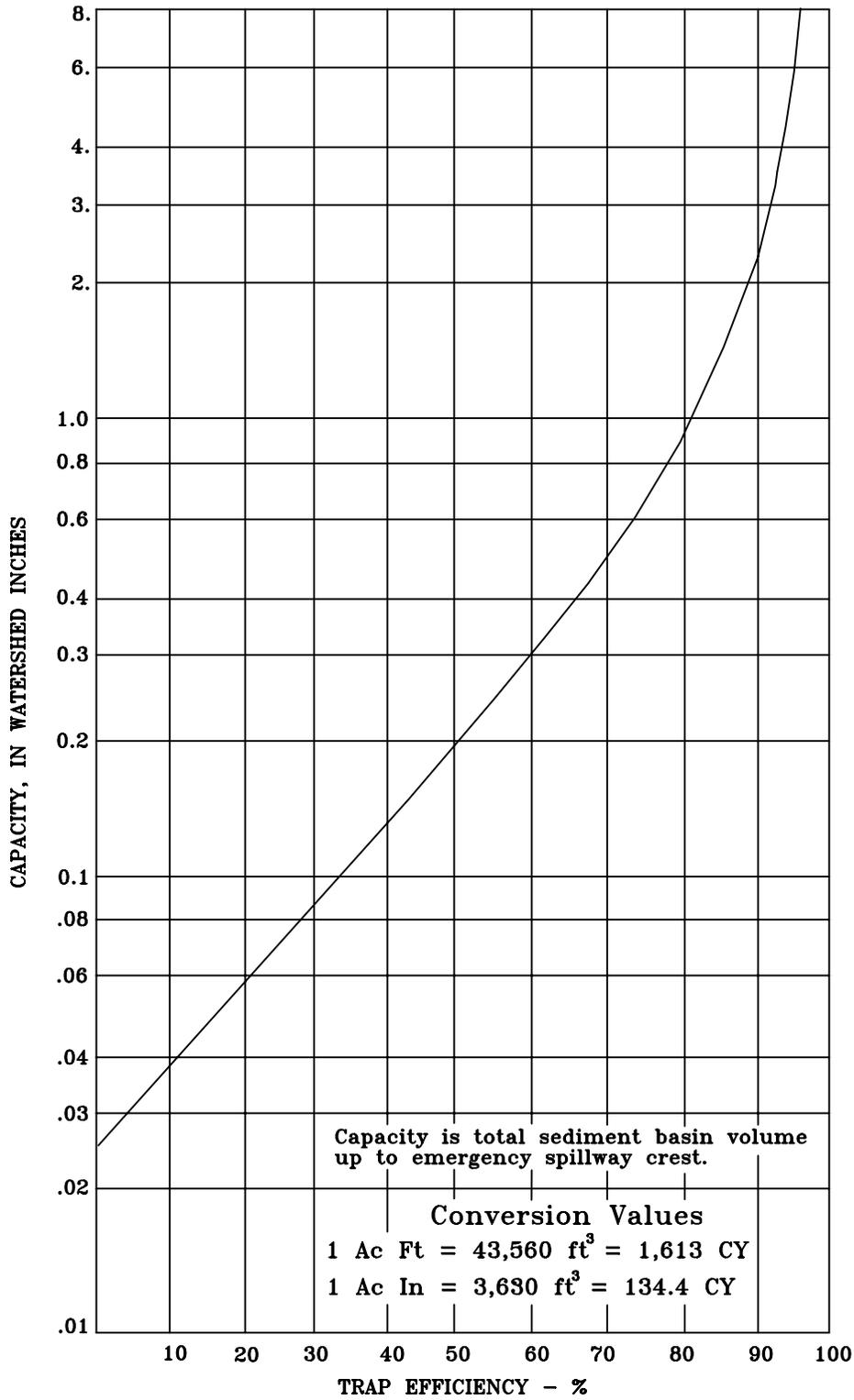


FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



Ref. Sec. 11-0109.7,
11-0110.3

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MAXIMUM