

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

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

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 hoving 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 moterial 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 the plans.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

Topsoil solvaged 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 solvaged 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 loom, sandy clay loam, loamy sond. 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 valume of cinders, stones, slag, coarse fragments, grovel, sticks, roots, trash, or other materials larger that 1 and 1/2" in

ii. Topsoil must be free of plants or plant parts such as Bermudo grass, quackgrass, Johnsongross, 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 rote 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:

---- CENTER.

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 dictoting 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

500 parts per million shall not be used.

d. No sod or seed shall be placed on soil soil which

used for weed control until sufficient time has

elapsed (14 days min.) to permit dissipation of

NOTE: Topsoil substitutes or omendments, as recommended

by a qualified agronomist or soil scientist and approved by

the appropriate approval authority, may be used in lieu of

ii. Place topsoil (if required) and apply soil ammendments

sediment control practices such as diversions, Grade

Stabilization Structures, Earth Dikes, Slope Silt Fence and

been previously established, shall be maintained, albeit 4"

specified in 20.0 Vegetative Stabilization-Section I-Vegetative

When topsoiling, maintain needed erosion and

ii. Grades on the areas to be topsoiled, which have

iii. Topsoil shall be uniformly distributed in a 4" -

3" layer and lightly compacted to a minimum thickness of 4".

Spreading shall be performed in such a monner that sodding

or seeding can proceed with a minimum of additional soil

corrected in order to prevent the formation of depressions

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.

preparation and tillage. Any irregularities in the surface

resulting from topsailing or other operations shall be

has been treated with soil sterilants or chemicals

.5 percent by weight.

phyto-toxic moterials

Stabilization Methods and Moterials.

natural topsoil.

V. Tapsoil Application

Sediment Traps and Basins.

- 8" higher in elevation.

or water packets.

SEEDBED PREPARATION: Loosen upper three inches of soil by roking, the tested soil demonstrates a pH of less than discing or other acceptable means before seeding, if not previously 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

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules: c. Topsoil having soluble salt content greater than

1) Preferred-Apply 2 tons per acre dolomitic limestone (92 lbs/ 100 sq.ft.) and 600 lbs per ocre 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, opply 400 lbs. per ocre 30-0-0 ureaform fertilizer (9 lbs/1000 sq.ft.)

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE

FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE

2) Acceptable-Apply 2 tons per ocre dolomatic limestone (92 lbs/ 1000 sq.ft.) and apply 1000 lbs. per acre 10-10-10- fertilizer (23 lbs./1000 sq.ft.) before seeding. Horrow 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 ocre (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/ocre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well onchored

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of unrotted small grain straw immediately ofter seeding. Anchor mulch immediately ofter 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 loosened.

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

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per ocre 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 ond seed os 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 unratted small grain strow immediately after seeding. Anchor mulch immediately after application using mulch onchoring tool or 218 gallons per ocre (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.

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

SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the stort of any construction (313-1855).

2. All vegetation 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 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

4. All sediment traps/basins shown must be fenced and worning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, HOWARD COUNTY DESIGN MANUAL, Storm Drainage.

5. All disturbed oreos must be stabilized within the time period specified above in occordonce with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall be done when recommended seeding dates do not allow for proper germination and establishment of grosses.

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 abtained from the Howard County Sediment Control Inspector.

7. Site Analysis Area Disturbed _____ Area to be roofed or payed Area to be vegetatively stabilized _____ Total Cut _____ Total Fill ___ Offsite waste/borrow area location ____

Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same doy of disturbance.

Additional sediment controls 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 shall be back-filled and stabilized within one working day, whichever is shorter

12. Estimates of earthwork quantities are provided solely for the purpose of calculating

* To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and octive grading permit

SEQUENCE OF CONSTRUCTION

1. Obtain grading permit.

2. Notify Howard County Bureau Of Inspections and Permits (410,313,1880) at least 24 hours before starting any work.

3. Construct Stabilized Construction Entrances. (1 day)

4. Install silt fence and erosion control motting. (2 days) 5. After obtaining permission from the sediment control inspector to proceed, rough grode site. (4 doys)

