

# EROSION & SEDIMENT CONTROL NARRATIVE

## PROJECT DESCRIPTION

The purpose of this project is to demolish a multifamily residential subdivision which includes the demolition of a two-way street (Westview Avenue S.W.) and six (6) parking areas. This project will include all necessary utility removal and site grading to serve future construction.

## EXISTING SITE CONDITIONS

The proposed site is located on approximately 7.31 acres that is located on the north side of Westport Avenue and Salem Avenue, in the city of Roanoke, VA.

## ADJACENT AREAS

The project site is bordered to the north by Norfolk and Western parcels and railroad tracks, to the east by a daycare/healthcare facility, to the south by Westport Avenue and Salem Avenue, to the west a private residential property and 18th street.

## SOILS

Soils found at this site are Chiswell-Litz-Urban land complex, 2 to 15% slopes, and are common to the area. 35% Chiswell, 25% Litz and 22% Urban and 18% other soils. All have high erosion tendencies.

## CRITICAL EROSION AREAS

1. The potential critical erosion areas are fill slopes and diversion ditches.
2. The outlet of all culverts.

## EROSION AND SEDIMENT CONTROL MEASURES

Unless otherwise indicated, all vegetative and structural erosion and sediment control practices shall be constructed and maintained according to minimum standards and specifications of the handbook. The minimum standards of the VESCR shall be adhered to unless otherwise waived or approved by a variance.

## STRUCTURAL PRACTICES

1. Temporary Construction Entrance (Section 3.02) The two temporary construction entrances will be installed to limit tracking onto public roads. Should tracking occur the road will be immediately cleaned.
2. Silt Fence (Section 3.05) Temporary silt fences will be installed as indicated on the site plan.
3. Inlet Protection (Section 3.07) Inlet protection will be placed at all storm structure inlets to prevent sediment from entering the system.
4. Surface Roughing (Section 3.29) Surface roughening will be employed on all slopes at or exceeding 2:1.
5. Temporary Seeding (Section 3.31) Temporary seeding will be placed on all disturbed. Temporary seeding will immediately aid in the reduction of dust and sediment. Temporary seeding will be Annual Ryegrass (100 #/ac), Feb 16 - April 30, German Millet (60 #/ac), May 1 - Aug. 31.
6. Permanent Seeding (Section 3.32) After final grading permanent seeding will be employed to reduce erosion and sediment yield. Seeding Specifications: Permanent seeding will be Kentucky Bluegrass, blended to contain 4 or more varieties, with no one variety exceeding 30%. The seeding will be applied at 140 lb. per acre. On slopes 2:1 or greater a mixture of Crown Vetch (50%), Perennial Ryegrass (40%), and Redtop (10%) will be used. All seeding, with required associated practices, will be in accordance with all applicable sections of the Virginia Erosion and Sediment Control
7. Dust Control (Section 3.39) If arid conditions prevail dust control practices will be employed as required.
8. Construction Road Stabilization (Section 3.03) All roads and parking areas on the site shall be stabilized with gravel immediately after grading. Traffic is prohibited from entering drainage swales or streams unless absolutely necessary.
9. Temporary Sediment Basin (Section 3.14) The two temporary sediment basins will collect runoff from them disturbed area and allow the sediment to settle before leaving the site.
10. Temporary Diversion Dike (Section 3.09) Temporary Diversion Dikes will divert runoff to a controlled outlet.
11. Stormwater Conveyance Channel (Section 3.17) The proposed conveyance channel will collect runoff and prevent erosion of the existing drainage ditch. The channel will remain after construction is finished.

## MANAGEMENT

1. Construction should be sequenced so that grading operations can begin and end as quickly as possible.
2. Erosion and Sediment control devices shall be installed as the first step of construction.
3. Areas which are not to be disturbed shall be clearly marked by flags, signs, etc.
4. The grading contractor shall be responsible for the installation and maintenance of all erosion and sediment control practices. Inspections are to be made periodically and after every significant rainfall.
5. After achieving adequate stabilization, the temporary E&S controls will be cleaned up and removed, and the sediment basins will be cleaned out and converted to permanent stormwater management basins.

