



**STORMWATER MANAGEMENT DESIGN CALCULATIONS**

AREAS REQUIRED FOR WATER QUALITY VOLUME (WV):  
 HOUSE ROOF AREA = 1,829 SF  
 HOUSE GARAGE AREA = 524 SF  
 GARAGE AREA = 864 SF  
 PAVED DRIVEWAY = 2,100 SF

**DRY WELL DESIGN CALCULATIONS (ROOF AREAS)\***

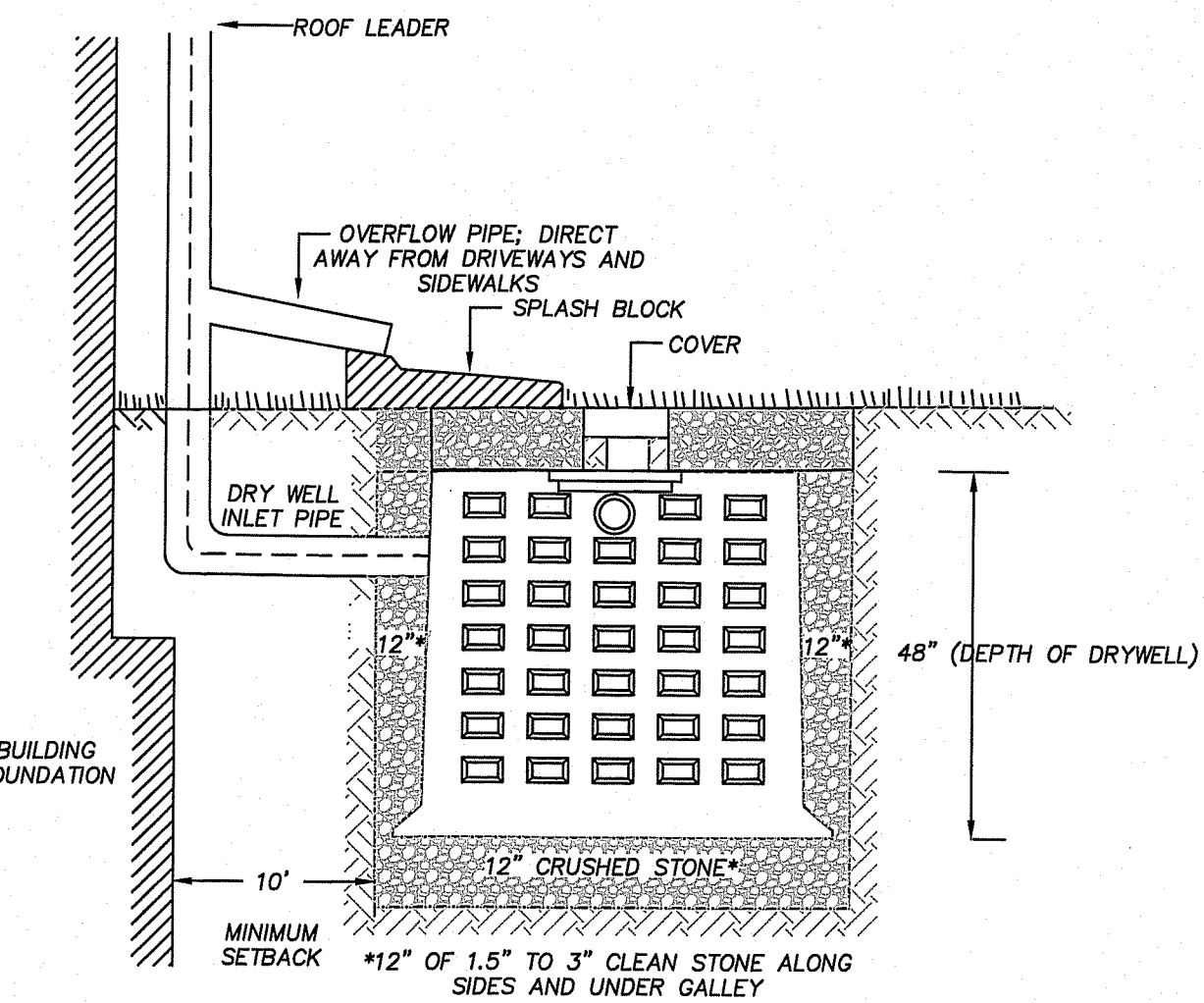
PROPOSED ROOF AREAS TO BE PIPED TO NEW DRY WELLS:  
 HOUSE & HOUSE GARAGE = 2,353 SF  
 WATER QUALITY VOLUME (WQV) = 2,353 SF x 1" = 196 CF  
 GARAGE = 864 SF  
 WATER QUALITY VOLUME (WQV) = 864 SF x 1" = 72 CF

USING 4' X 4' X 4' DEEP PRECAST CONCRETE DRY WELL WITH 12" STONE AROUND  
 OVERALL VOLUME = 6' X 6' X 5' DEEP = 180 CF  
 DRY WELL VOLUME = 4' X 4' X 4' = 64 CF  
 VOLUME STONE = 180 CF - 64 CF = 116 CF  
 VOID SPACE IN STONE = 116 CF X 0.35 = 40.6 CF  
 CAPACITY OF DRY WELL = 64 CF + 40.6 CF = 105 CF

INSTALL THREE (3) DRYWELLS TO PROVIDE REQUIRED WQV  
 (SEE SITE PLAN FOR LOCATIONS)

\*THE WATER QUALITY DESIGN IS BASED ON RECOMMENDATIONS AND PROCEDURES AS DEFINED AND AS REQUIRED IN MINIMUM STANDARD 11, IN THE LATEST RHODE ISLAND STORMWATER DESIGN AND INSTALLATION MANUAL (RISDIM).

