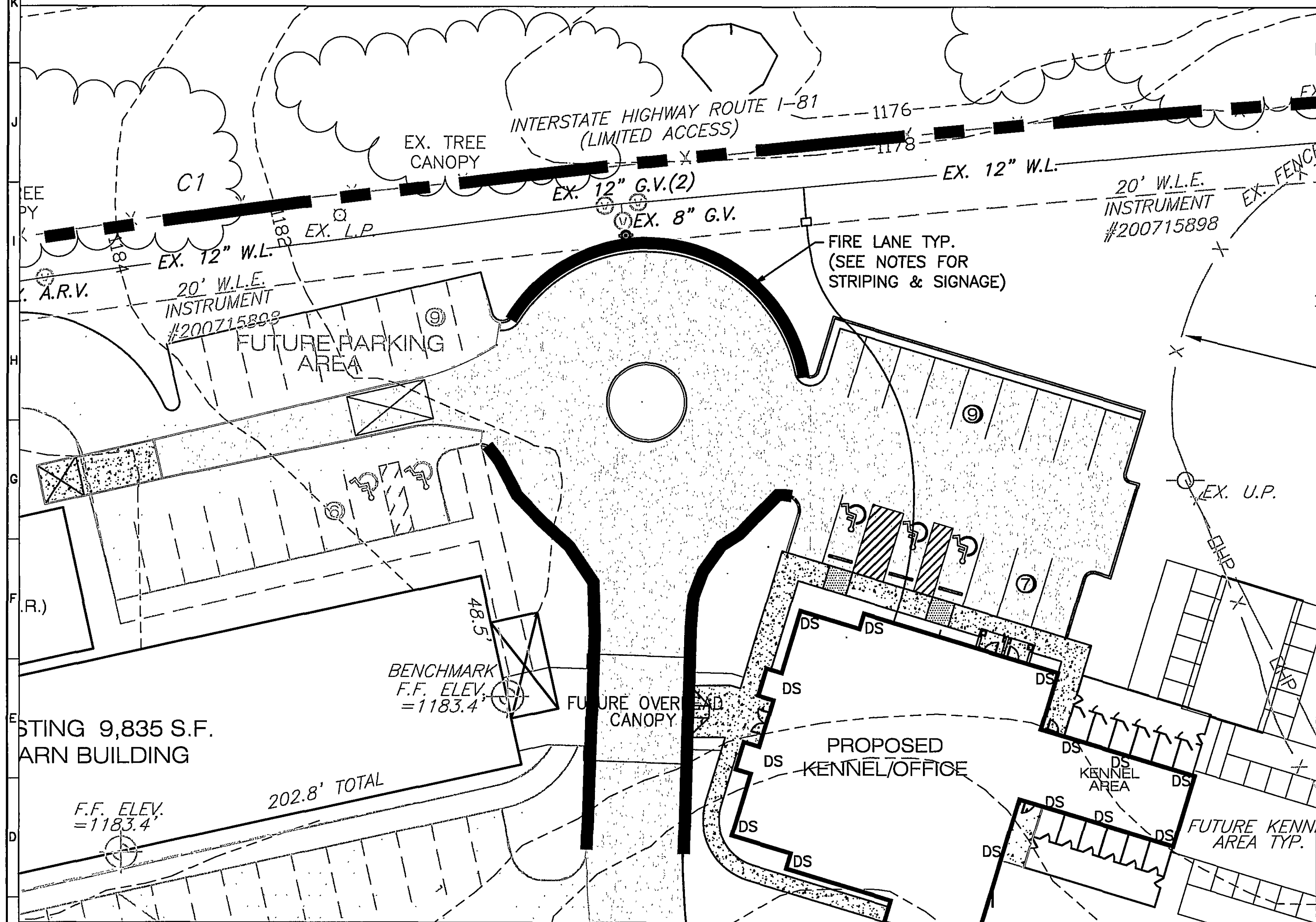


STORM SEWER PROFILE (1-4)