## PERMANENT STABILIZATION

All areas disturbed by construction shall be stabilized with permanent seeding immediately following finish grading. Seeding shall be done with Kentucky 31 Tall Fescue according to Std. & Spec. 3.32, PERMANENT SEEDING, of the handbook. Erosion control blankets will be installed over fill slopes which have been brought to final grade and have been seeded to protect the slopes from rill and gully erosion and to allow seed to germinate properly. Mulch (straw or fiber) will be used on relatively flat areas. In all seeding operations, seed, fertilizer and lime will be applied prior to mulching.

## MAINTENANCE OF DETENTION FACILITIES

The applicant shall obtain approval from the locality of a plan for maintenance of the detention facilities. The plan shall set forth the maintenance requirements of the facility and the person responsible for performing the maintenance.

## STORMWATER MANAGEMENT

Will not be addressed with this project.

## MAINTENANCE

In general, all erosion and sediment control measures will be checked daily and after each significant rainfall. Any items not found in accordance with the Virginia Erosion and Sediment Control Handbook will be immediately replaced and/or repaired. The following items will be checked in particular:

1. The sediment trap will be cleaned out when the level of sediment buildup reaches the cleanout point indicated on the riser pipe.
2. The gravel outlets will be checked regularly for sediment buildup which will prevent drainage. If the gravel is clogged by sediment, it shall be removed and cleaned or replaced.
3. The silt fence barrier will be checked regularly for undermining or deterioration of the fabric. Sediment shall be removed when the level of sediment deposition reaches half way to the top of the barrier.
4. The seeded areas will be checked regularly to ensure that a good stand is maintained. Areas should be fertilized and re-seeded as needed.
5. The division dike at the construction entrances will be checked and maintained on a regular basis, to prevent drainage buildup.

