND PARK" RECORDED SUBDIVISION PLAN PREPARED BY RICHARD A. GREENE & ASSOCIATES, INC.
2. TOPOGRAPHIC INFORMATION TAKEN FROM PLANS BY RICHARD A. GREENE & ASSOC. AND UPDATED WITH AS-BUILT SURVEYS BY SCITUATE SURVEYS, INC.
3. UTILITY LOCATIONS ARE PLOTTED FROM BEST AVAILABLE DATA AND SHOULD NOT BE CONSIDERED COMPLETE. CONTRACTOR SHALL VERIFY LOCATIONS IN ACCORDANCE WITH DIG SAFE REQUIREMENTS.

INSTALL BALED HAY OR SILT FENCE EROSION CHECK AT ALL DOWNGRADIENT LIMITS OF DISTURBANCE (TYP.)

A.P. 48 LOT 59  
 N/F RICHMOND REALTY ASSOCIATES, LLC



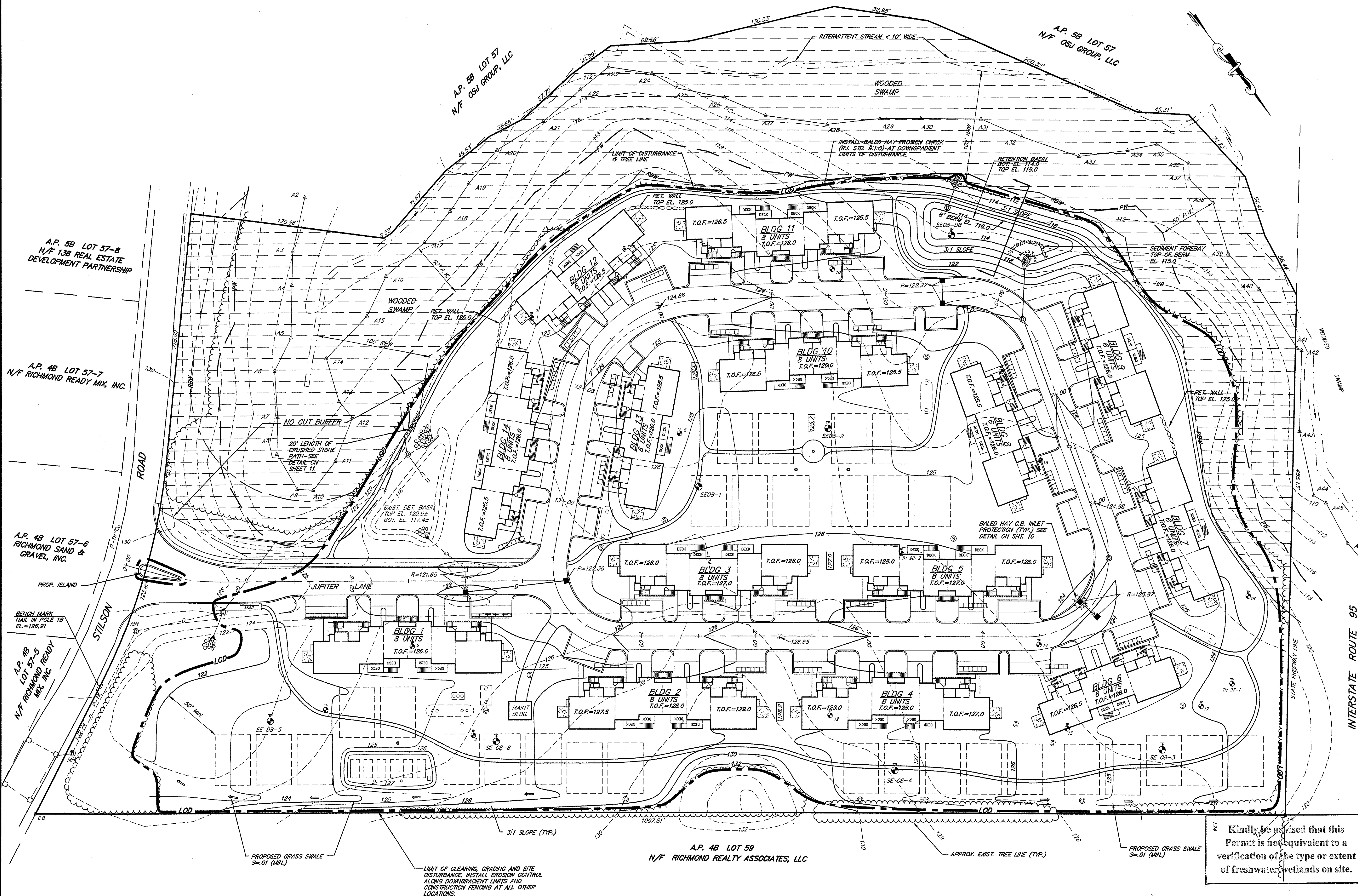
DATE	REVISION

**FOX RUN CONDOMINIUMS**  
 COMPREHENSIVE PERMIT DEVELOPMENT  
 A. P. 48 LOTS 62-1 TO 62-7  
 RICHMOND, RHODE ISLAND  
 PREPARED FOR:  
 NTH DEVELOPMENT CORP.  
 2091 NOOSENECK HILL ROAD  
 COVENTRY, RHODE ISLAND 02816  
 (401)392-3000



S.F.M. ENGINEERING ASSOCIATES  
 410 TIOGUE AVENUE  
 COVENTRY, R.I. 02816  
 (401)826-3736

EXISTING CONDITIONS



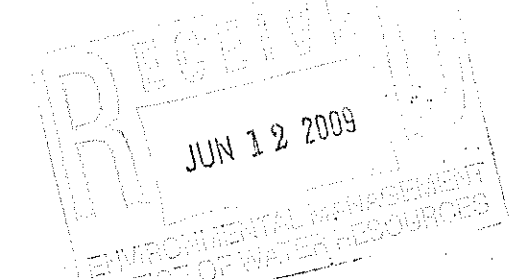
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*W. Joseph Carey*

**LEGEND**

- 124 --- EXISTING CONTOUR
- 124 --- PROPOSED CONTOUR
- A29 A30 WETLAND EDGE
- PW 30' PERIMETER WETLAND
- RBW 100' RIVERBANK WETLAND
- ⊕ GROUNDWATER TEST HOLE
- D- EXIST. DRAIN
- ⌞ EXIST. TREE LINE

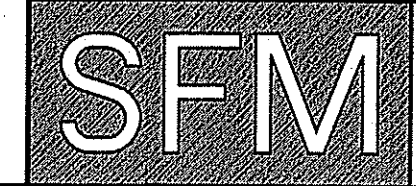
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SCOTT F. MOOREHEAD  
 No. 4298  
 REGISTERED PROFESSIONAL ENGINEER

DATE	REVISION

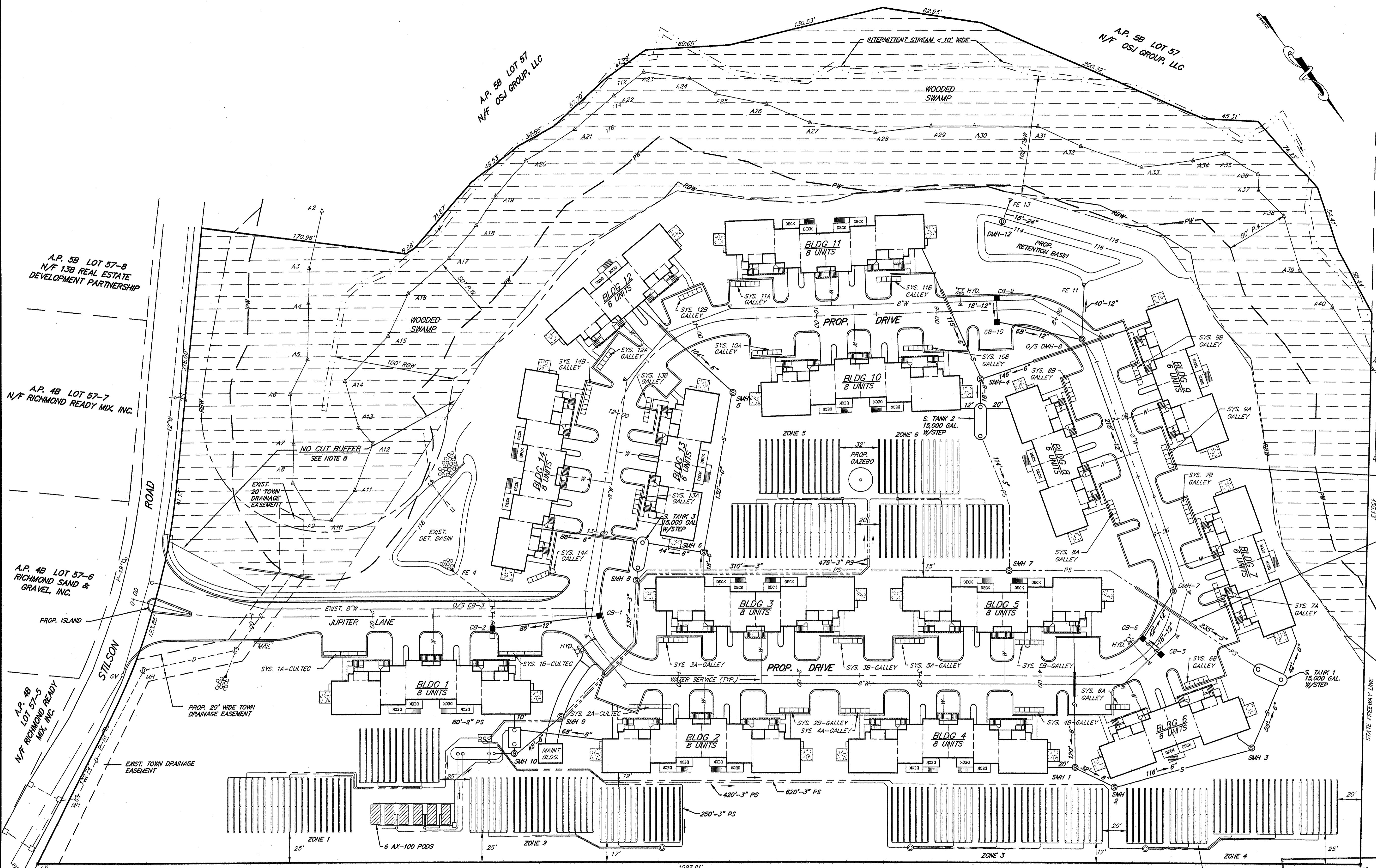
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 COMPREHENSIVE PERMIT DEVELOPMENT  
 A. P. 48 LOTS 62-1 TO 62-7  
 RICHMOND, RHODE ISLAND  
 PREPARED FOR:  
 MTM DEVELOPMENT CORP.  
 2091 NOOSENECK HILL ROAD  
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**GRADING PLAN**

ROOF DRAIN INFILTRATION SYSTEMS			
SYS. NO.	BOTTOM STONE EL.	SYS. NO.	BOTTOM STONE EL.
1A	118.50	1B	119.00
2A	118.00	2B	120.00
3A	118.00	3B	118.00
4A	120.00	4B	119.00
5A	120.00	5B	119.00
6A	118.00	6B	118.00
7A	118.00	7B	118.00
8A	118.00	8B	118.00
9A	118.00	9B	118.00
10A	118.00	10B	118.00
11A	118.00	11B	118.00
12A	118.00	12B	118.00
13A	117.50	13B	118.00
14A	118.00	14B	118.00



ROOF INFILTRATION GALLEYS TO BE 25' MIN. FROM SEWERS SEE DETAIL ON SHT. 10

SLEEVE SEWER AT ALL LOCATIONS WITHIN 25' OF DRAINS AND WITHIN 10' OF WATER LINES SEE DETAIL ON SHT. 9

EXIST. 21" R.C.P. CULVERT

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*W. Joseph Cooney*

**LEGEND**

- A29 - A30 - WETLAND EDGE
- FW - 50' PERIMETER WETLAND
- RBW - 100' RIVERBANK WETLAND
- W - EXIST. WATER
- D - EXIST. DRAIN
- W - PROP. WATER
- S - PROP. SEWER
- PS - PROP. PRESSURE SEWER

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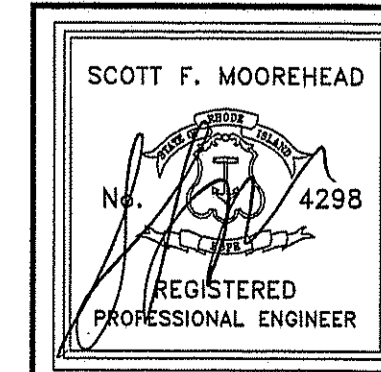
**NOTE:**  
CATCH BASIN FRAME & GRATES SHALL BE SET 2"(17) BELOW DESIGN RIM EL. FOR INSTALLATION OF BINDER PAVEMENT. GRATES SHALL BE ADJUSTED TO DESIGN RIM EL. PRIOR TO INSTALLATION OF FINISH PAVEMENT COURSE.

DRAINAGE TABLE						
NO.	TYPE	ROAD	STATION	RIM	INV. IN	INV. OUT
1	CB	DRIVE	0+00, 12' LT.	122.30	—	12' 119.10
2	O/S CB	JUPITER	3+00 12' RT.	121.84	12' 118.70	15' 118.70
3	CB	JUPITER	3+00 12' LT.	121.84	15' 118.54	15' 118.32
4	FE	JUPITER	2+75 42' LT.	—	15' 117.8	—
5	CB	DRIVE	5+00 RT.	123.87	—	12' 120.50
6	CB	DRIVE	5+00 LT.	123.87	12' 120.30	12' 120.30
7	DMH	DRIVE	5+50	124.50	12' 119.70	12' 119.70
8	O/S DMH	DRIVE	7+75	122.64	12' 117.00	12' 116.00
9	CB	DRIVE	8+50 12' RT.	122.27	—	12' 118.00
10	CB	DRIVE	8+50, 12' LT.	122.27	12' 117.80	12' 117.80
11	FE	DRIVE	7+90, 32' RT.	—	18' 115.60	—
12	DMH	RB	—	116.00	—	24' 112.50
13	FE	RB	—	—	24' 112.00	—

BUILDING SEWER TABLE		
BLDG. NO.	6" INV.	
1	122.00	
2	122.70	
3	119.10	
4	121.50	
5	122.30	
6	120.20	
7	119.90	
8	119.10	
9	120.30	
10	119.10	
11	120.10	
12	120.90	
13	118.70	
14	119.20	

SEPTIC TANK TABLE			
TANK NO.	RIM	INV. IN	INV. OUT
1	124.5	6" 119.50	PUMP
2	124.4	6" 118.90	PUMP
3	123.8	6" 118.50	PUMP
ANOXIC	125.4	6" 121.75	4" 121.50
REGIRC.	125.3	6" 120.75	PUMP

SEWER MANHOLE TABLE		
SMH NO.	RIM	INV. IN
1	125.8	6" 121.30
2	125.5	6" 121.00
3	124.2	6" 120.00
4	124.1	6" 119.10
5	123.5	6" 120.00
6	124.2	6" 118.90
7	125.5	3" 121.00
8	124.0	3" 119.5
9	125.5	6" 121.50
10	125.4	6" 118.90 (OUT & FROM SMH 9)
		4" 120.40 (FROM ANOXIC TANK)



**SFM**

DATE	REVISION

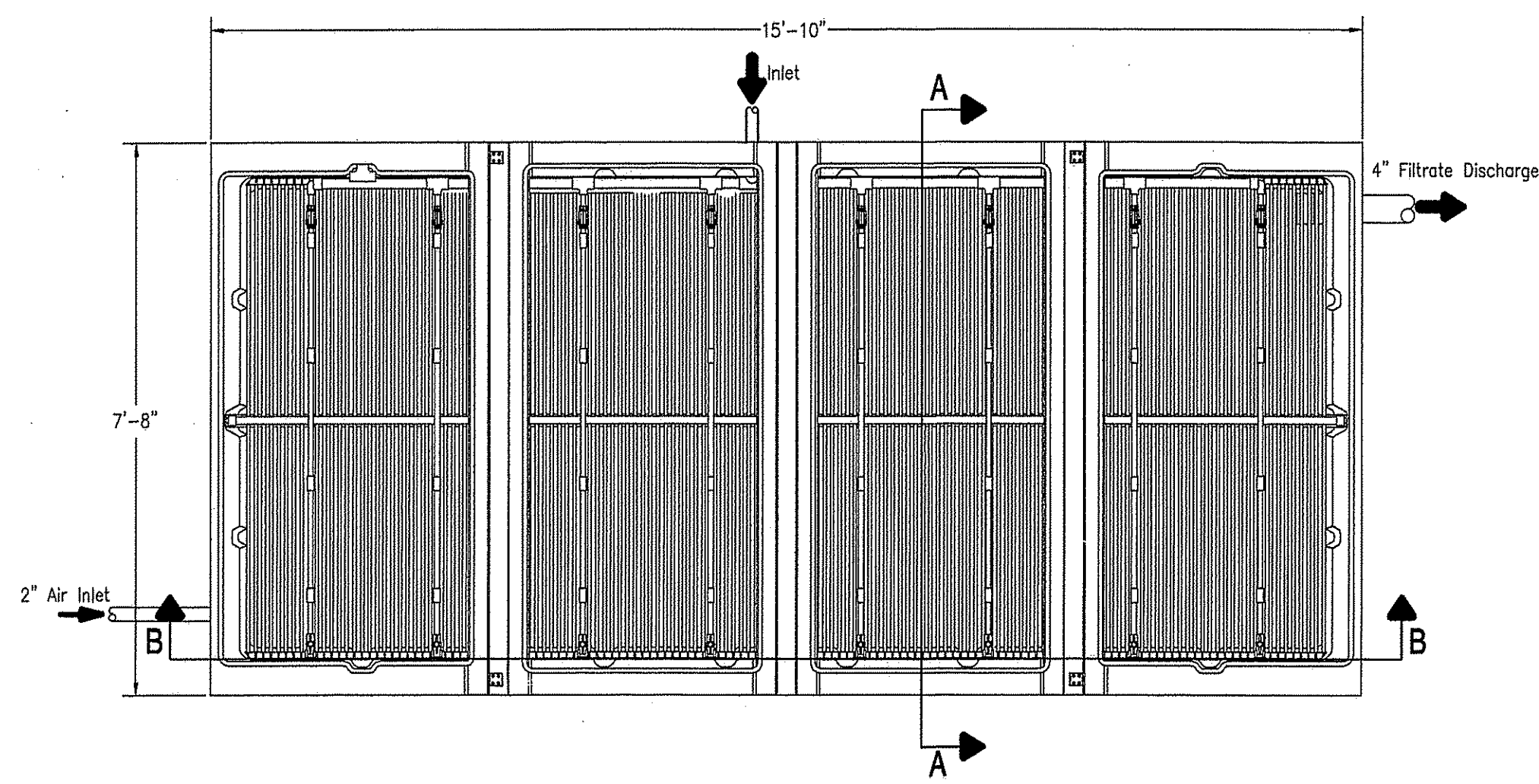
S.F.M. ENGINEERING ASSOCIATES  
410 TIGUE AVENUE  
COVENTRY, R.I. 02816  
(401)826-3736

**FOX RUN CONDOMINIUMS**  
A. P. 4B LOTS 62-1 TO 62-7  
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MTM DEVELOPMENT CORP.  
2091 NOOSENECK HILL ROAD  
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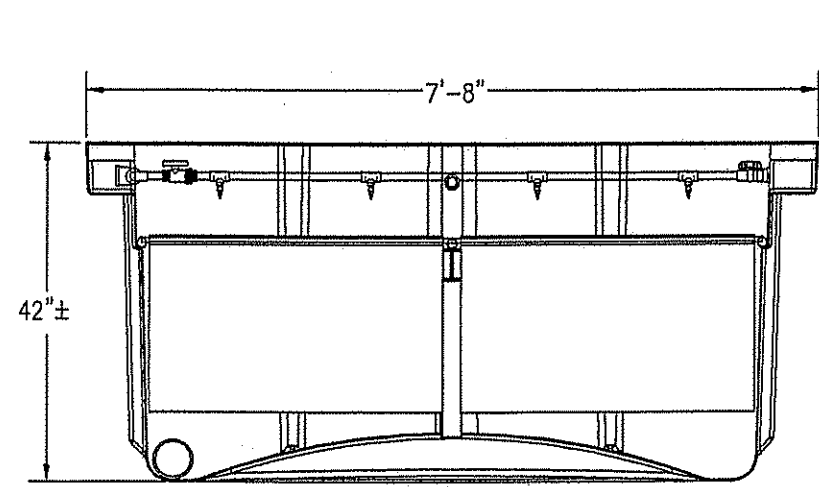
**UTILITY PLAN**  
DATE: SEPT. 15, 2008 SCALE: 1" = 40' SHEET 4 OF 13



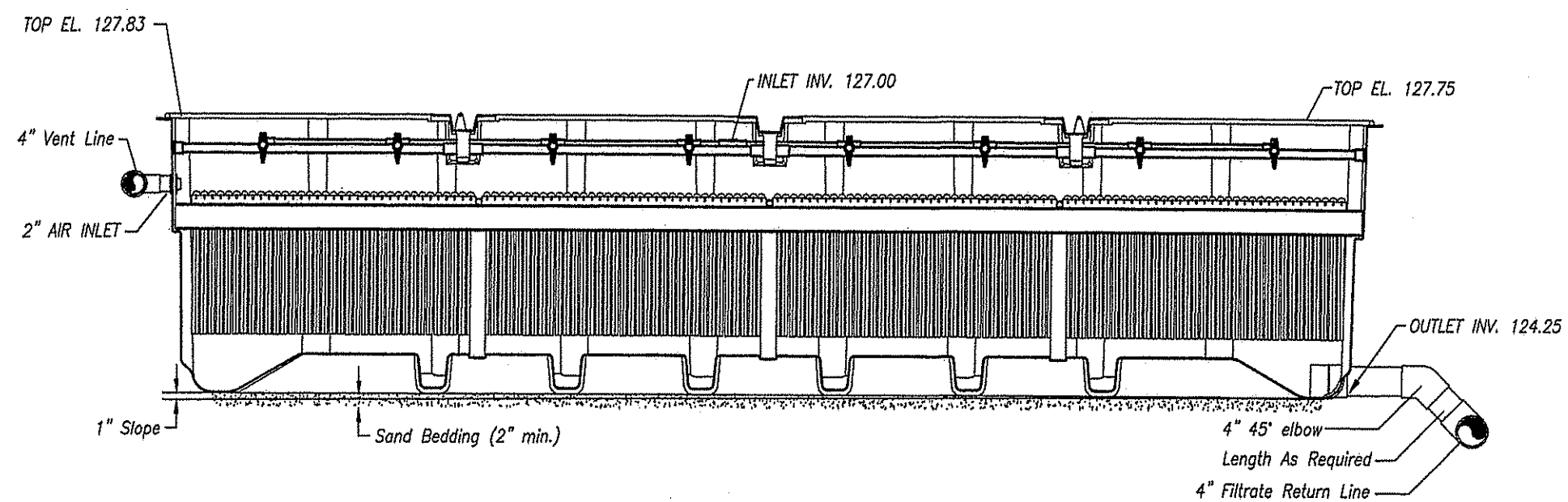




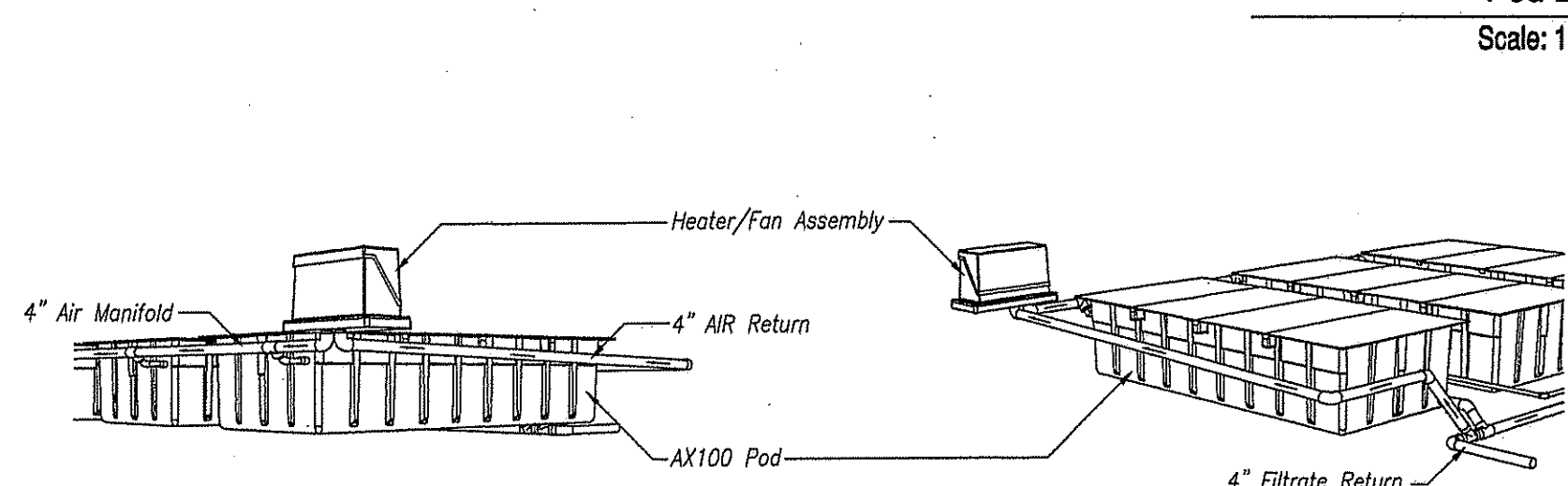
Top View  
Scale: 1" = 2'-0"



