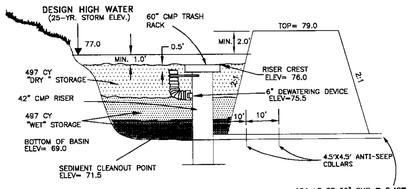
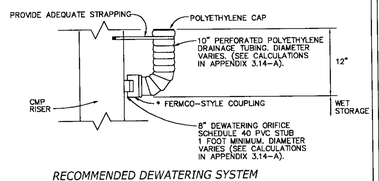
TEMPORARY SEDIMENT BASIN 1

SEDIMENT BASIN 1 SCHEMATIC ELEVATIONS



DESIGN ELEVATIONS WITHOUT EMERGENCY SPILLWAY

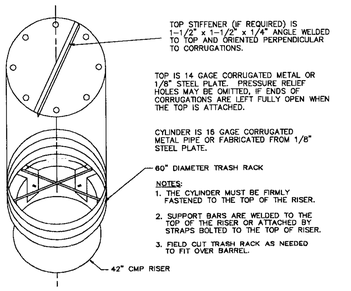


RECOMMENDED DEWATERING SYSTEM FOR SEDIMENT BASINS

NO SCALE

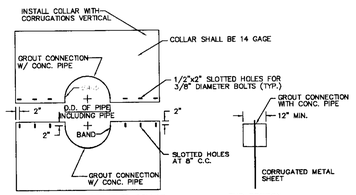
NOTE: WITH CONCRETE RISER, USE PVC SCHEDULE 40 STUB FOR DEWATERING ORIFICE.

* DRAINAGE TUBING SHALL COMPLY WITH ASTM F667 AND AASHTO M294



TRASH RACK DETAIL

N.T.S.



ELEVATION OF UNASSEMBLED COLLAR — END SECTION

NOTES FOR COLLAR:

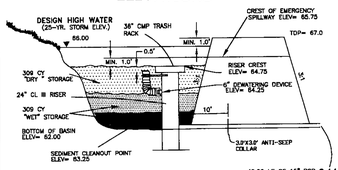
1. UNASSEMBLED COLLARS SHALL BE MARKED BY PAINTING OR TAGGING TO IDENTIFY MATCHING PAIRS.
2. THE LAP BETWEEN THE TWO HALF SECTIONS AND BETWEEN THE PIPE AND CONNECTING BAND SHALL BE CAULKED WITH ASPHALT MASTIC AT TIME OF INSTALLATION.

CORRUGATED METAL ANTI-SEEP COLLAR DETAIL

NO SCALE

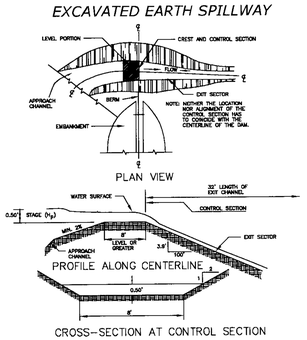
TEMPORARY SEDIMENT BASIN 2

SEDIMENT BASIN 2 SCHEMATIC ELEVATIONS

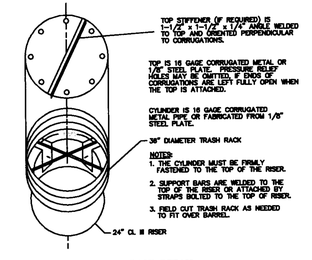


DESIGN ELEVATIONS WITH EMERGENCY SPILLWAY

EXCAVATED EARTH SPILLWAY

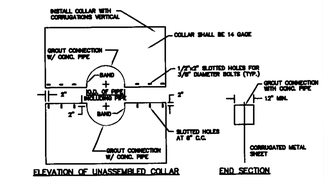


CROSS-SECTION AT CONTROL SECTION



TRASH RACK DETAIL

N.T.S.



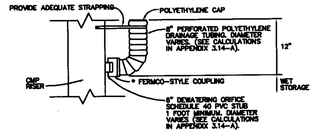
ELEVATION OF UNASSEMBLED COLLAR — END SECTION

NOTES FOR COLLAR:

1. UNASSEMBLED COLLARS SHALL BE MARKED BY PAINTING OR TAGGING TO IDENTIFY MATCHING PAIRS.
2. THE LAP BETWEEN THE TWO HALF SECTIONS AND BETWEEN THE PIPE AND CONNECTING BAND SHALL BE CAULKED WITH ASPHALT MASTIC AT TIME OF INSTALLATION.