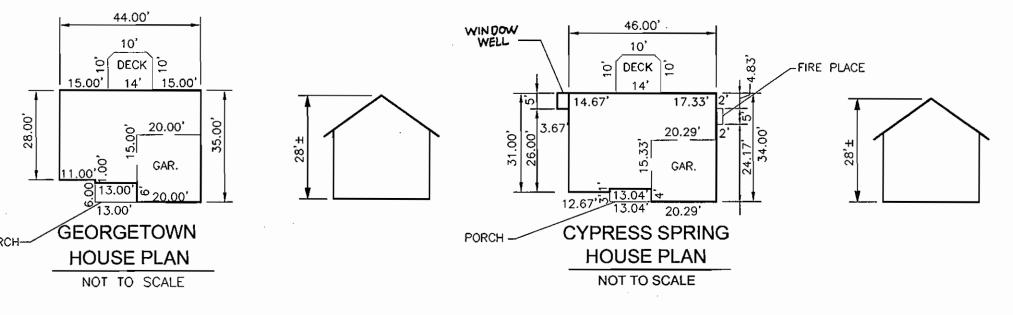
6. Construct house. The first floor elevation cannot be more than 1' higher or 0.2' lower than the elevations shown on this plan. The foundation footprint must be within the generic block. (3 months)

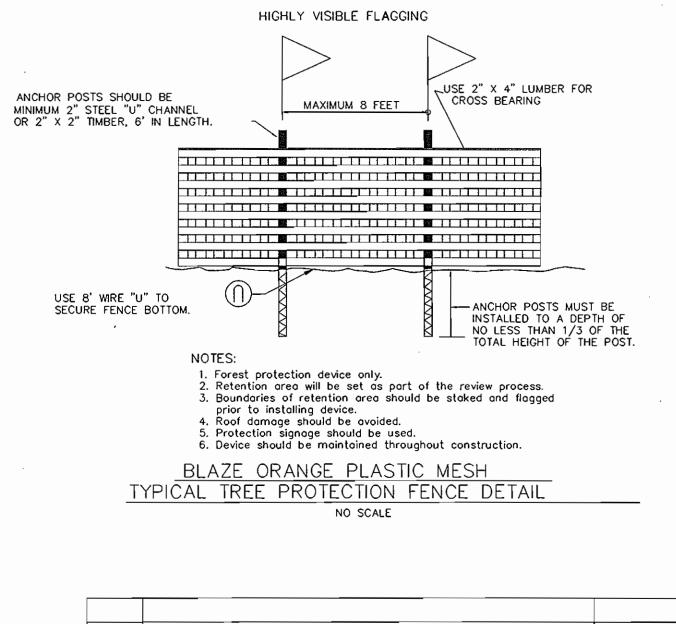
7. Construct Noisewall (F-04-007) 8. Upon stabilization of all disturbed areas and with the approval of the sediment control inspector, remove all sediment control devices.

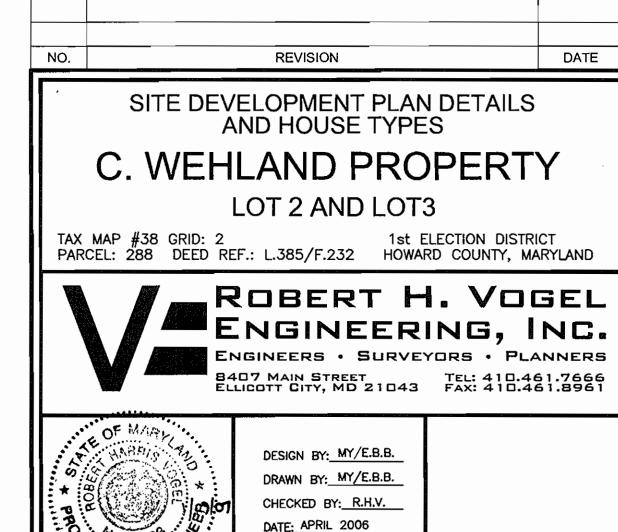
NOTES

1. DURING GRADING AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE THE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN

2. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLIED WITH.