Section A-A  
Scale: 1" = 2'-0"

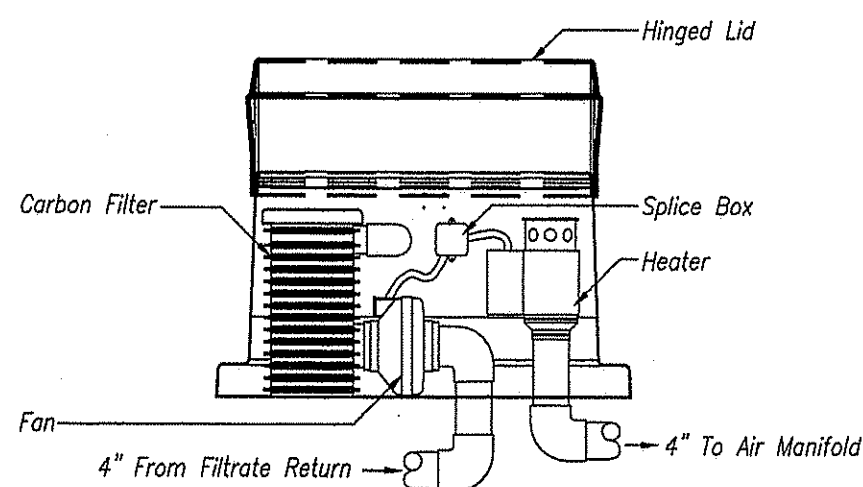


Pod Detail  
Scale: 1" = 2'-0"

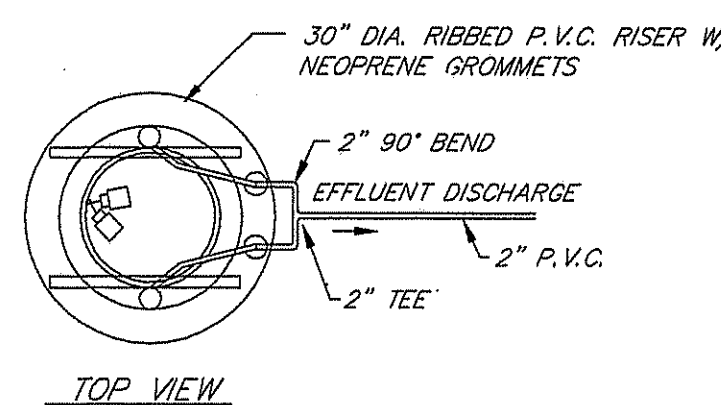


Air Manifold Iso  
Scale: NTS

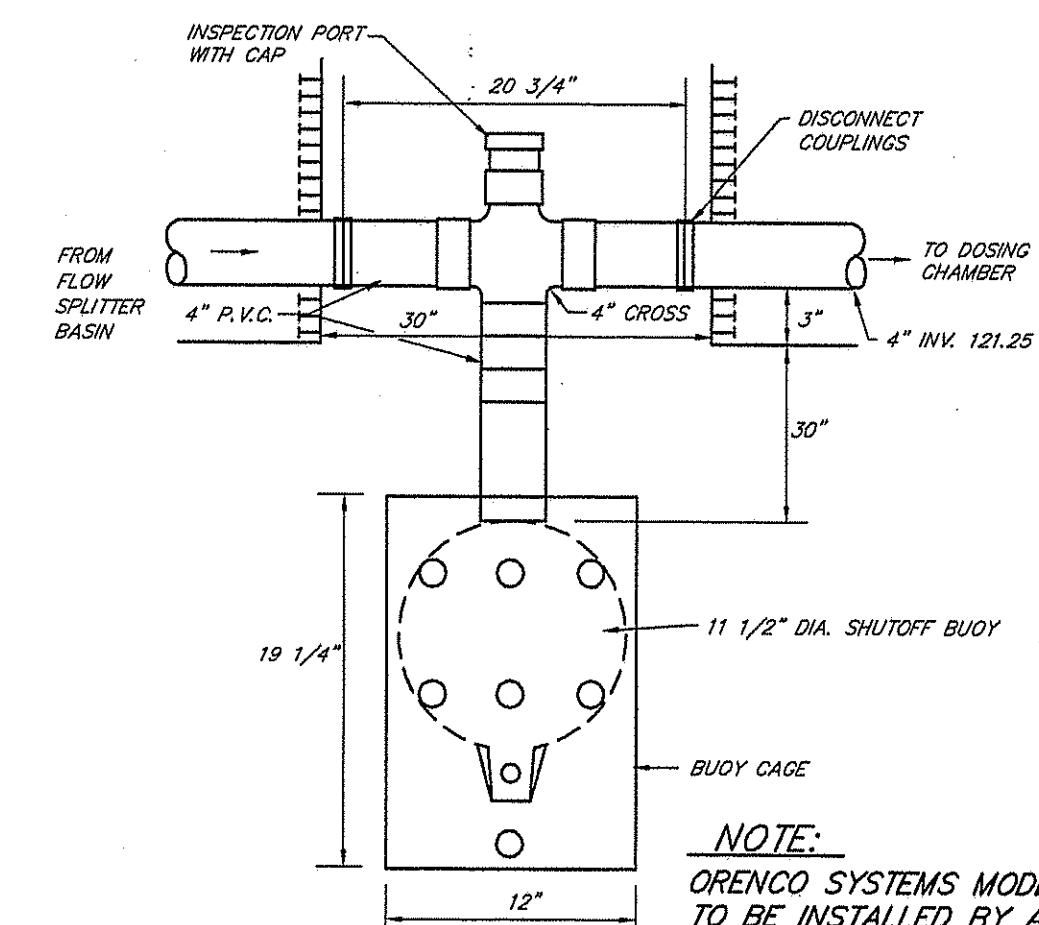
Filtrate Return Iso  
Scale: NTS



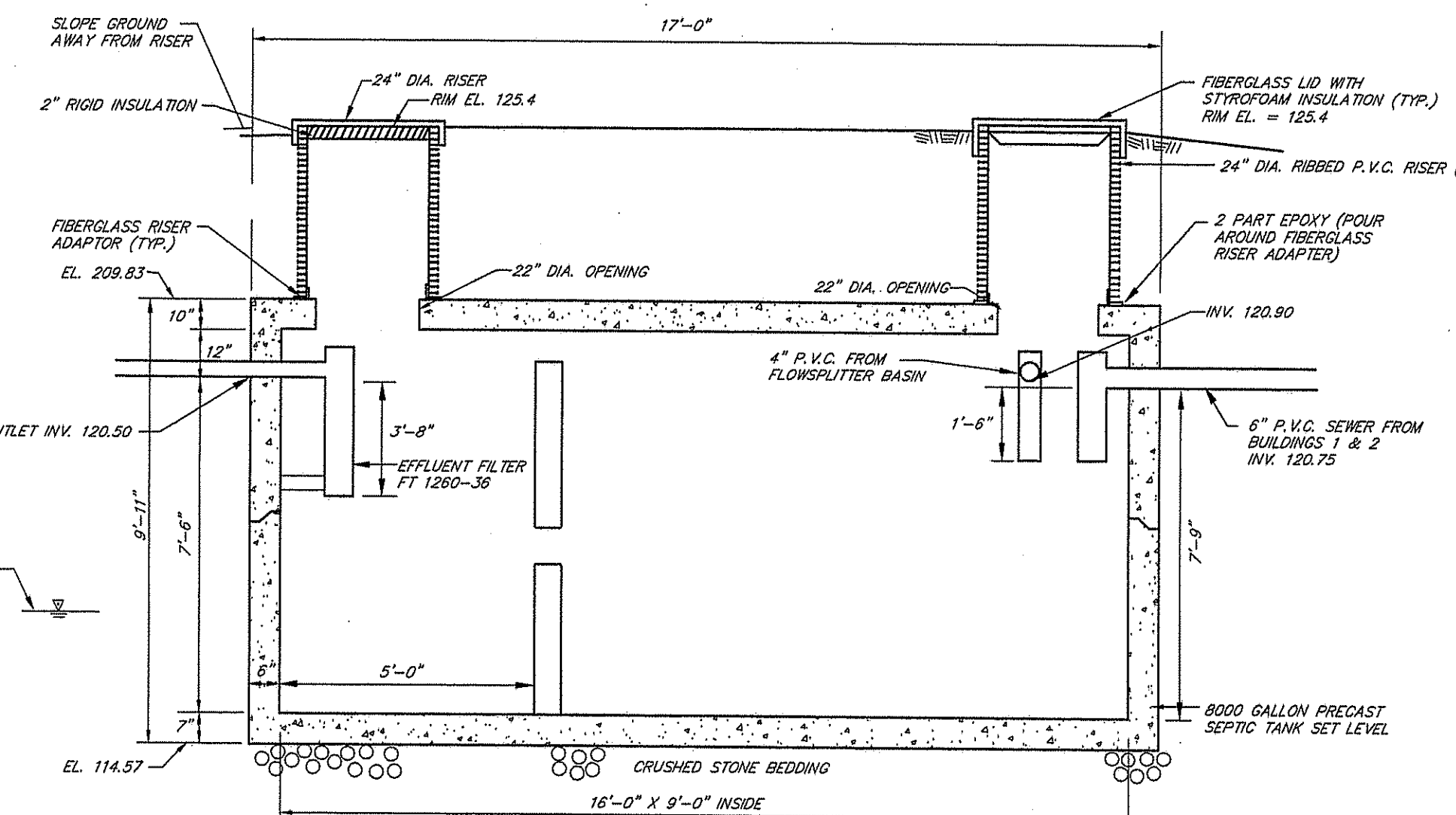
Heater/Fan Assembly  
Scale: 1" = 24"



TOP VIEW



RECIRCULATING BALL VALVE  
NOT TO SCALE



8000 GALLON TWO COMPARTMENT ANOXIC REACTOR TANK  
SCALE: 1/2" = 1'-0"

NOTE: 8" DIA. 8000 GAL. FRP TANK MAY BE SUBSTITUTED AS NECESSARY BY ATLANTIC SOLUTIONS.

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**MAINTENANCE NOTES**

1. THE RECIRC. TANK, ADVANTEX UNITS AND PUMP SYSTEM SHALL BE MONITORED ON A CONTINUAL BASIS AND SHALL BE INSPECTED, TESTED AND MAINTAINED EVERY SIX MONTHS (M/N).
2. INSPECTION AND MAINTENANCE SHALL BE PERFORMED IN CONFORMANCE WITH THE PROCEDURES SPECIFIED IN THE SYSTEM OPERATION AND MAINTENANCE MANUAL.
3. COPIES OF ALL MAINTENANCE AND EFFLUENT TESTING REPORTS SHALL BE KEPT ON RECORD.
4. PIPING SHALL BE FLUSHED AND CLEANED AS REQUIRED.
5. PUMP VAULT SCREENS AND EFFLUENT FILTERS SHALL BE INSPECTED AND CLEANED BY FLUSHING WITH A HOSE INTO THE TANK.
6. PUMP, FLOAT ASSEMBLY AND CONTROL PANEL SHALL BE CHECKED FOR PROPER OPERATION AND CYCLE TIMING.
7. DATE ELAPSED TIME AND EVENT COUNTER METER READINGS SHALL BE RECORDED. AVERAGE DAILY PUMP RUNS SHALL BE CALCULATED AND CHECKED FOR CONFORMANCE TO DESIGN PROGRAMS.
8. AN EFFLUENT SAMPLE SHALL BE COLLECTED ANNUALLY FROM THE DOSING CHAMBER AND TESTED BY A QUALIFIED TESTING LABORATORY. EFFLUENT SHALL BE TESTED FOR PH, TSS, BOD, NO3-N, NH4-N & TKN.
10. SCUM AND SLUDGE DEPTHS IN THE TANKS SHALL BE MEASURED AND RECORDED ANNUALLY. THE TANK SHALL BE PUMPED IF THE SCUM DEPTH EXCEEDS 12" OR THE SLUDGE DEPTH EXCEEDS 24".
11. ALL MAINTENANCE SHALL BE PERFORMED BY A QUALIFIED OSI ADVANTEX MAINTENANCE CONTRACTOR.
12. AFTER FINAL APPROVAL, THE HOMEOWNERS ASSOCIATION SHALL BE RESPONSIBLE FOR ALL MAINTENANCE OF THE SEWER COLLECTION SYSTEM (MANHOLES & PIPING) LOCATED WITHIN THE DEVELOPMENT AND ALL COMPONENTS OF THE COMMUNITY O.W.T.S. SYSTEM.

**TELEMETRY NOTES**

1. AN ORENCO TCOM PANEL WITH REMOTE TELEMETRY CONTROL FOR THE ENTIRE SYSTEM SHALL BE PROVIDED IN THE CONTROL PANEL WITH A DEDICATED PHONE LINE.
2. TELEMETRY UNIT SHALL SEND ALL ALARM CONDITIONS TO THE SYSTEM MAINTENANCE CONTRACTOR.
3. TELEMETRY UNIT SHALL ALLOW REMOTE MONITORING AND REPROGRAMMING OF THE PUMP SYSTEM CONTROLS.

**ADVANTEX NOTES**

1. ADVANTEX UNITS SHALL BE MODEL AX-100 (6 REQ'D).
2. CONTROL PANEL SETUP SHALL BE PERFORMED BY ATLANTIC SOLUTIONS, INC.
3. BALL VALVE AND PUMP FLOATS SHALL BE SET BY ATLANTIC SOLUTIONS, INC.

**RECIRCULATING TANK NOTES**

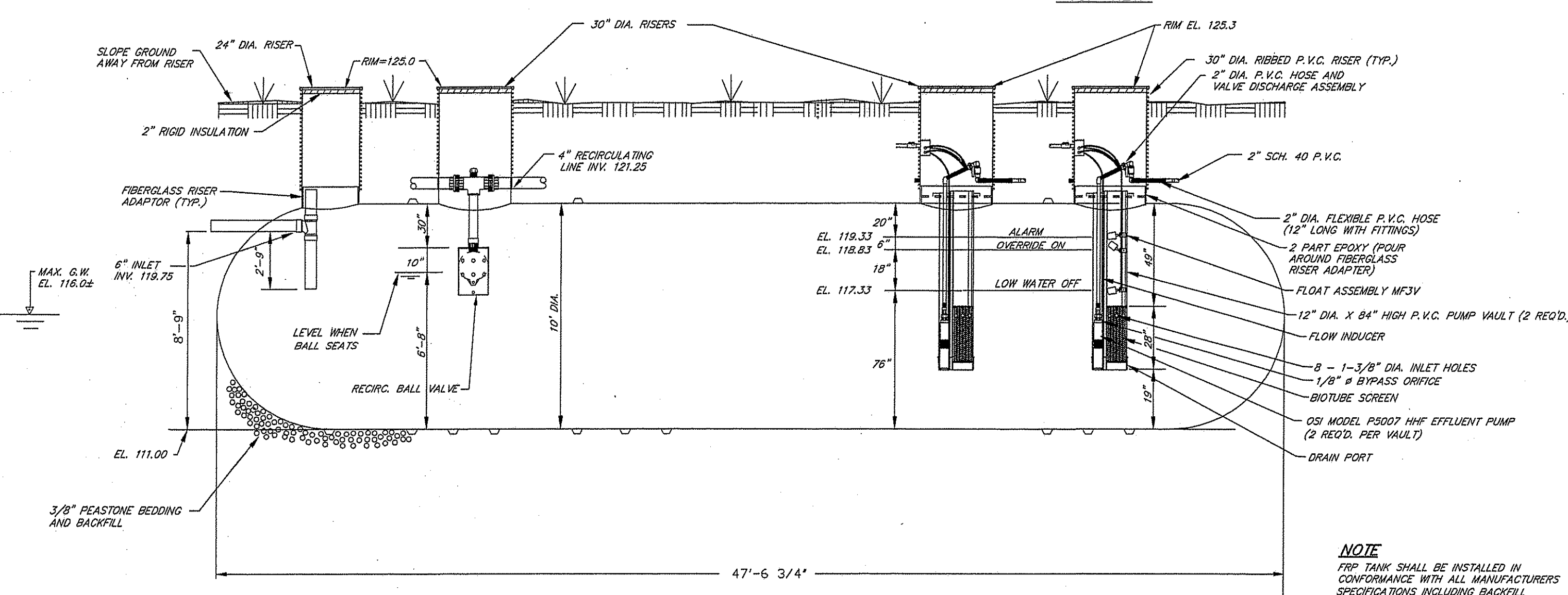
1. RECIRCULATING TANK SHALL BE 22,000 GAL. FIBERGLASS REINFORCED PLASTIC (FRP) AS MANUFACTURED BY XERKES CORP. OR EQUIVALENT. TANK TO BE CERTIFIED WATER TIGHT.
2. PUMP VAULT SHALL BE ORENCO SYSTEMS MODEL PV084-2425-L (2 REQ'D).
3. EFFLUENT PUMPS SHALL BE ORENCO SYSTEMS 3/4 H.P. MODEL P3007 HHF (4 REQ'D).
4. DISCHARGE ASSEMBLY SHALL BE ORENCO SYSTEMS MODEL HV2008A-DB (4 REQ'D).
5. FLOAT ASSEMBLY SHALL BE ORENCO SYSTEMS MODEL MF-3V (1 REQ'D).
6. CONTROL PANEL AND ALARM SHALL BE CUSTOM BUILT ORENCO SYSTEMS TCOM PANEL WITH REDUNDANT OFF, ELAPSED TIME METER, CYCLE COUNTER, PROGRAMMABLE TIMER, HEATER AND PHONE DIALER OPTIONS. CONTROLS FROM DOSING TANK AND S.T.E.P. TANKS SHALL BE CONNECTED TO TCOM PANEL.
7. P.V.C. RISER MANHOLES SHALL BE ORENCO SYSTEMS MODEL RR3030 RISERS, MODEL FL30-G LIDS AND MODEL FRTA30 TANK ADAPTERS.
8. RECIRCULATING BALL VALVE SHALL BE ORENCO SYSTEMS MODEL MM4U.
9. ALL COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND THESE PLANS.
10. ALL COMPONENTS AND INSTALLATION MUST BE INSPECTED AND APPROVED BY S.F.M. ENGINEERING ASSOCIATES. ANY COMPONENT SUBSTITUTION MUST BE PRE-APPROVED BY S.F.M. ENGINEERING ASSOCIATES.

**ADVANTEX DOSING NOTES**

1. FOR FULL BUILD OUT TIMER SETTINGS ARE CALCULATED TO BE:  
NORMAL TIMER SHALL BE SET FOR PUMP ON: 1 MIN. 50 SEC.  
PUMP OFF: 3 MIN. 10 SEC.  
OVERRIDE TIMER SETTINGS SHALL BE PUMP ON: 1 MIN. 50 SEC.  
PUMP OFF: 0 MIN. 40 SEC.
2. TIMER SETTINGS DURING PROJECT CONSTRUCTION SHALL BE AS SPECIFIED BY ATLANTIC SOLUTIONS.