CORRUGATED METAL ANTI-SEEP COLLAR DETAIL

NO SCALE



RECOMMENDED DEWATERING SYSTEM FOR SEDIMENT BASINS

NO SCALE

NOTE: WITH CONCRETE RISER, USE PVC SCHEDULE 40 STUB FOR DEWATERING ORIFICE.

* DRAINAGE TUBING SHALL COMPLY WITH ASTM F667 AND AASHTO M294

SWM/BMP DETAILS- BASIN #1

CONSTRUCTION NOTES:

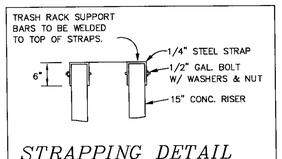
1. MATERIALS FOR DAM EMBANKMENT WILL CONSIST OF HOMOGENEOUS FILL SOILS (USCS ML, CL, OR CH) PLACE FILL IN 8" LOOSE LIFTS AND COMPACT AS APPROVED BY A GEOTECHNICAL ENGINEER TO MINIMUM 95% OF MAX. STD. PROCTOR DRY DENSITY PER ASTM D-698.

2. IMPERMEABLE CLAY CORE SHOULD BE KEYED A MINIMUM OF 2' INTO UNDISTURBED SOILS AND PERMEABILITY SHALL NOT EXCEED 10 CM/S.

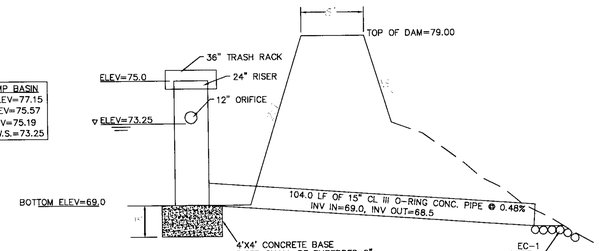
3. ALL FILL DURING SITE GRADING SHALL BE PLACED AS CONTROLLED STRUCTURAL FILL. CONTRACTOR WILL PROVIDE DOCUMENTATION THAT FILL WAS COMPACTED TO MIN. 95% OF MAX. STD. PROCTOR DRY DENSITY PER ASTM D-698.

4. A MINIMUM 6" LAYER OF TOPSOIL IS REQUIRED ON ALL EXPOSED DAM SURFACES

5. REFER TO MINIMUM STANDARD 3.01 OF THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK FOR FURTHER GEOTECHNICAL ITEMS RELATING TO DAM CORE, DAM FACE, AND BEDDING AROUND PIPE BARREL.



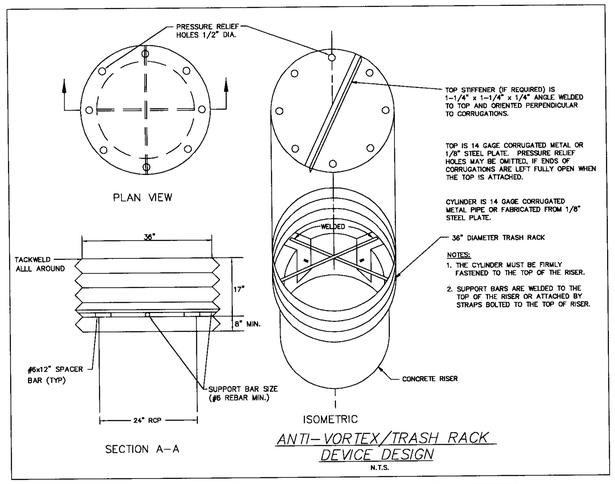
STRAPPING DETAIL



SWM/BMP BASIN
100YR ELEV=77.15
10YR ELEV=75.57
2YR ELEV=75.19
NORMAL W.S.=73.25

SWM/BMP BASIN DETAIL

N.T.S.