THE RECOMMENDATIONS AND GUIDELINES OF THE RISDIM AND THE LATEST RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK SHOULD BE INCORPORATED INTO THE CONSTRUCTION PRACTICES ON SITE.



**DRY WELL DETAIL (4'x4'x4' PRECAST GALLEY)**  
NOT TO SCALE

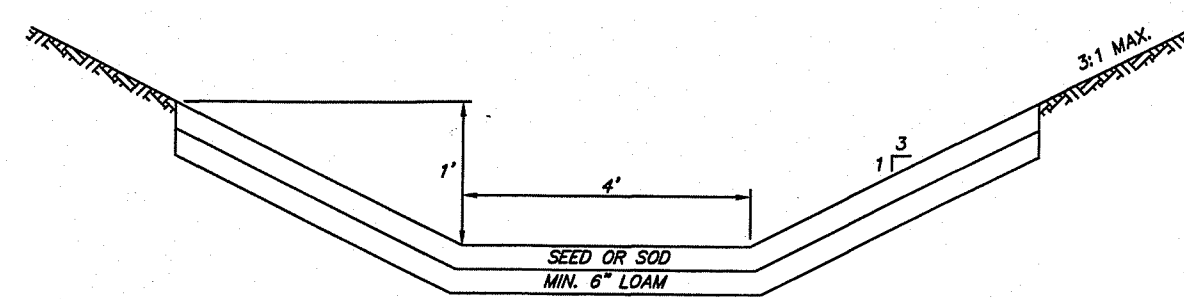
**PROPOSED VEGETATED SWALE (DRIVEWAY AREA)\***  
 DRIVEWAY AREA = 2,100 SF\*

USING A 4'-FT WIDE 8" DEEP SWALE;  
 80 SF SURFACE AREA/1000 SF OF IMPERVIOUS SURFACE AREA OF SWALE AREA REQUIRED  
 8 SF SURFACE AREA/100 SF OF IMPERVIOUS SURFACE AREA OF SWALE AREA REQUIRED;  
 THEREFORE, 8" DEEP SWALE AREA REQUIRED = 168 SF; PROVIDE 4' WIDE SWALE X 42' LONG

\* VEGETATED SWALE SIZING BASED ON THE STATE OF RHODE ISLAND STORMWATER MANAGEMENT GUIDANCE FOR INDIVIDUAL SINGLE-FAMILY RESIDENTIAL LOT DEVELOPMENT, SECTION 300.6 OF THE RI COASTAL RESOURCES MANAGEMENT PROGRAM (RICRMP) DOCUMENT; SECTION B, VEGETATED SWALES AND TABLE 5 SIZING GUIDANCE FOR SANDY SOILS.

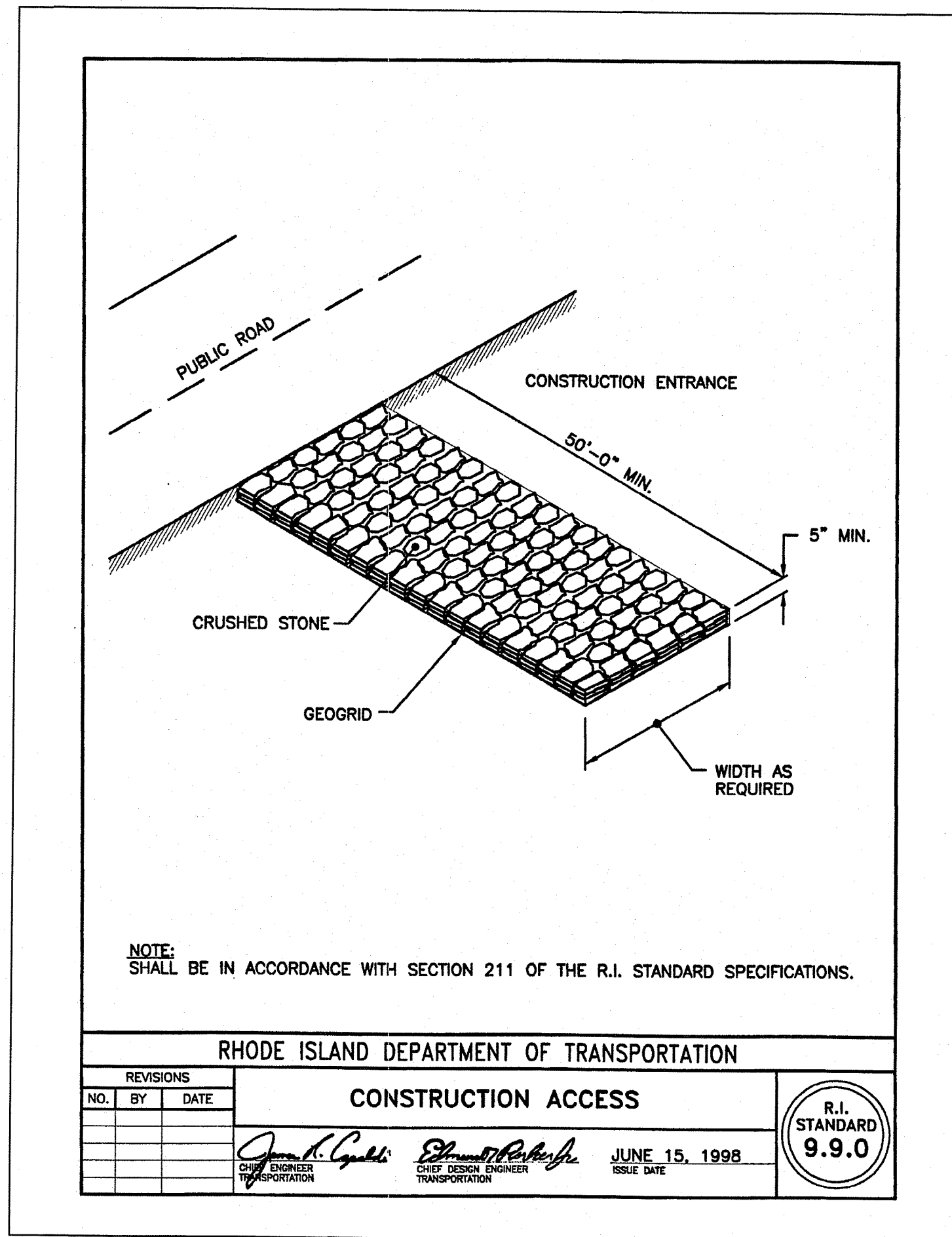
THE WATER QUALITY DESIGN IS BASED ON RECOMMENDATIONS AND PROCEDURES AS DEFINED AND AS REQUIRED IN MINIMUM STANDARD 11, IN THE LATEST RHODE ISLAND STORMWATER DESIGN AND INSTALLATION MANUAL (RISDIM)

