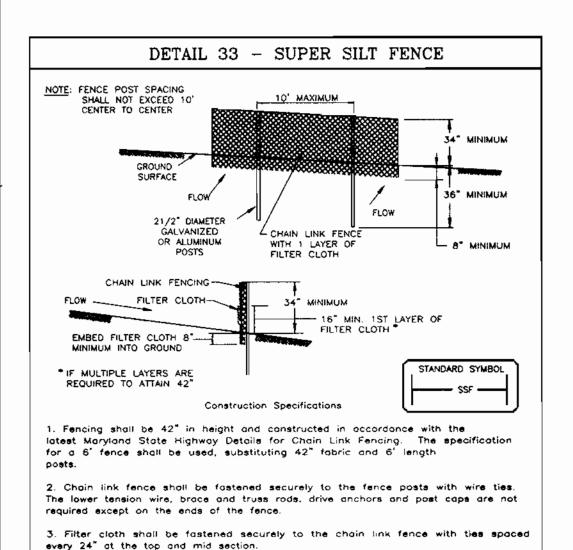
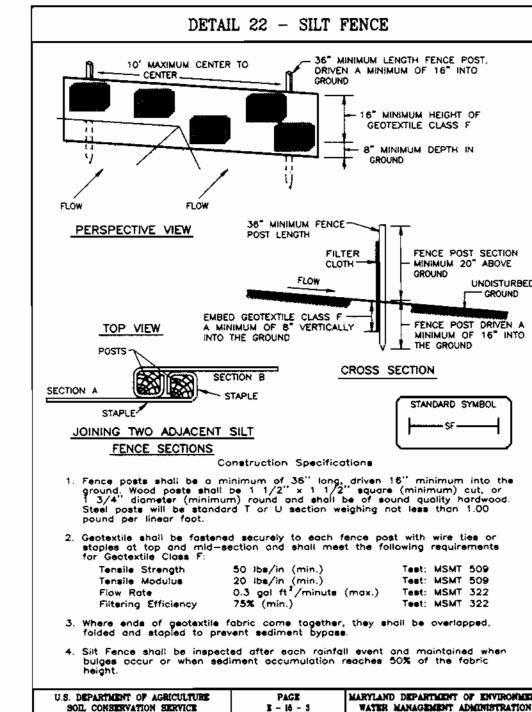
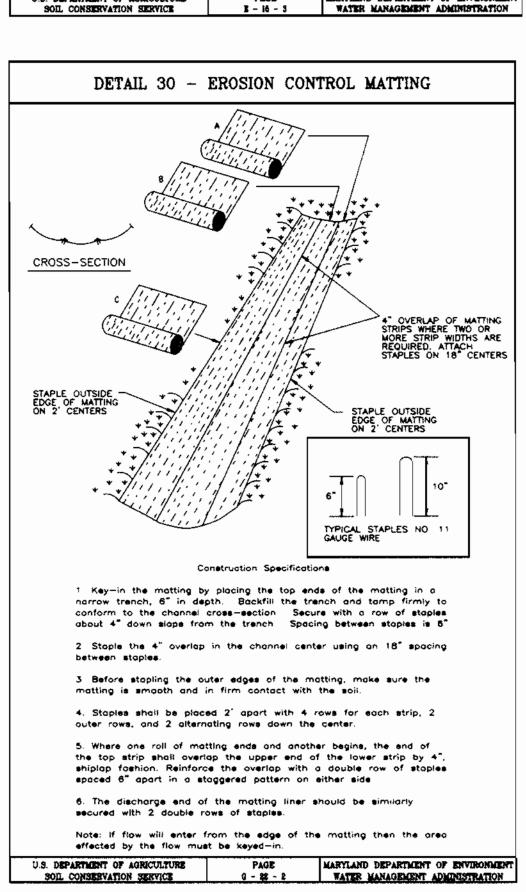


