

2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", and revisions thereto.

3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site. 4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, of the HOWARD COUNTY

DESIGN MANUAL, Storm Drainage. 5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL (Section G) for permanent seeding, sod, temporary seeding, and mulching. Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination

and establishment of grasses. 6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

7. Site Analysis: Total Area of Site \_Square Feet Area Disturbed \_Square Feet \_Square Feet Area to be roofed or paved Area to be vegetatively stabilized \_\_Square Feet \_Cu. Yds.

\_\_Cu. Yds.

Offsite waste/borrow area location \_\_\_\_N/A 8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

Total Fill

9. Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.

10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

11. Trenches for the construction of utilities is limited to three pipe lengths or that which can be back filled and stabilized within one working day, whichever is shorter.

## HOWARD SOIL CONSERVATION DISTRICT PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

acceptable means before seeding, if not previously loosened.

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, disking, or other

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules: 1) PREFERRED -- Apply 2 tons per acres dolomitic limestone (92 lbs/1000sq. ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.)

before seeding. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000sq. ft.) 2) ACCEPTABLE -- Apply 2 tons per acres dolomitic limestone (92 lbs/1000sq. ft.) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq. ft.)

before seeding. Harrow or disk into upper three inches of soil.

SEEDING -- For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs per acre (1.4 lbs/1000sq. ft.) of Kentucky 31 Tall Fescue and 2 lbs. per acre (.05 lbs/1000sq. ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) - 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) - Use sod. Option (3) - Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch 2 tons / acre well anchored straw.

MULCHING -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000sq. ft.) for anchoring.

MAINTENANCE -- Inspect all seeding areas and make needed repairs, replacements and

# HOWARD SOIL CONSERVATION DISTRICT TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-termvegetative cover

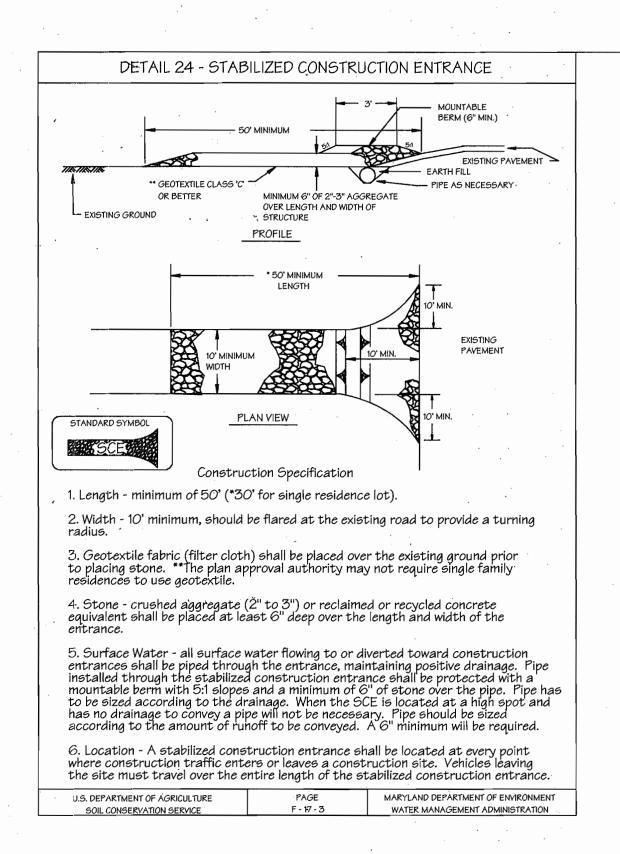
SEEDBED PREPARATION: -- Loosen upper three inches of soil by raking, disking, or other acceptable means before seeding, if not previously loosened.

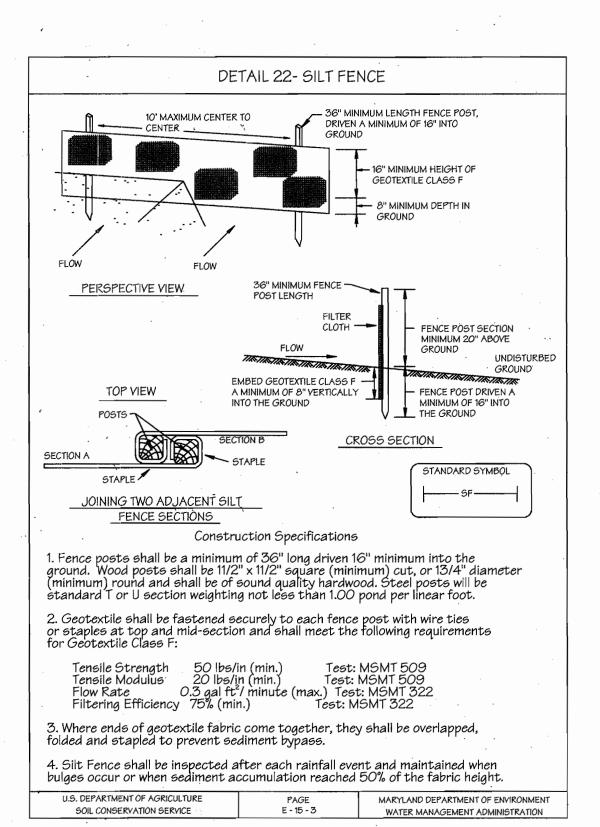
SOIL AMENDMENTS: -- Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000sq. ft.).