THE RECOMMENDATIONS AND GUIDELINES OF THE RISDIM AND THE LATEST RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK SHOULD BE INCORPORATED INTO THE CONSTRUCTION PRACTICES ON SITE.



- NOTES:**
- SWALE SEEDING SHALL BE AN EQUAL MIXTURE OF CREEPING RED FESCUE & TALL FESCUE.
  - SLOPES AND OTHER AREAS SHALL BE LOAMED AND SEEDED AS PER THE SOIL STABILIZATION AND PLANTING PROGRAM LISTED ON THIS SHEET.
  - SWALE AREA TO BE PROTECTED WITH TEMPORARY EROSION CONTROL MATTING TO BE INSTALLED AS PER THE MANUFACTURER'S INSTRUCTIONS.

**GRASSED SWALE**  
NOT TO SCALE

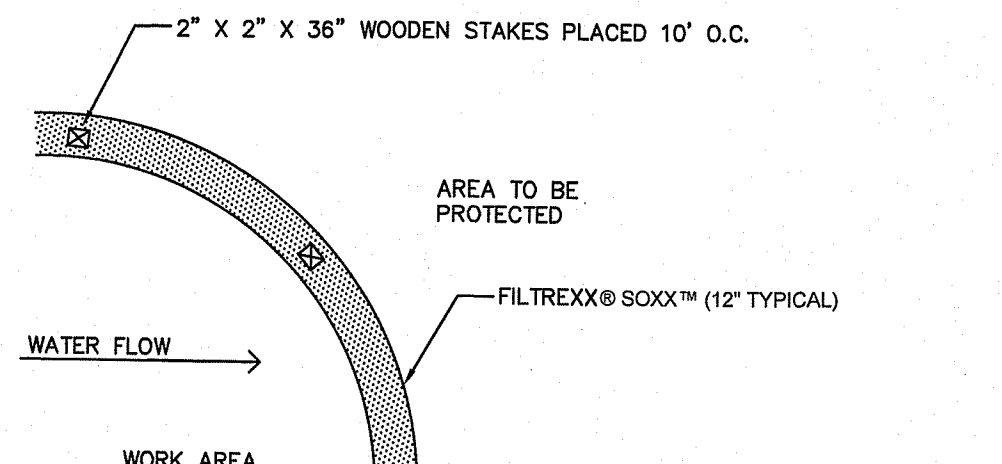
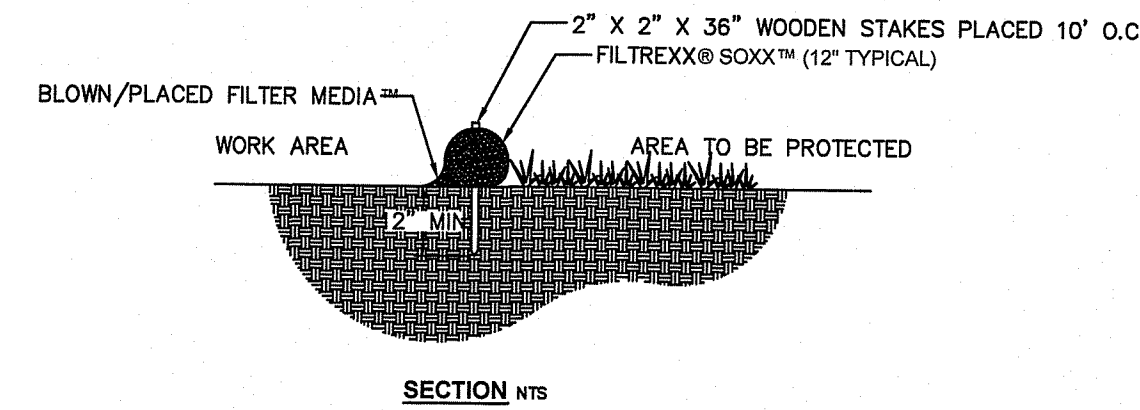