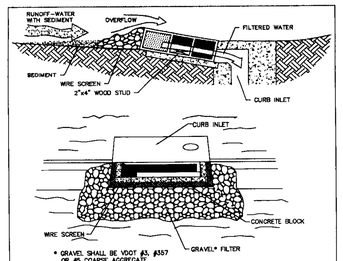
ANTI-VORTEX/TRASH RACK DEVICE DESIGN

N.T.S.

SEDIMENT BASIN CONVERSION APPARATUS

AFTER STABALIZATION OF UPSTREAM AREAS, THE SEDIMENT BASIN IS TO BE CONVERTED TO THE PERMANENT BMP AS OUTLINED BELOW

1. DEWATER THE TEMPORARY BASIN IN ACCORDANCE WITH VESCH. STD. 3.14 AND CLEAN OUT ALL ACCUMULATED SEDIMENT.
2. REMOVE EXISTING OUTLET RISER AND PIPE AND INSTALL PERMANENT BASIN OUTLET RISER AND PIPE PER DETAILS ON THIS SHEET.



* GRAVEL SHALL BE VDOT #3, #357 OR #6 COARSE AGGREGATE.

IP BLOCK & GRAVEL CURB INLET SEDIMENT FILTER

NO SCALE

SOURCE: VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, 3RD ED., 1983 PLATE: 3.07-8

TABLE 3.31-C
TEMPORARY SEEDING PLANT MATERIALS, SEEDING RATES, AND DATES.

SPECIES	SEEDING RATES: ACRE	SEEDING RATES: 1000 SQ. FT.	NORTH [a] 2/1 to 4/30	NORTH [a] 8/1 to 11/15	NORTH [a] 8/15 to 2/28	SOUTH [b] 2/1 to 4/30	SOUTH [b] 8/1 to 11/15	PLANT CHARACTERISTICS
OATS (Avena sativa)	3 bu. (UP TO 100 lbs., NOT LESS THAN 50 lbs.)	2 lbs.	X	—	—	X	—	Use spring, varieties (e.g., Noble).
RYE [d] (Secale cereale)	2 bu. (UP TO 110 lbs., NOT LESS THAN 50 lbs.)	2.5 lbs.	X	—	X	X	X	Use for late fall seedings, winter cover. Tolerates cold and low moisture.
GERMAN MILLET (Setaria italica)	50 lbs.	[illegible]	—	X	—	—	X	—	Warm-season annual. Dies at first frost. May be added to summer mixes.
ANNUAL RYEGRASS [c] (Lolium multi-florum)	50 lbs.	1.5 lbs.	X	—	X	X	—	X	May be added in mixes. Will mow out of most stands.
WEEPING LOVEGRASS (Eragrostis curvula)	15 lbs.	5.5 ozs.	—	X	—	—	X	—	Warm-season perennial. May bunch. Tolerates hot, dry slopes and cold, infertile soils. May be added to mixes.
KOREAN LESPEDEZA (Lespedeza stipulacea)	25 lbs.	approx. 1.5 lbs.	X	X	—	X	X	—	Warm-season annual legume. Tolerates cold soils. May be added to mixes.

a NORTHERN PIEDMONT AND MOUNTAIN REGION. SEE PLATES 3.22-1 AND 3.22-2.
b SOUTHERN PIEDMONT AND COASTAL PLAIN.
c MAY BE USED AS A COVER CROP WITH SPRING SEEDING.
d MAY BE USED AS A COVER CROP WITH FALL SEEDING.

X MAY BE PLANTED BETWEEN THESE DATES.
— MAY NOT BE PLANTED BETWEEN THESE DATES.

TABLE 3.32-D

SITE SPECIFIC SEEDING MIXTURES FOR COASTAL PLAIN AREA

	Total Lbs. Per Acre
Minimum Care Lawn	
- Commercial or Residential	
- Kentucky 31 or Turf-Type Tall Fescue	175-200 lbs.
or	
- Common Bermudagrass **	75 lbs.
High-Maintenance Lawn	
- Kentucky 31 or Turf-Type Tall Fescue	200-250 lbs.
or	
- Hybrid Bermudagrass (seed) **	40 lbs. (unhulled) 30 lbs. (hulled)
or	
- Hybrid Bermudagrass (by other vegetative establishment method, see Std. & Spec. 3.34)	
General Slope (3:1 or less)	
- Kentucky 31 Fescue	128 lbs.
- Red Top Grass	2 lbs.
- Seasonal Nurse Crop *	20 lbs.
	150 lbs.
Low Maintenance Slope (Steeper than 3:1)	
- Kentucky 31 Tall Fescue	93-108 lbs.
- Common Bermudagrass **	0-15 lbs.
- Red Top Grass	2 lbs.
- Seasonal Nurse Crop *	20 lbs.
- Sericea Lespedez **	20 lbs.
	150 lbs.