1"=30' HORIZONTAL  
1"=10' VERTICAL

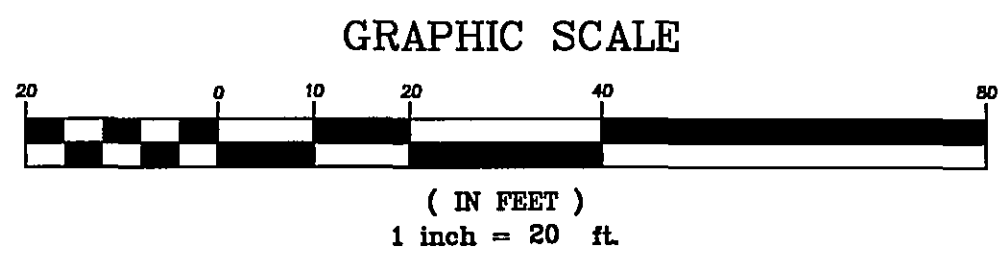


FIRE LANE STRIPING PLAN

SCALE: 1"=20'

FIRE LANE NOTES:

1. FIRE LANE TO HAVE CURBING PAINTED YELLOW OR YELLOW EDGE OF PAVEMENT IF THERE ISN'T ANY CURBING IS AVAILABLE.
2. THERE IS TO BE A "No Parking - Fire Lane" SIGN AT EACH END OF THE NOTED FIRE LANE.
3. EACH OF THE SIGNS SHALL BE POST MOUNTED OR MOUNTED TO THE BUILDING WHERE VISIBLE FROM THE DRIVE AISLE.
4. SIGNS SHALL BE MOUNTED A MAXIMUM OF 7' ABOVE A CURB OR 7' ABOVE THE PAVEMENT SURFACE.

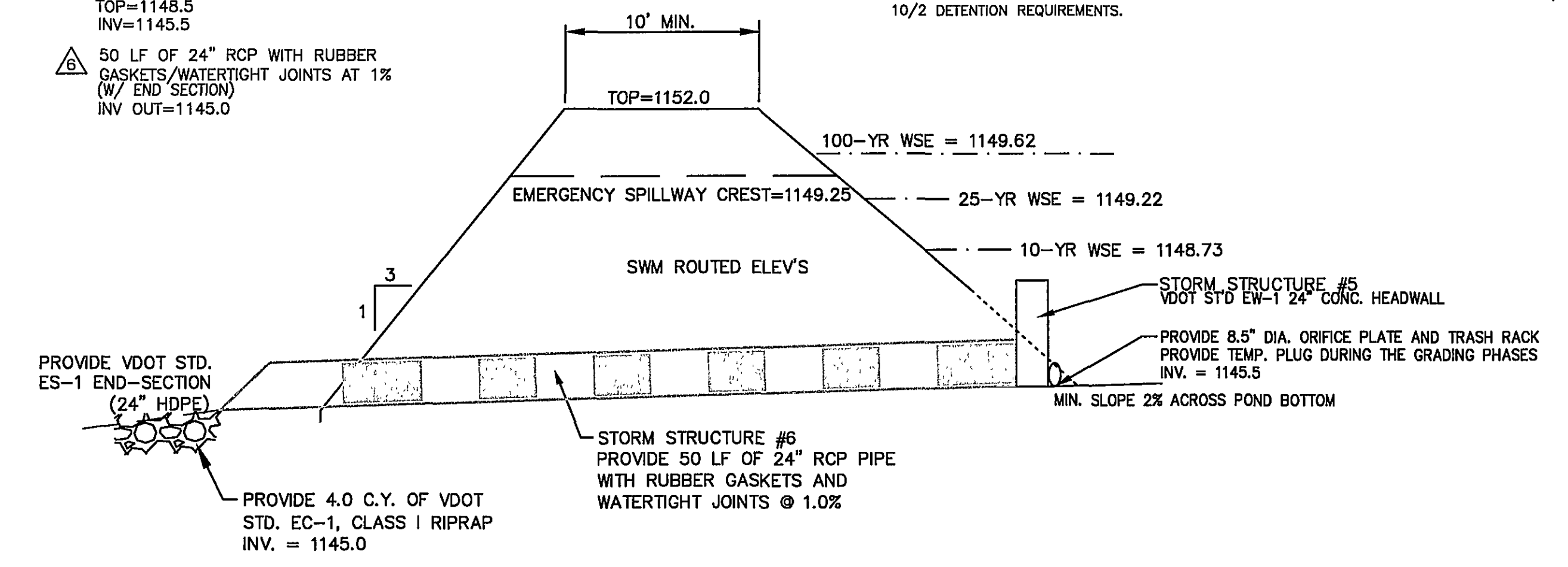


STORM STRUCTURE SCHEDULE:

- △ VDOT STD DI-3C (8' THROAT)  
TOP=1179.00  
INV OUT=1174.00
- △ 150 LF OF 15" HDPE PIPE AT 1.75%
- △ VDOT STD MH-1  
TOP=1177.5  
INV IN=1171.35  
INV OUT=1171.25
- △ 229 LF OF 15" HDPE PIPE AT 1% (W/ END SECTION)  
INV OUT=1168.95
- △ VDOT STD EW-1 24" CONC. HEADWALL WITH 8.5" ORIFICE PLATE & TRASH RACK  
TOP=1148.5  
INV=1145.5
- △ 50 LF OF 24" RCP WITH RUBBER GASKETS/WATERTIGHT JOINTS AT 1% (W/ END SECTION)  
INV OUT=1145.0

STORMWATER MANAGEMENT FACILITY REQUIREMENTS:

1. THE FACILITY IS REQUIRED TO BE AS-BUILT AND RESULTS, INCLUDING THE EMBANKMENT COMPACTION RESULTS AND SOIL CLASSIFICATION, PROVIDED TO ROANOKE COUNTY FOR REVIEW/APPROVAL.
2. BASIN SIDE SLOPES SHALL BE NO GREATER THAN 3:1.
3. THE PILOT CHANNEL IN THE BOTTOM OF THE POND SHALL HAVE A MINIMUM SLOPE OF 2%.
4. THE EMBANKMENT SHALL HAVE A MINIMUM WIDTH OF 10' WITH SIDE SLOPES NO STEEPER THAN 3:1.
5. THE TRASH RACK SHALL COMPLY WITH THE VA SWM HANDBOOK.
6. A MINIMUM OF 12" LAYER OF CLAY MATERIAL TO BE PROVIDED ALONG BOTTOM OF THE SWM BASIN. A MINIMUM OF 6" OF COMPACTED TOPSOIL TO BE PLACED OVER CLAY MATERIAL TO REACH FINAL GRADE. THE LAYERS OF THE EMBANKMENT SHALL BE CONSTRUCTION IN 10' LIFTS. EMBANKMENT MATERIAL SHALL NOT CONSIST OF UNIFIED SOIL CLASSES SM OR GM.
7. 95% COMPACTION REQUIRED FOR ALL MATERIAL USED FOR CONSTRUCTION OF THE BASIN.
8. REINFORCED CONCRETE OUTLET PIPE SHALL HAVE RUBBER GASKET WATERTIGHT JOINTS.
9. ROUTED STORM ELEVATIONS ARE FOR FULL BUILD-OUT OF THE PROPERTY BASED ON 25/10 AND 10/2 DETENTION REQUIREMENTS.

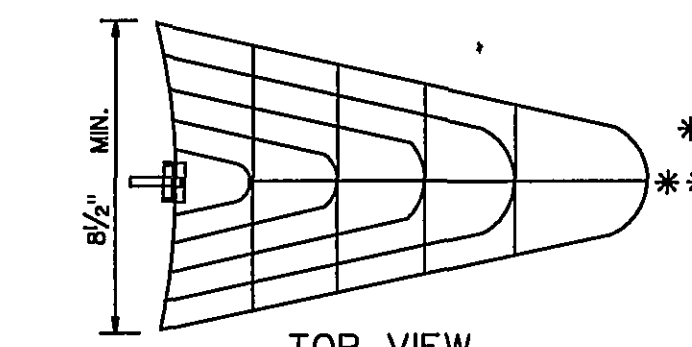
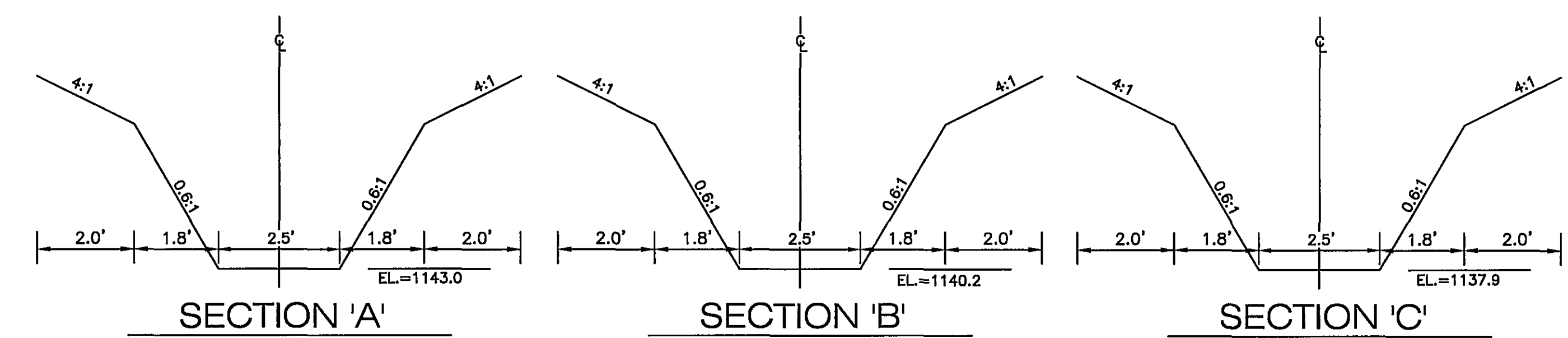


