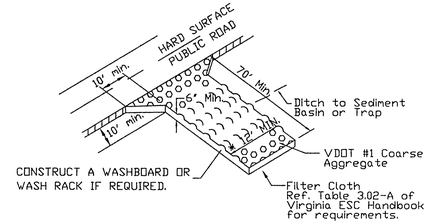
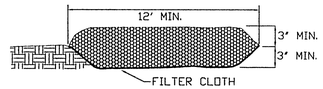
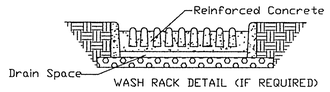
NO.	TITLE	KEY	SYMBOL
3.02	TEMPORARY GRAVEL CONSTRUCTION ENTRANCE	CE	
3.05	SILT FENCE	SF	
3.07	STORM DRAIN INLET PROTECTION	IP	
3.08	CULVERT INLET PROTECTION	CIP	
3.18	OUTLET PROTECTION	OP	
3.32	PERMANENT SEEDING	PS	

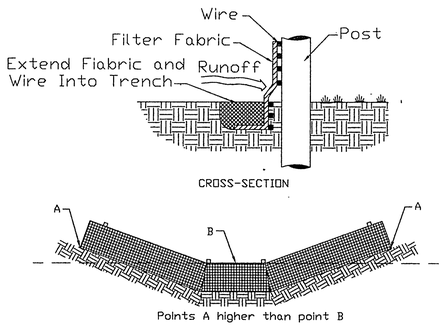


* MUST EXTEND FULL WIDTH OF INGRESS & EGRESS OPERATION.





CE CONSTRUCTION ENTRANCE
NO SCALE



SF SILT FENCE
NO SCALE

TYPE A

15 OCTOBER TO 1 FEBRUARY
K-31 FESCUE @ 5 LB / 1000 SF
BORZY WINTER RYE @ 1/2 LB / 1000 SF

1 FEBRUARY TO 1 JUNE
K-31 FESCUE @ 5 LB / 1000 SF
ANNUAL RYE @ 1/2 LB / 1000 SF

1 JUNE TO 1 SEPTEMBER
K-31 FESCUE @ 5 LB / 1000 SF
GERMAN MILLET @ 1/2 LB / 1000 SF

1 SEPTEMBER TO 15 OCTOBER
K-31 FESCUE @ 5 LB / 1000 SF
ANNUAL RYE @ 1/2 LB / 1000 SF

TYPE B (SLOPES 3:1 OR STEEPER)

15 MARCH TO 1 MAY
CROWN VETCH @ 1/2 LB / 1000 SF
PERENNIAL RYEGRASS @ 1/2 LB / 1000 SF
RED TOP @ 1/8 LB / 1000 SF

15 AUGUST TO 1 OCTOBER
CROWN VETCH @ 1/2 LB / 1000 SF
PERENNIAL RYEGRASS @ 1/2 LB / 1000 SF
RED TOP @ 1/8 LB / 1000 SF

LIME: 140 LB / 1000 SF PULVERIZED AGRICULTURAL LIMESTONE

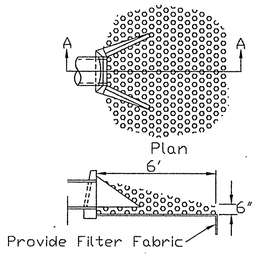
FERTILIZER: 20-10 @ 25 LB / 1000 SF
38-0-0 @ 7 LB / 1000 SF

MULCH: SHALL BE USED OVER ALL SEEDED AREAS AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 1.75 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

SOIL CONDITIONING: INCORPORATION OF LIME AND FERTILIZER, SELECTION OF CERTIFIED SEED, MULCHING, MAINTENANCE OF NEW SEEDLINGS, AND RESEEDING SHALL BE IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE VIRGINIA SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

SEED APPLICATION: APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE, SEEDBED. MAXIMUM SEEDING DEPTH SHALL BE 1/4 INCH.

PS PERMANENT SEEDING MIXTURE
NO SCALE



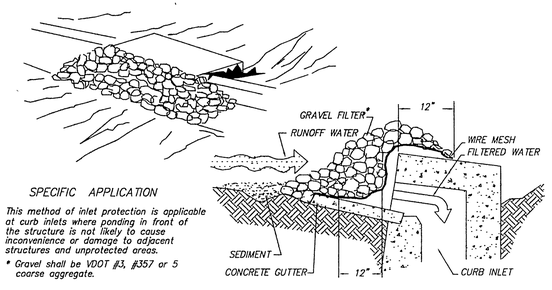
Section A-A
Pipe Outlet To Flat Area With No Defined Channel

Section A-A
Pipe Outlet To Well-Defined Channel

NOTES

1. Apron lining may be rip-rap, grouted rip-rap, gabion basket, or concrete.
2. La is the length of the rip-rap apron as calculated using plates 3.18-3 and 3.18-4.
3. d = 1.5 times the maximum stone diameter, but not less than 6".