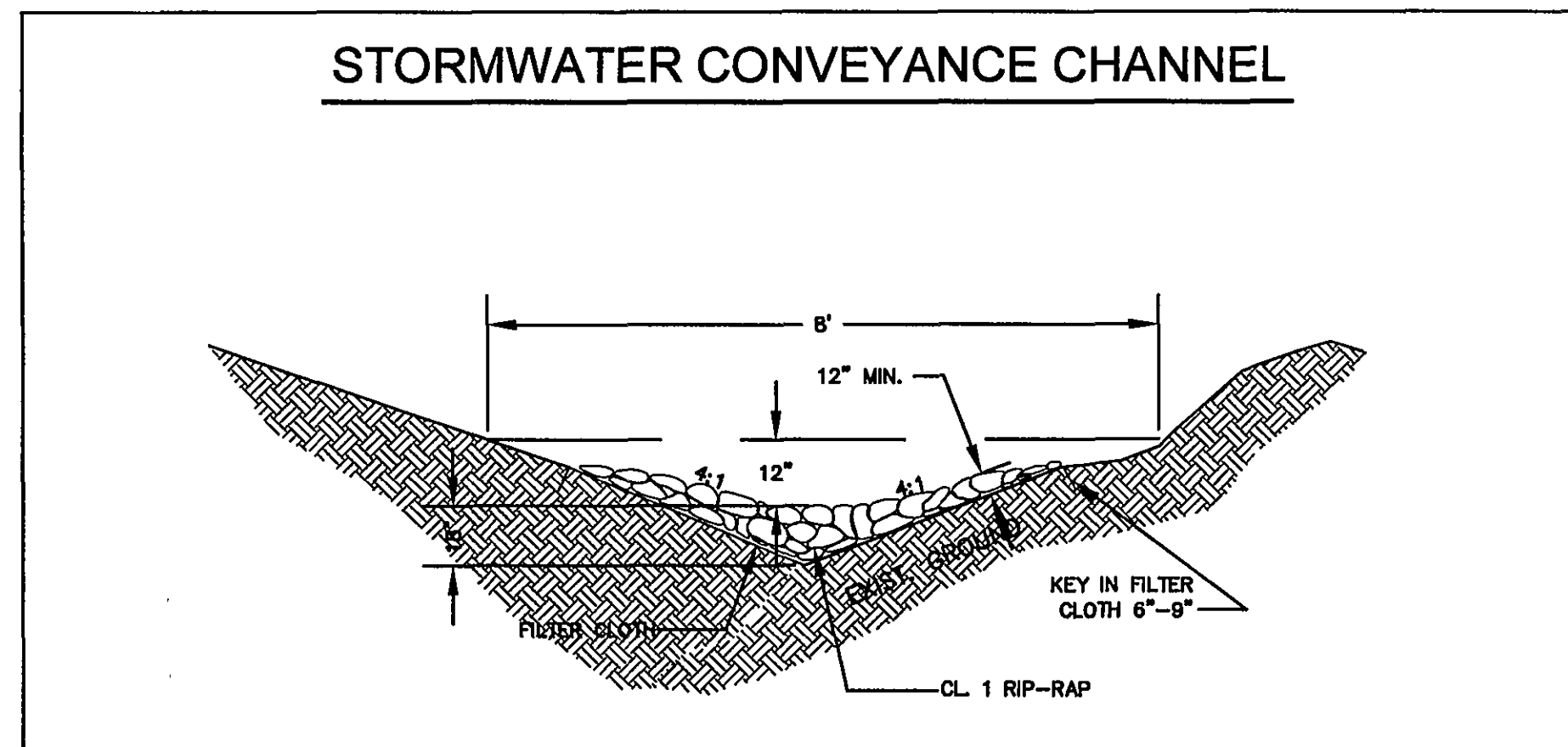