PROBABLE TRAP EFFICIENCY OF SEDIMENT BASINS

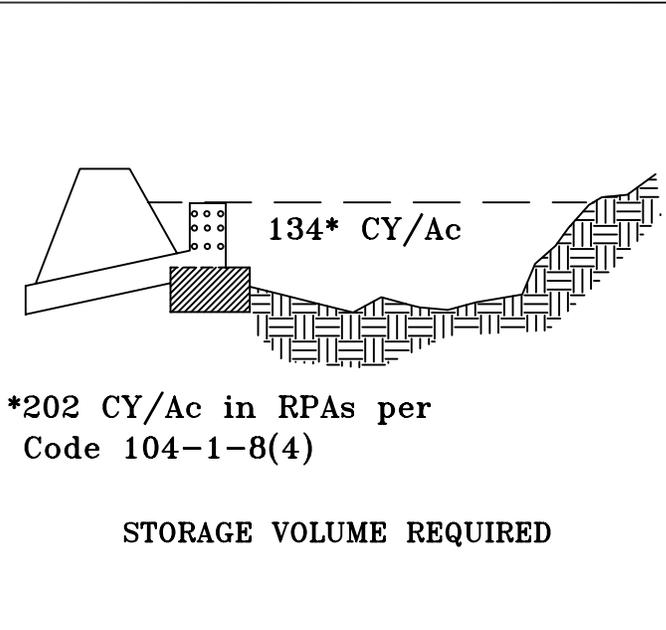
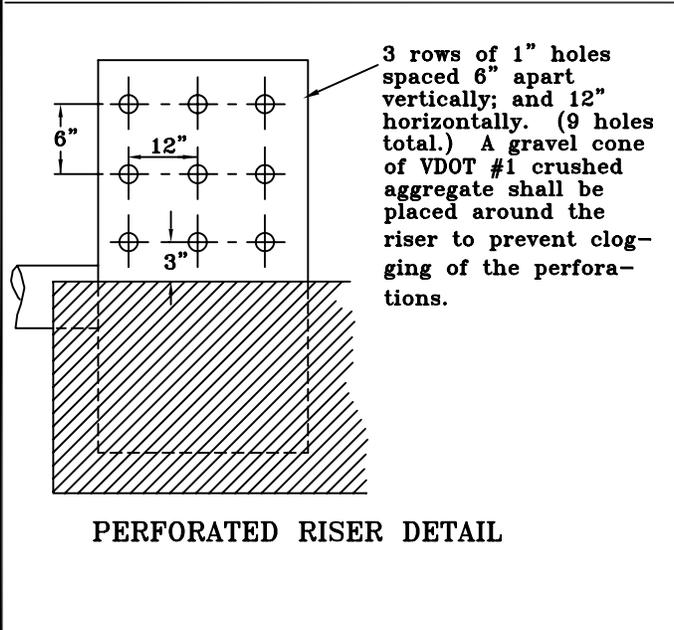
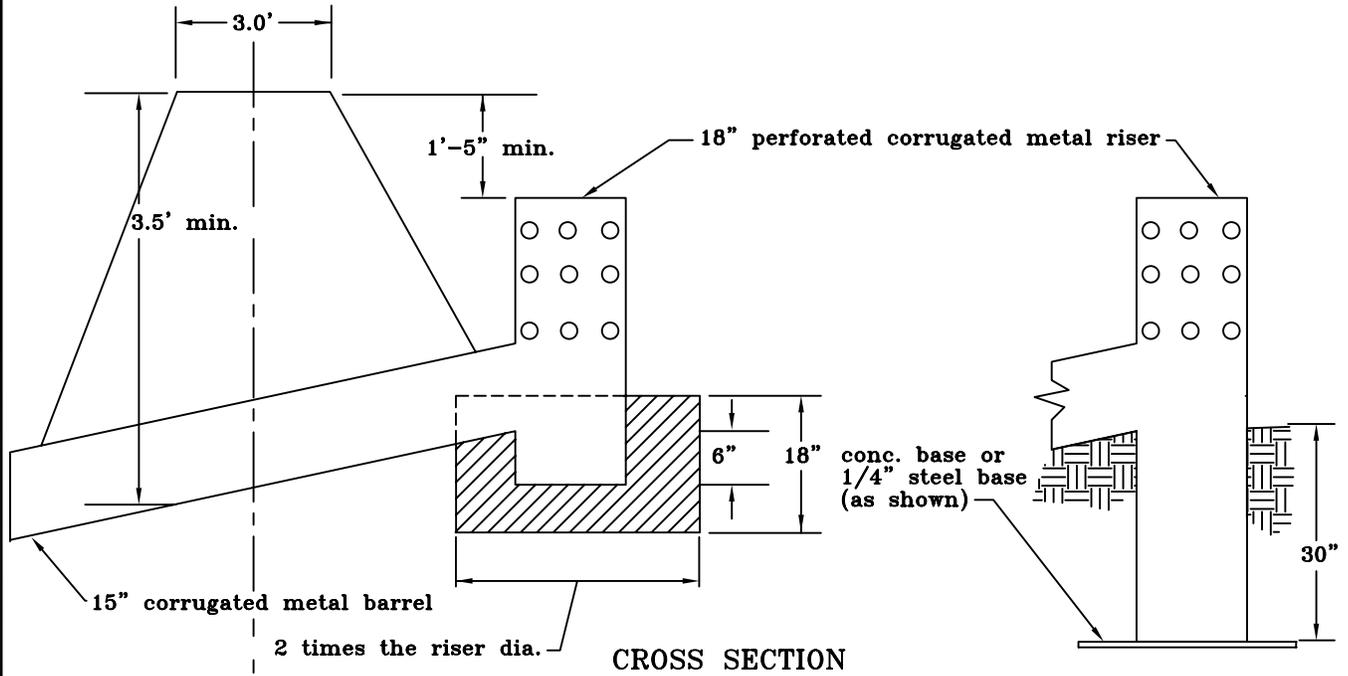
PLATE NO.