NOTE: SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
**CONSTRUCTION ACCESS**  
 JUN 15, 1998  
 R.I. STANDARD 9.9.0

**CONSTRUCTION ENTRANCE DETAIL NOTES:**

- CONSTRUCTION ENTRANCE DEPTH SHALL BE A MINIMUM OF 5" THICK.
- CONSTRUCTION ENTRANCE WIDTH SHALL BE THE AT LEAST THE FULL WIDTH OF THE INGRESS/EGRESS ACCESS POINT.
- CONSTRUCTION ENTRANCE LENGTH SHALL BE A MINIMUM OF 50'.
- AGGREGATE SIZE SHALL BE RIDOT 2" CRUSHED STONE OR GRAVEL. DETAIL BASED ON RHODE DEPARTMENT OF TRANSPORTATION DETAIL, R.I. STANDARD 9.9.0 CONSTRUCTION ACCESS AND RIDOT STANDARD STANDARD SPECIFICATIONS, SECTION 211, CONSTRUCTION ACCESSSES.

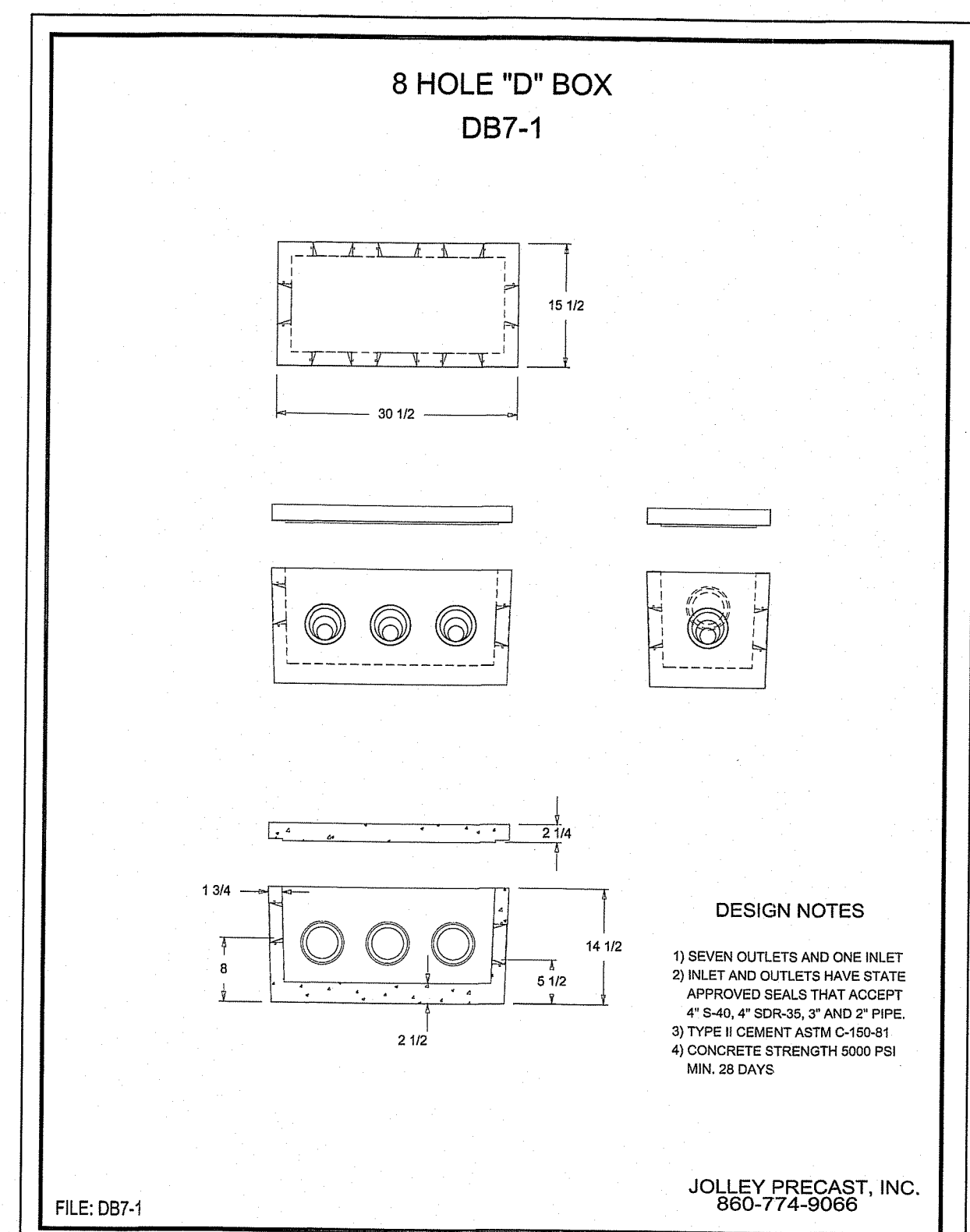
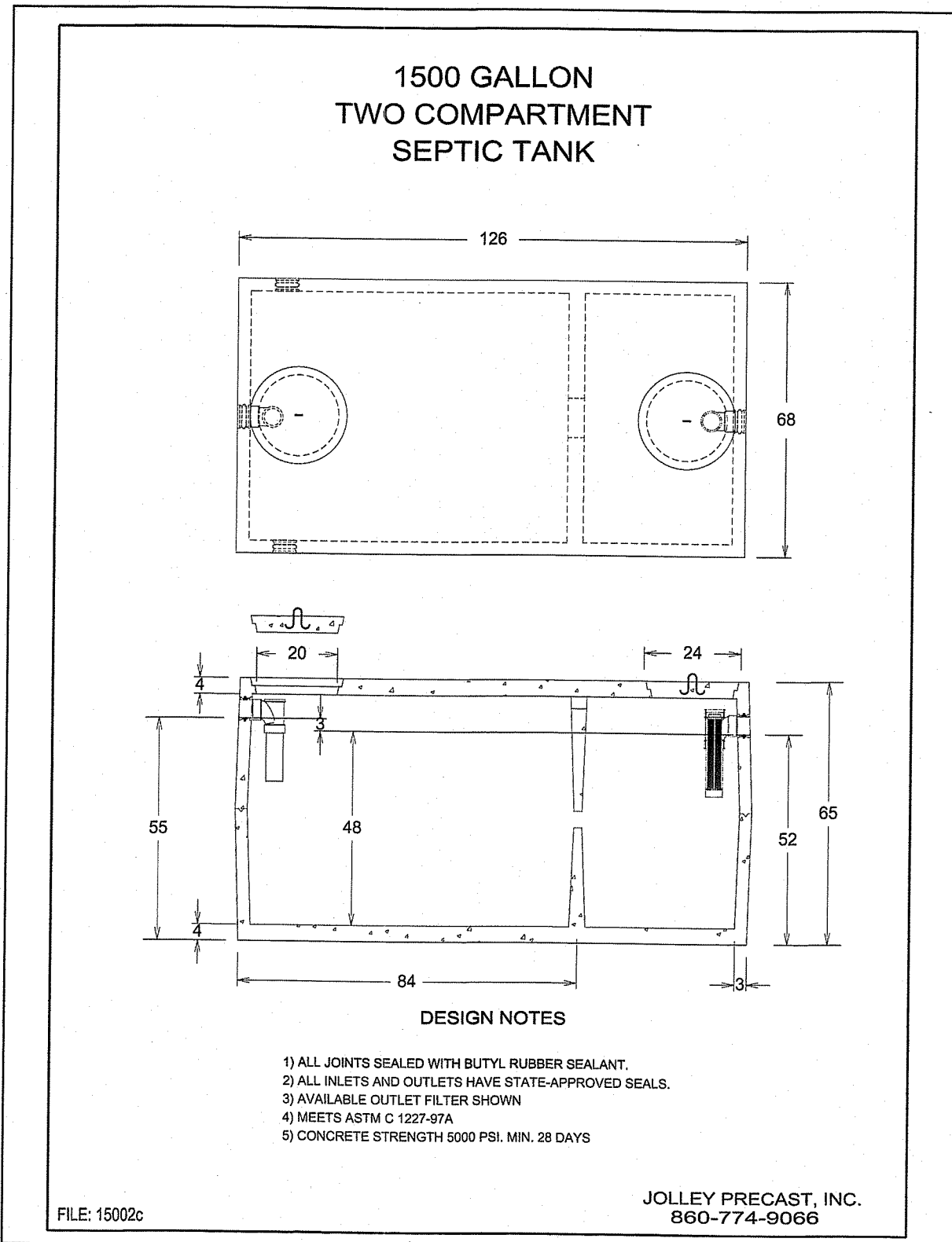