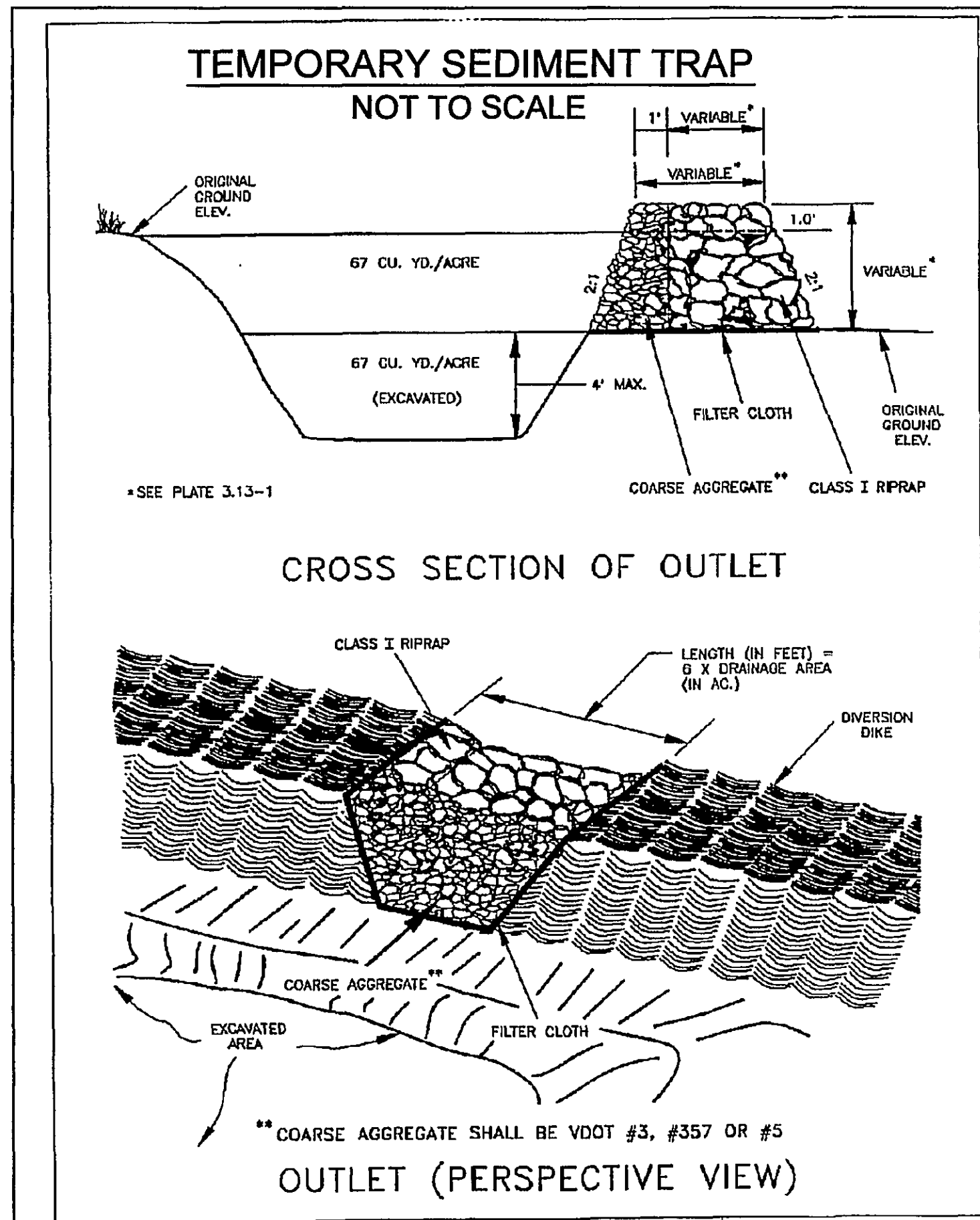
## GENERAL