STD. NO.

1-11

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These are the recommended standard specifications for the pipe outlet sediment trap. The design engineer may alter the pipe and perforation sizes, provided engineering calculations can justify it. The desired drawdown times are a minimum of 4 hours and a maximum of 40 hours. The perforation size and spacing as indicated below represents approximately 17 hours of drawdown time. When selecting a drawdown time, the designer must consider the proximity to existing residences and the safety of small children; thus, a shorter drawdown time. For remote sites, a longer drawdown time would be more appropriate.



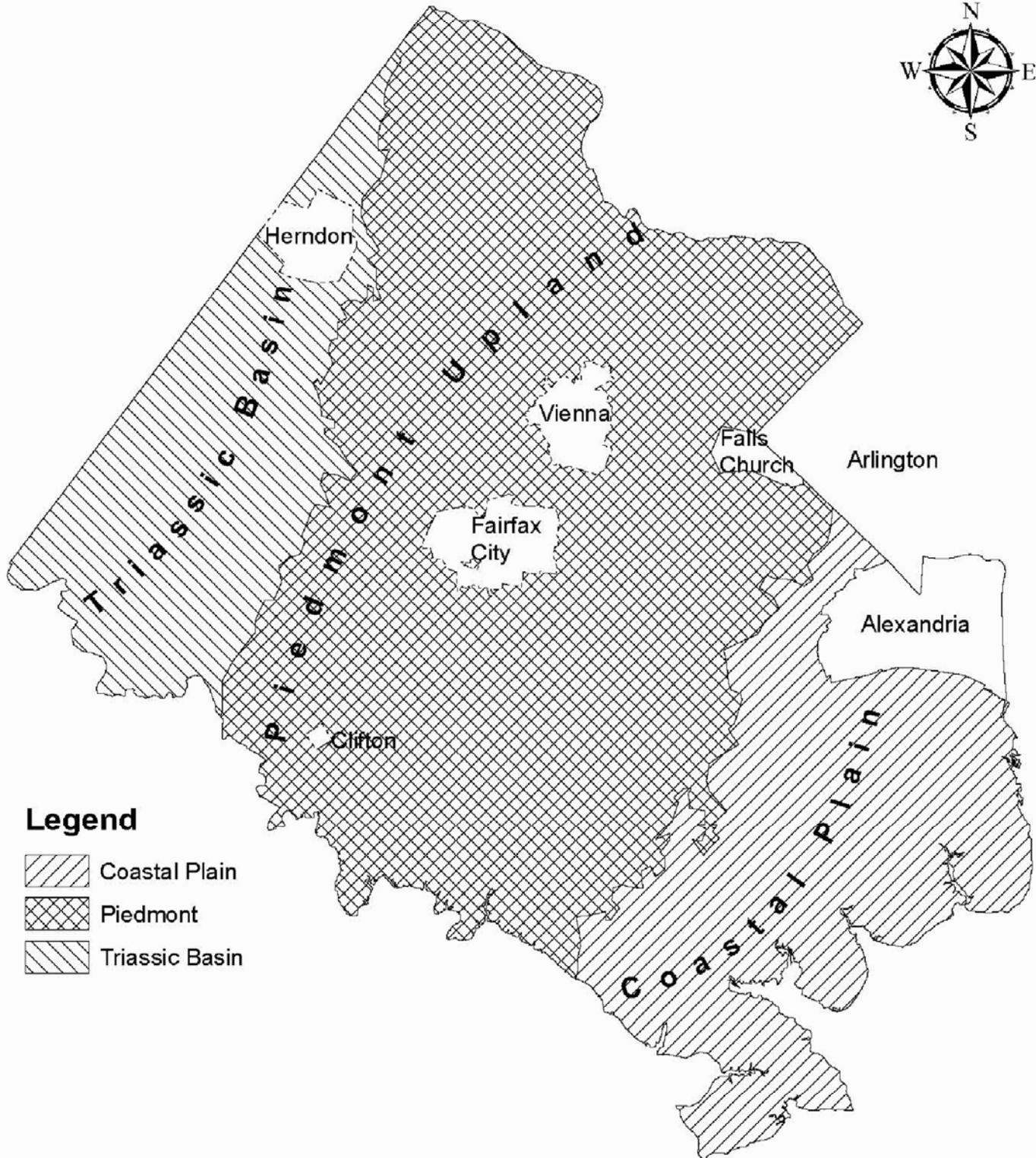
Ref. Sec. 11-0109.7,
11-0110.3, 11-0110.3D

