

# 21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

#### **DEFINITION**

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

#### CONDITIONS WHERE PRACTICE APPLIES

- THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES
- 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 ENOUGH TO SUPPORT PLANTS OR

FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT

- 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.
- . 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 MATERIALS

#### **SPECIFICATIONS**

- TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED 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.
- TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
- A. 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 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.
- B. TOPSOIL MUST BE FREE OF PLATS OR PLAT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY. THISTLE, OR OTHERS AS SPECIFIED.
- C. 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 LBS/1000 SF) PRIOR TO THE PLACEMENT OF TOPSOIL. LIMESTONE SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.
- . FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES: PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION — SECTION 1 — VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:

PERCENT BY WEIGHT.

- A. ON SOIL MEETING TOPSOIL SPECIFICATION. OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
- 1. 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. 2. ORGANIC CONTENT OF TOPSOIL SHALL NOT BE LESS THAN 1.5
- 3. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
- 4 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 PREVENT 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
- B. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

#### . TOPSOIL APPLICATION:

- A. 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.
- B. GRADES ON THE AREAS TO BE TOPSOILED. WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4"-8" HIGHER IN ELEVATION.
- C. 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.
- D. 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 SEEDBED PREPARATION.

## 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/ACRE 10-10-10- FERTILIZER (14 LBS/1000 SF).

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL/ACRE ANNUAL RYE (3.2 LBS/1000 SF). FOR THE PERIOD MAY 1 THRU AUGUST 14. SEED WITH 3 LBS/ACRE WEEPING LOVEGRASS (0.07 LBS/1000 SF) FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS/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/ACRE (70 TO 90 LBS/1000 SF) OF UNROTTED SMALL-GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS/ACRE (5 GAL/1000 SF) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT OR HIGHER, USE 348 GALLONGS/ACRE (8 GAL/1000 SF) FOR ANCHORING.

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

# PERMANENT SEEDING NOTES

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 ONE OF THE FOLLOWING SCHEDULES:

- . PREFERRED APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/100 SF) AND 600 LBS/ACRE 10-10-10 FERTILIZER (14 LBS/1000 SF) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT THE TIME OF SEEDING, APPLY 400 LBS/ACRE 20-0-0 UREAFORM FERTILIZER (9 LBS/1000 SF)
- ACCEPTABLE APPLY 2 TONS PER ACRE DOLOMATIC LIMESTONE (92 LBS/1000 SF) AND APPLY 1000 LBS/ACRE 10-10-10 FERTILIZER (23 LBS/1000 SF) 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/ACRE (1.4 LBS/1000 SF) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31. SEE WITH 60 LBS/ACRE OF KENTUCKY 31 TALL FESCUE AND 2 LBS/ACRE (0.05 LBS/1000 SF) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 29, PROTECT SITE BY OPTION 1) 2 TONS/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 FÉSCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1 1/2 TO 2 TONS/ACRE (70 TO 90 LBS/1000 SF) OF UNROTTED SMALL-GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS/ACRE (5 GAL/1000 SF) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT OR HIGHER. USE 348 GALLONS/ACRE (8 GAL/1000 SF) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

# 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 START OF ANY CONSTRUCTION
- 2. ALL VEGETATION AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISION 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 STRÚCTURES. 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 WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL 1. CHAPTER 7, HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITH THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOLD, 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 GRASSES.
- 6. ALL SEDIMENT CONTROLS 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 AREA DISTURBED AREA TO BE ROOFED OR PAVED AREA TO BE VEGETATIVELY STABILIZED TOTAL CUT
- OFFSITE WATE/BORROW AREA LOCATION ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING
- ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY 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 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. \*TO BE DETERMINED BY CONTRACTOR, WITH PRE-APPROVAL OF THE SEDIMENT

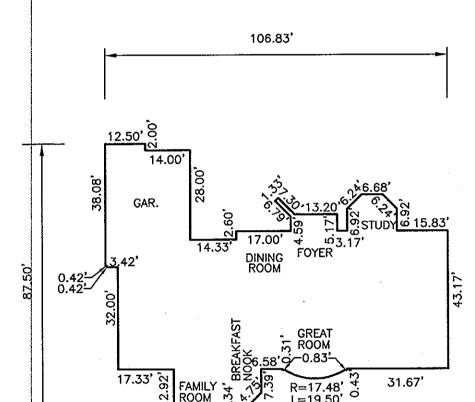
CONTROL INSPECTOR WITH AN APPROVED AND ACTIVE GRADING PERMIT.

# SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT.
- NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410.313.1880) AT LEAST 24 HOURS BEFORE STARTING ANY WORK. INSTALL SEDIMENT CONTROL MEASURES AS SHOWN ON PLAN AND
- IN ACCORDANCE WITH DETAILS PERIODICALLY AND AFTER RAIN. (5 DAYS)
- . AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR TO PROCEED, GRADE SITE. (2 WEEKS)
- CONSTRUCT HOUSES. THE FIRST FLOOR ELEVATIONS CANNOT BE MORE THAN 1' HIGHER OR 0.2' LOWER THAN THE ELEVATIONS SHOWN ON THIS PLAN. (6 MONTHS) STOCKPILE TO REMAIN APPROXIMATLEY 6 MONTHS
- INSTALL DRIVEWAYS AND LANDSCAPING. (3 DAYS)
- REMOVE STOCKPILE, FINISH GRADING SITE. (1 DAYS)
- UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES. (2 DAYS)

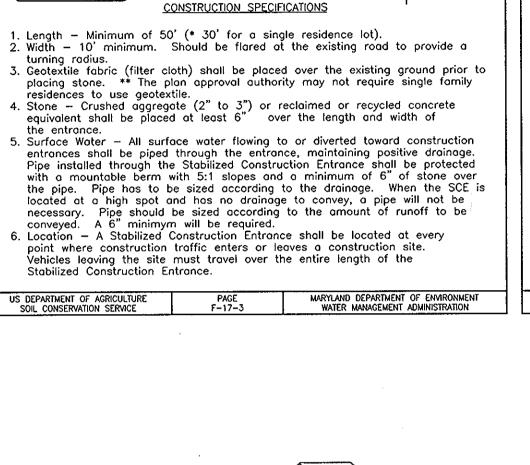
#### **NOTES**

- . DURING GRADING AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE THE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN
- . FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLIED WITH.



NOTE: THE MAX. MEAN HEIGHT PERMITTED IS 34' PER FDP PHASE 194-A.

HOUSE PLANS



DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

**PROFILE** 

PLAN VIEW

MINIMUM 6" OF 2"-

\* 50' MINIMUM LENGTH

AGGREGATE OVER LENGTH

AND WIDTH OF STRUCTURE

GROUND

\*\* GEOTEXTILE CLASS

'C' OR BETTER ----

STANDARD SYMBOL

SCE S

BERM (6" MIN)

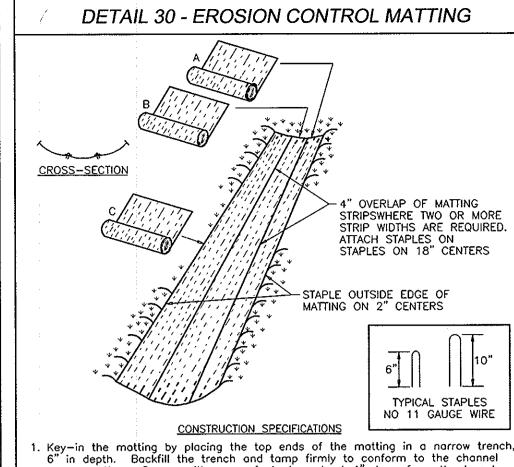
PIPE AS NECESSARY

EARTH FILL

EXISTING

PAVEMENT

PAVEMEN<sup>®</sup>



cross-section. Secure with arow of staples, about 4" down from the trench. Spacing between staples is 6".

- . Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
- and 2 alternating rows down the center. . 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 spaced 6" apart in a staggered pattern on either side.
- 6. The discharge end of the matting liner should be similarly secured with

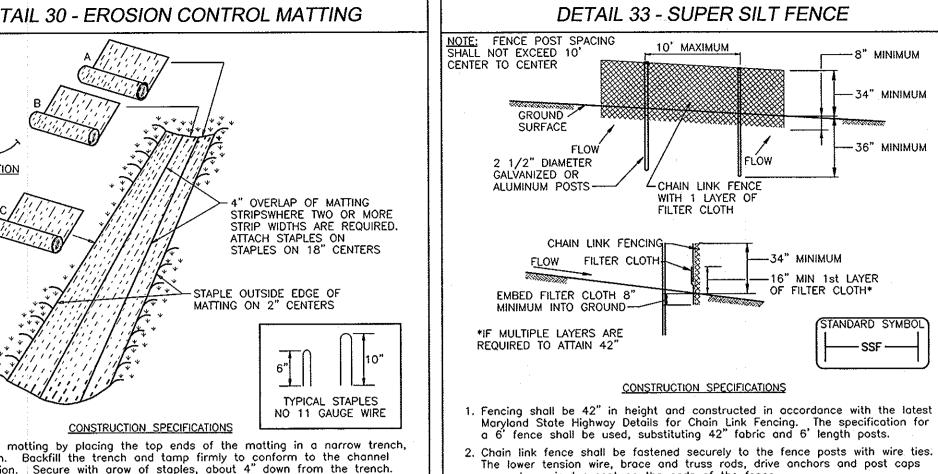
34' MEAN ROOF HEIGHT RESTRICTION

2 double rows of stoples.

STRIPSWHERE TWO OR MORE STRIP WIDTHS ARE REQUIRED. TYPICAL STAPLES NO 11 GAUGE WIRE

- 2. Staple the 4" overlap in the channel center using an 18" spacing between
- . Staples shall be placed 2" apart with 4 rows for each strip, 2 outer row,

- Note: If flow will enter from the edge of the matting then the area effected by the flow must be keved-in. US DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE



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

- every 24" at the top and midsection. 4. Filter cloth shall be embedded a minimum of 8" into the ground.
- 5. 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' develop in the silt fence, or when silt reaches 50% of fence height. . Filter cloth shall be fastened securely to each fence post with wire ties or

staples at top and midsection and shall meet the following requirements for Geotextile Class F 50 lbs/in (min) 20 lbs/in (min) Tensile Strength Test: MSMT 509 Tensile Modulus

0.3 gal/ft <sup>2</sup>/minute (max) Test: MSMT 322 Flow Rate Test: MSMT 322 Filtering Efficiency US DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

- PRUNE AS DIRECTED

---- WIRE GUYS TURNBUCKLES NOTE : ALL MATERIALS AS SPECIFIED - PLANT SAUCER - REMOVE BURLAP FROM TOP 1/3 OF BALL 2"X4"X3" WOOD STAKES BACKFILL MATERIAL COMPACTED BACKFILL MATERIAL 6" MIN. - 1'-0" ALL SIDES

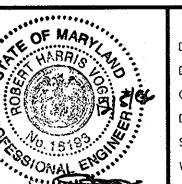
TYPICAL EVERGREEN TREE PLANTING DETAIL

REVISION DATE SITE DEVELOPMENT PLAN WEISS RESIDENCE

VILLAGE OF HARPER'S CHOICE SINGLE FAMILY DETACHED DWELLING

SECTION 5, AREA 9, PHASE TAX MAP #29 PARCEL 370 HOWARD COUNTY, MARYLAND 5TH ELECTION DISTRICT

ROBERT H. VOGEL ENGINEERING, INC. ENGINEERS . SURVEYORS . PLANNERS 8407 MAIN STREET TEL: 410.461.7666 ELLICOTT CITY, MD 21043 FAX: 410.461.8961



DESIGN BY: RHV/MY DRAWN BY: CHECKED BY: AS SHOWN SCALE: W.O. NO.: 06-27

ASDA-NATURAL RESOURCES, CONSERVATION SERVICE THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT 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.

12/5/66  $\langle \omega \rangle$ ROBERT H. VOGEL, PE #16193

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

W/ Whi 12/5/2006

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS Jim Migus

12/11/06 DATE

1.362 AC 0.785 AC

.249 AC

860 CY

860 CY

0.536 AC.

CONSERVATION DISTRICT.

ROBERT J. WEISS

ROSERT H. VOGEL, PE No.1619

PREPARED FOR

Rob and Cathy Weiss

4561 Hemlock Cone Way

Ellicott City, MD 21042

SDP-07-014