The erosion and sediment control measures shown on the construction plans are the minimum measures required. Due to construction phasing and other considerations all measures can not be shown. The owner, through his contractor, will employ whatever measures which may be required to assure that sediment laden runoff does not leave the site.

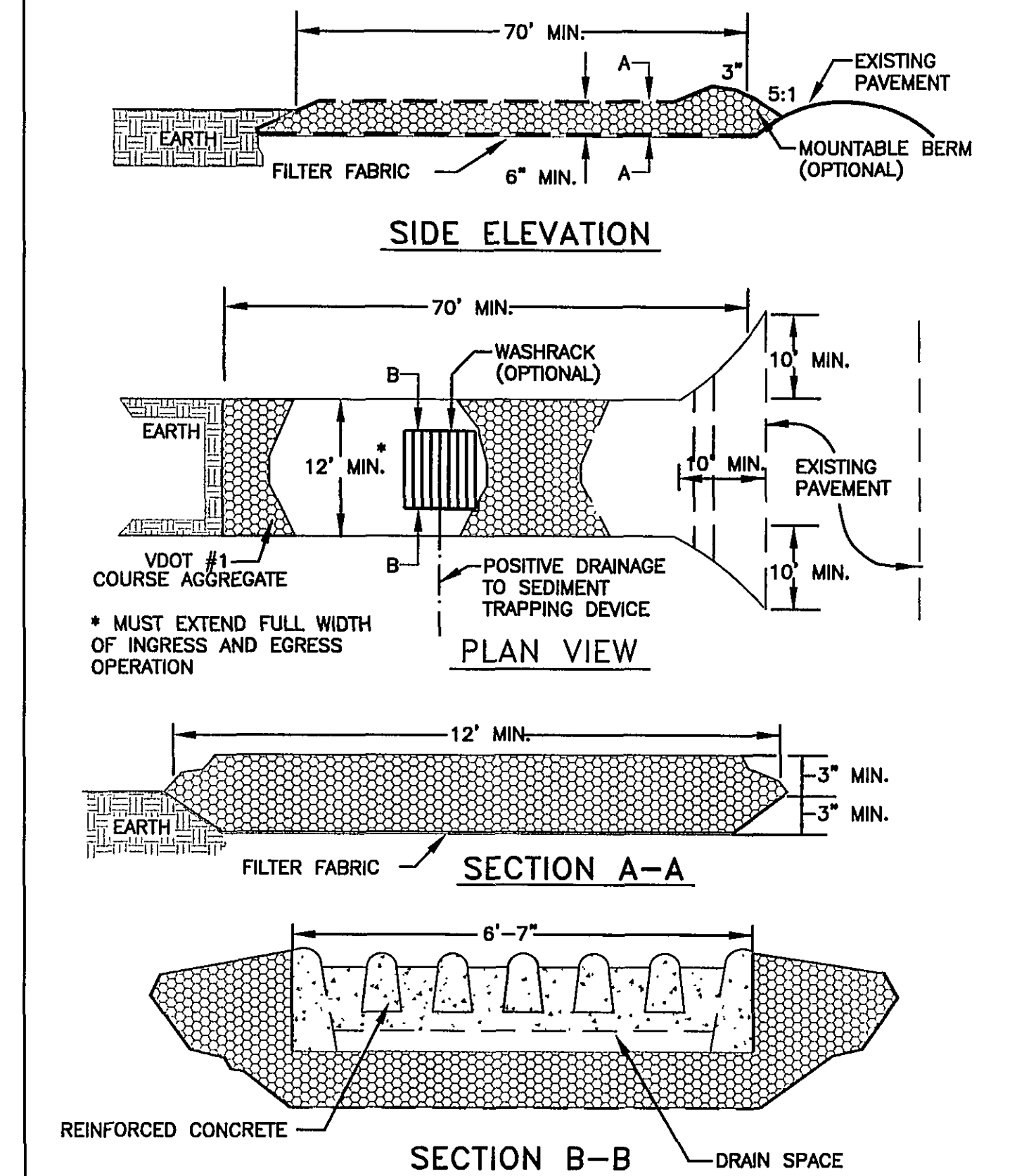
All materials and measures employed for erosion and sediment control will be in accordance with the Virginia Erosion and Sediment Control Handbook, latest edition.

If, during construction, additional Erosion and Sediment Control measures are deemed necessary, they shall be installed as directed by the Owner, Engineer or County agent.