* Use seasonal nurse crop in accordance with seeding dates as stated below:
February, March through April ..... Annual Rye
May 1st through August ..... Foxtail Millet
September, October through November 15th ..... Annual Rye
November 16th through January ..... Winter Rye

** May through October, use hulled seed. All other seeding periods, use unhulled seed. Weeping Lovegrass may be added to any slope or low-maintenance mix during warmer seeding periods; add 10-20 lbs./acre in mixes.

SWM/BMP DETAILS - BASIN #2

CONSTRUCTION NOTES:

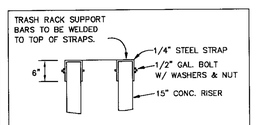
1. MATERIALS FOR DAM EMBANKMENT WILL CONSIST OF HOMOGENEOUS FILL SOILS (USCS ML, CL, OR CH) PLACE FILL IN 8" LOOSE LIFTS AND COMPACT AS APPROVED BY A GEOTECHNICAL ENGINEER TO MINIMUM 95% OF MAX. STD. PROCTOR DRY DENSITY PER ASTM D-698.

2. IMPERMEABLE CLAY CORE SHOULD BE KEYED A MINIMUM OF 2' INTO UNDISTURBED SOILS AND PERMEABILITY SHALL NOT EXCEED 10 CM/S.

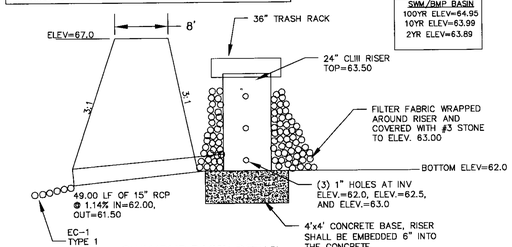
3. ALL FILL DURING SITE GRADING SHALL BE PLACED AS CONTROLLED STRUCTURAL FILL. CONTRACTOR WILL PROVIDE DOCUMENTATION THAT FILL WAS COMPACTED TO MIN. 95% OF MAX. STD. PROCTOR DRY DENSITY PER ASTM D-698.

4. A MINIMUM 6" LAYER OF TOPSOIL IS REQUIRED ON ALL EXPOSED DAM SURFACES

5. REFER TO MINIMUM STANDARD 3.01 OF THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK FOR FURTHER GEOTECHNICAL ITEMS RELATING TO DAM CORE, DAM FACE, AND BEDDING AROUND PIPE BARREL.



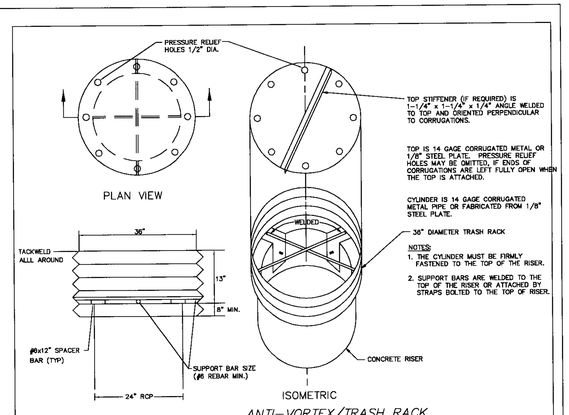
STRAPPING DETAIL



SWM/BMP BASIN
100YR ELEV=64.95
10YR ELEV=63.99
2YR ELEV=63.89

SWM/BMP BASIN DETAIL

N.T.S.