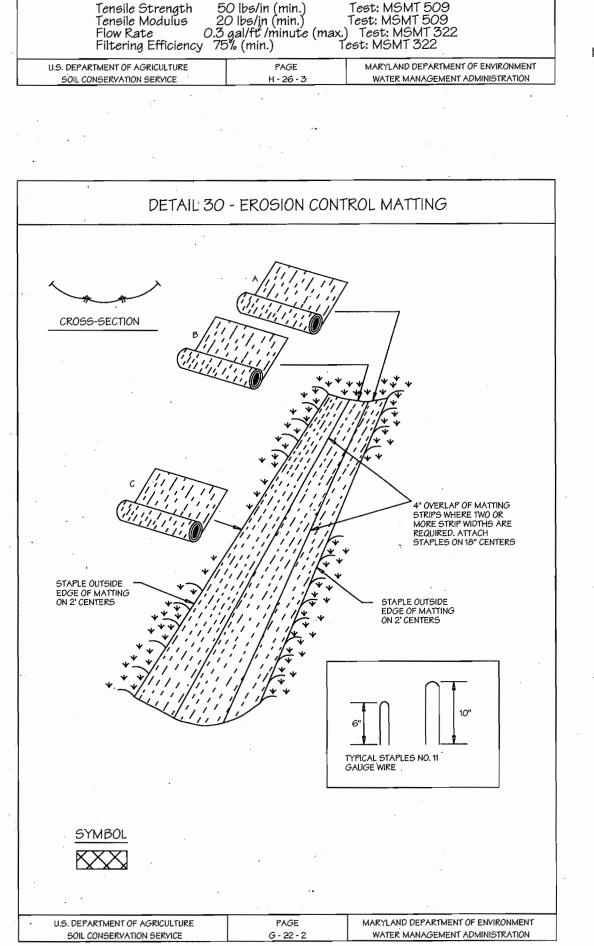
SEEDING -- For periods March 1 thru April 30, and from August 15 thru October 15 seed with 2-12 bushels per acre of annual rye (3.2 lbs/1000sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs/1000sq. ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

MULCHING -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000sq. ft.) of unrotted weed free small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000sq. ft.) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.







DETAIL 33- SUPER SILT FENCE

10' MAXIMUM

CHAIN LINK FENCE

WITH 1 LAYER OF

Construction Specifications

1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length

2. Chain link fence shall be fastened securely to the fence posts with wire ties.

The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.

3. Filter cloth shall be fastened securely to the chain link fence with ties spaced

5. When two sections of filter cloth adjoin each other, they shall be overlapped

7. Filter cloth shall be fastened securely to each fence post with wire ties or

staples at top and mid section and shall meet the following requirements for

6. Maintenance shall be performed as needed and silt buildups removed when "bulges"

4. Filter cloth shall be embedded a minimum of 8" into the ground.

develop in the silt fence, or when silt reaches 50% of fence height

36" MINIMUM

STANDARD SYMBOL

FLOW

- 16" MIN. 15T LAYER OF

NOTE: FENCE POST SPACING

SHALL NOT EXCEED 10' CENTER TO CENTER

SURFACE

CHAIN LINK FENCING

EMBED FILTER CLOTH 8" -

every 24" at the top and mid section.

Tensile Strength

MINIMUM INTO GROUND

\* IF MULTIPLE LAYERS ARE

by 6" and folded.

REQUIRED TO ATTAIN 42

21/2" DIAMETER

OR ALLIMINIUM



### Definition

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

### Purpose

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

# Conditions Where Practice Applies

I. This practice is limited to areas having 2:1 or flatter slopes where:

- a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth. b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish
- continuing supplies of moisture and plant nutrients. c. The original soil to be vegetated contains material toxic to plant growth.

Construction and Material Specifications

d. The soil is so acidic that treatment with limestone is not feasible.