- NOTES:**
- ALL MATERIAL TO MEET FILTERSOX® SPECIFICATIONS.
  - FILTER MEDIA™ FILL TO MEET APPLICATION REQUIREMENTS.
  - COMPOST MATERIAL TO BE DISPersed ON SITE, AS DETERMINED BY ENGINEER.

**FILTERSOX® SEDIMENT CONTROL**  
NTS

**FILTER SOCK NOTES**

- Soxx™ shall meet Filtersox Soxx™ Specifications and use Filtersox GrowingMedia™.
- Contractor is required to be a Filtersox Certified™ Installer.
- Soxx™ must be installed and stabilized before flow is allowed from culverts and storm outlets.
- Land surface shall be cleared of debris, including rocks, roots, large clods, and sticks prior to Soxx™ installation.
- Channel bed shall be made smooth prior to installation of Soxx™.
- Soil bed may be composted and graded prior to installation.
- The upslope end of the Soxx™ shall be installed under the lip of the culvert or outlet drain to ensure initial storm flow contact is on top of the Soxx™, not under or in front of the system.
- Soxx™ shall be placed parallel to water flow, where socks are tightly abutted to prevent water seepage between and underneath the Soxx™.
- Once in place, Soxx™ shall be lightly compacted and abutting edges leveled to tighten seal between socks and encourage even water flow over Soxx™ system.
- Stakes shall be installed through the middle of the Soxx™ on 10 ft (3m) centers, using 2 in. (50mm) by 2 in. (50mm) by 3 ft (1m) wooden stakes. Top of stakes should be cut off, leaving 3 in. (75mm) above the top of the Soxx™.
- Soxx™ may be seeded at the time of application, seed selection will be determined by the Engineer.