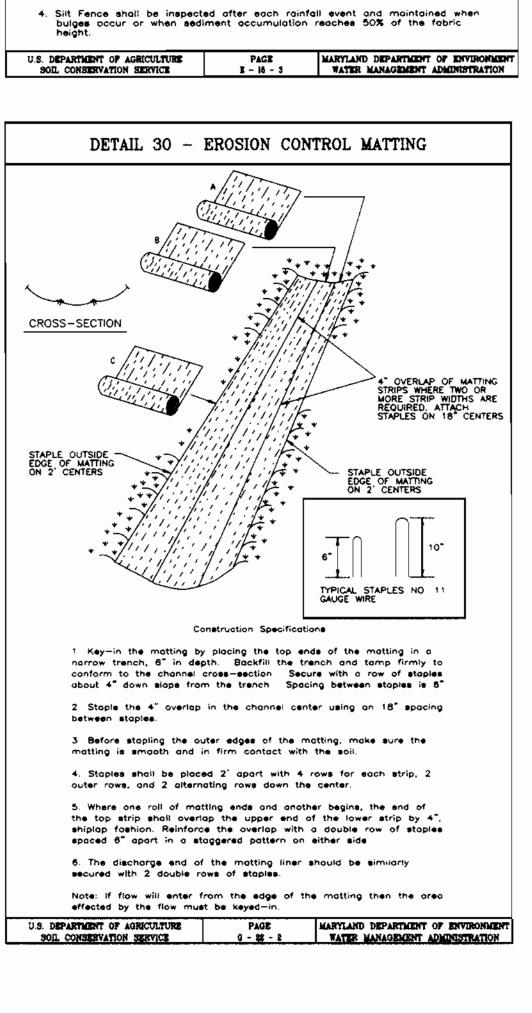
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone ** The plan approval authority may not require single family residences to use geotextile.
- 4. Stone \pm crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of
- 5. Surface Water all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage When the SCE is located at a high spot and has no drainage to convey, a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6° minimum will be required.
- Location A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles

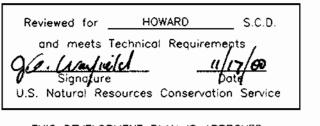
leaving the site must travel over the entire length of the stabilized con-struction entrance. MARYLAND DEPARTMENT OF ENVIRONMEN WATER MANAGEMENT ADMINISTRATION











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

Geotextile Class F:

Tensile Strength

Tensile Modulus

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Filtering Efficiency 75% (min.)

Flow Rate

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

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

PAGE

Test. MSMT 509

Test, MSMT 509

Test: MSMT 322

MARYLAND DEPARTMENT OF ENVIRONMEN

WATER MANAGEMENT ADMINISTRATION

0.3 gal/ft ¹/minute (max.) Test: MSMT 322

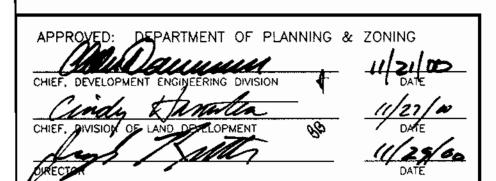
7. Fifter cloth shall be fastened securely to each fence post with wire ties or