II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require

## special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

I. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.

II. Topsoil Specifications - Soil to be used as topsoil must meet the following:

i. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay Loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1-1/2" in diameter.

ii. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.

iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

## III. For sites having disturbed areas under 5 acres:

i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization Section I - Vegetative Stabilization Methods and Materials.

EROSION CONTROL MATTING

Construction Specifications

narrow trench, 6" in depth. Backfill the trench and tamp firmly to

2. Staple the 4" overlap in the channel center using an 18" spacing

3. Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.

4. Staples shall be placed 2' apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.

5. Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4", shiplap fashion. Reinforce the overlap with a double row of staples

space'd 6" apart in a staggered pattern on either side.

effected by the flow must be keyed-in.

6. The discharge end of the matting liner should be similarly secured with 2 double rows of staples.

Note: If flow will enter from the edge of the matting then the area

conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between staples is 6'

1. Key-in the matting by placing the top ends of the matting in a

### IV. For sites having disturbed areas over 5 acres:

i. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments

required to bring the soil into compliance with the following: a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than

6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher. b. Organic content of topsoil shall be not less than 1.5 percent by weight.

c. Topsoil having soluble salt content greater than 500 parts per million shall not be used. d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.

Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

ii. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization --Section I - Vegetative Stabilization Methods and Materials.

### V. Topsoil Application

i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.

ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.

iii. Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.

iv. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and

VI. Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer. composted sludge and amendments may be applied as specified below:

i. Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:

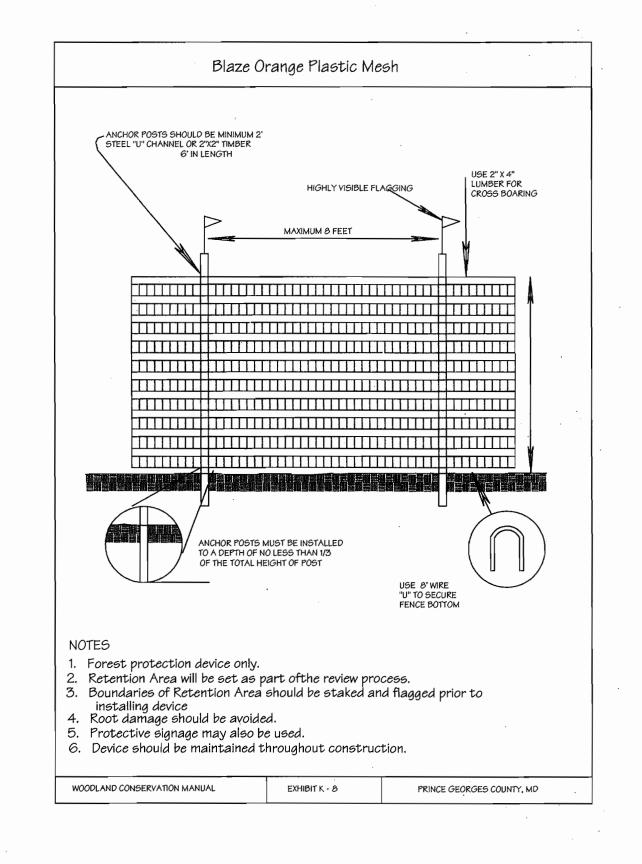
a. Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.

b. Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a Ph of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements

c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet,

ii. Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb./1,000 square feet, and 1/3 the normal lime application rate.

References: Guideline Specifications, Soil Preparation and Sodding. MD-VA, Pub.#1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.



. THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS

HIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIME SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

I hereby certify that this plan for erosion and so Fment approve presents a practical and

We certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site nspections by Howard Soil Conservation District or their authorized agents, as are deemed

APPROVED: DEPARTMENT OF PLANNING AND ZONING



MARYLAND DEPARTMENT OF ENVIRONMENT

WATER MANAGEMENT ADMINISTRATION

9250 Rumsey Road, Suite 106, Columbia, MD. 21045 (410) 715-1070 (301) 596-3424 (410) 715-9540 (Fax) SEDIMENT & EROSION CONTROL NOTES AND DETAILS EDITH M. RALSTON PROPERTY 3 of 3 Lot 3 5th Election District - Howard County, Maryland Tax Map No. 30 - Grid No. 20 - Parcels 238 02-022 Previous Submittals: FDP Phase Two A VIII, F97-156, BA97-20, F03-110 VNER: STEVEN P. RALSTON DEVELOPER: BROOKFIELD HOMES 5500 Executive Parkway 515 Edann Road 6/2003 SDP 03-170 Glenside, PA 19038 Suite 300 Fairfax, VA 22031