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PIPE OUTLET SEDIMENT TRAP
1 TO 3 AC OF DRAINAGE AREA

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Legend

-  Coastal Plain
-  Piedmont
-  Triassic Basin

Ref. Sec. 11-0408.2

PHYSIOGRAPHIC PROVINCES FAIRFAX COUNTY, VIRGINIA

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-SOIL NUMBER -- GLENELG SILT LOAM.....39B
 -SLOPE -- 2 TO 7 PERCENT.....39B - B
SLOPE
 0-2 PERCENT.....A
 2-7 PERCENTB
 7-15 PERCENT.....C
 15-25 PERCENT.....D
 25-45 PERCENT.....E



Soil Lines

Soil survey maps are to be used for general planning purposes only. Please be aware that soil lines are not definitive. Soils gradually phase into one another and characteristics of neighboring soil types will be found within a soil's borders



Marumsco Soils

Marumsco soils are mapped in complexes with other soil types. The complexes are highly variable and consist of combinations of clays, silts, sands and gravels. They may also be problematic. In steep areas that contain clays known as "marine clays," slope stability can be a problem. In addition, structures constructed on clays found in this complex could suffer foundation distress if adequate precautions are not taken during design and construction.



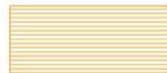
Previously Mapped Marine Clay

These areas were mapped as marine clays in previous soil surveys. Marine clays are high shrink-swell soils that can cause foundation distress. They are sometimes referred to as Potomac Clays or Deltaic Clays.



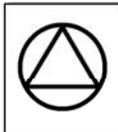
Non-Marine Clay High Shrink-Swell Soils

Soils containing other shrinking-swelling clays that can lead to foundation distress if precautions are not taken during design and construction



Potential Asbestos Containing Soils

These soils are mapped over naturally asbestos-containing bedrock. Safety precautions must be taken during construction. Orange soils, which overlie a majority of this geology, also contain shrinking-swelling clays which can cause foundation distress.