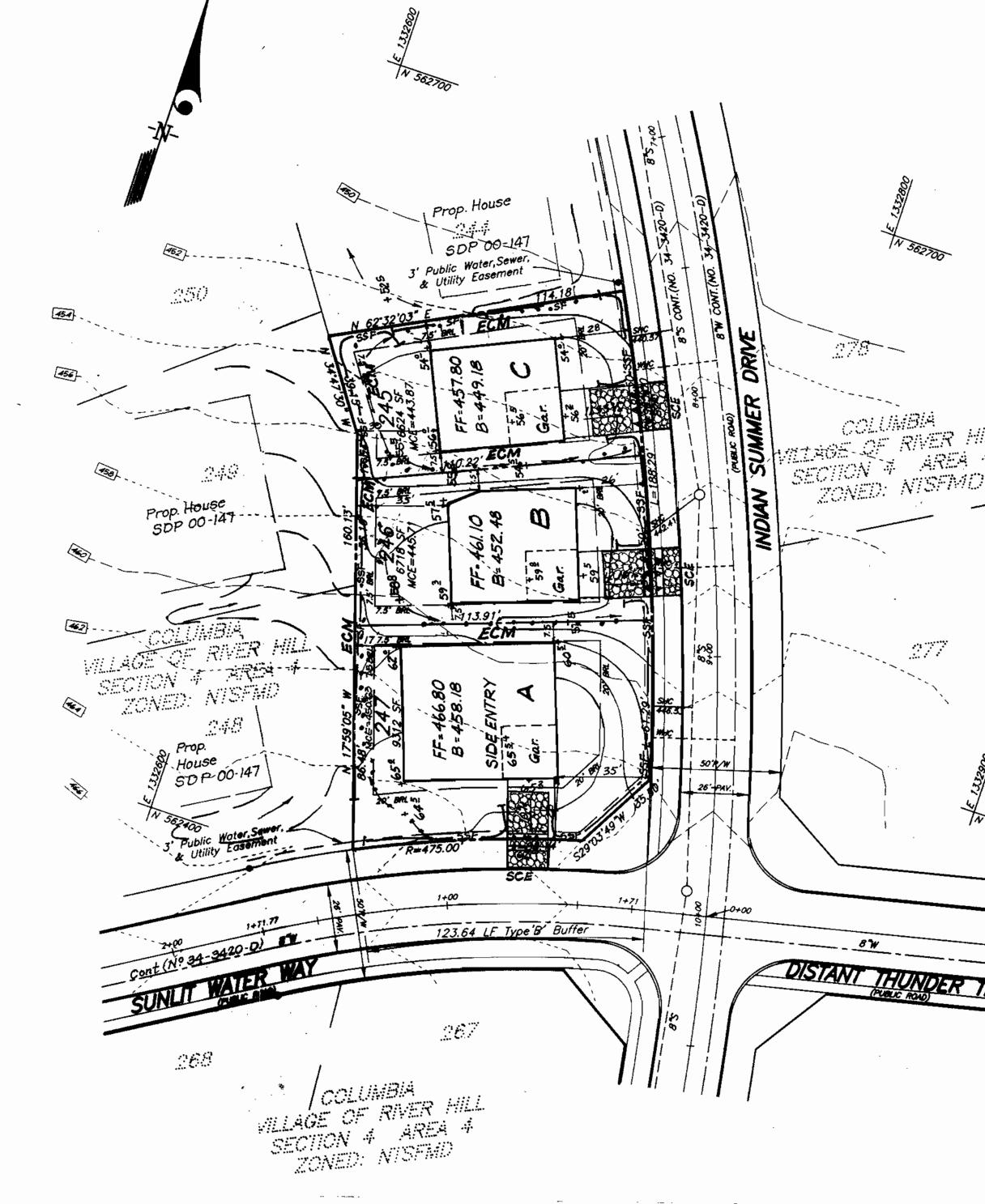
staples at top and mid section and shall meet the following requirements for

50 lbs/in (min.)

20 lbs/in (min.)

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





DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and construction will be done according

to this plan of development and plan for sediment and erosion control and

that all responsible personnel involved in the construction project will have

a Certificate of Attendance at a Department of the Environment Approved

the project. I also authorize periodic on-site inspection by the Howard So

Conservation District or their authorized agents, as are deemed necessary'

NAME R.W. KUNKLE

10-6-00

Training Program for the Control of Sediment and Erosion before beginning

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE

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

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules: 1) Preferred-Apply 2 tons per acre dolomitic limestone (92 lbs/100 sq.ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs./

1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureoform fertilizer (9 lbs/1000 sq.ft.) 2) Acceptable-Apply 2 tons per acre dolomatic limestone (92 lbs/ 1000 sq.ft.) and apply 1000 lbs. per acre 10-10-10- fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow or disc 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/1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. 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/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