OP OUTLET PROTECTION
NO SCALE

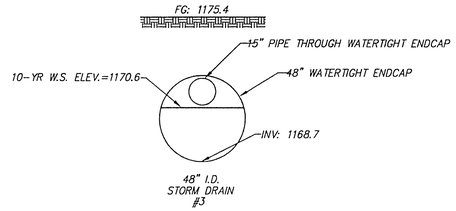


SPECIFIC APPLICATION

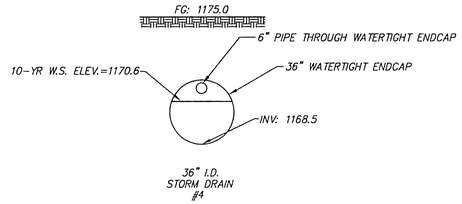
This method of inlet protection is applicable at curb inlets where ponding in front of the structure is not likely to cause inconvenience or damage to adjacent structures and unprotected areas.

* Gravel shall be VDOT #3, #357 or 5 coarse aggregate.

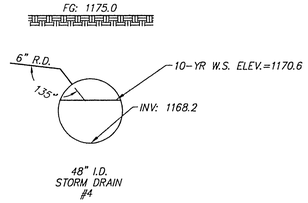
IP GRAVEL CURB INLET SEDIMENT FILTER
NO SCALE



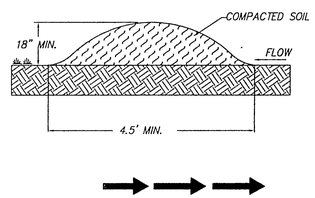
A/6 CONNECTION DETAIL
NO SCALE



B/6 CONNECTION DETAIL
NO SCALE



C/6 CONNECTION DETAIL
NO SCALE



TDD TEMPORARY DIVERSION DIKE
NO SCALE

STORMWATER MANAGEMENT COST ESTIMATE

ALL COSTS GIVEN ARE COMPLETE IN PLACE.

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
48" CM PIPE	L.F.	120	$ 60.00	$ 7,200.00
36" CM PIPE	L.F.	77	$ 48.00	$ 3,696.00
15" CM PIPE	L.F.	96	$ 26.00	$ 2,496.00
5'X4' CONCRETE MOND-BOX	EA.	1	$ 750.00	$ 750.00
DI-22 X 22	EA.	1	$ 350.00	$ 350.00
VDOT STD. ES-1	EA.	1	$ 150.00	$ 150.00
CL-I RIP RAP	C.Y.	2.5	$ 55.00	$ 137.50
AS-BUILTS	L.S.	1	$ 500.00	$ 500.00
SUB-TOTAL				$ 15,279.5
10% CONTINGENCY				$ 1,527.95
TOTAL PROJECT COST				$ 16,810.00

COMMONWEALTH OF VIRGINIA
CORBIN L. WHITE
No. 23843
05/07/04
PROFESSIONAL ENGINEER

EROSION CONTROL, SITE AND STORMWATER MANAGEMENT DETAILS
FOR
ANDRE PERDUE

SHOWING A NEW 7250 SQ. FT. BUILDING AND ASSOCIATED IMPROVEMENTS
SITUATE LOT 1 SOUTHWEST INDUSTRIAL PARK, PHASE II
(PB 11, PG 57)
COMMONWEALTH DRIVE (VA. SEC. RTE. 1723)
CAVE SPRING MAGISTERIAL DISTRICT
COUNTY OF ROANOKE, VA

Designed: JWK/CLW
Drawn: JWK
Checked: CLW
Date: FEB. 27, 2004
Rev: MAY 7, 2004
Scale: 1"=10'
Tax Parcel: 087.14-03-01.05
W.O. No.: 03-0125
F.B. No.: WES-22

CWA
CALDWELL WHITE ASSOCIATES
ENGINEERS / SURVEYORS / PLANNERS
4203 MELROSE AVENUE
P.O. BOX 6260
ROANOKE, VIRGINIA 24017-0260
(540) 366-3400
FAX: (540) 366-8702
WVWA ID# 6UYPNU