SCALE: AS SHOWN

W.O. NO.: 2034006

ROBERT H. VOGEL. PE No.1619

DEVELOPER TRINITY QUALITY HOMES

3675 PARK AVE., STE. 301

ELLICOTT CITY, MARYLAND 21043

(410) 480-0023

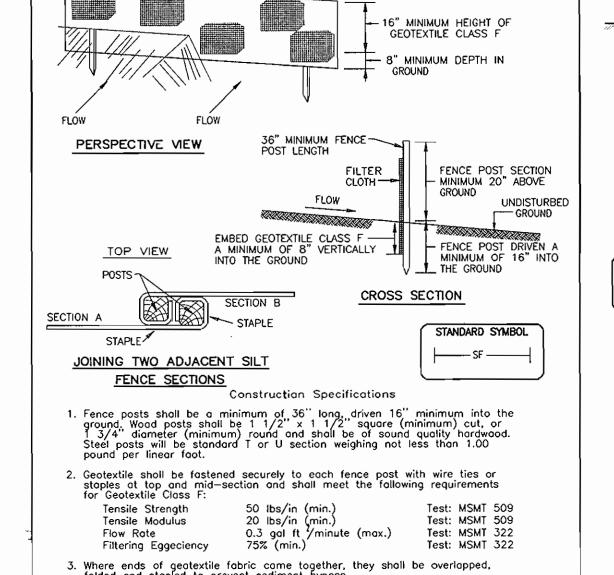
OWNERS

PFAU MICHAEL L

3675 PARK AVE., STE. 301

ELLICOTT CITY, MARYLAND 21043

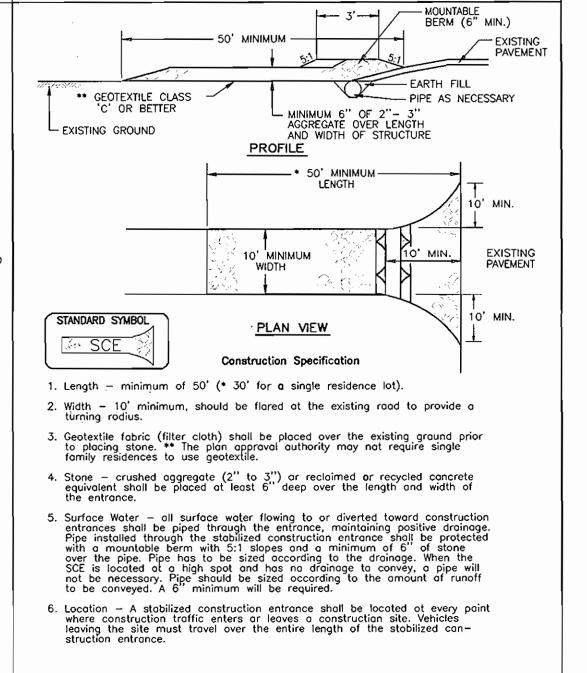
(410) 480-0023



DETAIL 22 - SILT FENCE

36" MINIMUM LENGTH FENCE POST,

DRIVEN A MINIMUM OF 16" INTO



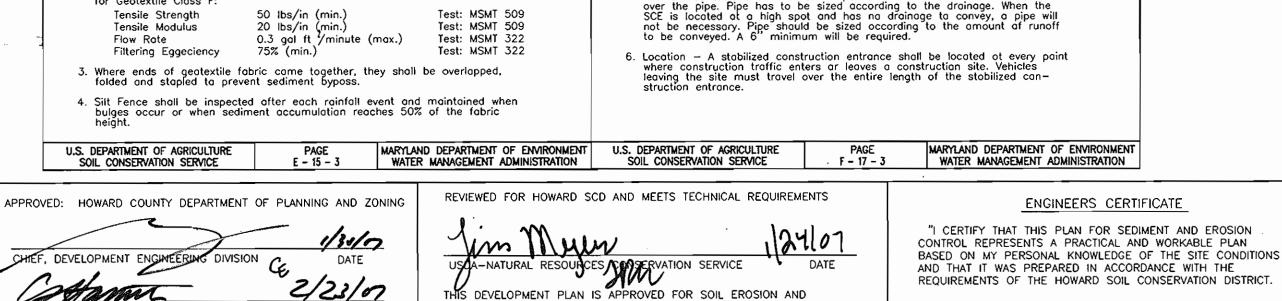
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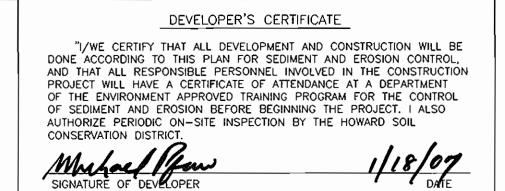
SIGNATURE OF ENGINEER

ROBERT H. VOGEL

1/19/07

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE





SHEET 2