MAINTENANCE: inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

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

SOIL AMENDMENTS: Apply 600 lbs. per acre 10-10-10 fertilizer SEEDING: For periods March 1 thru April 30 and from August 15 thr

November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.) For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq.ft.). For the period November 1 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./1000 sq.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/1000 sq.ft.) of emulsified asphalt on areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT

SEDIMENT AND EROSION CONTROL NOTES

- A <u>minimum of 48 hours</u> notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction
- . All vegetative and structural practices are to be installed
- according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto Following initial soil disturbance or redisturbance, permonent or temporary stabilization shall be completed within:

a) 7 calendar days for all perimeter sediment control stuctures, dikes, perimeter slopes and all slopes greater than 3:1

- All sediment traps/basins shown must be fenced and warning
- 5. All disturbed greas must be stabilized within the time period specified above, in accordance with the 1994 MARYLAND STAND-ARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings, sod, temporary seeding
- recommended seeding dates do not allow for proper germination
- 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.

Total Area of Site:
Area Disturbed:
Area to be roofed or paved: 0.18 Acres 0.34 Acres 657 C.Y.

- 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
- Trenches for the construction of utilities shall be backfilled and
- 385 LF The total amount of silt fence = 206 LF
- * It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from

CONSTRUCTION SEQUENCE:

- NO. OF DAYS . Obtain grading permit. . Install tree protection fence. (netal) sediment and erosion control devices and stabilize Excavote for foundations, rough grade and temporarily stabilize.
 Construct structures, sidewalks and driveways.
- accordance with standards and specifications. 7 Upon approval of the sediment control inspector, remove
- sediment and erasion control devices and stabilize.

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

<u>Definition</u>

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

Purpose To provide a suitable soil medium for vegetable 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

- This practice is limited to areas having 2:1 or flotter
- The texture of the exposed subsoil/parent
- material is not adequate to produce vegetative 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
- moterial toxic to plant growth. d. The soil is so acidic that treatment with

H 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.

Construction and Material Specifications

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:

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 agranomist or a 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:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization -Section I - Vegetative Stabilization Methods and
- IV. For sites having disturbed areas over 5 acres:
- On soil meeting topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the 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
- b. Organic content of topsoil shall be not less than
 1.5 percent by weight.
 c. Topsoil having soluble solt 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
- NOTE: Topsail substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in

phyto-toxic materials.

- ii. Place topsoil (if required) and apply soil amendments specified in 20.0 Vegetative Stabilization—Section I— Vegetative Stabilization Methods and Materials.
- When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Trops and Basins.
- Grades on the greas 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 sadding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsailing or other operations shall be corrected in order to prevent the formation of depressions or
- Topsoil shall not be place while the topsoil or subsail 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 seedbed preparation.

SCALE

1" = 30'

DRAWING

JOB NO.

00-046

00-046-SE

OWNER / DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORP 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044



LOTS 245, 246, AND 247 VILLAGE OF RIVER HILL 2 OF 2 SECTION 4 AREA 4 CHECKED FIFTH (5TH) ELECTION DISTRICT HOWARD COUNTY, MARYLAND FILE NO. DATE FOR : PATRIOT HOMES

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Sediment and

18CK

G. NELSON CLARK

Frosion Control represents a practical and workable

plan based on my personal knowledge of the site

conditions and that it was prepared in accordance

with the requirements of the Howard Soil Conservation

- b) 14 days as to all other disturbed or graded areas on the project site. signs posted around their perimeters in accordance with Vol.1, Chapter 7, of the HOWARD COUNTY DESIGN MANUAL, Storm

- and mulching (Sec G).
 Temporary stabilization with mulch alone can only be done when and establishment of grasses.

- stabilized within one working day, or is limited to three pipe lengths.
- 12 The total amount of earth dike * 13. The total amount of super slit fence =
- the sediment control inspector of the site and it's grading permit number at the time of construction

P.O. BOX 1018

10-B-00