**EROSION AND SEDIMENTATION CONTROL CONSTRUCTION NOTES:**

- EROSION AND SEDIMENTATION (E&S) CONTROLS WILL BE INSTALLED PRIOR TO THE COMMENCEMENT OF WORK UNDER THE LIMITS OF DISTURBANCE (LOD) AS SHOWN ON THE SITE PLAN AND DETAILS.
- CRITICAL AREAS SUCH AS WETLAND AREAS, SLOPED STREAMS SHALL BE PROTECTED AS PER PLAN AND, IN THE PRESENCE OF WETLANDS, PER THE CONDITIONS OF THE CRMC ASSENT ORDER AND/OR RIDEM PERMIT.
- ALL E&S CONTROLS SHALL BE FULLY MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL VEGETATIVE STABILIZATION HAS BEEN ACHIEVED. E&S CONTROLS ARE TO BE INSPECTED WEEKLY AND IMMEDIATELY FOLLOWING ALL PRECIPITATION EVENTS THAT INCLUDE RAINFALL OF 1.0" OR MORE OR WHICH PRODUCES STORMWATER RUNOFF. UNDER NO CIRCUMSTANCE SHALL THE E&S CONTROLS BE COVERED WITH FILL MATERIAL. ANY FILL MATERIAL THAT IS PLACED ON OR AGAINST E&S CONTROLS SHALL BE IMMEDIATELY REMOVED.

ALL FILTER SOCK (OR SILT FENCE AND/OR STRAW WATTLES) SHALL BE INSTALLED IN ACCORDANCE WITH THE RIDOT STANDARD DETAILS. ALL REFERENCED SOIL EROSION AND SEDIMENTATION CONTROLS, INCLUDING MATERIALS USED, APPLICATION RATES AND THE INSTALLATION PROCEDURES SHALL BE PERFORMED PER THE MOST CURRENT VERSION OF THE RIDOT ISLAND SOIL EROSION AND SEDIMENTATION CONTROL HANDBOOK AND THE RIDOT ISLAND STORMWATER INSTALLATION & DESIGN MANUAL, AS APPROPRIATE.

- ALL EXPOSED SLOPES, INCLUDING STOCKPILES OF MATERIAL, SHALL RECEIVE TEMPORARY SEDIMENTATION AND EROSION CONTROLS. THIS WILL INCLUDE LOAMING AND SEEDING, MULCHING, HAYMATS, ETC., TO STABILIZE THE AREA.
- ALL DRAINAGE STRUCTURES SHALL BE SURROUNDED BY HAYBALES TO PREVENT INFILTRATION OF SEDIMENTS.
- SHOULD SEDIMENTS ENTER A CRITICAL AREA (WETLAND, BUFFER AREA OR ABUTTING PROPERTY), THE CONTRACTOR SHALL IMMEDIATELY CLEAN AND RESTORE THE AFFECTED AREA.
- ALL DISTURBED SOILS, EITHER NEWLY CREATED, OR EXPOSED, PRIOR TO OCTOBER 15 OF ANY CALENDAR YEAR SHALL BE SEEDED OR PROTECTED BY THAT DATE. ANY AREAS THAT DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION BY NOVEMBER 15 OF THE SAME YEAR MUST BE STABILIZED BY INSTALLING EROSION CONTROL MATTING, HAY MULCH OR EQUIVALENT.
- THE CONTRACTOR IS RESPONSIBLE FOR PROPER EROSION CONTROL BOTH ON AND OFF-SITE AND SHALL UTILIZE EROSION CONTROL MEASURES WHERE NEEDED, REGARDLESS OF WHETHER THE CONTROLS ARE SPECIFIED ON THE SITE PLAN.
- TEMPORARY CONSTRUCTION ACCESS, CHECK DAMS AND STAGING AREAS WILL BE INSTALLED, THEN DEWATERING BASIN WILL BE EXCAVATED.
- PONDS SHALL BE EXCAVATED AND BANK STABILIZATION INSTALLED ONCE EXCAVATED MATERIALS HAVE BEEN REMOVED.
- TEMPORARY CONSTRUCTION ACCESS, CHECK DAMS AND STAGING AREAS WILL BE REMOVED, THE AREA OF DISTURBANCE WILL BE RESTORED IF NECESSARY. ONCE VEGETATION IS ESTABLISHED, EROSION CONTROL MATERIALS SHALL BE REMOVED FOR OFF-SITE DISPOSAL.

**SOIL STABILIZATION & PLANTING PROGRAM**

ACCEPTABLE PLANTING MATERIALS: LOAM - THE MATERIAL TO BE FURNISHED SHALL CONSIST OF LOOSE, FRIABLE, SANDY LOAM OR LOAM TOPSOIL FREE OF A MIXTURE OF SUCCUL, REFUSE, STUMPS, ROOTS, ROCKS, BRUSH, WEEDS AND OTHER MATERIAL WHICH WILL PREVENT THE FORMATION OF A SUITABLE SEED BED.

SEED MIXTURES - ALL LEGUME SEED SHALL BE INOCULATED WITHIN 24 HOURS BEFORE MIXING AND PLANTING WITH THE APPROPRIATE INOCULUM FOR EACH VARIETY. ALL INOCULA SHALL BE FRESH AND SHALL BE USED WITHIN THE DATE LIMIT PRESCRIBED BY THE MANUFACTURER.