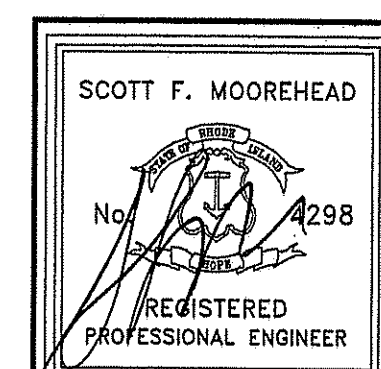
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*Ed Joseph Conroy*



22,000 GALLON RECIRCULATION TANK  
NOT TO SCALE

NOTE: FRP TANK SHALL BE INSTALLED IN CONFORMANCE WITH ALL MANUFACTURERS SPECIFICATIONS INCLUDING BACKFILL REQUIREMENTS



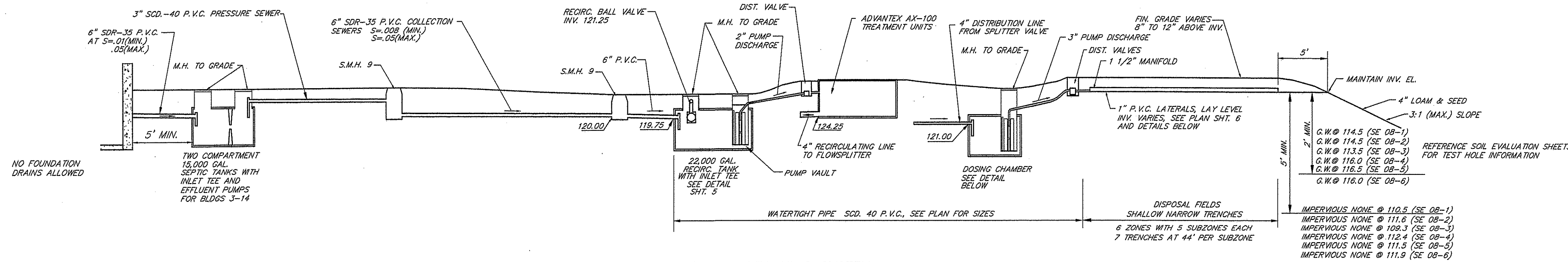
DATE	REVISION



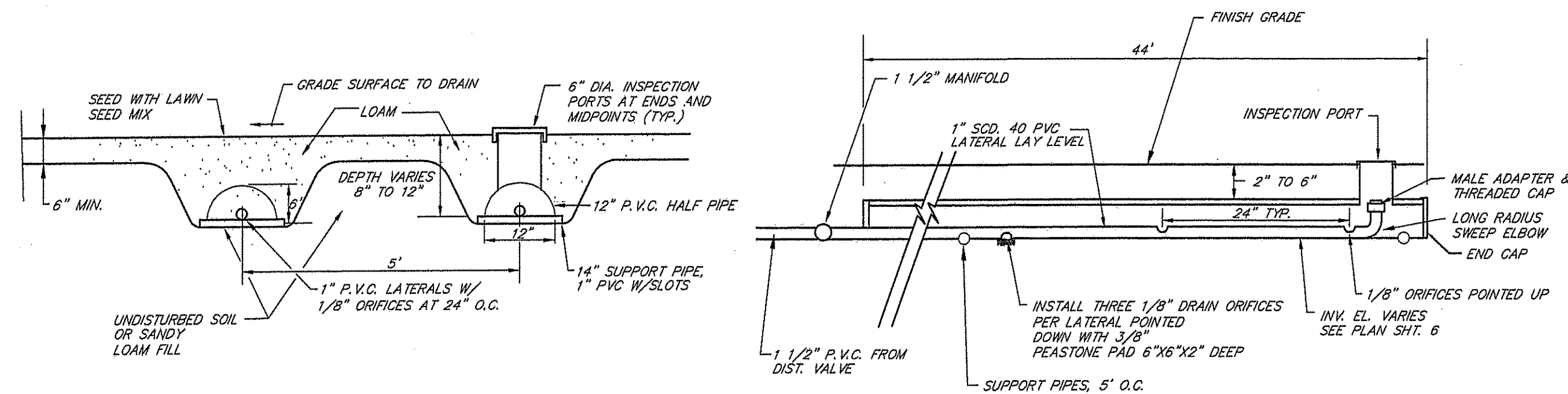
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**FOX RUN CONDOMINIUMS**  
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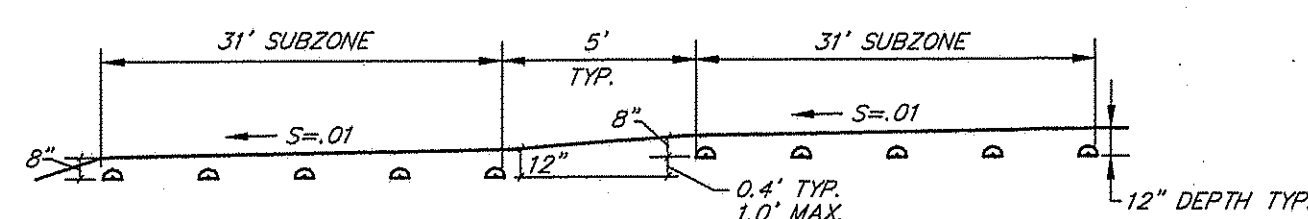
**O.W.T.S. DETAILS 1**  
DATE: SEPT. 15, 2008 SCALE: AS NOTED SHEET 7 OF 13



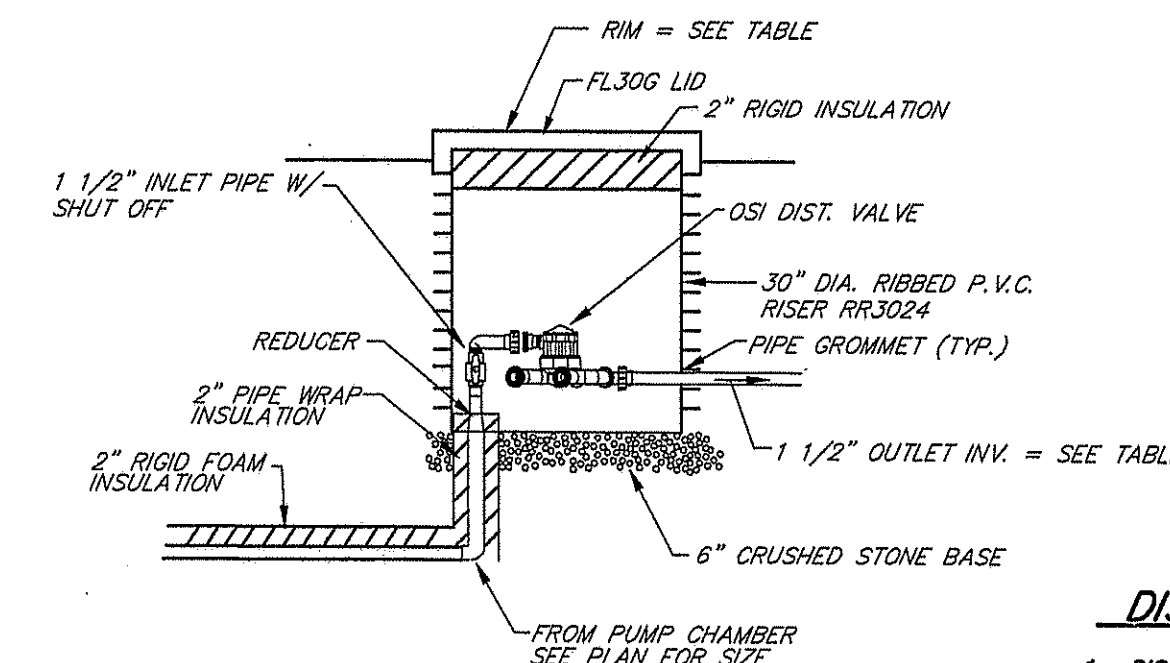
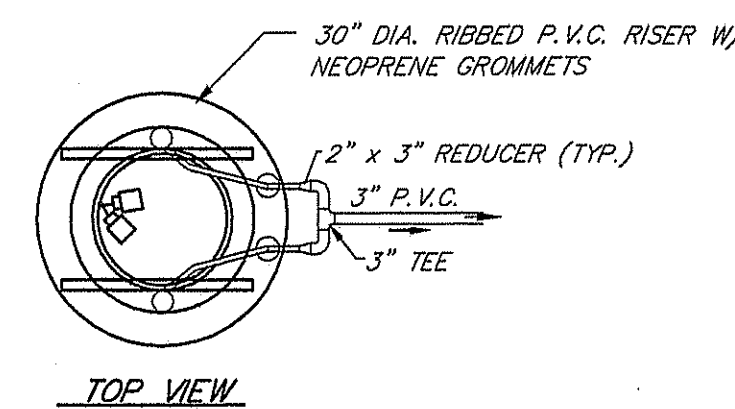
**TYPICAL LEACHING SYSTEM**  
NOT TO SCALE



**SHALLOW DISPOSAL TRENCH DETAIL**  
NOT TO SCALE



**TYPICAL SHALLOW DISPOSAL TRENCH SECTION**  
NOT TO SCALE

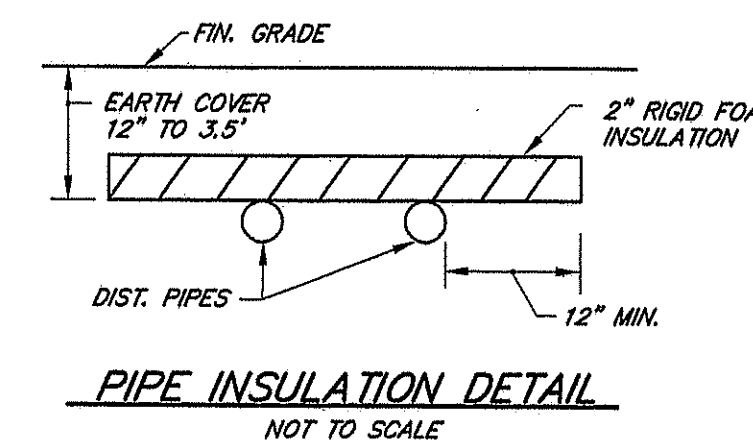


**DISTRIBUTING VALVE MANHOLE**  
NOT TO SCALE

DIST. VALVE TABLE		
ZONE	RIM EL.	INV. OUT.
AX	128.6	127.1
1	125.4	123.9
2	127.6	126.1
3	126.3	126.8
4	126.2	124.7
5	126.2	124.7
6	126.4	124.9

**DIST. VALVE NOTES**

- DIST. VALVES SHALL BE ORENCO MODEL V6403 FOR THE ADVANTEK AX-100 (2 REQ'D.)
- DIST. VALVES SHALL BE MODEL V6505 FOR PRESSURIZED SHALLOW NARROW DRAINFIELDS. (6 REQ'D.)
- THE OUTLET INVERT OF THE DIST. VALVE SHALL BE SET HIGHER THAN THE LATERAL INVERTS TO ALLOW FOR DRAINAGE.
- DIST. VALVE INLET AND OUTLET PIPES SHALL BE SET AT CONSTANT GRADE WITH NO HIGH OR LOW POINTS.
- ALL INLET PIPES TO DIST. VALVES WITH LESS THAN 3.5' OF COVER SHALL BE COVERED BY 2\"/>



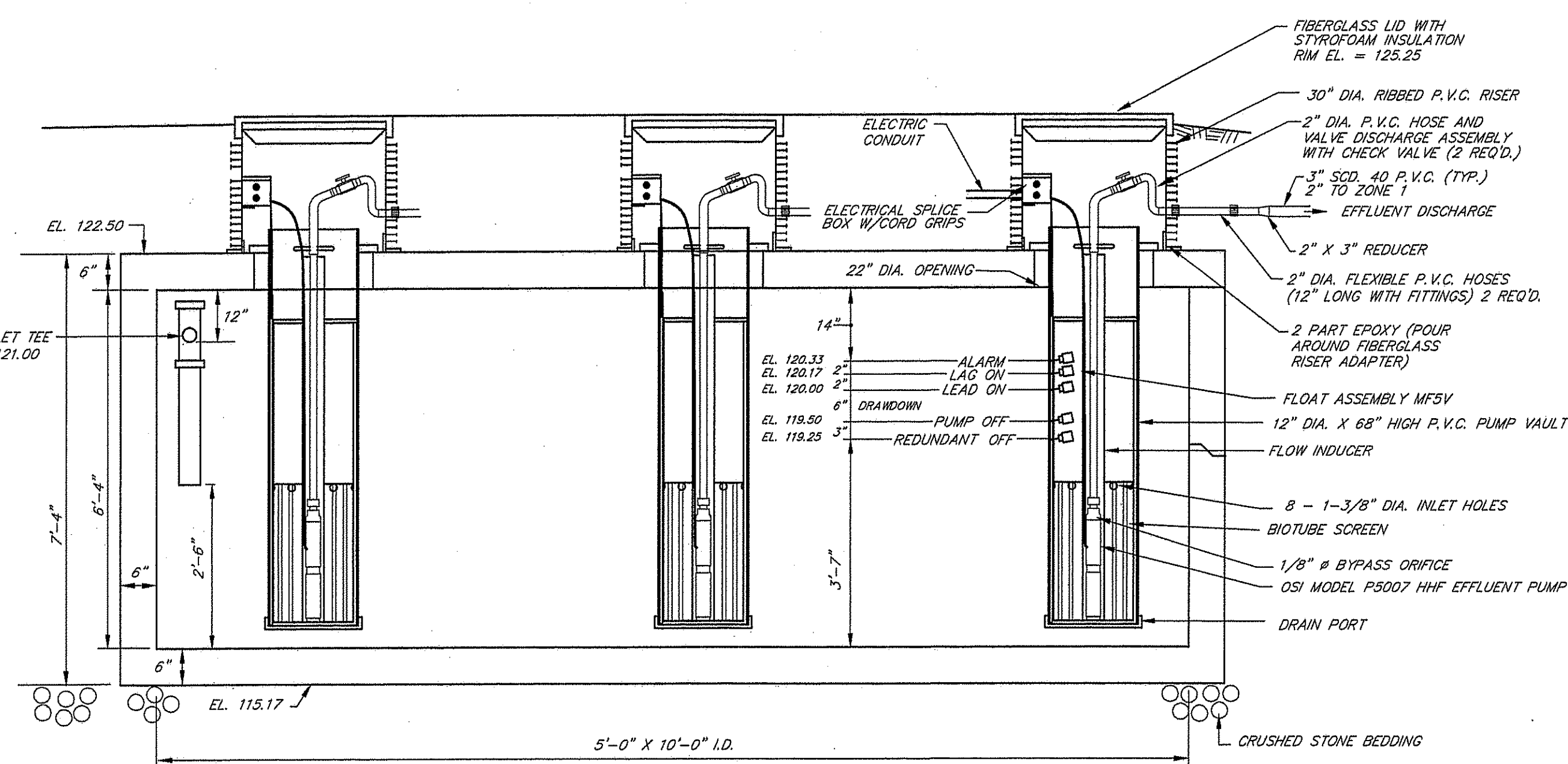
**PIPE INSULATION DETAIL**  
NOT TO SCALE

**DOSING CHAMBER NOTES**

- DOSING CHAMBER SHALL BE 2000 GAL. PRECAST CONCRETE TANK SHALL BE CERTIFIED WATER TIGHT.
- PUMP VAULT SHALL BE ORENCO SYSTEMS MODEL PV168-1819-L OR EQUIVALENT (3 REQ'D.)
- EFFLUENT PUMPS SHALL BE ORENCO SYSTEMS 3/4 H.P. MODEL P5007 HHF OR EQUIVALENT (6 REQ'D.)
- DISCHARGE ASSEMBLIES SHALL BE ORENCO SYSTEMS MODEL HV200BXC OR EQUIVALENT (6 REQ'D.)
- FLOAT ASSEMBLY SHALL BE ORENCO SYSTEMS MODEL MFSV OR EQUIVALENT (1 REQ'D.)
- CONTROL PANEL AND ALARM SHALL PROVIDE DUPLEX OPERATION WITH REDUNDANT OFF, ELAPSED TIME METERS AND EVENT COUNTERS OR EQUIVALENT. CONTROLS SHALL BE CONNECTED TO THE MAIN TC0M CONTROL PANEL.
- P.V.C. RISER MANHOLES SHALL BE ORENCO SYSTEMS MODEL RR300X RISERS MODEL FL306 LIDS AND MODEL RR17430 TANK ADAPTER OR EQUIVALENT.
- DISCHARGE LINES SHALL HAVE 4' COVER TYPICAL. IF LINES ARE INSTALLED WITH LESS THAN 3.5' OF COVER THEN 2\"/>

**MAINTENANCE NOTES**

- THE DOSING CHAMBER, DISPOSAL TRENCH LATERALS AND PUMP SYSTEMS SHALL BE MAINTAINED ANNUALLY.
- INSPECTION AND MAINTENANCE SHALL BE PERFORMED IN CONFORMANCE WITH THE PROCEDURES SPECIFIED IN THE SYSTEM OPERATION AND MAINTENANCE MANUAL.
- DISPOSAL TRENCH PIPING SHALL BE FLUSHED AND CLEANED AS REQUIRED. ORIFICES SHALL BE CHECKED FOR PLUGGING AND SQUIRT HEIGHT MEASURED. SQUIRT HEIGHT SHOULD BE 2' MINIMUM.
- PUMP VAULT SCREENS SHALL BE RAISED AND CLEANED BY FLUSHING WITH A HOSE INTO THE CHAMBER.
- PUMP, FLOAT ASSEMBLY AND CONTROL PANEL SHALL BE CHECKED FOR PROPER OPERATION AND CYCLE TIMING.
- DATE, ELAPSED TIME AND EVENT COUNTER METER READINGS SHALL BE RECORDED. AVERAGE DAILY PUMP RUNS SHALL BE CALCULATED AND CHECKED FOR CONFORMANCE TO DESIGN PROGRAM.
- THE SURFACE OF THE DISPOSAL FIELDS AND A 10' PERIMETER AROUND THE DISPOSAL FIELDS SHALL BE KEPT FREE OF ANY TREES, BUSHES OR BRUSH. THE GRASS OVER THE DISPOSAL FIELDS SHALL BE MOWED ON A REGULAR BASIS.

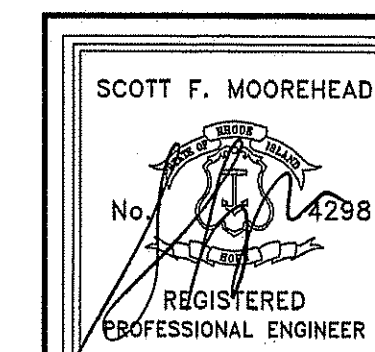


**2000 GAL. DOSING CHAMBER**  
NOT TO SCALE

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APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

*W. Joseph Casey*



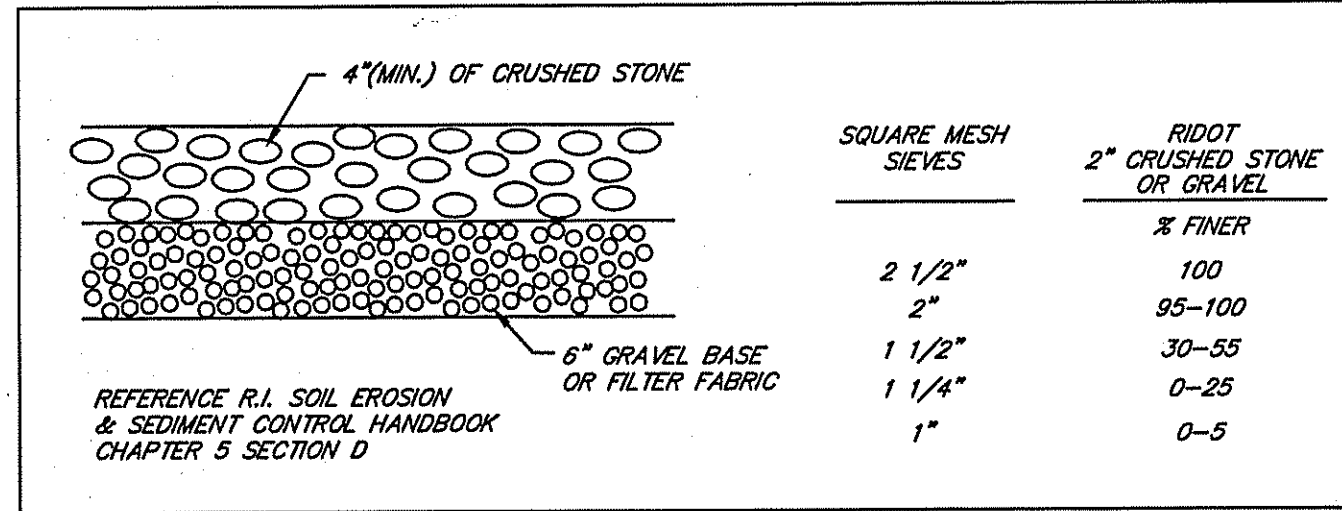
DATE: \_\_\_\_\_ REVISION: \_\_\_\_\_  
DWN. BY: LBC DWG. NO. SFM437SD2  
S.F.M. ENGINEERING ASSOCIATES  
410 TIOGUE AVENUE  
COVENTRY, R.I. 02816  
(401)826-3736

**FOX RUN CONDOMINIUMS**  
A. P. 4B LOTS 62-1 TO 62-7  
RICHMOND, RHODE ISLAND  
PREPARED FOR:  
MTM DEVELOPMENT CORP.  
2091 NOOSENECK HILL ROAD  
COVENTRY, RHODE ISLAND 02816  
(401)392-3000

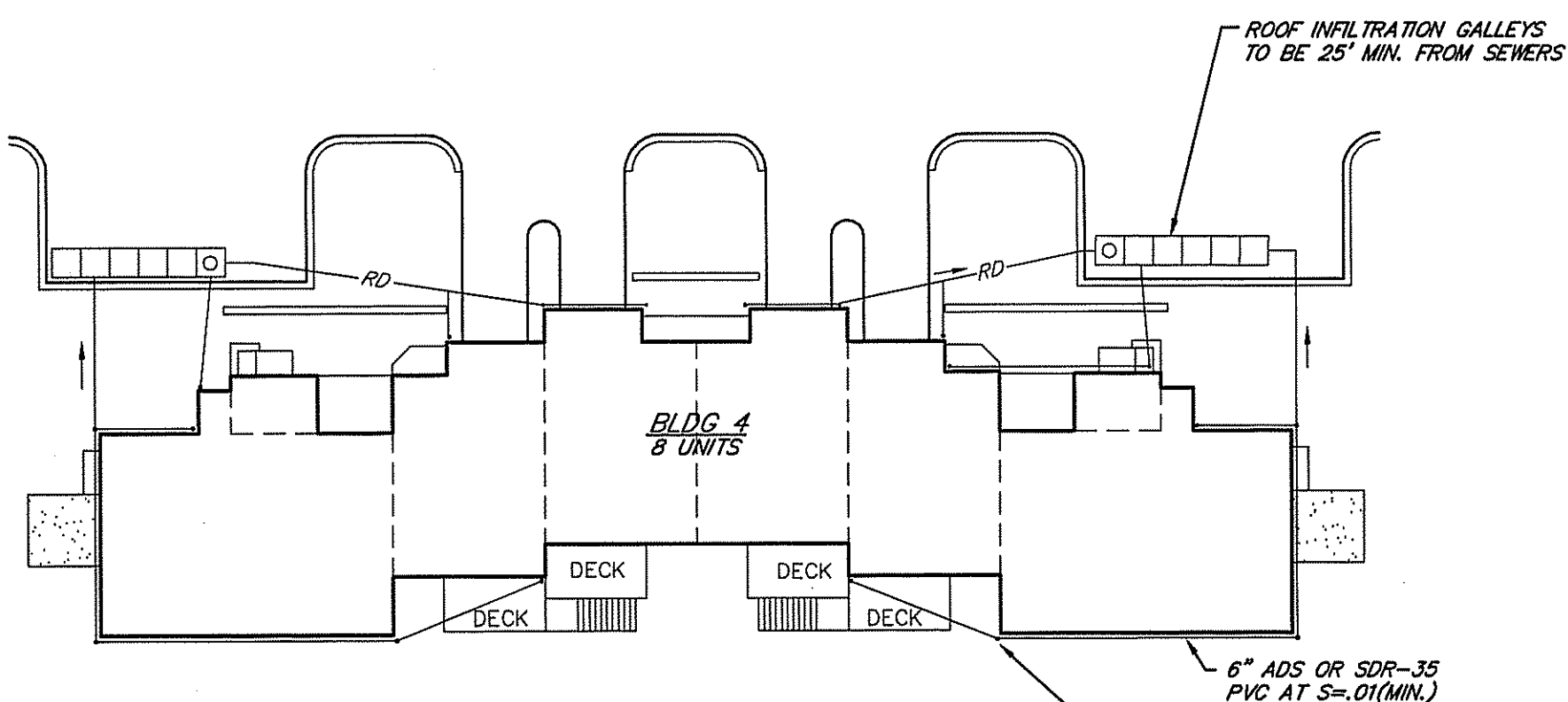
**O.W.T.S. DETAILS 2**



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AUG 25 2008



ROCK STABILIZATION PAD AT CONSTRUCTION ENTRANCE  
NOT TO SCALE



TYPICAL ROOF DRAIN CONNECTION DETAIL  
NOT TO SCALE

INFILTRATION SYSTEM INSTALLATION NOTES

- 1. THE GALLEY & CULTEC UNITS SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURERS SPECIFICATIONS.
2. THE INFILTRATION SYSTEM SHALL BE PROTECTED FROM SILTATION AT ALL TIMES. OPEN INLET PIPES SHALL BE FITTED WITH TEMPORARY WATER TIGHT CAPS.
3. THE SYSTEM SHALL BE COVERED WITH GRAVEL IMMEDIATELY AFTER INSTALLATION.
4. THE SYSTEM SHALL BE PROTECTED FROM CONSTRUCTION EQUIPMENT UNTIL PAVEMENT IS INSTALLED.
5. ROOF DRAINS FOR EACH 8 UNIT BUILDING SHALL BE CONNECTED TO TWO INFILTRATION SYSTEMS. TYPICAL SYSTEM SHALL CONSIST OF 6 GALLEY UNITS. SYSTEMS 1A, 1B AND 2A SHALL CONSIST OF 5 CULTEC UNITS.
6. ROOF DRAINS FOR EACH 6 UNIT BUILDING SHALL BE CONNECTED TO TWO INFILTRATION SYSTEMS CONSISTING OF 5 GALLEY UNITS EACH.

