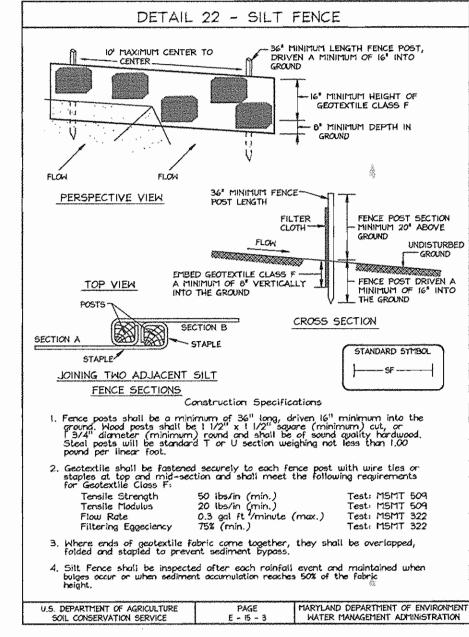


6. Location – A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE PAGE
SOIL CONSERVATION SERVICE F - 17 - 3



# PERMANENT SEEDING NOTES

IMARYLAND DEPARTMENT OF ENVIRONMENT

APPLY TO GRADED OR "CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED. SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: In lieu of soil test recommendations, use the following schedule: Apply 2 tons per acre dolomitic limestone (92 lbs/1000 s.f.) And 900 lbs. / acre (20.7 lbs./1000s.f.) of 10-20-20 before seeding. Harrow or disc into upper 3 in. Of soil. SEEDING: Apply a mixture of Turf Type Tall fescue(80%) and Hard Fescue (20%) in accordance with seeding dates and rates shown in the Permanent Seeding Summary shown on this sheet. For stabilization outside of the seeding dates, apply strow mulch at rates and methods specified below and apply permanent seeding when within proper seeding dates. MULCHING: Immediately following seeding, apply a uniform 1-2 in. Deep layer of un-rotted small grain straw at a rate of 2 tons/acre. (Apply 2.5 Tons/acre if a mulch anchoring tool is used). Straw may be anchored with wood cellulose fiber at a rate of 750 lbs. / acre mixed at a ratio of 50 lbs. Of wood fibre/ 100 gal. of water. Synthetic liquid binders such as Terra Tax II, Acrylic DLR (Agro- Tack), DCA-70, Petroset and other approved equals may be used at rates recommended by the manufacturers.

|   | Pe                                     | ermanen                     | t Seed                 | ling S            | burnr                         | nary                          |                              |                                |
|---|--|-----------------------------|------------------------|-------------------|-------------------------------|-------------------------------|------------------------------|--------------------------------|
| Seed Mixture (Hardiness Zone <u>7a and 6b)</u><br>From Table 25 |  |                             |                        |                   |                               | Fertilizer Rate<br>(10-20-20) |                              |                                |
| No.   | Species                                | Application<br>Rate (1b/ac) | Seeding<br>Dates       | Seeding<br>Depths | N                             | P205                          | K20                          |                                |
| 10  | Tall Fescue (80%)<br>Hard Fescue (20%) | 120<br>30                   | 3/1-5/15<br>8/15-11/15 | 0.5 in.           | 901b/ac<br>(2.01b/<br>1000sf) | 1751b/ac<br>(41b/<br>1000sf)  | 1751b/ac<br>(41b/<br>1000sf) | 2tons/ac<br>(1001b/<br>1000sf) |

### TEMPORARY SEEDING NOTES SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or ather acceptable

SOIL AMENDMENTS: In lieu of soil test recommendations, use the fallowing schedule: Apply 2 tons