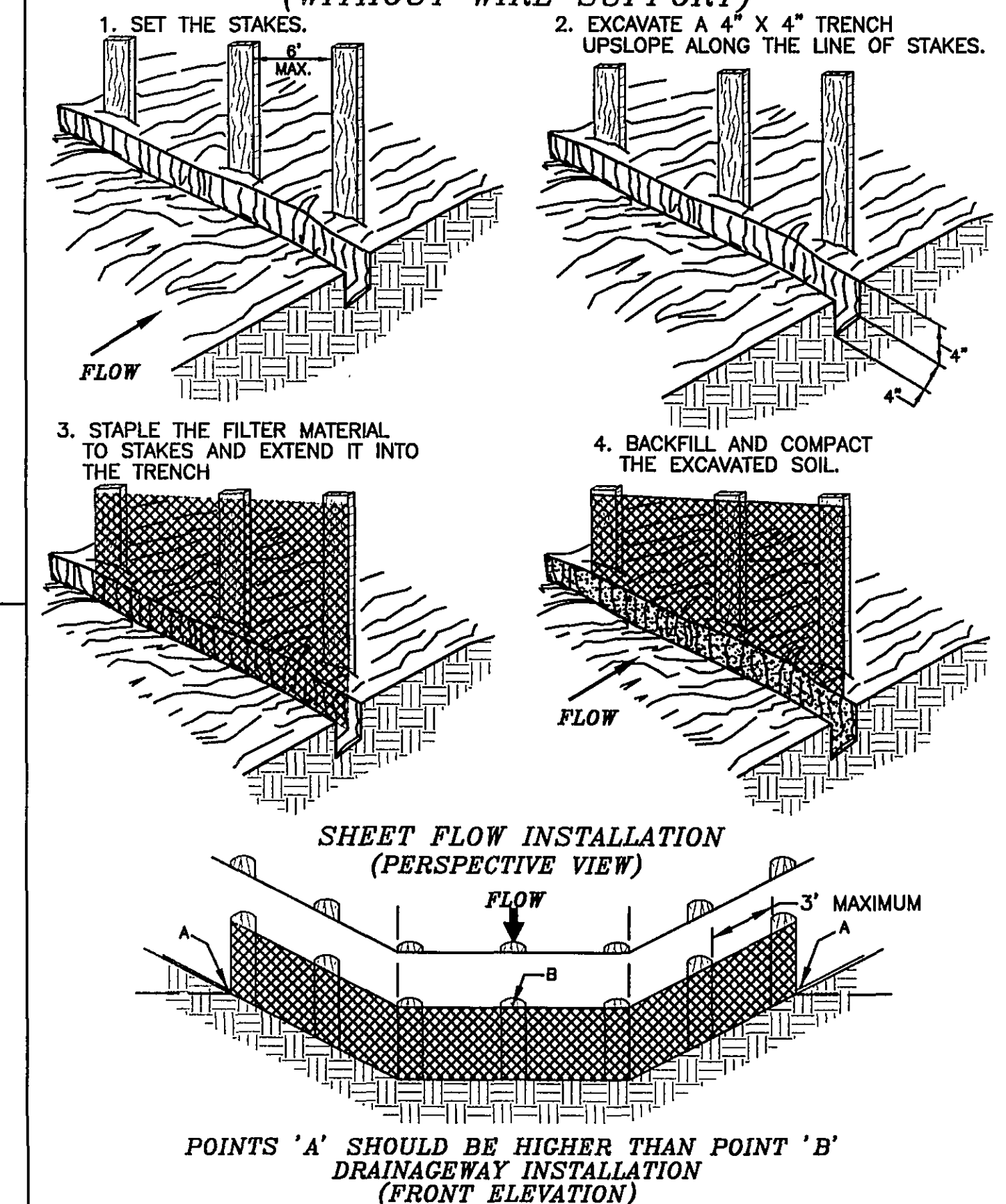
This project is to be constructed consistent with the 1992 Virginia Erosion And Sediment Control Regulations.



## STONE CONSTRUCTION ENTRANCE



## CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)



## E&S LEGEND

- |     |                                      |
|-----|--------------------------------------|
| CE  | 3.02 CONSTRUCTION ENTRANCE           |
| CRS | 3.03 CONSTRUCTION ROAD STABILIZATION |
| SF  | 3.05 SILT FENCE                      |
| IP  | 3.07 INLET PROTECTION                |
| SB  | 3.14 TEMPORARY SEDIMENT BASIN        |
| DD  | 3.09 TEMPORARY DIVERSION DIKE        |
| PS  | 3.32 PERMANENT SEEDING               |
| TS  | 3.31 TEMPORARY SEEDING               |
| SR  | 3.29 SURFACE ROUGHING                |
| SCC | 3.17 STORMWATER CONVEYANCE CHANNEL   |

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Engineering  
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ROANOKE REDEVELOPMENT AND HOUSING AUTHORITY  
ASBESTOS & LEAD BASED PAINT ABATEMENT AND BUILDING DEMOLITION  
HURT PARK, VA-11-3 PROJECT # 060901  
CITY OF ROANOKE, VIRGINIA

NO.	DATE	PER C.O.R. COMMENTS	MCP	RCW	BY
1	12/14/06	PER C.O.R. COMMENTS			
2	11/21/06	PER C.O.R. COMMENTS			
3		DESCRIPTION			

EROSION & SEDIMENT  
CONTROL SHEET

Richard C. White  
No. 020021  
12-13-06  
PROFESSIONAL ENGINEER

Designed By	RCW
Drawn By	MCP
Checked By	RCW
Approved By	RCW
Submitted By	RCW
Drawing	3260A
Date	08/28/06
Scale	NONE
Commission No.	3260A