STORMWATER MANAGEMENT AREA DETAIL

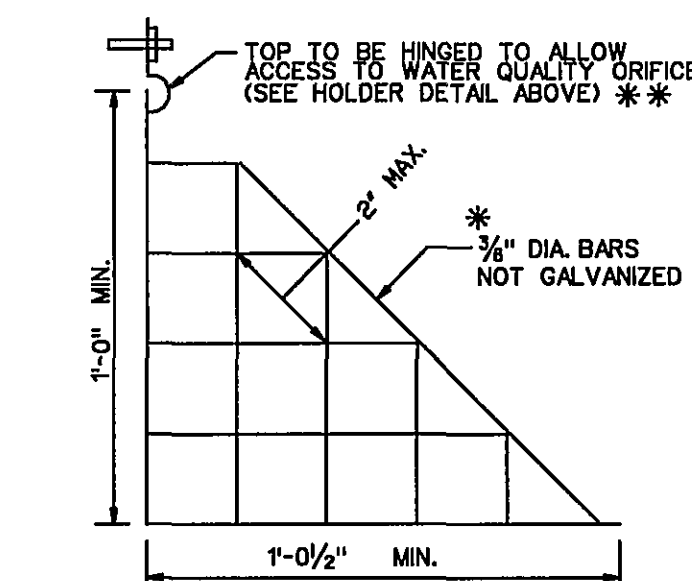
EMBANKMENT SECTION

NO SCALE

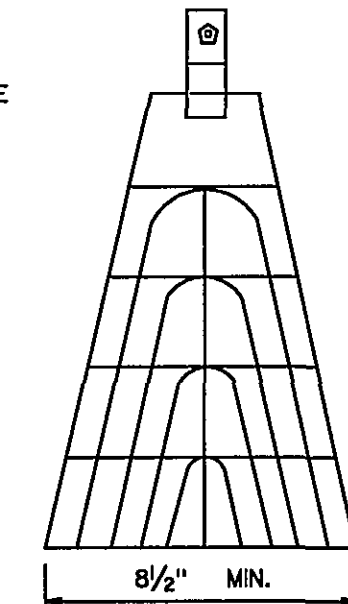
SECTIONS THRU NATURAL WATERCOURSE DOWNSTREAM OF SWM OUTLET



TOP VIEW



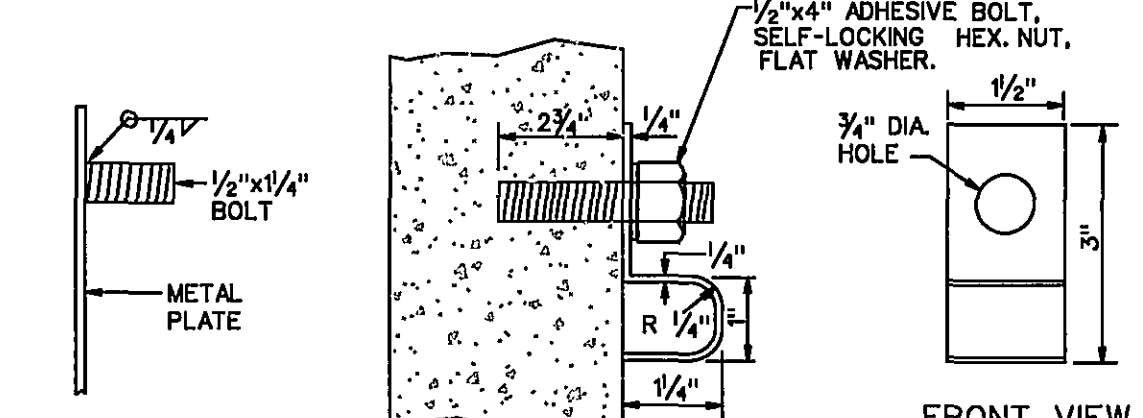
SIDE VIEW



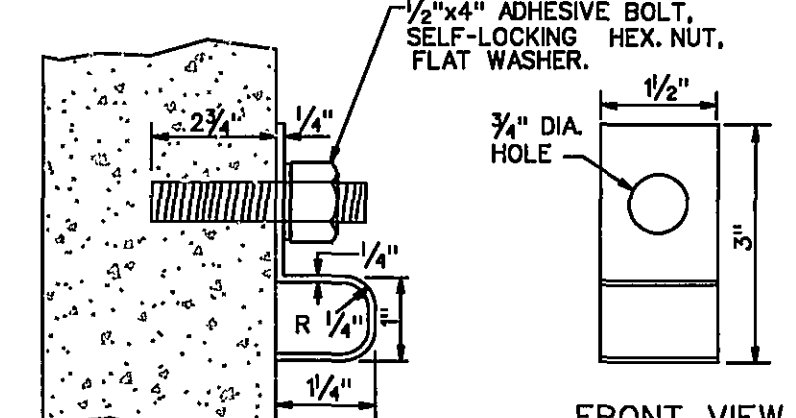
FRONT VIEW

DETAIL FOR DEBRIS RACK (FOR WATER QUALITY ORIFICE)

THE LOCATION OF THE DEBRIS RACK HOLDER MAY BE ADJUSTED FOR VARIABLE CONDITIONS. WHEN THE HOLDER BOLT IS LOCATED ON THE METAL PLATE THE 1/2" DIA. BOLT LENGTH IS TO BE SHORTENED TO 1/4" AND WELDED TO THE PLATE. DEBRIS RACK HOLDER AND ALL HARDWARE IS TO BE GALVANIZED.



SIDE VIEW OF BOLT WELDED ON TO METAL PLATE



SIDE VIEW DEBRIS RACK HOLDER

APPROVED

STORMWATER QUALITY DEVICE - VDOT STD. SWM-DR