INFILTRATOR MAINTENANCE NOTES

- 1. DURING CONSTRUCTION AND THE FIRST 6 MONTHS OF OPERATION, THE INFILTRATION SYSTEM SHALL BE INSPECTED WITHIN 24 HOURS OF EACH RAINFALL EVENT THAT GENERATES .25 INCHES OF RAIN. IN A 24 HOUR PERIOD. AFTER THE FIRST SIX MONTHS OF OPERATION, THE INFILTRATION SYSTEM SHALL BE INSPECTED TWICE PER YEAR (SPRING & FALL).
2. THE GALLEYS SHALL BE INSPECTED VIA THE INSPECTION MANHOLES. IN THE EVENT THAT THE SYSTEM HAS STANDING WATER FOR MORE THAN 72 HOURS AFTER A RAINFALL EVENT THE SYSTEM SHALL BE CONSIDERED FAILED. A FAILED SYSTEM MUST BE REPLACED OR REPAIRED BY THE RESPONSIBLE PARTY.
3. THE INFILTRATOR CHAMBERS SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF TWICE PER YEAR UPON COMPLETION OF CONSTRUCTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTION AND MAINTENANCE OF ALL DRAINAGE FACILITIES, AS PER THEIR RESPECTIVE PROGRAMS, UNTIL FINAL ACCEPTANCE BY THE OWNER.
5. UPON FINAL ACCEPTANCE, THE OWNER SHALL BE RESPONSIBLE FOR ALL DRAINAGE INSPECTION AND MAINTENANCE.
6. ANY INADVERTENT OR DELIBERATE DISCHARGE OF WASTE OIL OR ANY OTHER POLLUTANT TO THE STORMWATER DISPOSAL SYSTEM REQUIRES IMMEDIATE NOTIFICATION OF THE RIDEM-UC PROGRAM.
7. ANY INCIDENT OF GROUNDWATER CONTAMINATION RESULTING FROM THE IMPROPER DISCHARGE OF CONTAMINANTS TO THE DISPOSAL SYSTEM SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE RIDEM WILL REQUIRE THE PROPERTY OWNER TO REMEDIATE ANY INCIDENTS THAT MAY ADVERSELY IMPACT THE QUALITY OF THE GROUNDWATER.

GENERAL NOTES

- 1. ALL WORK PERFORMED HEREIN SHALL BE COVERED BY THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (REVISION OF 6-30-2006) WITH ALL CORRECTIONS AND ADDENDA AND THE 11-10-2006 R.I. STANDARD DETAILS WITH ALL CORRECTIONS AND ADDENDA. THE LATEST R.I.D.O.T. SPECIFICATIONS AND DETAILS ARE AVAILABLE ONLINE AT WWW.DOT.RI.GOV/ENGINEERING
2. EMBANKMENT SLOPES AND ALL DISTURBED AREAS ARE TO RECEIVE 4\"/>

SEDIMENTATION CONTROL PROGRAM

- 1. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY SEDIMENTS FROM ENTERING THE WETLANDS OR ADJOINING PROPERTIES.
2. BANKS OR SLOPES OVER 5 PERCENT SHALL BE SEEDED AS SOON AS POSSIBLE AND SHALL BE PROTECTED WITH A HAY, STRAW OR FIBER MULCH.
3. DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING STORMS AND PERIODS OF RAINFALL.
4. SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL.
5. CARE SHALL BE TAKEN SO NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATERCOURSES OR THOSE AREAS SUBJECTED TO STORM WATER FLOW.
6. ADDITIONAL HAYBALES, SILT FENCE OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
7. REFERENCE THE "R.I. EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE U.S. DEPT. OF AGRICULTURE, SOIL CONSERVATION SERVICE, 1989, AS A GUIDE.

ORDER OF PROCEDURE

- 1. PRIOR TO ANY CONSTRUCTION OR EXCAVATION, HAYBALES OR SILT FENCE SHALL BE INSTALLED AT THE PROPERTY LINE OR LIMIT OF DISTURBANCE. TEMPORARY HAYBALES OR SILT FENCE SHALL BE INSTALLED AT THE LIMIT OF WORK ACTIVITY IF CONSTRUCTION IS TO BE DONE IN PHASES.
2. ALL EROSION AND SEDIMENTATION CONTROL STRUCTURES SHALL BE PERIODICALLY MAINTAINED AS PER THE RESPECTIVE PROGRAMS FOR TEMPORARY CONTROL.
3. IF WORK PROGRESS IS TO BE INTERRUPTED AT ANY TIME, REFERENCE EROSION AND SEDIMENTATION PROGRAMS FOR TEMPORARY CONTROL.
4. TEMPORARY HAYBALES AND SANDBAGS ALONG AND AT THE ENDS OF ROADWAYS MAY ALSO BE REMOVED AFTER FINAL SOIL STABILIZATION HAS BEEN ACHIEVED AND APPROVED.
5. HAYBALES LOCATED AT DRAINAGE INLETS OR OUTLETS MUST REMAIN UNTIL SUCH TIME THAT A DESIRABLE STAND OF GRASS OR GROUND COVER HAS BEEN ESTABLISHED AND THE PROJECT RECEIVES A FAVORABLE APPROVAL FOR FINAL ACCEPTANCE FROM THE ENGINEER.

UTILITY NOTES:

- 1. LOCATIONS AND SIZES OF EXISTING UTILITIES IS PLOTTED FROM BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY ALL INFORMATION WITH THE APPROPRIATE UTILITY AUTHORITY AND DIG SAFE PRIOR TO ANY CONSTRUCTION OR EXCAVATION.
2. EXPLORATORY TEST PITS SHALL BE EXCAVATED TO CONFIRM LOCATION AND DEPTH AT ANY CRITICAL AREAS, AS REQUIRED.
3. CONTRACTOR SHALL COORDINATE SERVICE LOCATIONS WITH THE D.M.T.S. PLANS AND THE ARCHITECTURAL PLANS.
4. STORM DRAINAGE PIPE SHALL BE CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) OR EQUAL.
5. WATER MAINS, SERVICES AND METERS SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE RICHMOND WATER DEPT.
6. CABLE, ELECTRIC AND TELEPHONE SERVICES SHALL BE AS PER APPROPRIATE UTILITY AUTHORITY.
7. UTILITY SERVICE INSTALLATIONS SHALL BE APPROVED AND INSPECTED BY THE APPROPRIATE UTILITY COMPANY.

EROSION CONTROL & SOIL STABILIZATION PROGRAM

- 1. DENUDED SLOPES SHALL NOT BE UNPROTECTED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE RICHMOND WATER RESOURCES!
2. ALL DISTURBED SLOPES, EITHER NEWLY CREATED OR EXPOSED PRIOR TO OCTOBER 15, SHALL BE SEEDED OR PROTECTED BY THAT DATE FOR ANY WORK COMPLETED DURING EACH CONSTRUCTION YEAR.
3. THE TOP SOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AND SHALL CONFORM WITH R.I. STANDARD SPECIFICATION M. 20.
4. THE SEED MIX SHALL BE INOCULATED WITHIN 24 HOURS BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.
5. THE DESIGN MIX SHALL BE COMPRISED OF THE FOLLOWING PERMANENT SEEDING MIXTURES:

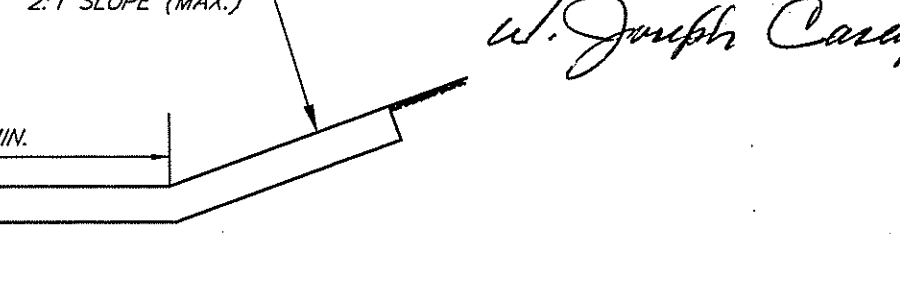
Table with columns: MIXTURE, % BY WT, SEEDING DATES. Lists various seed types like Red Fescue, Kentucky Bluegrass, Colonial Bentgrass, Perennial Ryegrass, etc.

Table with columns: MIXTURE, % BY WT, SEEDING DATES. Lists temporary seed types like Tall Fescue, Red Fescue, Perennial Ryegrass, Wildflower Mix, Reed Canary Grass, Redtop.

Table with columns: SPECIES, LBS./1,000 S.F., LBS./AC., SEEDING DATES. Lists species like Annual Ryegrass, Perennial Ryegrass, Sudan Grass, Millet, Winter Rye.

9. THE CONTRACTOR MUST REPAIR AND/OR RESEED ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR AND HE SHALL DO SO AT NO ADDITIONAL EXPENSE.
10. THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1 - OCTOBER 15.
11. ALL FILL SHALL BE THOROUGHLY COMPACTED UPON PLACEMENT IN STRICT CONFORMANCE WITH THE R.I.D.P.W. STD. SPECIFICATIONS SECTION 202.
12. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 15 DAYS OF FINAL GRADING.
13. STOCKPILES OF TOPSOILS SHALL NOT BE LOCATED NEAR WATERWAYS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 30% AND STOCKPILES SHALL ALSO BE SEEDED AND/OR STABILIZED.
14. ON BOTH STEEP AND LONG SLOPES, CONSIDERATION SHOULD BE GIVEN TO "CRIMPING" OR "TRACKING" TO TACK DOWN MULCH APPLICATIONS.
15. REFERENCE THE SEDIMENTATION CONTROL PROGRAM AND ORDER OF PROCEDURE FOR PROPER COORDINATION.

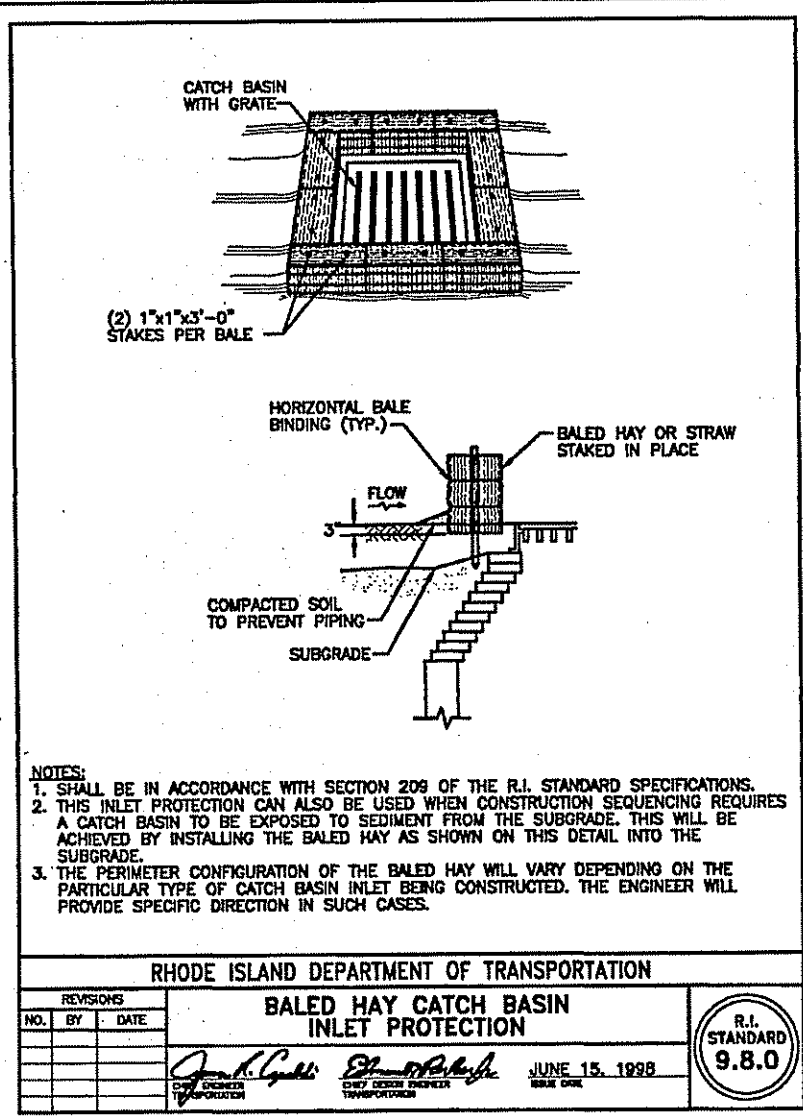
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED OCT - 8 2008 FILE # 08-0149  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL.  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.



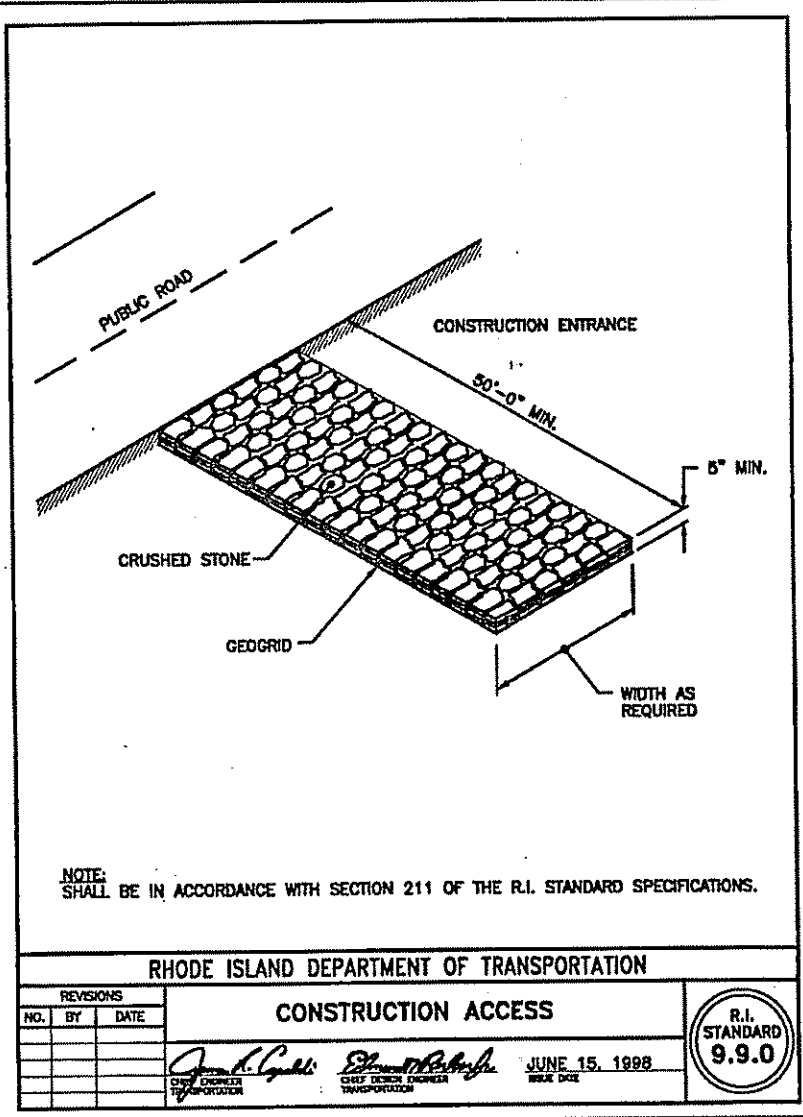
NOTE: SLOPES MAY VARY TO SUIT CONDITIONS AS PER PLANS OR CONSTRUCTION ENGINEER. PROVIDE DITCH EROSION CHECKS R.I. STD. 9.4.0, 25\"/>

GRASS SWALE DETAIL  
Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

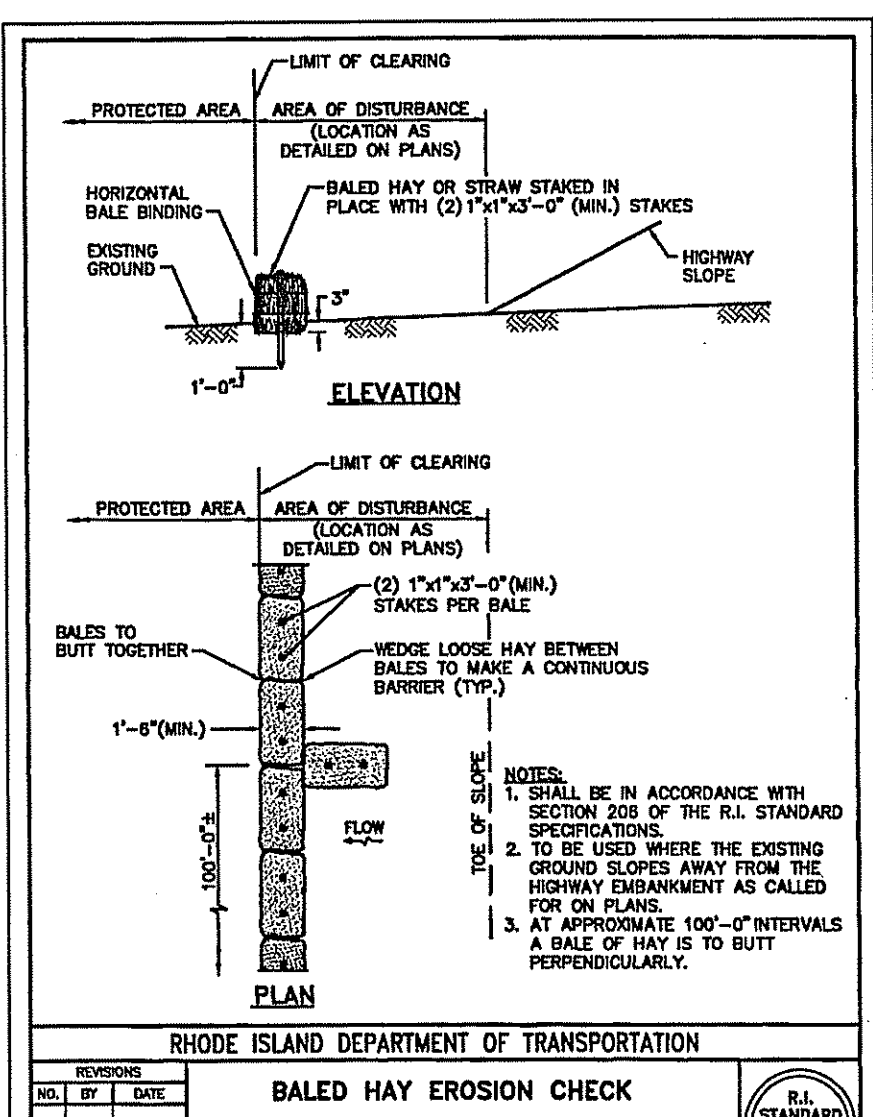
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AUG 25 2008



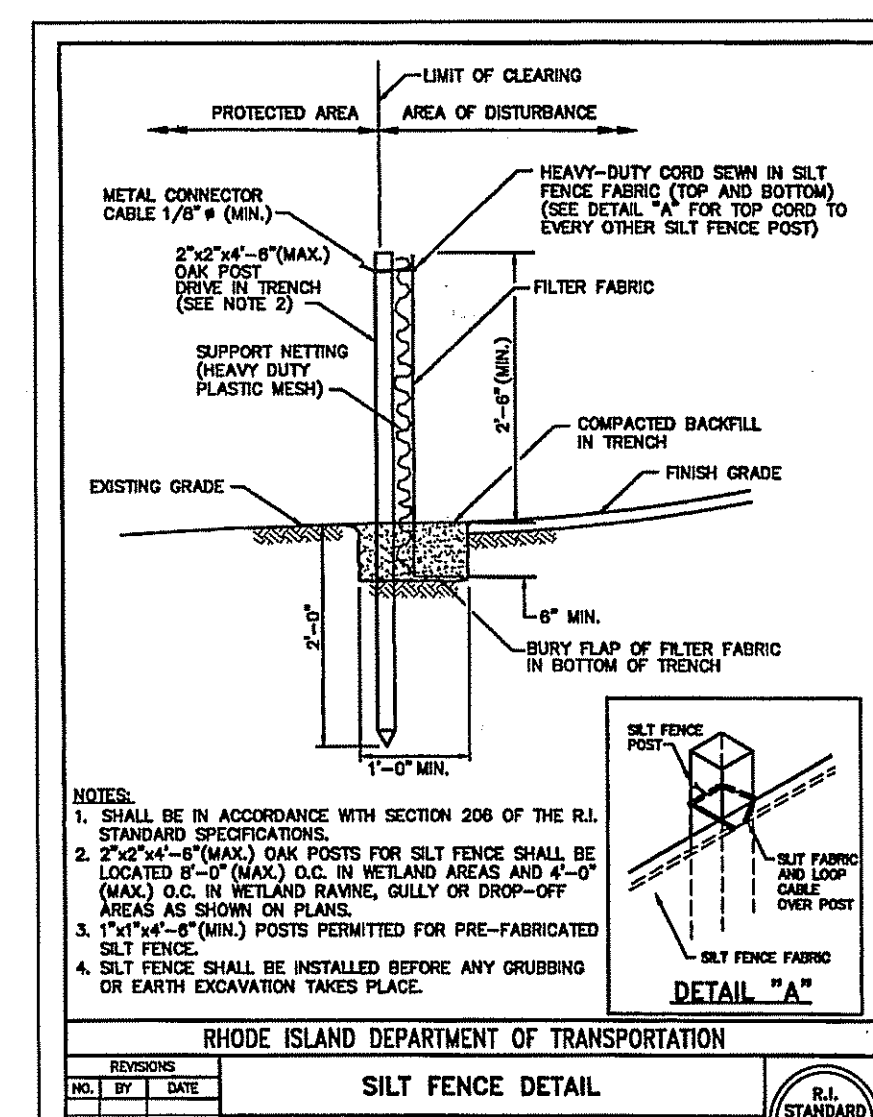
RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
BALED HAY CATCH BASIN INLET PROTECTION  
R.I. STANDARD 9.8.0  
DATE: JUNE 15, 1998



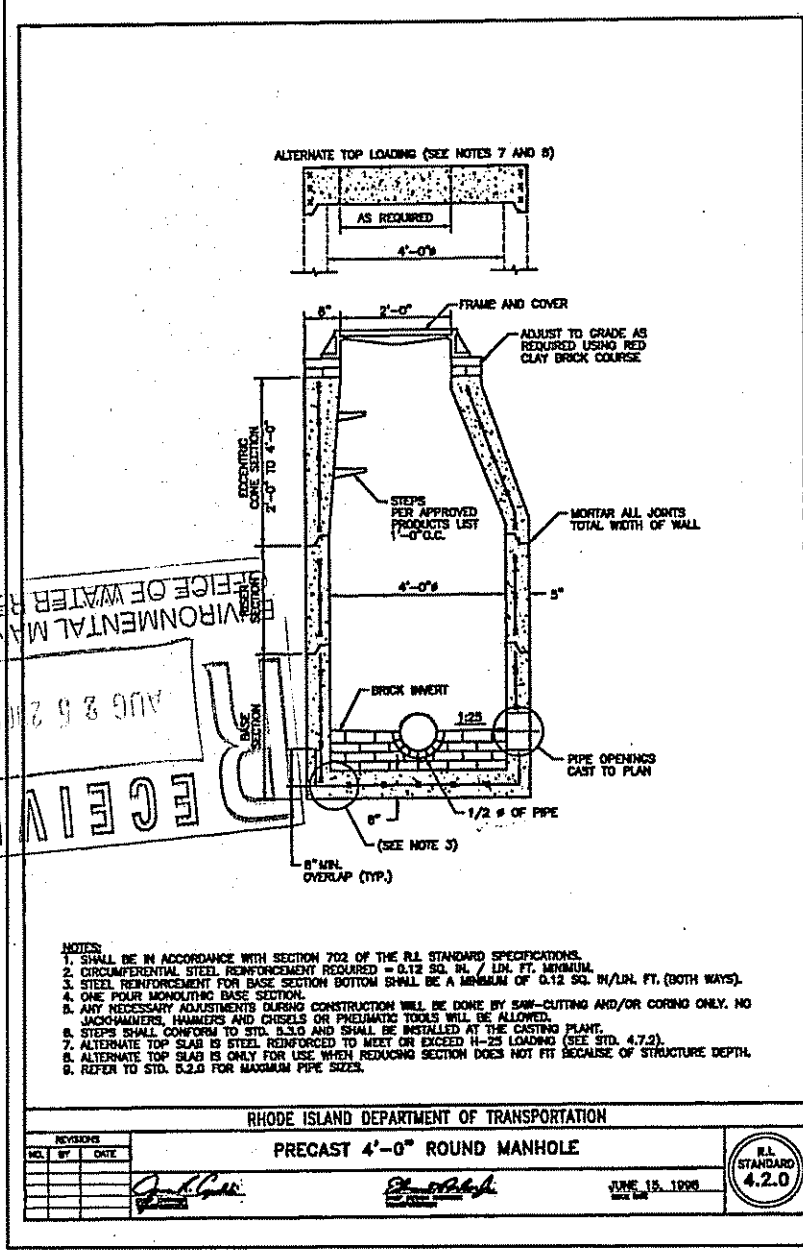
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CONSTRUCTION ACCESS  
R.I. STANDARD 9.9.0  
DATE: JUNE 15, 1998