Landfill



Quarry

Ref. Sec. 11-0408.11

SYMBOLS SHOWN ON SOIL MAPS OF FAIRFAX COUNTY

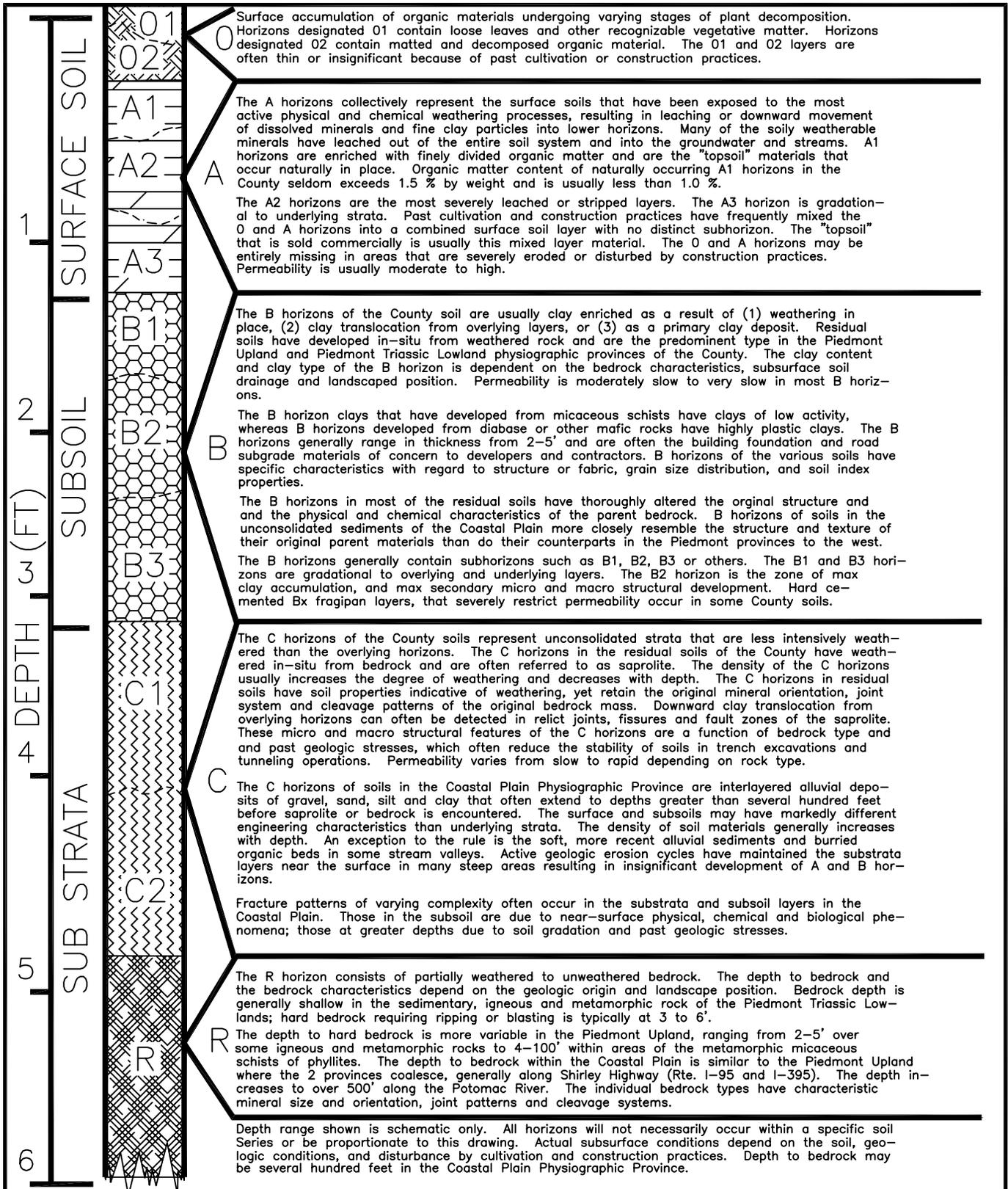
PLATE NO

STD NO

4-11

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Ref. Sec. 11-0408

GENERALIZED STRATIGRAPHIC PROFILE OF COUNTY SOILS

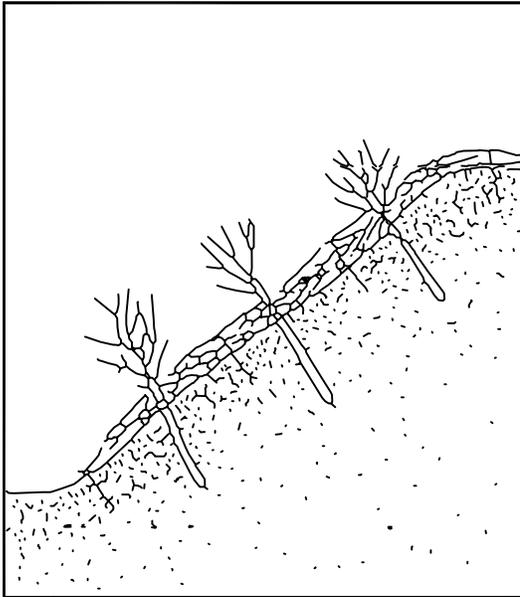
PLATE NO.