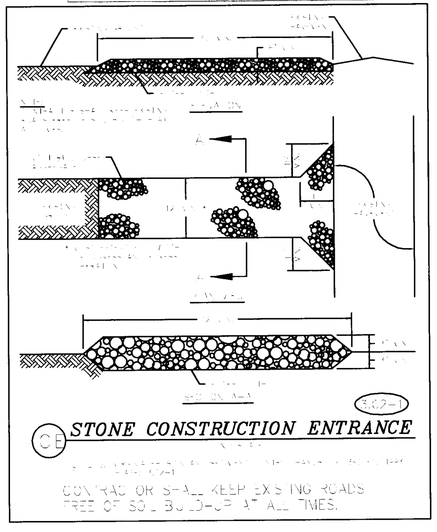
ANTI-VORTEX/TRASH RACK DEVICE DESIGN

N.T.S.

SEDIMENT BASIN CONVERSION APPARATUS

AFTER STABALIZATION OF UPSTREAM AREAS, THE SEDIMENT BASIN IS TO BE CONVERTED TO THE PERMANENT BMP AS OUTLINED BELOW

1. DEWATER THE TEMPORARY BASIN IN ACCORDANCE WITH VESCH. STD. 3.14 AND CLEAN OUT ALL ACCUMULATED SEDIMENT.
2. CONVERT EXISTING OUTLET RISER TO PERMANENT BASIN OUTLET RISER BY ADJUSTING THE TOP OF STRUCTURE TO ELEVATION 63.50 AND CUTTING THE (3)-1 INCH HOLES INTO THE RISER AT ELEVATIONS 62.0, 62.5 AND 63.0. INSTALL FILTER FABRIC AND STONE PER DETAILS ON THIS SHEET.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SEC. AAAAAAAAAAA-AAAAAAAAAAA
SEC. BBBBBBBBBBB-BBBBBBBBBBB
SEC. CCCCCCCCCCC-CCCCCCCCCCC
SEC. DDDDDDDDDDD-DDDDDDDDDDD
SEC. EEEEEEEEEEE-EEEEEEEEEEE
SEC. FFFFFFFFFFF-FFFFFFFFFFF
SEC. GGGGGGGGGGG-GGGGGGGGGGG
SEC. HHHHHHHHHHH-HHHHHHHHHHH
SEC. IIIIIIIIIIII-IIIIIIIIIIII
SEC. JJJJJJJJJJJ-JJJJJJJJJJJ
SEC. KKKKKKKKKKK-KKKKKKKKKKK
SEC. LLLLLLLLLLL-LLLLLLLLLLL
SEC. MMMMMMMMMMM-MMMMMMMMMMM
SEC. NNNNNNNNNNN-NNNNNNNNNNN
SEC. OOOOOOOOOOO-OOOOOOOOOOO
SEC. PPPPPPPPPPP-PPPPPPPPPPP
SEC. QQQQQQQQQQQ-QQQQQQQQQQQ
SEC. RRRRRRRRRRR-RRRRRRRRRRR
SEC. SSSSSSSSSSS-SSSSSSSSSSS
SEC. TTTTTTTTTTT-TTTTTTTTTTT
SEC. UUUUUUUUUUU-UUUUUUUUUUU
SEC. VVVVVVVVVVV-VVVVVVVVVVV
SEC. WWWWWWWWWWW-WWWWWWWWWWW
SEC. XXXXXXXXXXX-XXXXXXXXXXX
SEC. YYYYYYYYYYY-YYYYYYYYYYY
SEC. ZZZZZZZZZZZ-ZZZZZZZZZZZ
SEC. AAAAAAAAAAAA-AAAAAAAAAAAA
SEC. BBBBBBBBBBBB-BBBBBBBBBBBB
SEC. CCCCCCCCCCCC-CCCCCCCCCCCC
SEC. DDDDDDDDDDDD-DDDDDDDDDDDD
SEC. EEEEEEEEEEEE-EEEEEEEEEEEE
SEC. FFFFFFFFFFFF-FFFFFFFFFFFF
SEC. GGGGGGGGGGGG-GGGGGGGGGGGG
SEC. HHHHHHHHHHHH-HHHHHHHHHHHH
SEC. IIIIIIIIIIII-IIIIIIIIIIII
SEC. JJJJJJJ