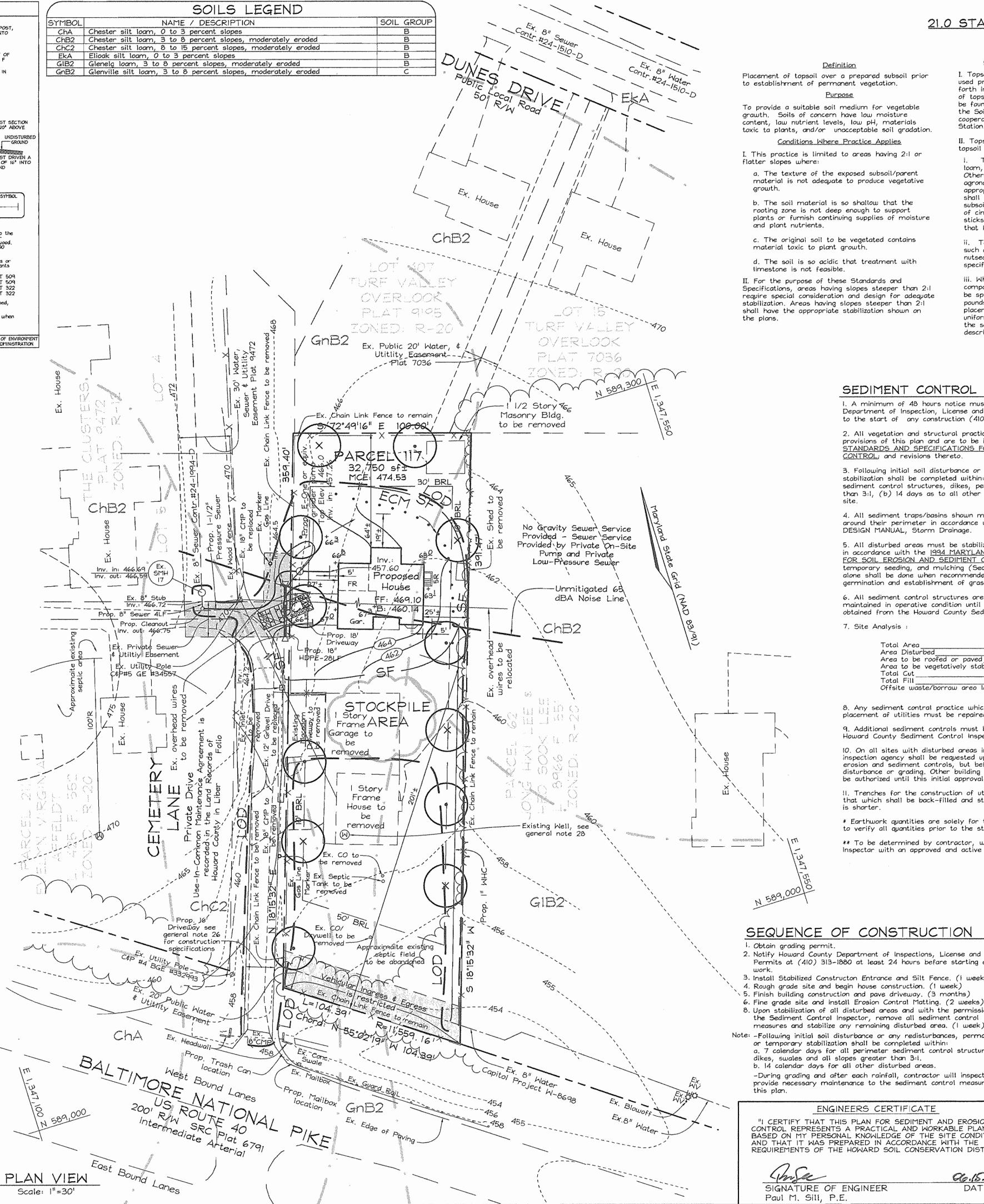
per acre dolomitic limestone(92 lbs/1000 s.f.) And 600 lbs. / acre (15 lbs./1000s.f.) of 10-10-10 before seeding. Harrow or disc into upper 3 in. Of soil. SEEDING: Apply the Maryland State Highway opproved seed mixture of Barley or Rye plus Foxtail Millet in accordance with seeding dates and rates shown in the Temporary Seeding Summory shown on this sheet. For stabilization outside of the seeding dates, apply straw mulch at rates and methods specified below.

MULCHING: Immediately following seeding, apply a uniform 1-2 in. Deep layer of un-rotted small grain straw at a rate of 2 tons/acre. (Apply 2.5 Tons/acre if a mulch anchoring tool is used). Straw may be anchored with wood cellulose fiber at a rate of 750 lbs. / acre mixed at ratio of 50 lbs. Of wood fibre/ 100 gal. of water. Synthetic liquid binders such as Terra Tax II, Acrylic DLR (Agro- Tack), DCA-70, Petroset and other approved equals may be used at rates recommended by the manufacturers.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROLFOR RATE AND METHODS NOT COVERED.

|   |           | Tempora                     | ry Seeding       | g Sun             | nmary           |                |  |
|---|-----------|-----------------------------|------------------|-------------------|-----------------|----------------|--|
| Seed Mixture (Hardiness Zone <u>6a and 7a</u> ) |           |                             |                  |                   | Fertilizer Rate | Lime           |  |
| From Toble 26                                   |           |                             |                  |                   | (10-10-10)      | Rate           |  |
| No.   | Species   | Application<br>Rate (1b/ac) | Seeding<br>Dotes | Seeding<br>Depths |                 |                |  |
| 2   | Barley or | 150 lbs                     | 2/1-11/30 (7a)   | 1/4 in-           | 600 lb/ac       | 2 tons/ac      |  |
|   | Rye plus  | (3.51bs/1000sqf)            | 3/15-10/31 (6a)  | 1/2 in            | (15lb/1000sf)   | (1001b/1000sf) |  |

| DEVELOPER'S CERTIFICATE  |
|--|
| *I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS 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 TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT." |
| SIGNATURE OF DEVELOPER DATE  |
| REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS   |
| USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE   |
| THIS DEVELOPMENT PLAN APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  |
| HOWARD SCD RATE  |
| APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  |
| CHIEF DEVELOPMENT ENGINEERING DIVISION DATE  |
| CHIEF, DIVISION OF LAND DEVELOPMENT DATE   |
| DIRECTOR DATE  |



#### 21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

#### Definition

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

# Purpose

grawth. Soils of concern have low moisture content, law nutrient levels, low pH, materials toxic ta 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
- 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.
- 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

SEDIMENT CONTROL NOTES

to the start of any construction (410-313-1855).