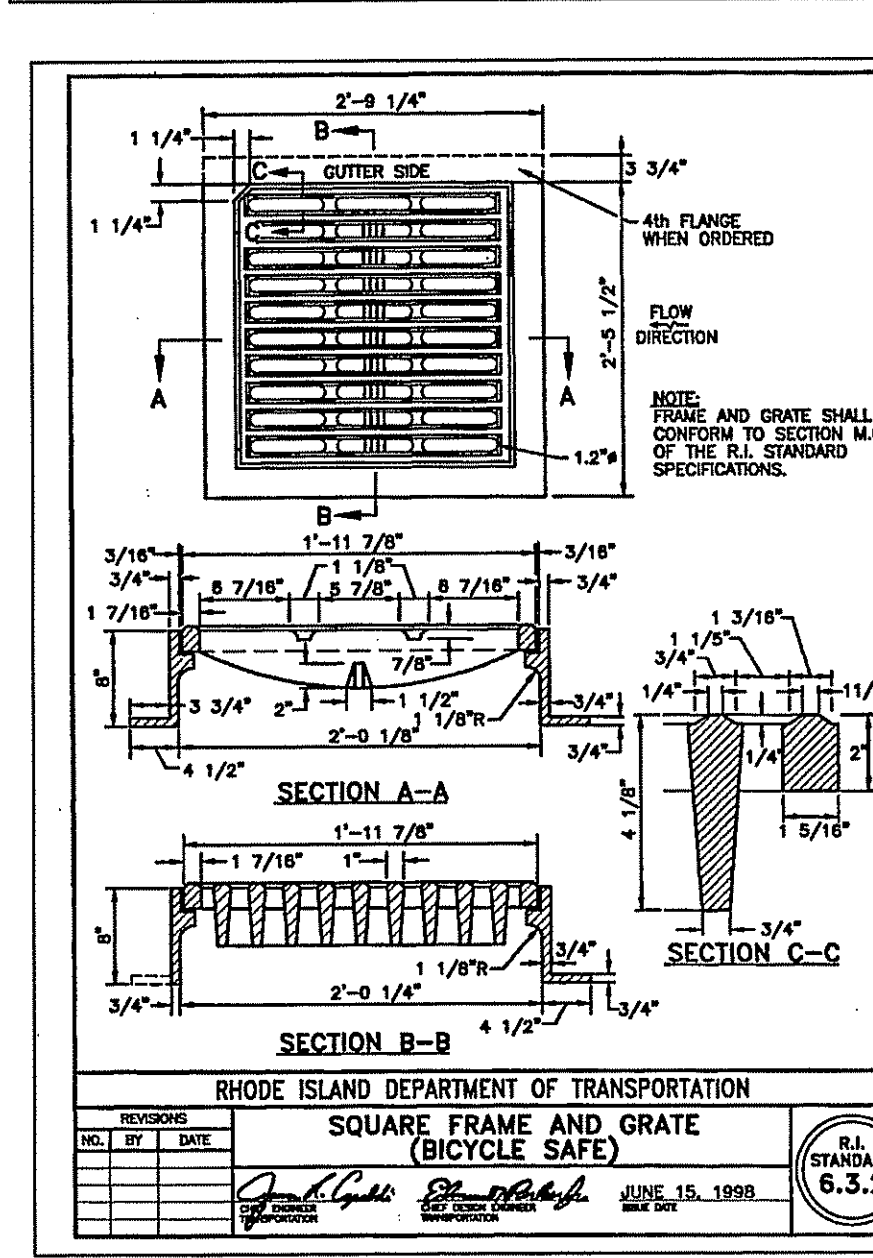
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R.I. STANDARD 9.1.0  
DATE: JUNE 15, 1998



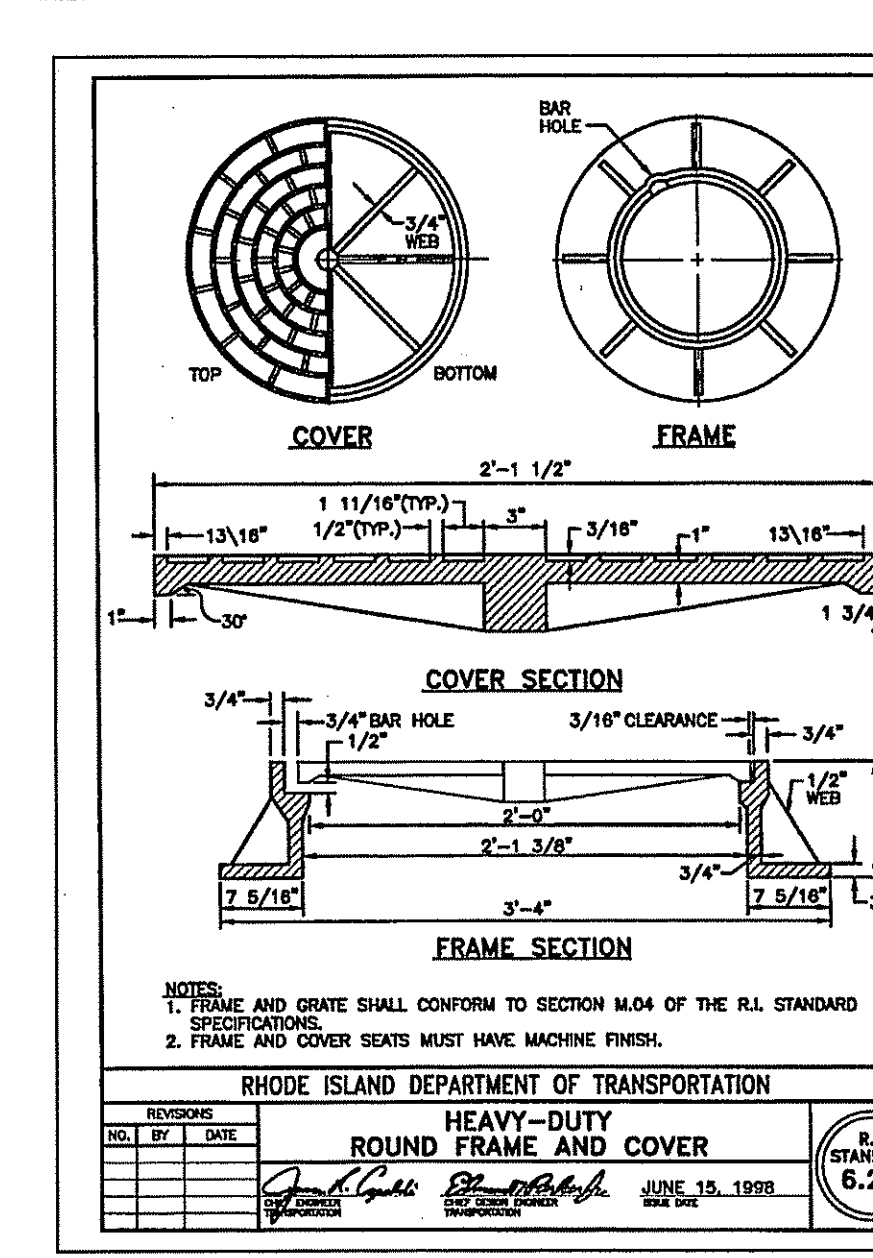
RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
SILT FENCE DETAIL  
R.I. STANDARD 9.2.0  
DATE: JUNE 15, 1998



RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
PRECAST 4\"/>



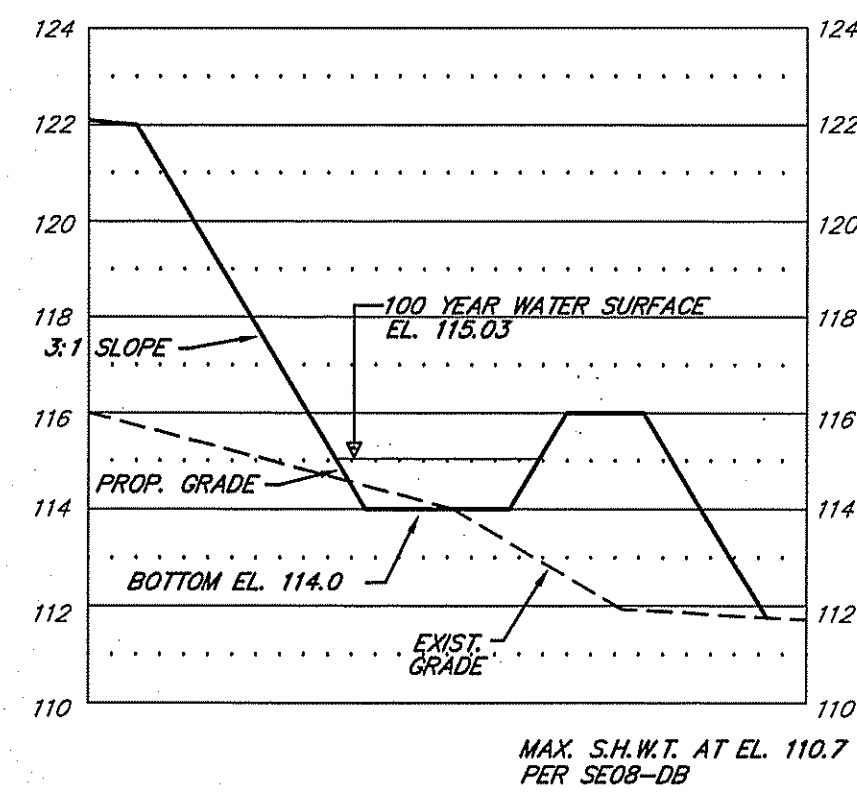
RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
SQUARE FRAME AND GRATE (BICYCLE SAFE)  
R.I. STANDARD 6.3.2  
DATE: JUNE 15, 1998



RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
HEAVY-DUTY ROUND FRAME AND COVER  
R.I. STANDARD 6.2.1  
DATE: JUNE 15, 1998

SCOTT F. MOOREHEAD  
REGISTERED PROFESSIONAL ENGINEER  
S.F.M. ENGINEERING ASSOCIATES  
410 TIQUOE AVENUE  
COVENTRY, R.I. 02816  
(401)826-3736

FOX RUN CONDOMINIUMS  
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PREPARED FOR:  
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2091 NOOSENECK HILL ROAD  
COVENTRY, RHODE ISLAND 02816  
(401)392-3000  
CONSTRUCTION NOTES & DETAILS  
DATE: SEPT. 15, 2008 SCALE: AS NOTED SHEET 10 OF 13

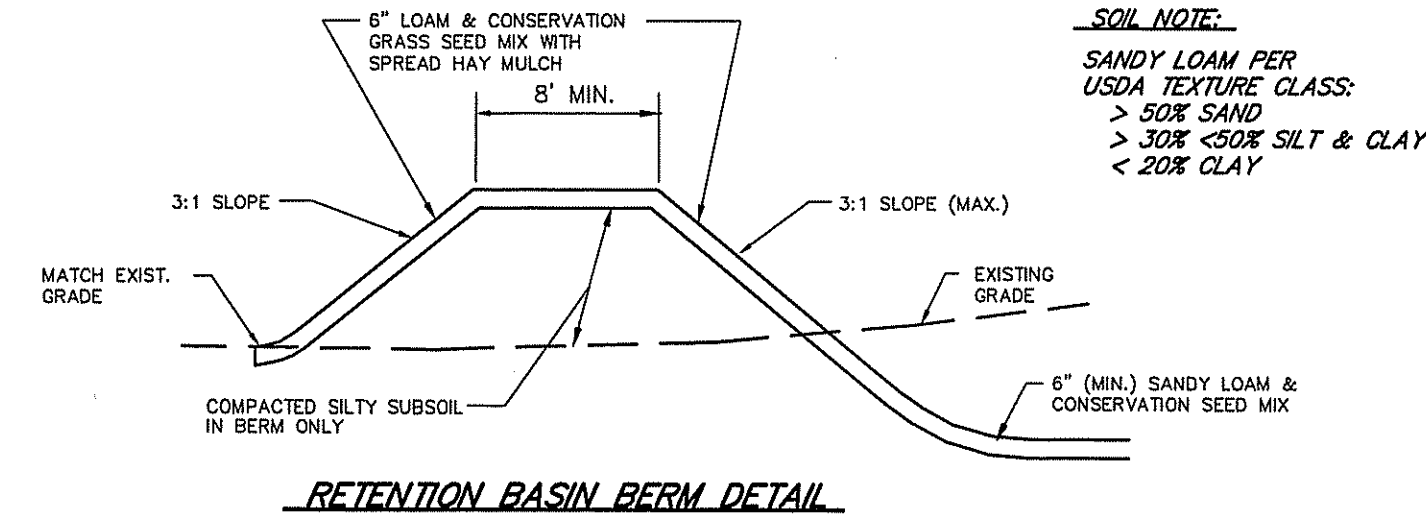


**CROSS SECTION - RETENTION BASIN**

SCALE: HOR. 1" = 20'  
VERT. 1" = 4'

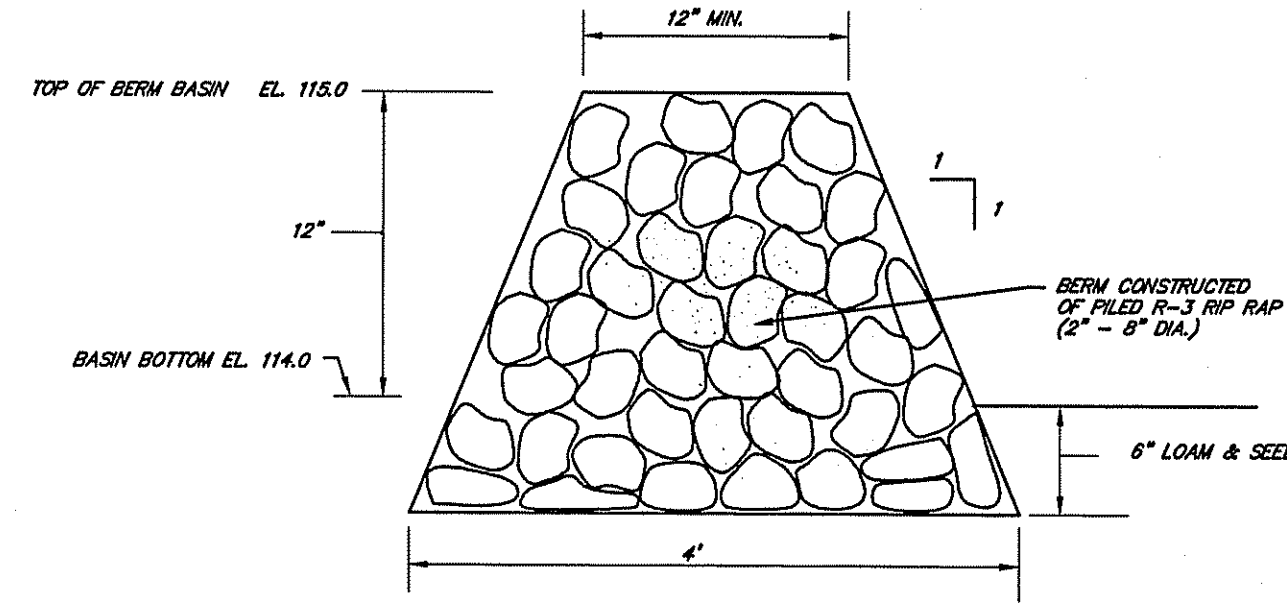
**STORM WATER BASIN - DIMENSION TABLE**

	ELEV. (FT.)	AREA (S.F.)	OUTLET DATA
RET. BASIN	114	1920	12.5" OVERFLOW MH RIM EL. = 115.00
	116	3760	



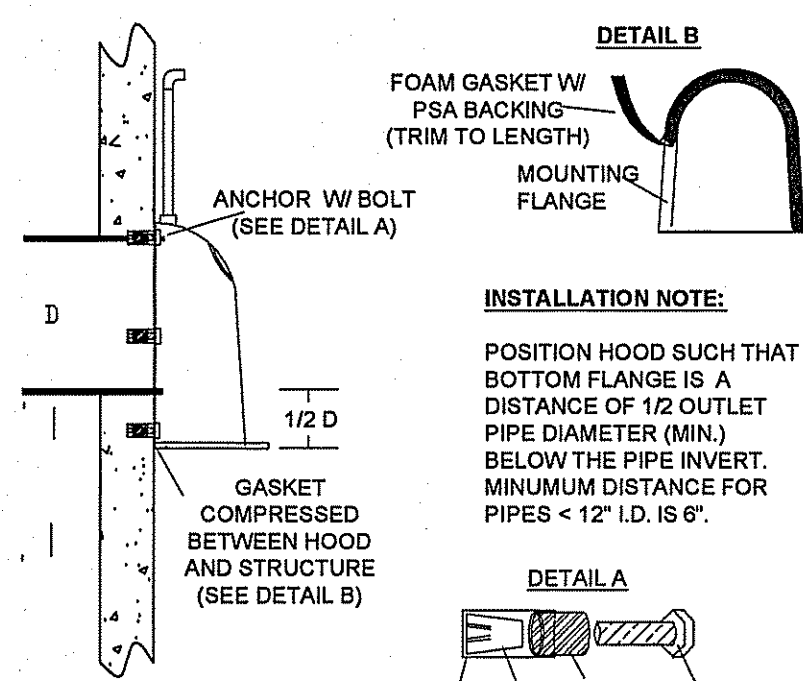
**RETENTION BASIN BERM DETAIL**

**SOIL NOTE:**  
SANDY LOAM PER USDA TEXTURE CLASS:  
> 50% SAND  
> 30% SILT & CLAY  
< 20% CLAY



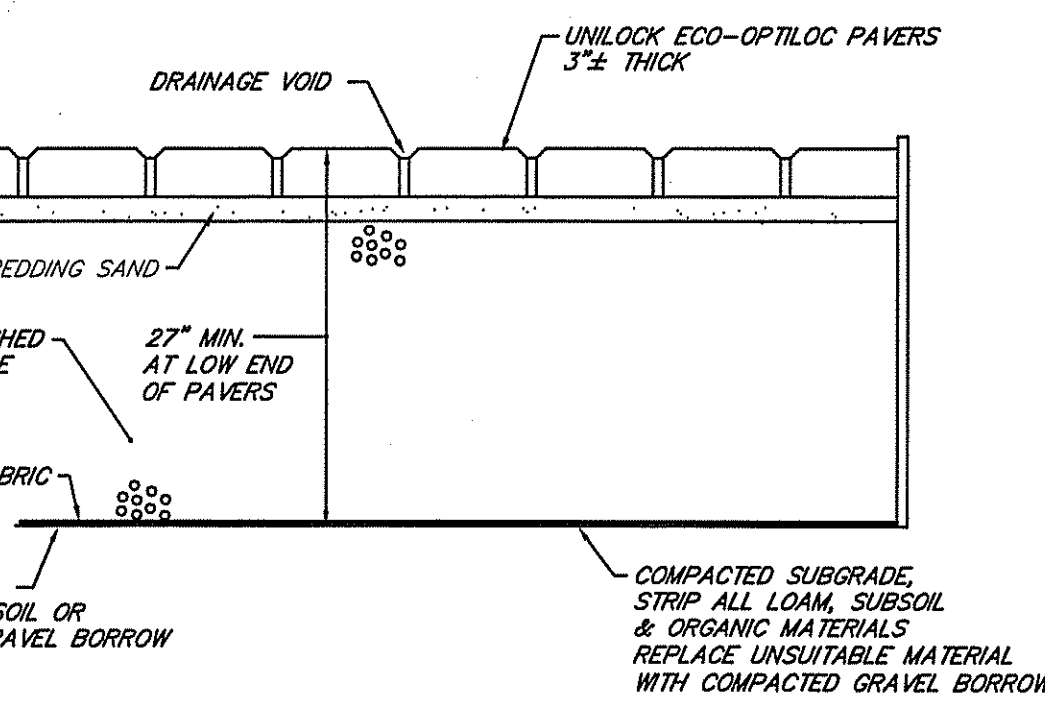
**SEDIMENT FOREBAY RIP RAP BERM**

NOT TO SCALE



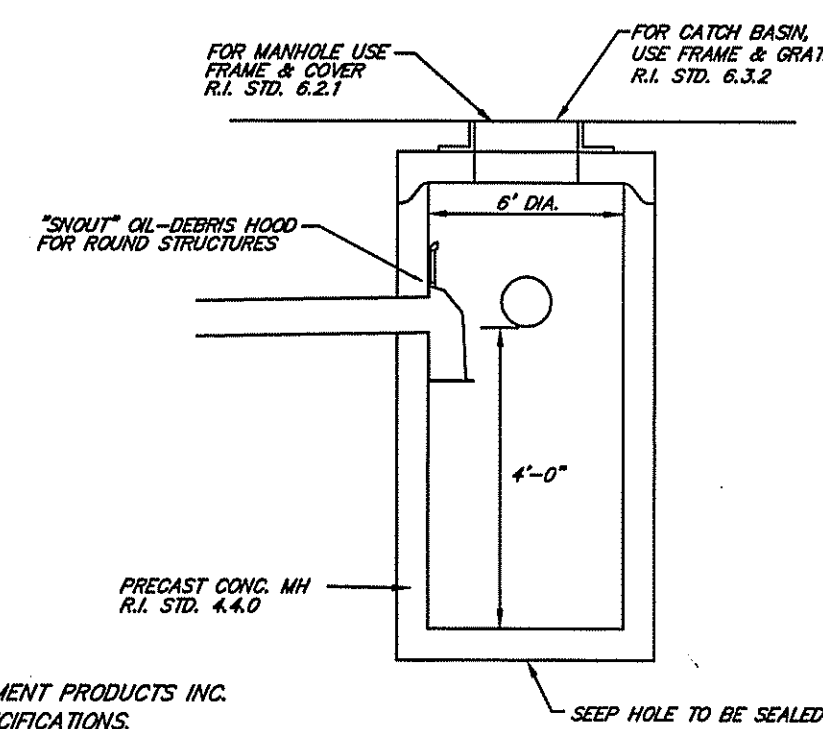
**SNOUT INSTALLATION DETAIL**

NOT TO SCALE



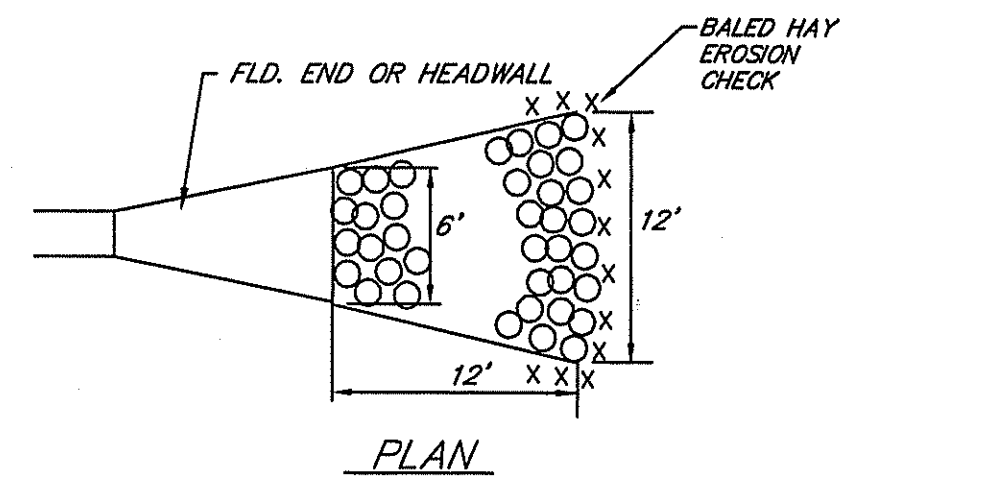
**PERMEABLE PAVER DETAIL**

SCALE: 1" = 1'