STD. NO.

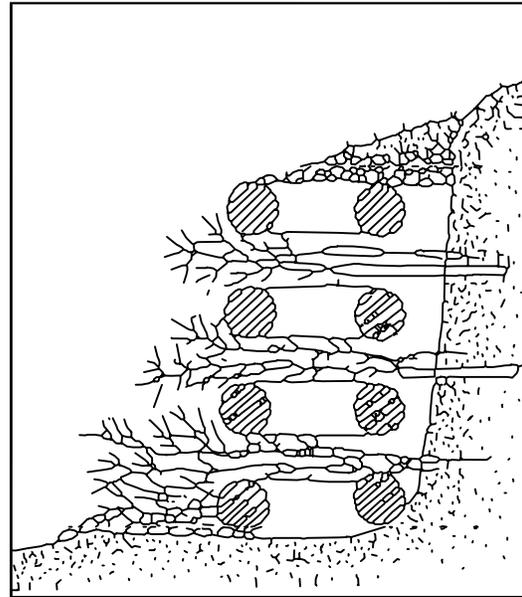
5-11

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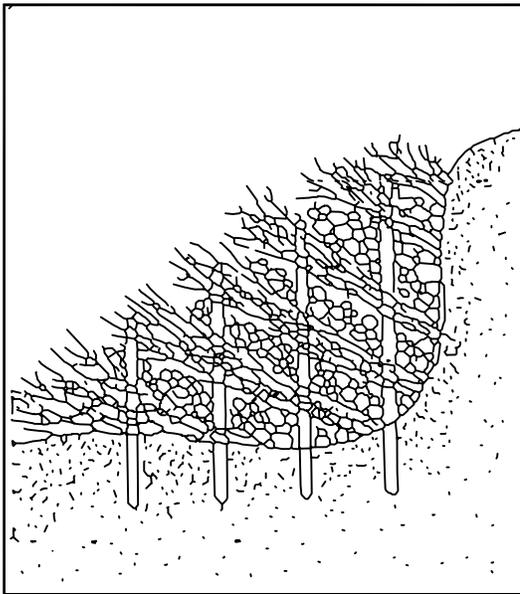
FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



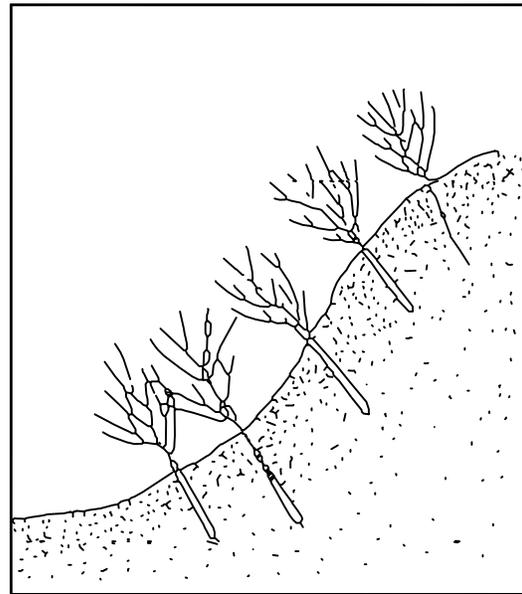
BRUSH MATTRESS



LIVE CRIB WALL



BRUSH LAYERING



LIVE STAKES

Source: Erosion and Improvement Plan for Stream Valley Parks -- Fairfax County
 Gauthier, Alvarado & Associates/Sheladia Associates