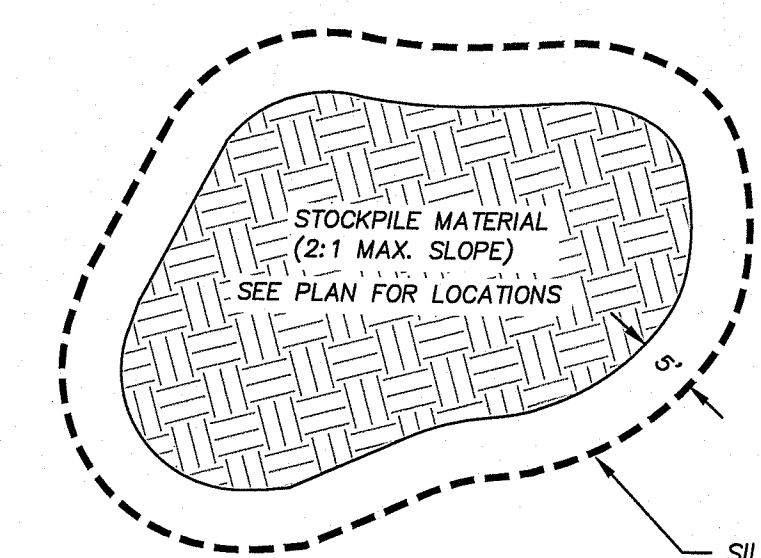
FOR RELATIVELY FLAT SLOPES:

MIX	% BY WEIGHT
RED FESCUE - CHEWING'S PENNLAWN	70
OR CREEPING	
KENTUCKY BLUEGRASS	15
COLONIAL BENTGRASS - ASTORIA OR EXETER	5
PERENNIAL RYEGRASS	10
SEEDING RATE = 100 LBS. PER ACRE	
FOR STEEP SLOPES 3:1 OR GREATER	
MIX	% BY WEIGHT
RED FESCUE - PENNLAWN OR CREEPING	75
PERENNIAL RYEGRASS	5
COLONIAL BENTGRASS - ASTORIA OR EXETER	5
BIRDSFOOT TREFLOIL - EMPIRE	15
SEEDING RATE: 100 LBS. PER ACRE	
FOR SOD WATERWAYS, DRAINAGE DITCHES, DRAINAGE BASINS:	
MIX	% BY WEIGHT
CREEPING RED FESCUE	50
TALL FESCUE OR REED CANARY GRASS*	50

\* USE REED CANARY GRASS WHERE MOWING IS NOT REQUIRED.

THE ACCEPTED PLANTING SEASON SHALL BE BETWEEN APRIL 1ST AND OCTOBER 15TH. CONTRACTOR SHOULD COORDINATE, ON ALL DISTURBED AREAS. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF FOUR (4) INCHES OF LOAM ON AREAS UP TO 10% IN GRADE. ALL AREAS OVER 10% SHALL RECEIVE A MINIMUM OF SIX (6) INCHES.

REFERENCE IS HEREBY MADE TO THE RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, REVISED AUGUST 2014, PUBLISHED BY THE SOIL CONSERVATION SERVICE. THE GUIDELINES SHOWN THEREIN SHOULD BE INCORPORATED INTO THE CONSTRUCTION PRACTICES ON SITE.



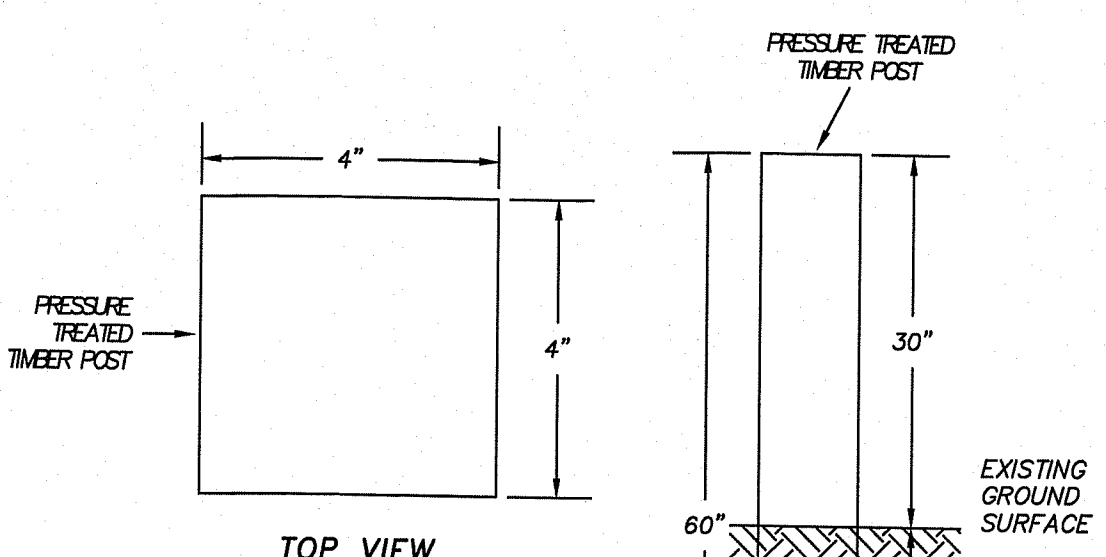
**STOCKPILE PROTECTION DETAIL**  
NOT TO SCALE