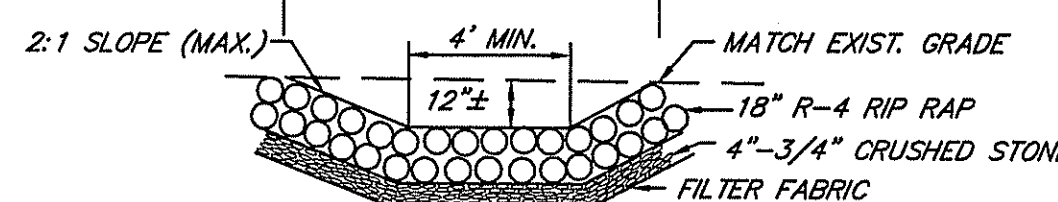


**OIL SEPARATOR CATCH BASIN OR MANHOLE DETAIL**

NOT TO SCALE



**PLAN**



**SECTION**

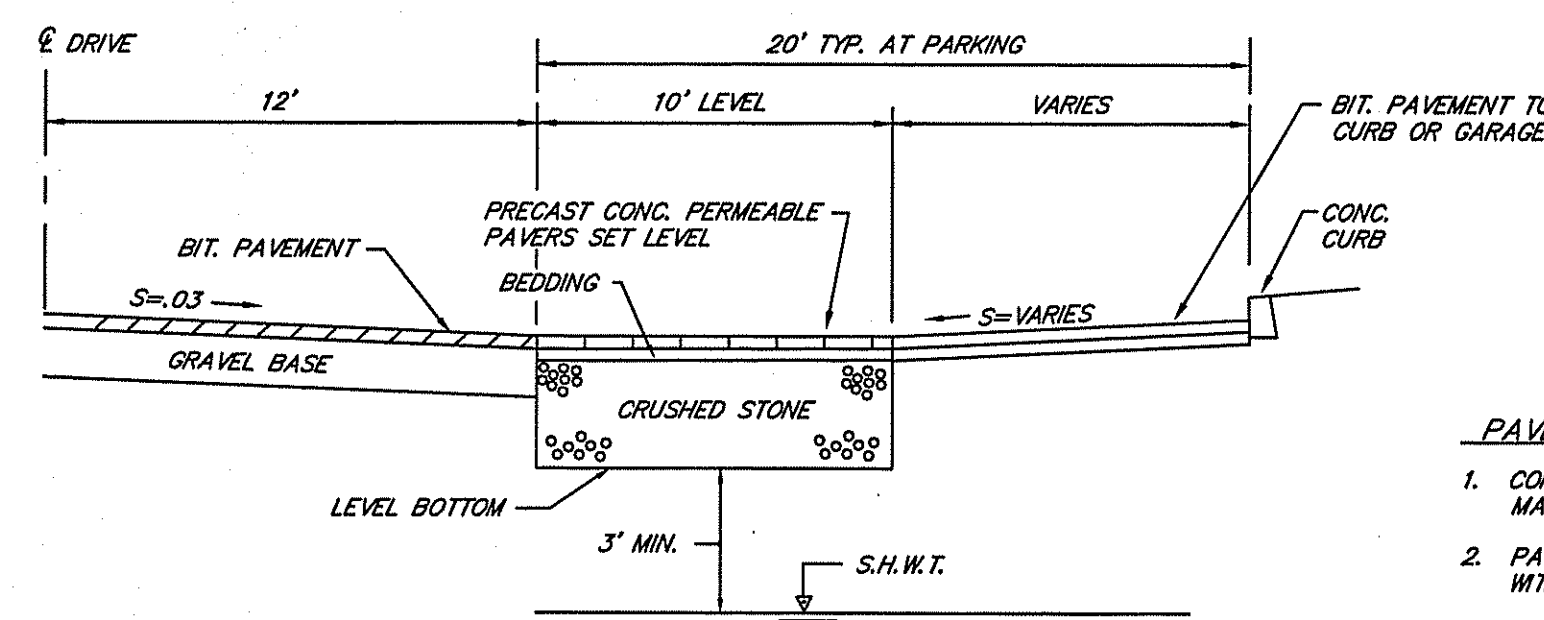
**NOTE:**  
RIP RAP SWALES SHALL BE 6" WIDE AT FLRD. END AND WIDEN TO 12', LENGTH = 12'

**RIP RAP @ FLARED END**

NOT TO SCALE

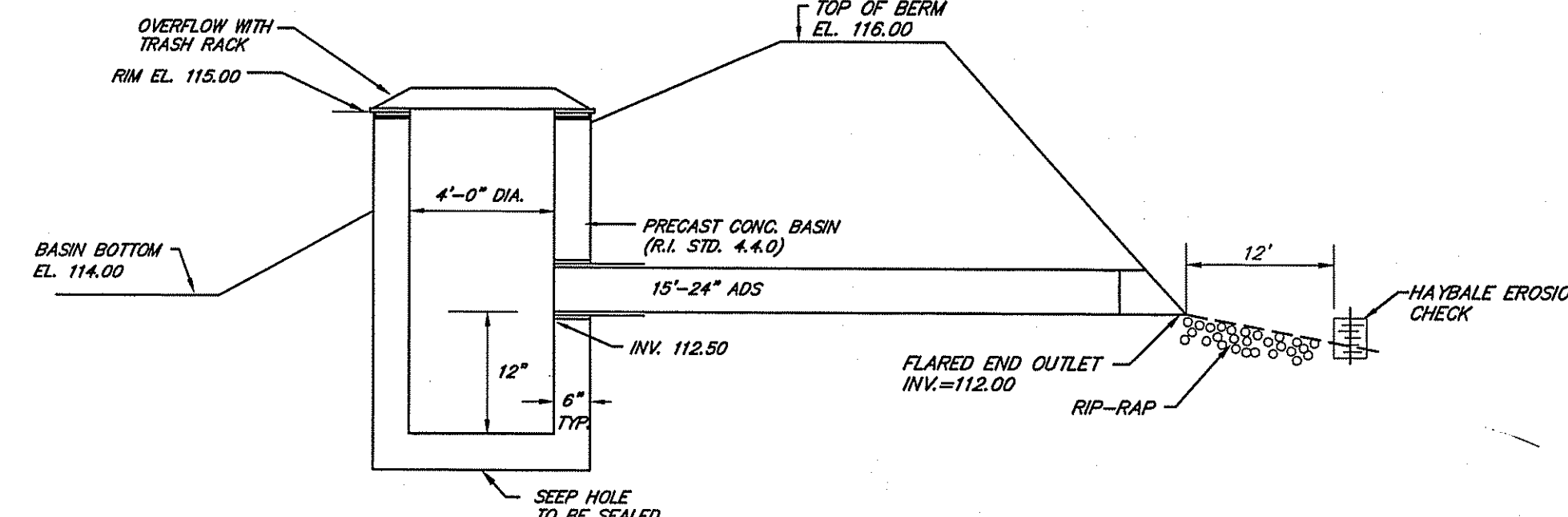
**PAVER NOTES:**

1. CONCRETE PAVERS SHALL BE ECO-OPTILOK AS MANUFACTURED BY UNILOCK OR APPROVED EQUAL.
2. PAVERS SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. BEDDING MATERIAL SHALL BE ASTM C33 NO. 8.
4. CRUSHED STONE SHALL BE ASTM C33 NO. 57 SPREAD AND COMPACTED IN 6" MAX. LIFTS.
5. PERMEABLE PAVEMENT & CRUSHED STONE INSTALLATION MUST BE INSPECTED AND APPROVED BY THE PROJECT ENGINEER.



**PERMEABLE PAVEMENT SECTION**

SCALE: 1" = 4'

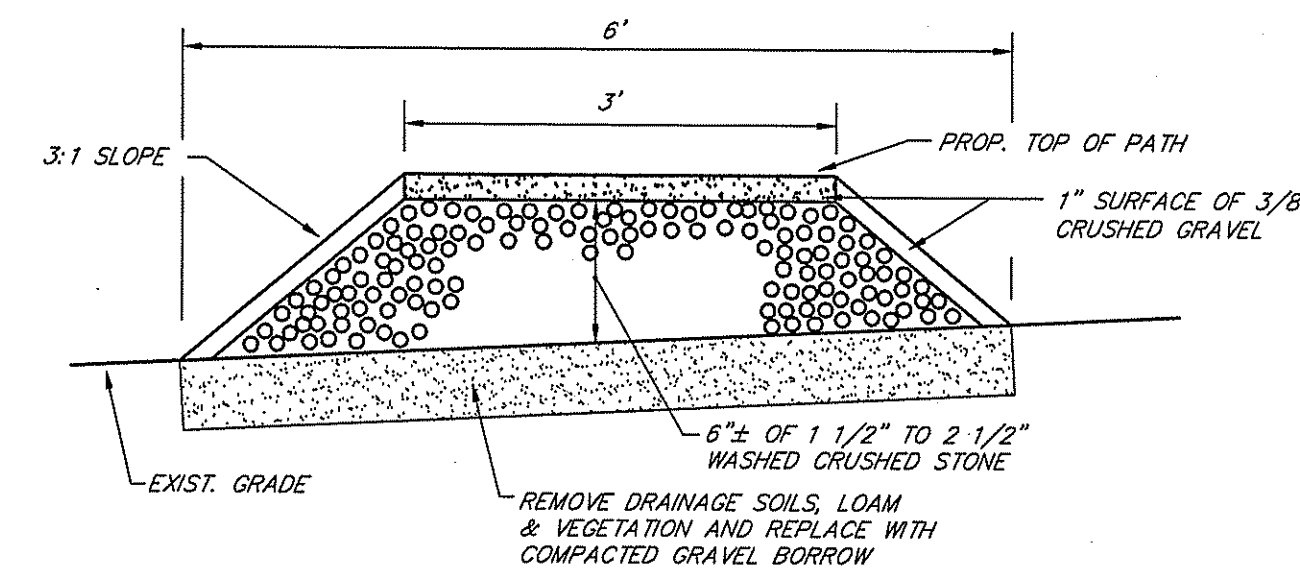


**OUTLET STRUCTURE DETAIL**

NOT TO SCALE

**NOTE:** TRASH RACK BY ACF ENVIRONMENTAL OR EQUAL. PLASTIC FRAMED STYLE INLET PROTECTION. INSTALL PER MANUFACTURER'S SPECIFICATIONS.

**CONTACT:** PLASTIC SOLUTIONS INC.  
P.O. BOX 4386  
WINCHESTER, VA 22604  
(877)877-5727



**CRUSHED STONE PATH DETAIL**

NOT TO SCALE

**RETENTION BASIN MAINTENANCE PLAN**

THE STORMWATER BASINS SHALL BE MAINTAINED ACCORDING TO THE FOLLOWING SCHEDULE:

1. THE GRASS ON THE BASIN (DIKE & SLOPES) SHALL BE MOWED EVERY 6 WEEKS (MIN. THREE (3) TIMES) BETWEEN THE MONTHS OF MAY AND OCTOBER. MOWED HEIGHT OF VEGETATION SHALL NOT BE LESS THAN TWO INCHES.
2. THE INLET & OUTLET STRUCTURES TO THE BASINS SHALL BE KEPT CLEAN OF SILT AND DEBRIS. THE PIPES SHALL BE CLEANED AT THE THREE (3) MOWINGS AND ONCE DURING THE WINTER MONTHS.
3. ACCUMULATED SILT AND DEBRIS SHALL BE REMOVED FROM THE BASINS ONCE EVERY TEN (10) YEARS.
4. ACCUMULATED SILT, SAND AND DEBRIS SHALL BE REMOVED FROM CATCH BASIN SUMPS AS REQUIRED BUT AT A MINIMUM OF TWO (2) TIMES A YEAR IN THE FALL AND SPRING.
5. BASINS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL FINAL APPROVAL OF CONSTRUCTION.
6. AFTER FINAL APPROVAL THE HOMEOWNERS SHALL BE RESPONSIBLE FOR MAINTENANCE.

**DRAINAGE NOTES**

1. CATCH BASINS SHALL BE 4' I.D. PRECAST CONC. WITH 3" SUMP R.I. STD. 4.4.0 TYPE 'F' IN PAVED AREAS, TYPE 'R' IN GRASS AREAS.
2. CATCH BASIN FRAMES & GRATES SHALL BE R.I. STD. 6.3.2. FRAME & GRATES SHALL BE SET 2" BELOW DESIGN GRADE UNTIL FINAL PAVEMENT COURSE IS TO BE INSTALLED. AT FINAL PAVING, RAISE FRAME & GRATE TO DESIGN GRADE. UTILIZE 4" FRAME & GRATE STRUCTURES AS NECESSARY.
3. MANHOLES SHALL BE 4' I.D. PRECAST CONC. R.I. STD. 4.2.0.
4. MANHOLE FRAMES & COVERS SHALL BE R.I. STD. 6.2.1.
5. DRAINAGE PIPING SHALL BE CORRUGATED HDPE PIPE (ADS=12 OR EQUAL) UNLESS OTHERWISE SPECIFIED.
6. ROOF DRAINS SHALL BE 6" PVC OR ADS AT S=01 (MIN.)
7. CATCH BASINS SHALL BE CLEANED A MINIMUM OF TWICE PER YEAR (SPRING & FALL). REMOVED SILTS AND OIL SHALL BE DISPOSED OF AT A LICENSED WASTE FACILITY.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTION & MAINTENANCE OF ALL DRAINAGE FACILITIES, AS PER THEIR RESPECTIVE PROGRAMS, UNTIL FINAL ACCEPTANCE OF CONSTRUCTION.
9. UPON FINAL ACCEPTANCE OF THE CONSTRUCTION, THE HOMEOWNERS SHALL BE RESPONSIBLE FOR ALL DRAINAGE INSPECTION & MAINTENANCE ITEMS.

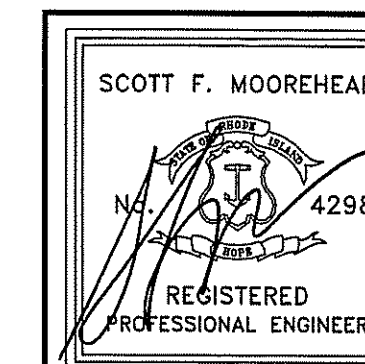
**RETENTION BASIN NOTES**

1. SLOPES OF BASIN SHALL BE 3:1 (MAX.).
2. RETENTION BASIN SHALL BE CONSTRUCTED AND STABILIZED PRIOR TO OTHER CONSTRUCTION. TEMPORARY DRAINAGE SHALL BE DIVERTED TO RETENTION BASIN OR TEMPORARY SEDIMENT BASINS.
3. ALL LOAM AND SUBSOIL SHALL BE STRIPPED FROM THE INFILTRATION AREAS AND THE AREA EXCAVATED TO THE GRAVELLY SUBSTRATE SOILS AT LEAST 6" BELOW THE FINISH BOTTOM GRADE. GRAVEL BORROW SHALL BE PLACED AS REQUIRED TO BRING THE SUBGRADE TO 6" BELOW FINISH BOTTOM GRADE.
4. RETENTION BASIN SUBGRADE MUST BE FINISHED AND APPROVED BY SFM ENGINEERING AND RICHMOND DPW PRIOR TO THE PLACEMENT OF LOAM.
5. THE GRAVEL SUBGRADE SHALL BE COVERED WITH A 6" LAYER OF SOIL WITH A SANDY LOAM TEXTURE. LEVELED, HOLLOWED AND IMMEDIATELY SEED WITH CONSERVATION GRASS SEED MIX. SANDY LOAM SAMPLES SHALL BE SUBMITTED TO SFM ENGINEERING FOR APPROVAL PRIOR TO PLACEMENT.
6. ONLY LIGHT EARTH MOVING EQUIPMENT ON TRACKS SHALL BE USED TO INSURE THAT THE BASIN BOTTOM IS NOT OVERLY COMPACTED.
7. BOTTOM OF RETENTION BASIN SHALL HAVE A MINIMUM OF 6" OF SANDY LOAM AND SHALL BE PLANTED WITH CONSERVATION SEED MIX. ALL OTHER AREAS NOT RIP RAPPED SHALL HAVE A MINIMUM OF 6" LOAM, CONSERVATION GRASS SEED MIX AND STRAW MULCH.
8. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROLS AT ALL TIMES TO INSURE NO SILTS ARE DEPOSITED IN THE RETENTION BASIN. THE RETENTION BASIN SHALL BE MAINTAINED IN ACCORDANCE WITH THE RETENTION BASIN MAINTENANCE PLAN.
9. ACCUMULATED SILTS AND SEDIMENTS SHALL BE REMOVED IMMEDIATELY FROM THE BASINS AS REQUIRED DURING SITE CONSTRUCTION.
10. SHOULD THE INFILTRATION CAPACITY DECREASE OVER TIME SUCH THAT STANDING WATER REMAINS FOR MORE THAN 72 HOURS AFTER A RAINFALL EVENT, REMEDIATION SHALL BE REQUIRED. REMEDIATION SHALL INCLUDE, AT A MINIMUM, HARROWING AND RESEEDING OF THE BASIN BOTTOM. AFTER REMEDIATION A QUALIFIED TESTING LABORATORY SHALL PERFORM INFILTRATION TESTS TO INSURE DESIGN INFILTRATION RATES OF 8 MINUTES PER INCH ARE RESTORED.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED OCT - 8 2009 FILE # 09-0149  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

W. Joseph Carney

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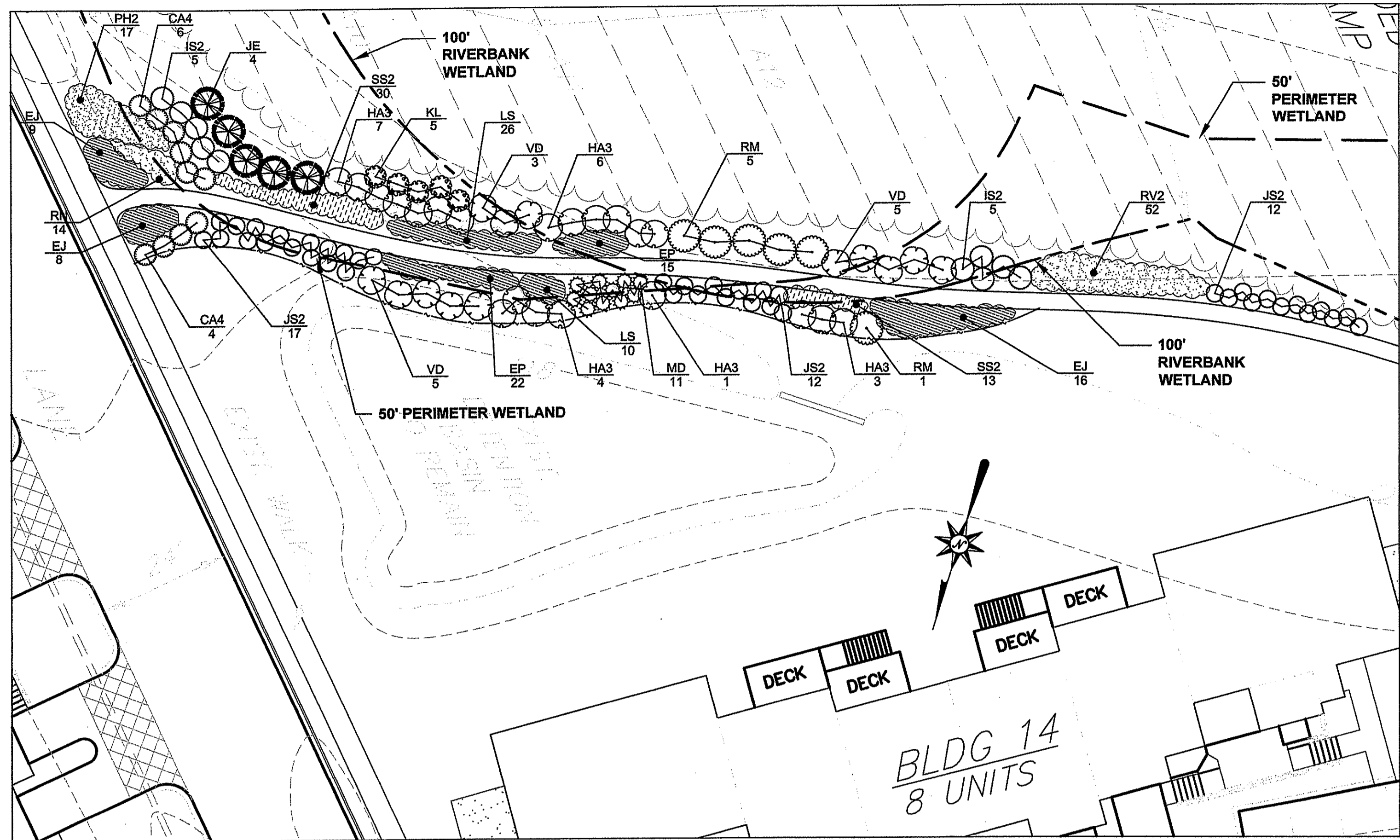


DATE	REVISION
8-21-09	D.E.M. OWTS COMMENTS

S.F.M. ENGINEERING ASSOCIATES  
410 TIOGUE AVENUE  
COVENTRY, R.I. 02816  
(401)826-3736

**FOX RUN CONDOMINIUMS**  
A. P. 4B LOTS 62-1 TO 62-7  
RICHMOND, RHODE ISLAND  
PREPARED FOR:  
MTM DEVELOPMENT CORP.  
2091 NOOSENECK HILL ROAD  
COVENTRY, RHODE ISLAND 02816  
(401)392-3000