Ref. Sec. 11-0110.3,
 11-0409.6

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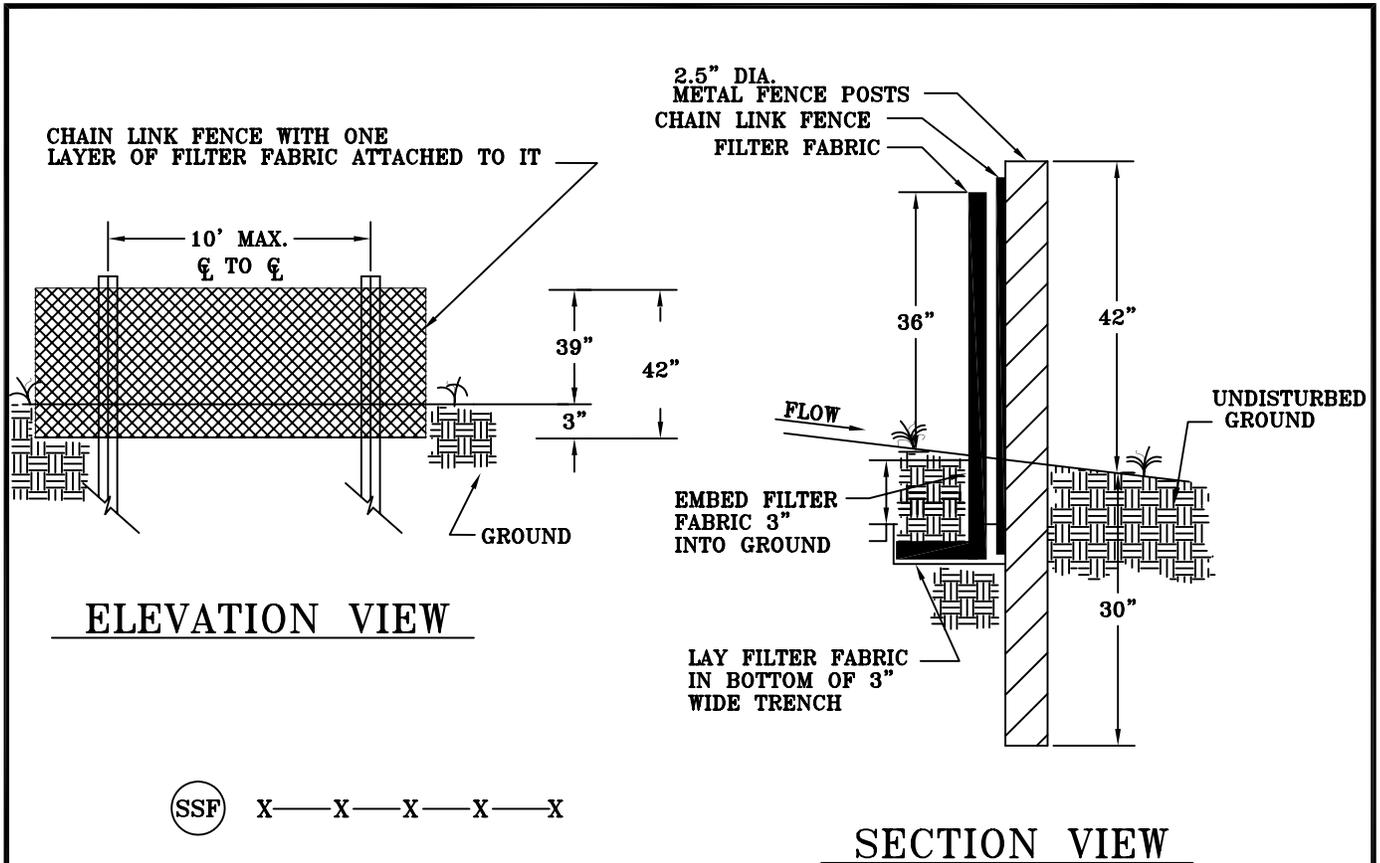
BIOTECHNICAL SLOPE PROTECTION

PLATE NO.

STD. NO.

6-11

FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



SUPER SILT FENCE
NO SCALE

FENCING

Chain link fence shall be 39" above grade with 3" embedded for a total fabric width of 42". The post shall be 42" above grade with 30" placed below grade (without concrete) for a total length of 72".

NOTES

1. Chain link fence shall be fastened securely to fence posts with wire ties.
2. Filter fabric shall be fastened securely to chain link fence with ties spaced horizontally 24" at the top and midsection.
3. Physical properties of the filter fabric shall conform to the latest edition of THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK.
4. When two sections of filter fabric adjoin each other, they shall be overlapped by 6".
5. Maintenance shall be performed as needed and material shall be removed when sediment build-up reaches 50% of the height of the super silt fence.

Ref. Sec. 11-0110.3,
11-0110.3J

SUPER SILT FENCE
NO SCALE

PLATE NO.

STD. NO.

7-11

Rev. 1-00, 2011 Reprint