THE DETAILS ON THIS SHEET ARE REPRESENTATIVE DETAILS FOR THE STATE MINIMUM STANDARDS AND SPECIFICATIONS RELATIVE TO THE PROPOSED PROJECT. THE GENERAL CONTRACTOR SHALL RELY ON THE COMPLETE STANDARD AS INDICATED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK FOR PROPER INSTALLATION, CONSTRUCTION AND MAINTENANCE OF THE INDIVIDUAL ITEMS REQUIRED BY THESE PLANS OR AS MAY BE REQUIRED BY THE LOCAL GOVERNING AUTHORITY.



REFLECTING TOMORROW

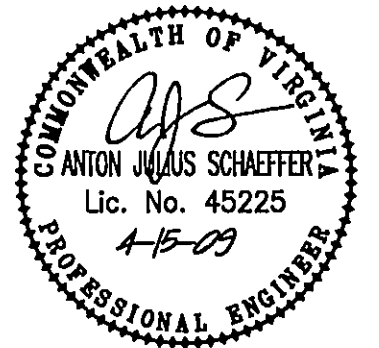
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Balzer and Associates, Inc.

1208 Corporate Circle  
Roanoke, VA 24018  
540-772-9580  
FAX 540-772-8050



SAINT FRANCIS SERVICE DOGS

UTILITY PROFILES

HOLLINS  
ROANOKE COUNTY, VIRGINIA

DRAWN BY BTC  
DESIGNED BY BTC  
CHECKED BY SMH  
DATE 2-6-09  
SCALE AS SHOWN

REVISIONS:  
3-6-09  
3-27-09  
4-15-09

SHEET NO.

C-7

JOB NO. R0500037.00