**CONSTRUCTION NOTES & DETAILS 2**

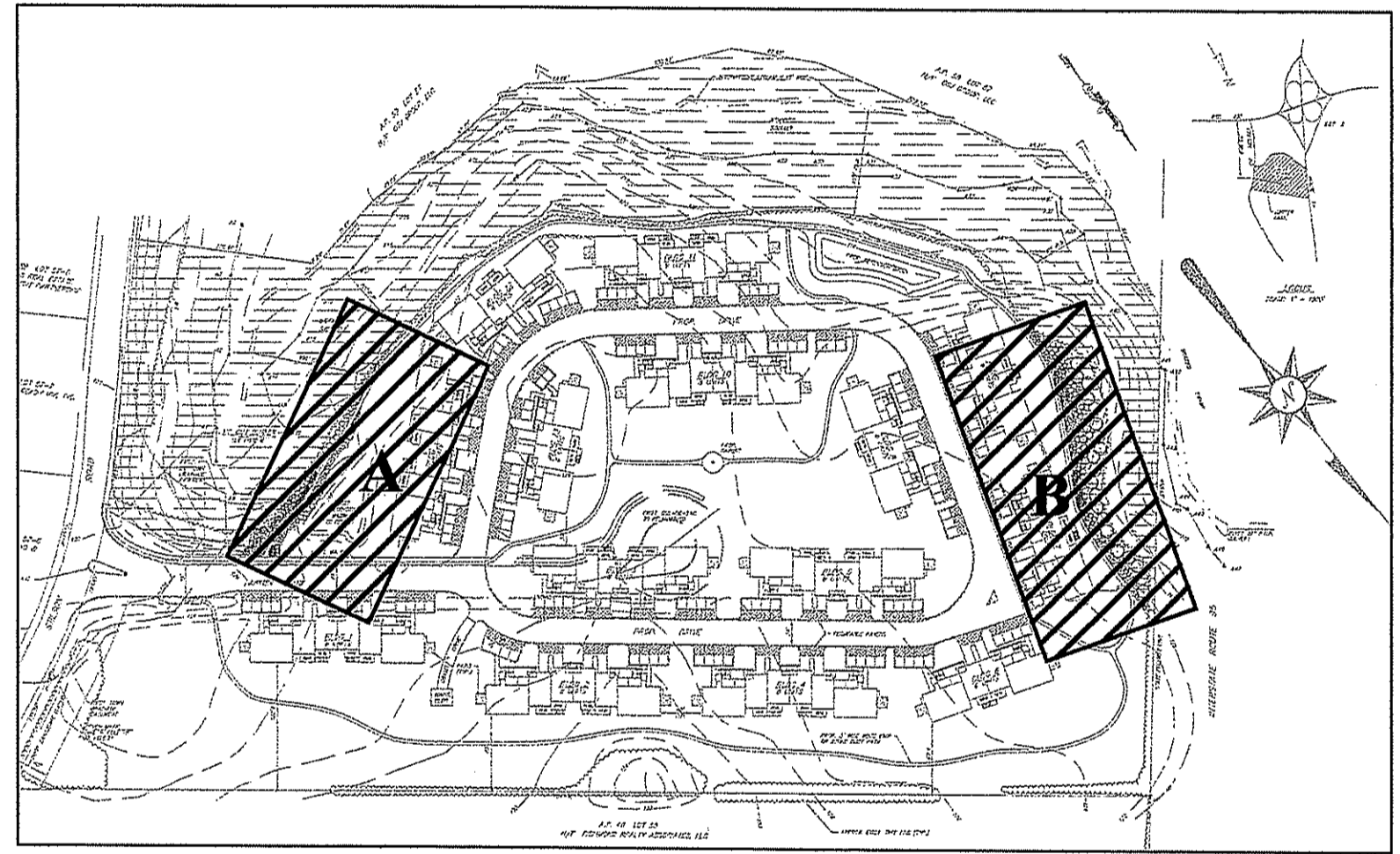


Planting Area A

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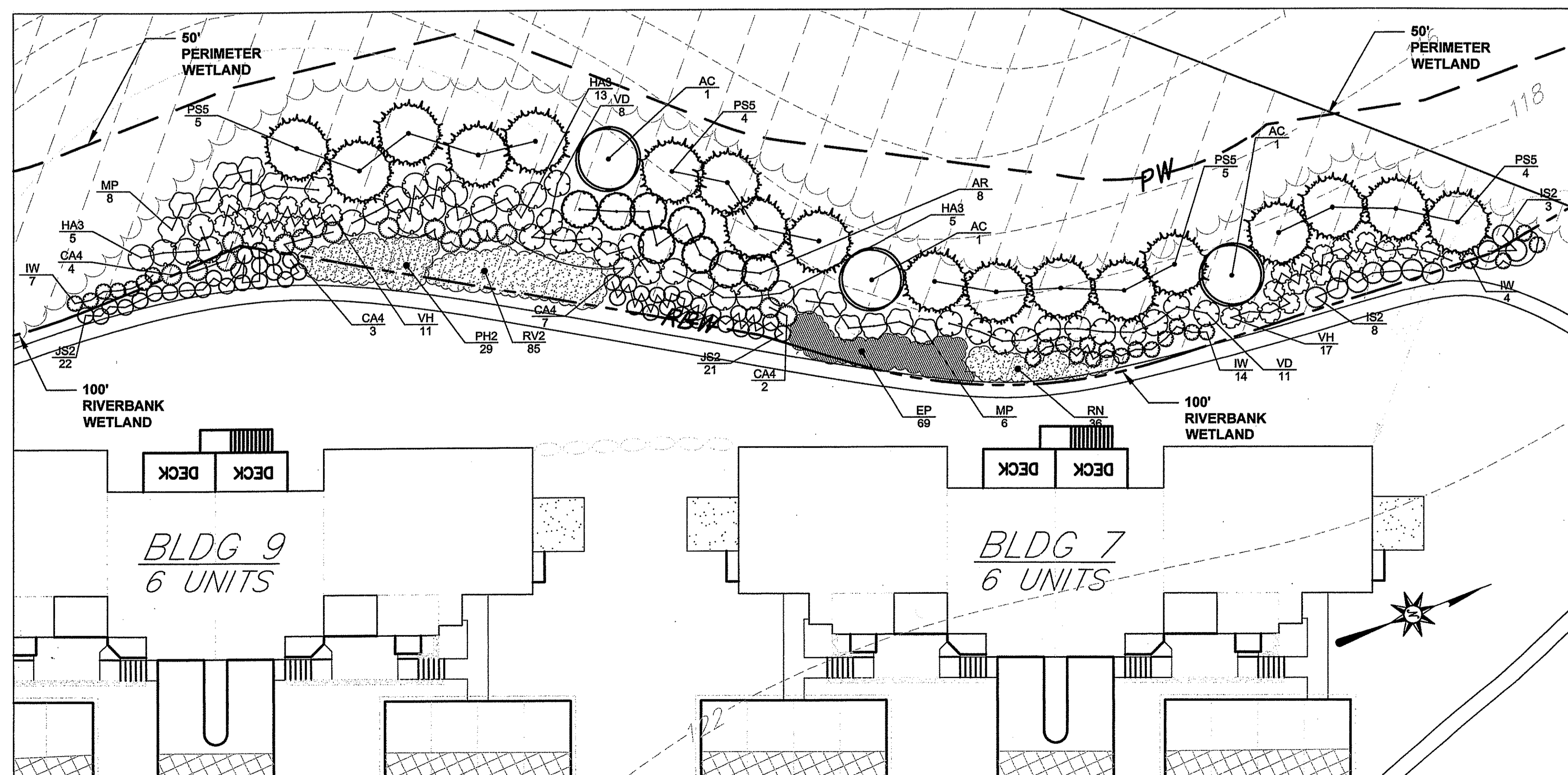
PLANT SCHEDULE PLANTING AREA A

TREES	QTY	BOTANICAL	COMMON	SIZE	REMARKS
JE	4	Juniperus virginiana	Eastern Red Cedar	5' - 6' Ht	B & B
SHRUBS	QTY	BOTANICAL	COMMON	SIZE	REMARKS
CA4	10	Cornus sericea 'Arctic Fire'	Arctic Fire Dogwood	2.5'-3' Ht.	Container
HA3	21	Hydrangea quercifolia 'Alice'	Alice Oakleaf Hydrangea	30" - 36"	Container
IS2	11	Ilex glabra 'Shamrock'	Inkberry	3' - 4' Ht	Container
JS2	42	Juniperus conferta	Shore Juniper	3 gal	Container
KL	5	Kalmia latifolia	Mountain Laurel	24" - 30"	Container
MD	11	Microbiota decussata	Siberian Carpet Cypress	3 gal	Container
RM	6	Rhododendron maximum	Rosebay Rhododendron	4' - 5' Ht	Container
VD	17	Viburnum dentatum	Arrowwood Viburnum	3' - 4' Ht	Container
PERENNIALS	QTY	BOTANICAL	COMMON	SIZE	
EP	37	Echinacea purpurea	Purple Coneflower	1 gal@ 24" oc	
EJ	33	Eupatorium maculatum	Joe Pye Weed	1 gal@ 36" oc	
LS	36	Liatris spicata	Spike Gayfeather	1 gal@ 24" oc	
PH2	17	Panicum virgatum 'Heavy Metal'	Heavy Metal Switch Grass	1 gal@ 36" oc	
RV2	52	Rudbeckia fulgida fulgida	Orange Coneflower	1 gal@ 24" oc	
RN	14	Rudbeckia nitida 'Herbstsonne'	Autumn Sun Coneflower	1 gal@ 24" oc	
SS2	43	Solidago sempervirens	Seaside Goldenrod	1 gal@ 24" oc	



Planting Areas Locus Plan

SCALE IN FEET  
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SCALE: 1"=160'-0"



Planting Area B

SCALE IN FEET  
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SCALE: 1"=16'-0"

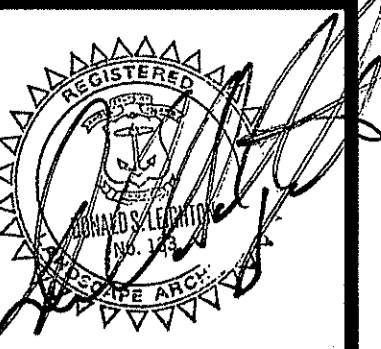
PLANT SCHEDULE PLANTING AREA B

TREES	QTY	BOTANICAL	COMMON	SIZE	REMARKS
AC	3	Amelanchier canadensis	Canadian Serviceberry	6' - 7' Ht	
AR	8	Aronia arbutifolia	Red Chokeberry	4' - 5' Ht	Natural
PS5	20	Pinus strobus	White Pine	2"-2.5" Cal.	B & B
SHRUBS	QTY	BOTANICAL	COMMON	SIZE	REMARKS
CA4	19	Cornus sericea 'Arctic Fire'	Arctic Fire Dogwood	2.5'-3' Ht.	Container
HA3	27	Hydrangea quercifolia 'Alice'	Alice Oakleaf Hydrangea	30" - 36"	Container
IS2	11	Ilex glabra 'Shamrock'	Inkberry	3' - 4' Ht	Container
IW	24	Ilex verticillata	Winterberry	18" - 24"	Container
JS2	22	Juniperus conferta	Shore Juniper	3 gal	Container
MP	14	Myrica pensylvanica	Northern Bayberry	30" - 36"	Container
VH	28	Vaccinium corymbosum	Highbush Blueberry	30" - 36"	Container
VD	19	Viburnum dentatum	Arrowwood Viburnum	3' - 4' Ht	Container
PERENNIALS	QTY	BOTANICAL	COMMON	SIZE	
EP	69	Echinacea purpurea	Purple Coneflower	1 gal@ 24" oc	
PH2	29	Panicum virgatum 'Heavy Metal'	Heavy Metal Switch Grass	1 gal@ 36" oc	
RV2	85	Rudbeckia fulgida fulgida	Orange Coneflower	1 gal@ 24" oc	
RN	36	Rudbeckia nitida 'Herbstsonne'	Autumn Sun Coneflower	1 gal@ 24" oc	

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED OCT - 8 2009 FILE # 09-0118  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE.

*W. Joseph Caray*

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.



Not Issued For Construction

Revisions:

Job No: C-1749  
Dwg No:  
Drawn: abt  
Checked: jw  
Issued: 2009-01-16

Gates, Leighton & Associates, Inc.  
LANDSCAPE ARCHITECTURE  
865-A Waterman Avenue, East Providence, Rhode Island 02914  
Phone: (401) 438-2071 Fax: (401) 438-2111 Website: www.gla.com

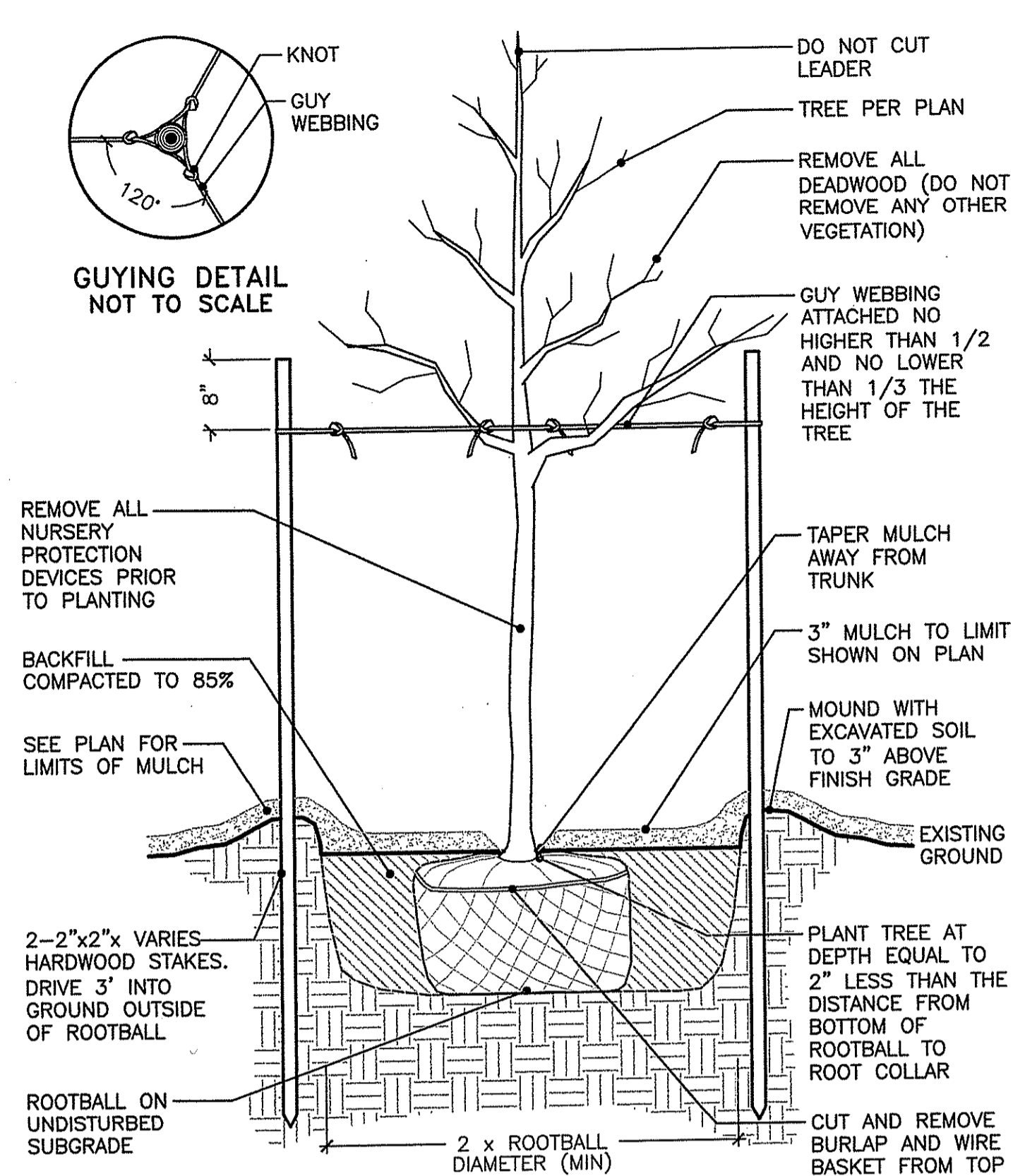
**GLA**

REVEGETATION & WETLAND BUFFER MITIGATION  
**Fox Run Condominiums**  
JUPITER LANE  
RICHMOND, RHODE ISLAND

DEM Wetlands Submittal

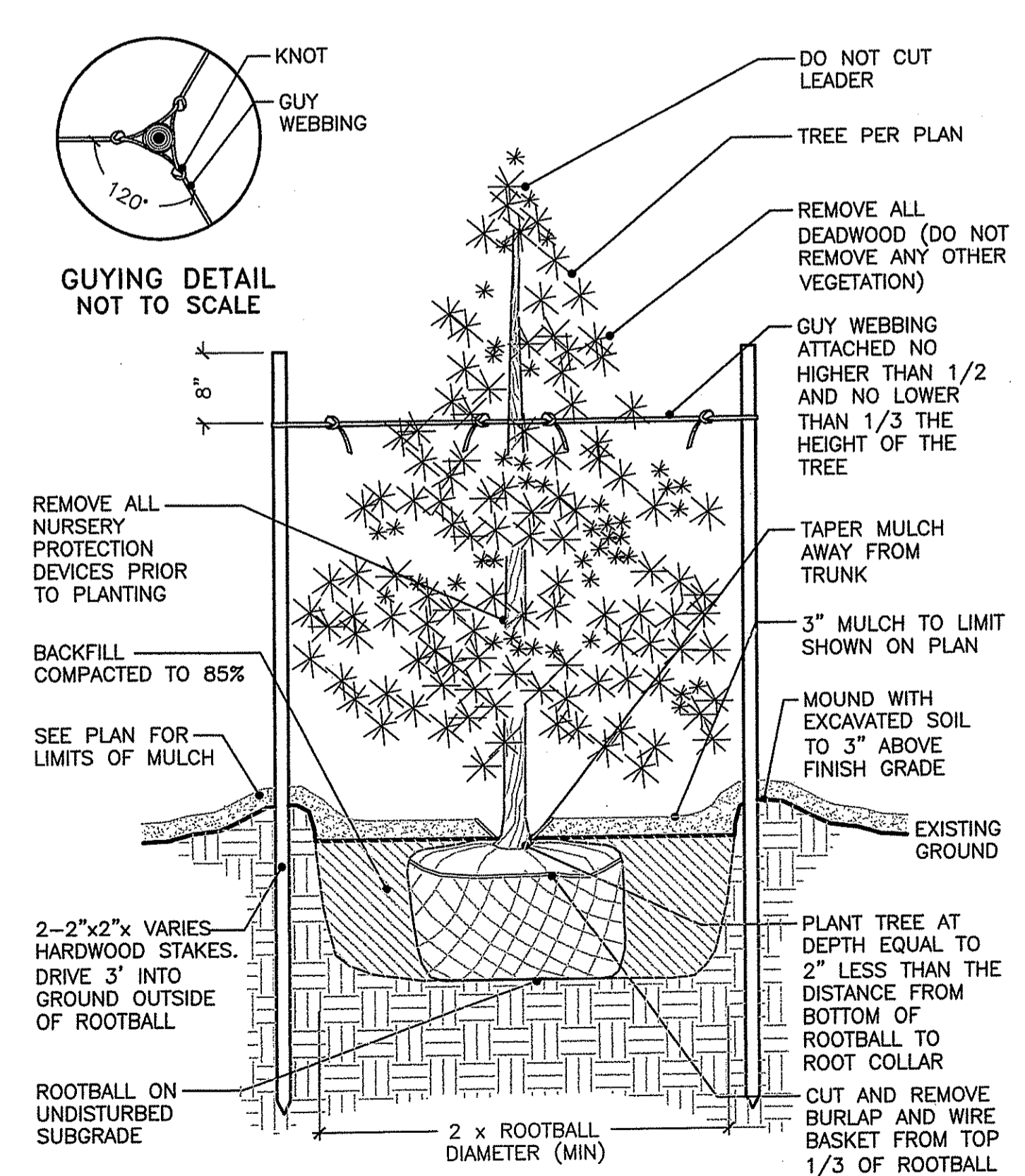
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Sheet 12 of 13  
**LP-101**



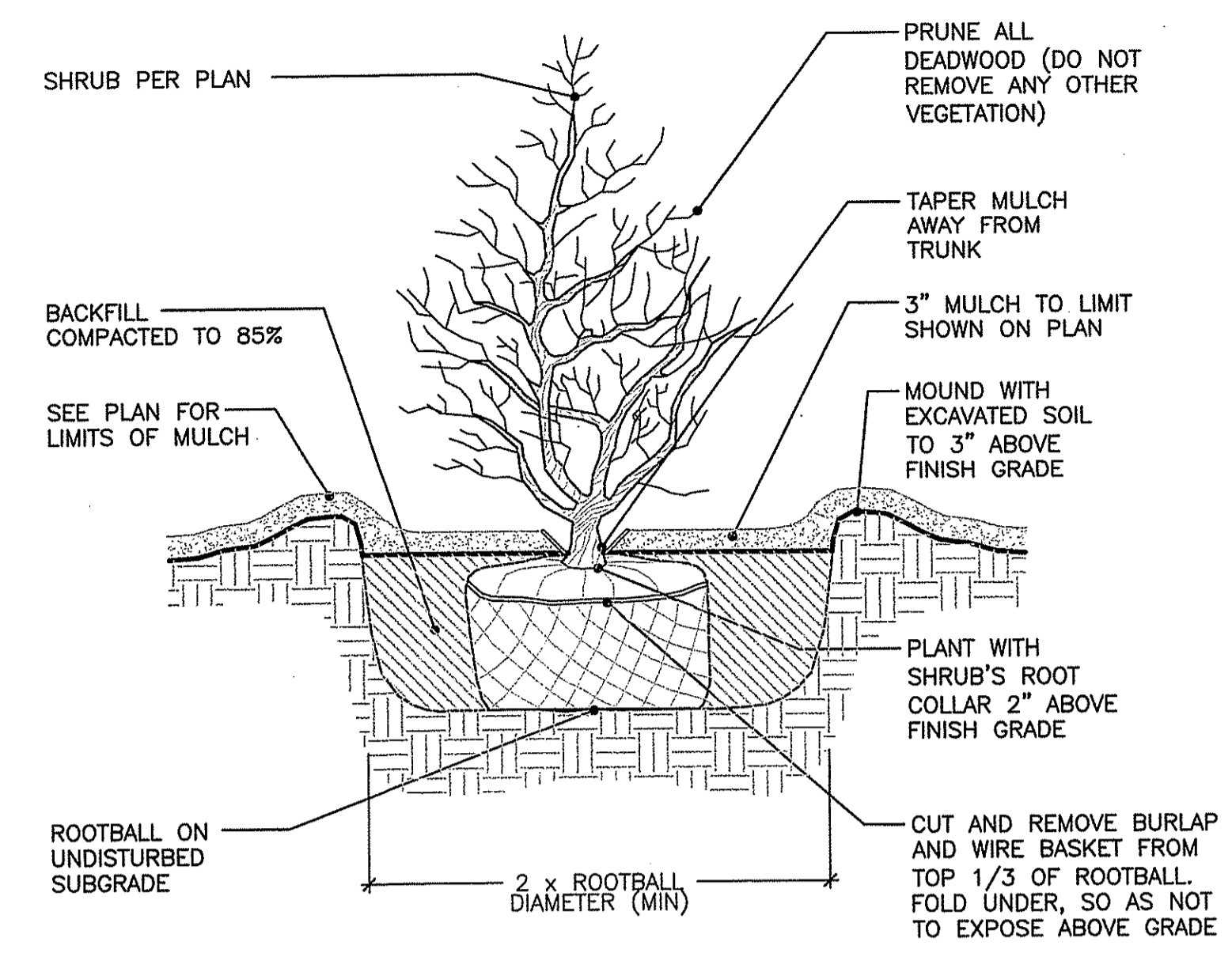
NOTE:  
1. AFTER THE GUARANTEE PERIOD THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF STAKES AND GUY WEBBING.

DECIDUOUS TREE STAKING AND PLANTING DETAIL

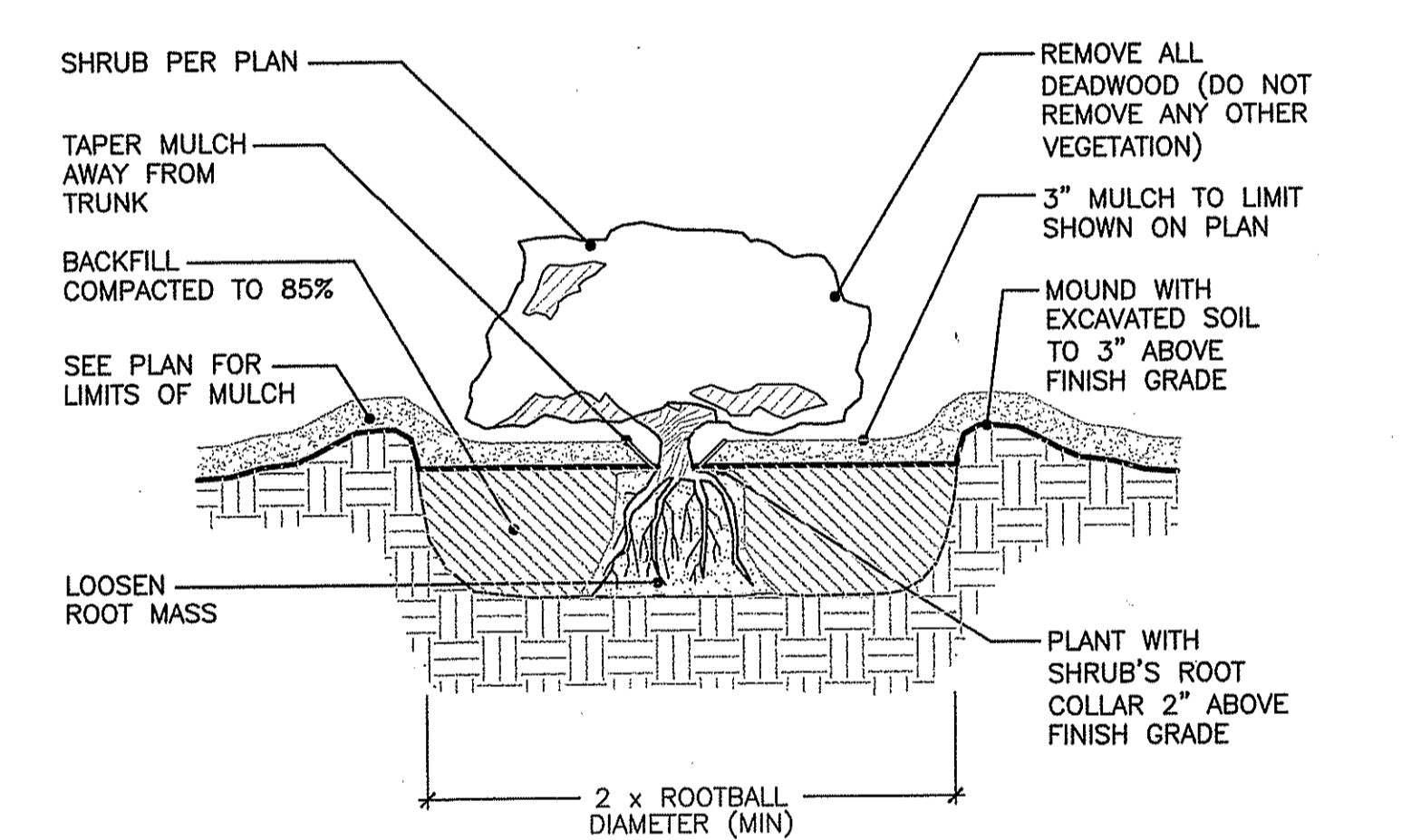


NOTE:  
1. AFTER THE GUARANTEE PERIOD THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF STAKES AND GUY WEBBING.