CONTROL; and revisions thereto.

DESIGN MANUAL, Storm Drainage.

Total Area

Total Cut\_

Total Fill

Area Disturbed

Area to be roofed or paved

Howard County Sediment Control Inspector.

Area to be vegetatively stabilized

Offsite waste/borraw areo location

Inspectar with an approved and active grading permit.

germination and establishment of grasses.

1. A minimum of 48 hours notice must be given to the Howard County

Department of Inspection, License and Permits Sediment Control Division prior

2. All vegetation and structural practices are to be installed according to the

3. Following initial soil disturbance or redisturbance, permanent or temporary

stabilization shall be completed within: (a) 7 calendor days for all perimeter

than 3:1, (b) 14 days as to all other disturbed or graded areas on the project

4. All sediment traps/basins shown must be fenced and warning signs posted

around their perimeter in accordance with Vol. 1, Chapter 7, HOWARD COUNTY

5. All disturbed areas must be stabilized within the time period specified above

temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall be done when recommended seeding dates do not allow for proper

in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS

FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod,

6. All sediment control structures are to remain in place and are to be

8. Any sediment control practice which is disturbed by grading activity for

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 shall be back-filled and stabilized within one working day, whichever

\* Earthwork quantities are solely for the purpose of calculating fees. Contractor to verify all quantities prior to the start of construction.

\*\* To be determined by contractor, with pre-approval of the Sediment Control

placement of utilities must be repaired on the same day of disturbance.

obtained from the Howard County Sediment Control Inspector.

maintained in operative condition until permission for their removal has been

sediment control structures, dikes, perimeter slopes, and all slopes greater

STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT

provisions of this plan and are to be in conformance with the 1994 MARYLAND

#### Construction and Material Specifications

II. Topsoil Specifications - Soil to be used as

- i. Topsoil shall be a loam, sandy laam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist 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 lorger that I and 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

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

topsoil must meet the following:

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.

#### II. For sites having disturbed areas under 5 acres: i. Place topsoil (if required) and apply soil omendments as specified in 20.0 Vegetative

Stabilization - Section I - Vegetative Stabilization Methods and Materials.

III. 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 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 ammendments 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 place 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 seedbed preparation.

# LEGEND

Direction of Flow

Existing Contour Proposed Contaur Spot Elevation

-----382 ----®>-+82<sup>53</sup>

mommon

monumen

Existing Trees to Remain

Stabilized Construction Entrance

\_\_\_\_\_ SF\_\_\_\_\_\_SF\_\_\_\_\_ Silt Fence

Limit of Disturbance Erosion Control Mattina 9. Additional sediment controls must be provided, if deemed necessary by the Soil Boundary

# SEQUENCE OF CONSTRUCTION

is shorter.

2. Notify Howard County Department of Inspections, License and Permits at (410) 313-1880 at least 24 hours before starting any

3. Install Stabilized Constructon Entrance and Silt Fence. (I week) 4. Rough grade site and begin house construction. (1 week) 5. Finish building construction and pave driveway. (3 months) 6. Fine grade site and install Erosion Control Matting. (2 weeks) 8. Upon stabilization of all disturbed areas and with the permission of

measures and stabilize any remaining disturbed area. (I week) Note: -Following initial soil disturbance or any redisturbances, permanent or temporary stabilization shall be completed within: a. 7 calendar days for all perimeter sediment control structures, dikes, swales and all slopes greater than 3:1. b. 14 calendar days for all other disturbed areas

-During grading and after each rainfall, contractor will inspect and provide necessary maintenance to the sediment control measures on this plan.

# ENGINEERS CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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 DISTRICT."

SIGNATURE OF ENGINEER

96.15.07 DATE

# OWNER/DEVELOPER

Jason Bonagura 9017 Red Branch Road, Suite 201 Columbia, Maryland 21045 443,865,5336

# SEDIMENT AND EROSION CONTROL PLAN AND DETAILS

# BONAGURA RESIDENCE SINGLE FAMILY DETACHED DWELLING

TAX MAP 16 GRID 24 2ND ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



# Sill · Adcock & Associates · LLC

Engineers · Surveyors · Planners Phone: 443.325.7682 Fax: 443.325.7685 mail: info@saaland.com

hecked By: PS Scale: <u>As Shown</u> Date: <u>June 15, 2007</u> Job Number: <u>06-002</u> 5heet #: <u>2</u> of <u>2</u>

PARCEL 117

SDP-06-135