**GENERAL CONSTRUCTION NOTES:**

- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE AND THE MUNICIPALITY IN WHICH WORK IS BEING PERFORMED PRIOR TO START OF ANY WORK.
- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DOCUMENT EXISTING CONDITIONS OF SURROUNDING PROPERTIES AND TO MAINTAIN THE INTEGRITY OF THE SAME. ANY DAMAGE TO AND THE COST OF REPAIR OF UTILITIES, ROADWAYS, STRUCTURES AND SURROUNDING PROPERTY SHALL BE FULLY BORNE BY THE CONTRACTOR.
- ALL WORKMANSHIP AND MATERIALS SHALL MEET OR EXCEED THE LATEST STANDARDS OF THE MUNICIPALITY, AND THE LATEST STATE STANDARDS AND SPECIFICATIONS PUBLISHED FOR ROAD AND BRIDGE CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN UTILITY COMPANIES FOR EXACT ON-SITE LOCATION OF EXISTING UNDERGROUND UTILITIES AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN REQUIRED SCHEDULE OF THE MUNICIPALITY. UTILITY COMPANIES AND ALL OTHER REQUIRED PARTIES AND SHALL STRICTLY ADHERE TO THOSE REQUIREMENTS.
- ALL CONTRACTORS SHALL ADHERE TO ALL CONDITIONS OF CONSTRUCTION APPROVALS AND SHALL KEEP A COPY OF ALL APPROVALS ON-SITE DURING CONSTRUCTION. CONTRACTOR SHALL READ ALL APPROVALS PRIOR TO START OF CONSTRUCTION AND SHALL CLARIFY ANY QUESTIONS BEFOREHAND.
- OIL ABSORBING PILLOWS OR OTHER MEANS SHALL BE USED TO REMOVE ACCUMULATIONS OF HYDROCARBONS (OIL, GREASE) THAT ARE REGULARLY OBSERVED TO CONTAIN HYDROCARBONS, THAT DO NOT EVAPORATE BETWEEN INSPECTIONS.
- ANY REFUELING, GREASING OR ADJUSTMENTS OF CONSTRUCTION VEHICLES OR EQUIPMENT SHALL TAKE PLACE AT LEAST 100 FEET FROM WETLAND AREAS.
- ANY ON-SITE DISPOSAL OF SOLID WASTE, INCLUDING EARTH MATERIALS, SHALL OCCUR OUTSIDE RIDEM/RICRM JURISDICTIONAL WETLANDS AND OUTSIDE OF THE CONSTRUCTION AREAS (UNLESS OTHERWISE DESIGNATED). ANY MATERIAL NOT RE-USED ON-SITE SHALL BE HAULED OFF-SITE TO AN AUTHORIZED, LEGAL LOCATION.
- ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE INFORMED THAT THE CLEANING OF EQUIPMENT IS PROHIBITED IN AREAS WHERE THE WASH-WATER WILL DRAIN DIRECTLY TO WETLANDS.
- THE LOCATION AND DEPTH OF EXISTING UTILITIES HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND DIG-SAFE™ MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) ALL MATERIALS TO INCLUDE, BUT NOT BE LIMITED TO, TREES, STUMPS, UNSUITABLE MATERIAL, BITUMINOUS PAVEMENT, ETC.
- MATTING AS SPECIFIED BY ENGINEER OR ENVIRONMENTAL CONSULTANT IS TO BE PLACED ALONG ACCESS ROUTE FROM PAVED DRIVEWAY TO STAGING AREA FOR ANY EQUIPMENT MOVEMENT.
- ALL STORMWATER FACILITIES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MOST CURRENT VERSION OF RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL.

**GENERAL LANDSCAPING NOTES:**

- ALL DISTURBED AREAS ARE TO BE REVEGETATED AS SOON AS POSSIBLE. ALL BANKS AND SLOPING AREAS ARE TO RECEIVE A MINIMUM OF 6" OF CLEAN TOPSOIL, THEN SEED AND FERTILIZE. LEVEL AREAS TO RECEIVE 4" MIN. OF CLEAN TOPSOIL, SEED AND FERTILIZE.
- SEED AND SOD SHALL CONSIST OF A BLEND OF KENTUCKY BLUE GRASS, PLANT BY SUPPLIER'S SPECIFICATIONS.
- LIME SHALL BE APPLIED AS NECESSARY.
- USE OF HAY OR STRAW MULCH DURING SLOPE STABILIZATION IN CONJUNCTION WITH TEMPORARY SEEDING. APPLY MULCH AT A RATE OF 75 TO 100 LBS. PER 1000 SQUARE FEET.
- CONTRACTOR TO MAINTAIN TREE REMOVAL AT A MINIMUM.
- STOCKPILE ALL STRIPPED TOPSOIL FOR LATTER USE. THE LOCATION IS TO BE APPROVED BY THIS ENGINEER. MULCH AND TEMPORARY SEED THE STOCKPILE.
- REMOVE ALL ROCKS 3" OR LARGER IN PLANTING AREA.
- ALL CLEARING SHALL CONFORM TO THE LIMITS AS SHOWN ON PLANS. CLEARING LIMITS ARE TO BE MARKED IN THE FIELD BY THE ENGINEER.



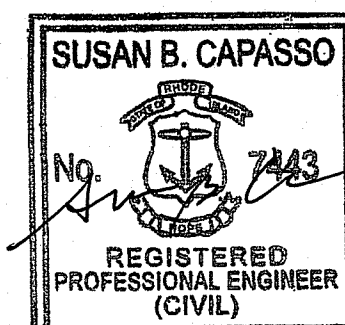
**"RIDEM BUFFER MARKER" POST DETAIL**  
NOT TO SCALE

**RIDEM OWTS APPLICATION NO. 2003-1810**

**PROPOSED DETAILS**

Project:  
**GOSS REALTY LLC**  
**A.P. 208 LOT 2**  
**COURT HOUSE LANE**  
**BURRILLVILLE, RHODE ISLAND**

Prepared By:  
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 401-261-8870  
 MAY 5, 2021



REVISION	DATE
RIDEM COMMENTS	6/16/21

PROJECT NO.: 20-74 SHEET 2/2