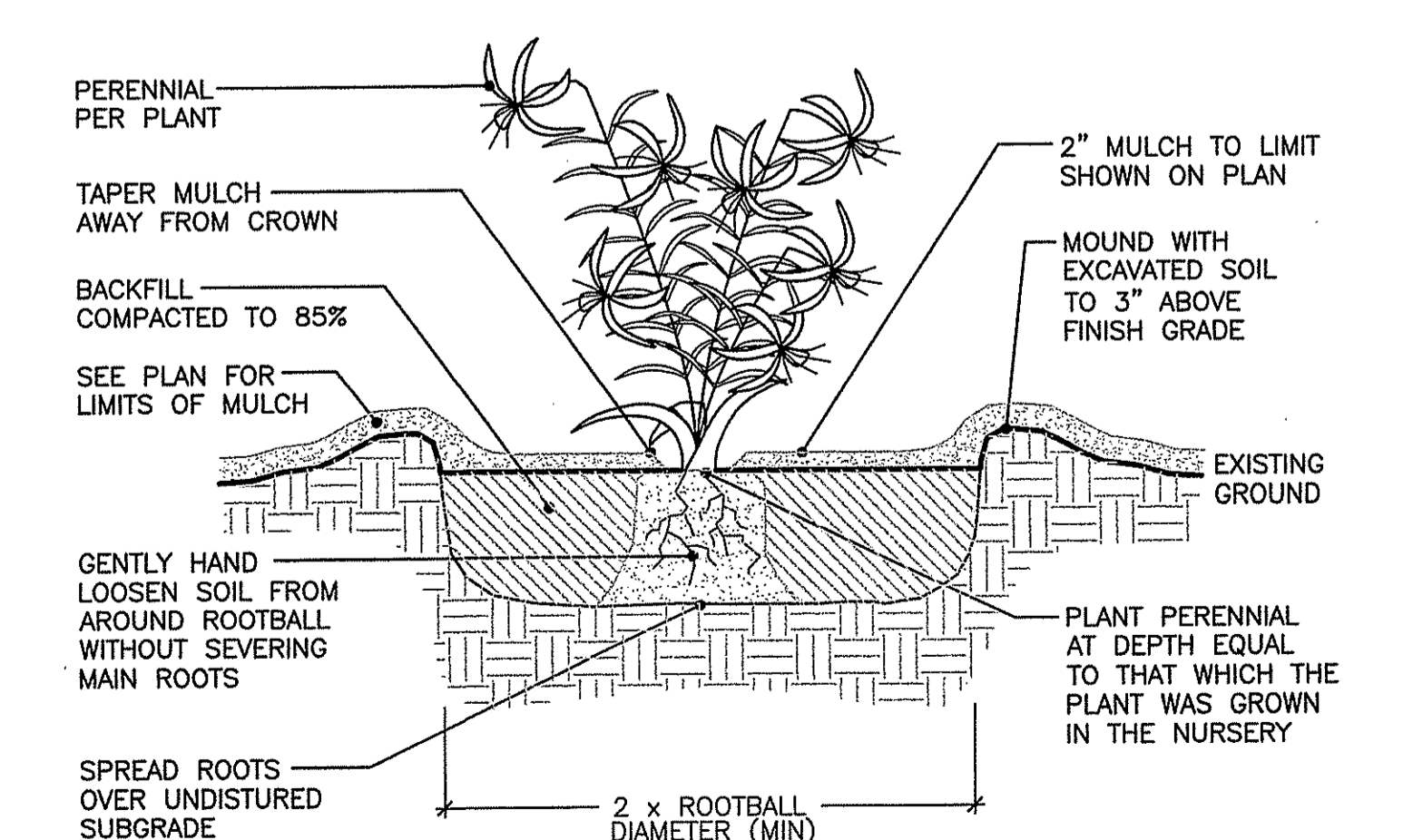
EVERGREEN TREE PLANTING DETAIL



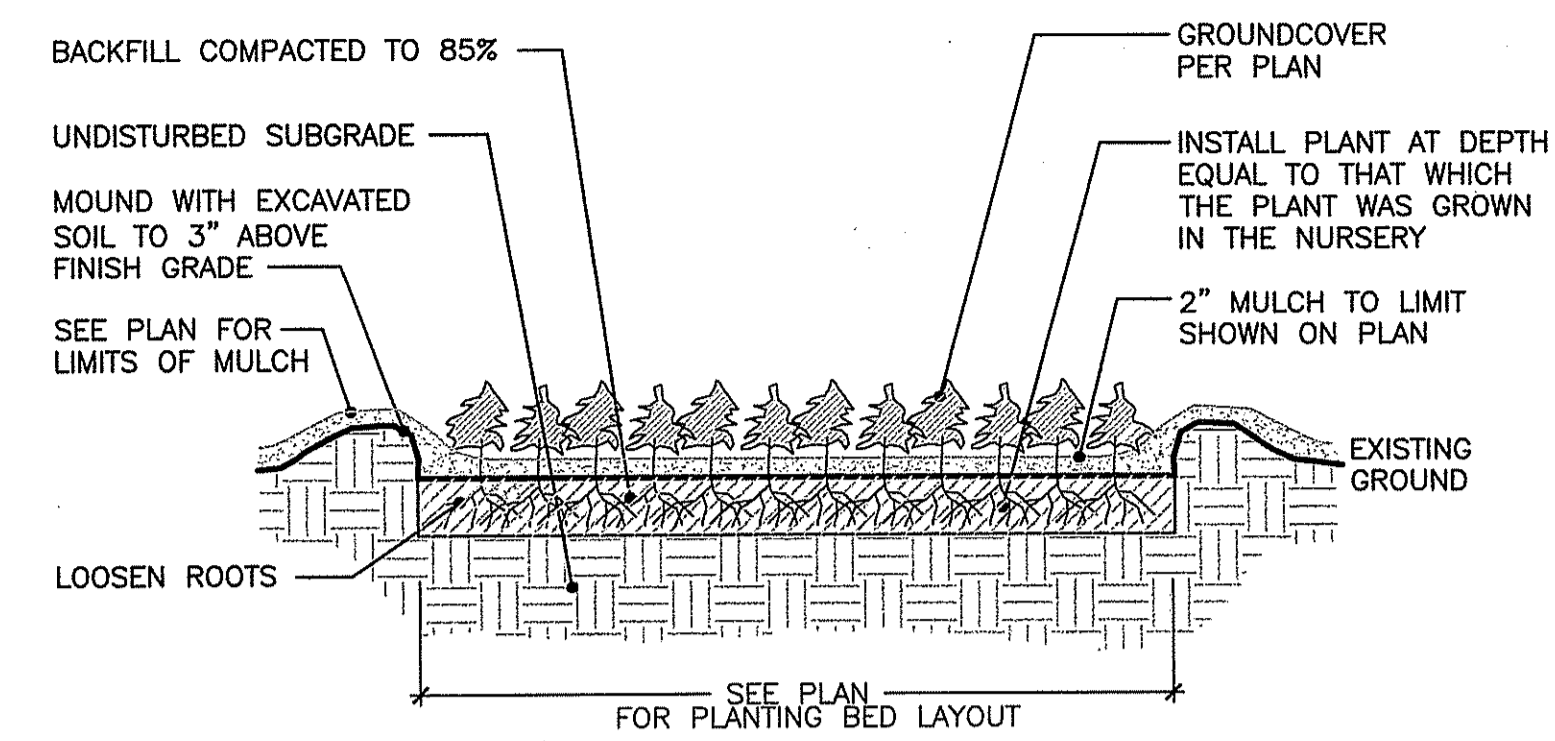
SHRUB PLANTING DETAIL



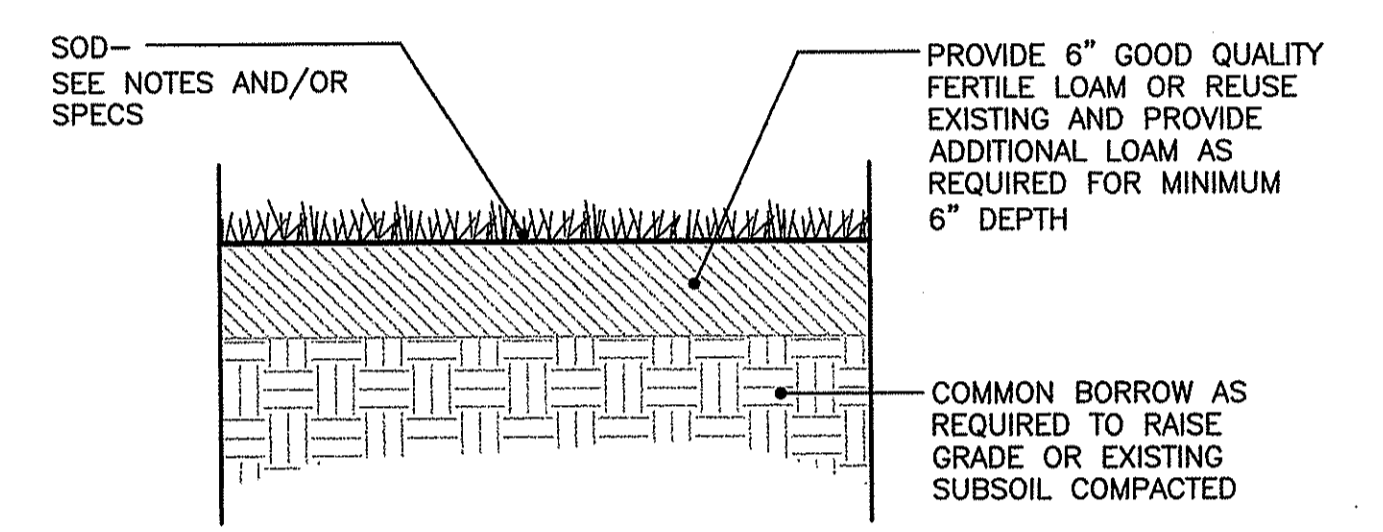
CONTAINER GROWN TREE AND SHRUB PLANTING DETAIL



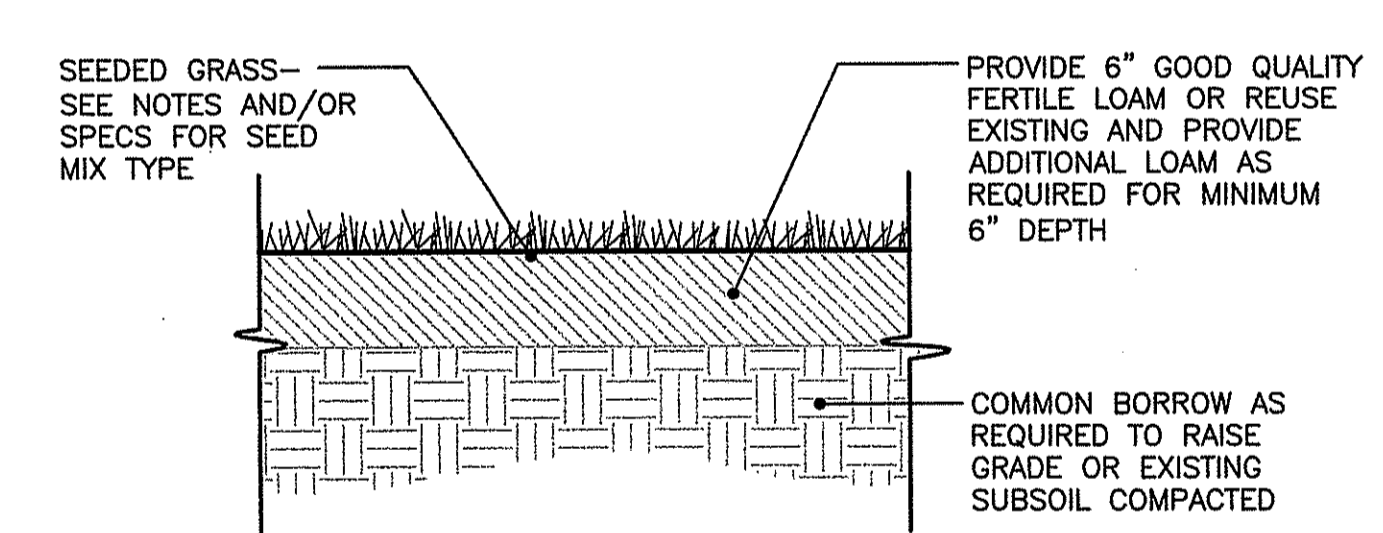
PERENNIAL PLANTING DETAIL



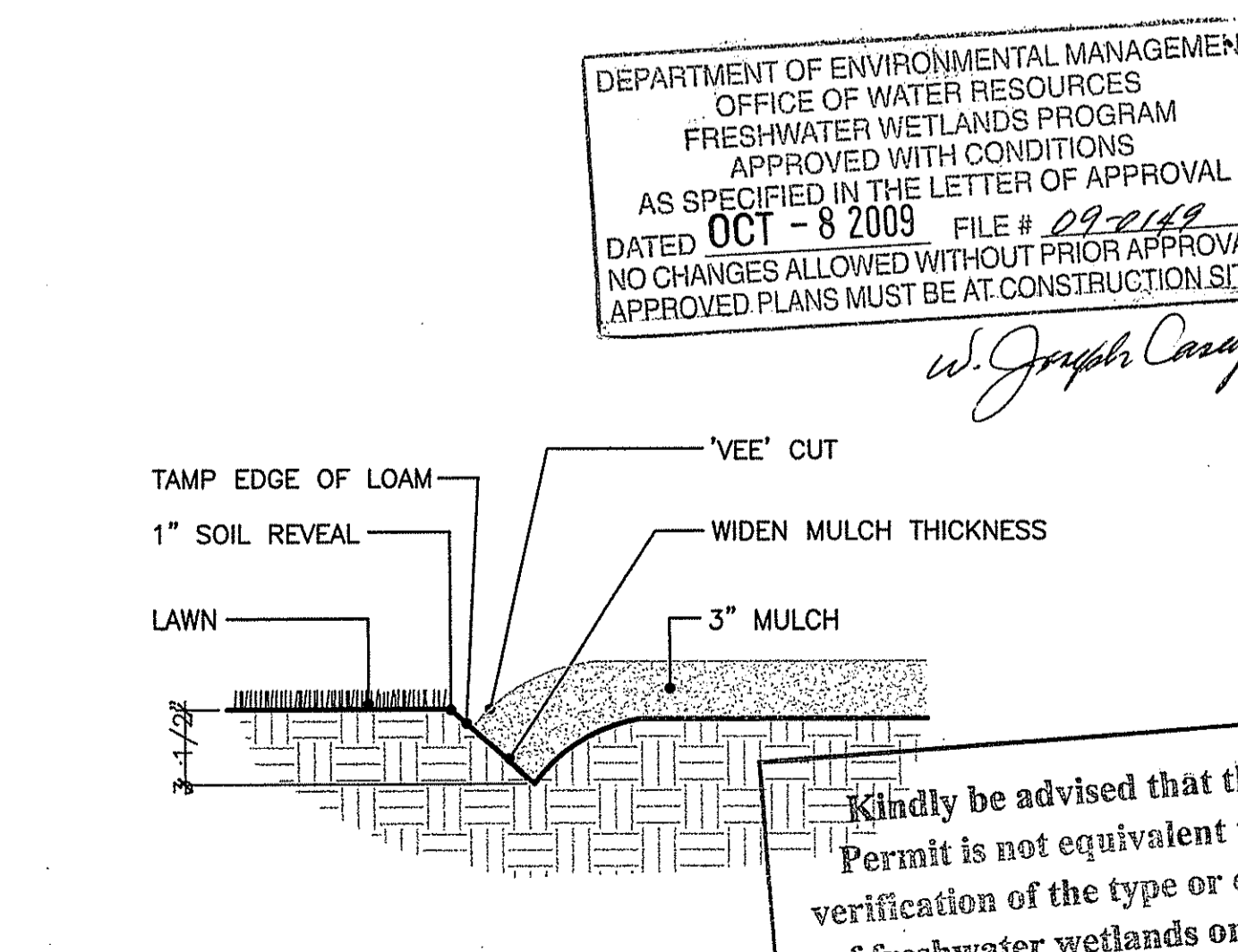
GROUNDCOVER PLANTING DETAIL



LOAM AND SOD DETAIL



LOAM AND SEED DETAIL



NOTE: LOCATE BEDLINE AS SHOWN ON PLAN

BEDLINE EDGE DETAIL

GENERAL NOTES:

- All plant material must be tagged in the ground, at the nursery by the Landscape Architect. All plant material shall be commercially obtained and shall meet the American Association of Nurseryman standards for nursery stock, latest edition, and its amendments. Plant only during season normal to the particular variety. All plant inspections will be at the expense of the contractor. Permanent seals will be required.
- Cover all planting beds with 3" shredded hardwood bark mulch within a seventy-two hour period after planting. See plan for bed layout.
- All existing and proposed trees shown in lawn areas shall receive a 6' diameter mulch bed. Mulch shall be placed to a depth of 3". Remove all sod, roots, sticks and stones prior to placement of mulch.
- All plant materials furnished by the contractor shall be guaranteed for a period of one year from final acceptance of landscape work.
- Stake all trees over 5' as shown on details. Remove stakes at the end of the guarantee period.
- The contractor is responsible for keeping the site clean of miscellaneous debris throughout the construction period. All waste material is to be disposed of immediately to an off-site location, unless otherwise indicated on the plans.
- The contractor shall perform all work in accordance with all local, state, and federal regulations, and shall obtain all necessary permits for this project.
- Layout: All notes and dimensions are typical unless otherwise noted. All dimensions are square (parallel or perpendicular) unless otherwise noted. The contractor shall notify the owner/owner's representative immediately in the event of any discrepancies found in the contract documents and/or in the field, or of conditions uncovered in the work which are not reflected in the plans.
- Loam: Loam moved during the course of construction shall be retained and distributed within the site in accordance with the landscape plan. Stockpiled loam shall not be mixed with any subsoil or unsuitable materials. All excess loam shall remain on the property of the owner. New loam if required to provide the specified depth, shall be a fertile, friable medium textured sandy loam free of material toxic to healthy plant growth. Loam shall also be free of all stumps, roots, stones and other extraneous matter on inch (1") or greater in diameter. The PH shall be between 5.5 and 7.5 when tested.
- Lawn Preparation: Remove all debris and other inorganic materials on the prepared subgrade, reshape and dress any damaged or eroded area prior to spreading the loam. Scarify and loosen subgrade in any areas where compaction may have occurred. Spread stockpiled and off-site loam on all disturbed areas to produce a depth of 6". Fine grade loamed areas to produce a smooth and unbroken finish grade to the required depth. Apply a starter fertilizer (10-20-10) at a rate of 20 lbs. per 1000 square feet and lime at a rate of 40 lbs. per 1000 square feet. Once spread, the fertilizer and lime shall be thoroughly incorporated into the loam. The loam shall be rolled, and depression shall be top dressed and raked to create a smooth surface.
- Seeding: Seeding shall take place between March 15 and May 31 or August 15 and October 15 only. Seed shall be pure, live, fresh seed from commercial sources meeting and labeled in accordance with State and Federal rules and regulations.  
Seeded areas shall, at a minimum, include all areas of the site that have been disturbed or are barren unless otherwise noted on the plans.  
In all wetland areas requiring seeding, the seed mixture shall be:  

Seed Type	Percentage
Virginia Wild Rye	30.0%
Broomsedge	10.0%
Fox Sedge	10.0%
Soft Rush	10.0%
Fowl Bluegrass	10%
Woolgrass	5%
Blue Vervain	5%
Heriot Colonial Bentgrass	5%
Nodding Bur Marigold	5%
Path Rush	5%
Square-stemmed Monkey Flower	5%

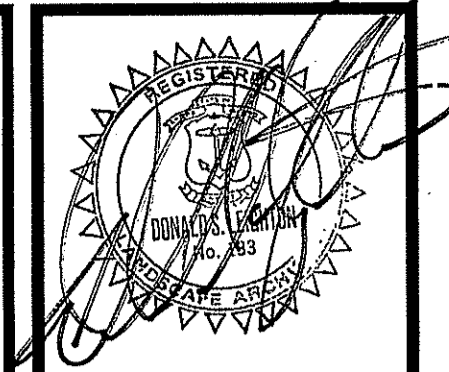
Wetland seed shall be applied at a rate of 15-20 lbs./acre. This seed mix is available from EH Turf Supply, Inc., dba Allens Seed, 401-294-2722.  
In all lawn areas requiring seeding, the seed mixture shall be:  

Proportion by Type	Weight	Pur.	Germ.
Palmer Perennial Ryegrass	20.0%	99%	90%
Ranger Perennial Ryegrass	20.0%	99%	90%
Baron Kentucky Bluegrass	30.0%	95%	85%
Merion Kentucky Bluegrass	30.0%	95%	85%
Inert Materials	2.5% (maximum)		

Lawn seed shall be applied at a rate of 7 lbs. per 1000 square feet.
- Protection of Existing Plantings: Maximum effort should be made to save tree or other plant specimens which are large for their species, rare to the area, or of special horticultural or landscape value. Contact owner/landscape architect before removing any specimen of this type unless otherwise noted on the plans. No material or temporary soil deposits shall be placed within the drip line of shrubs or trees designated on the landscape plan to be retained. Protective barriers are to be installed around each plant and/or group of plants that are to remain on the site. Barriers shall not be supported by the plants they are protecting, but shall be self supporting. They shall be of minimum of four feet (4') high and constructed of a durable material, such as snow or silt fence, that will last until construction is completed.
- Pruning: The contractor shall carefully prune branches in the way of construction by using only approved methods and tools. The use of axes for trimming or spurs for climbing will not be permitted.
- Existing Utilities: In accordance with Dig-Safe law (1-800-225-4977), the contractor shall contact all applicable utility companies and verify utility line locations. The contractor shall be solely responsible for any/all utility damage. Record locations of Dig-Safe utility line markings on project record documents.
- Disturbed Areas: Any areas disturbed during the course of construction are to be restored to original (or better) condition by contractor before completion of the project, and are subject to approval by landscape architect and owner. All grass areas disturbed during construction shall be fork raked to remove stones and loamed and seeded as per specifications.
- Drainage Systems: Contractor is responsible for general clean-out of all catch basins, manholes, and/or other drainage features on the site which have accumulated sediment as a result of construction activities.
- Cleaning: Contractor is responsible for keeping site clean of miscellaneous debris throughout the construction period. All waste material is to be disposed of immediately to an off-site location, unless otherwise indicated on the plan.

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*W. Joseph Conroy*

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NOT Issued For Construction

Revisions:

Job No: C-1749	Drawn: AEHS	Checked: JW
Dwg No: LP-501	Issue: 2009-01-16	

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GLA

PLANTING NOTES & DETAILS  
Fox Run Condominiums  
JUPITER LANE  
RICHMOND, RHODE ISLAND

DEM Wetlands Submittal

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