

5DP 06-28

ing vegetation as cover for barren soil to protect it from forces that cause erosion

regetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources.

CONDITIONS WHERE PRACTICE APPLIES

This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration Olup to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary Soil Stockpiles, cleared areas being left idle between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dams, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc.

effects on water quality and quantity Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices must remain in place during grading, seedbed preparation, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS

- Site Preparation i. Install erosion and sediment control structures (either temporary of permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins. ii. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually
- necessary for temporary seeding. iii. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed area over 5 acres. Soil Amendments (Fertilizer and Lime Specifications)
- . Soil tests must be performed to determine the exact ratios and application rates for both lime and fertifizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
- . Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee
- iii. Lime materials shall be ground limestone thydrated or burnt lime may be substituted which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a "100 mesh sieve and 98-100% will pass through a "20
- mesh sieve.

 iv. Incorporate time and fertilizer into the top 3-5" of soil by disking or other suitable means.
- a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not b rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 3:1) should be tracked leaving the surface in an irregular condition with ridges
- Apply fertilizer and lime as prescribed on the plans. in corporate time and fertilizer into the top 3-5" of soil by disking or other suitable means. Permanent Seeding
 a. Hinimum soil conditions required for permanent vegetative establishment:
 1. Soil pH shall be between 6.0 and 7.0.

running parallel to the contour of the slope.

- Soluble salts shall be less than 500 parts per million (ppm). The soil shall contain less than 40% clay, but enough fine grained material 030% sift plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if lovegrass or
- serecia lespedezas is to be planted, then a sandy soil (C30% silt plus clay) would be acceptable. . Soil shall contain 1.5% minimum organic matter by weight. Soil must contain sufficient pore space to permit adequate root penetration.

If these conditions cannot be met by soils on site, adding topsoil is required

- in accordance with Section 21 Standard and Specification for Topsoil Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from
- Apply soil amendments as per soil test or as included on the plans. Mix soil amendments into the top 3-5° of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches and ready the area for seed and application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving soil in an irregular condition with nidges running parallel to the contour of the slope. The top 1-3" of soil should be loose and friable. Seedbed loosening may not be necessary on newly disturbed areas.

i. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job.

Note: Seed tags shall be made available to the inspector to verify type and rate of seed used. ii. Inoculant - The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species. Inoculants shall not be used later than the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note it is very important to keep inoculant as cool as possible until used. Temperatures above 75°-00° F. can weaken bacteria and make the inoculant less effective.

Methods of Seeding

i. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeded, or a cultipacker seeder. a. If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: nitrogen maximum of 100 bs. per acre total of soluble nitrogen. P205 (phosphorous), 200 bs/ac; K20 (potassium): 200 bs/ac.

a. Lime - use only ground agricultural limestone. Oup to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and

without interruption.

ii. Dry Seeding: This includes use of conventional drop or broadcast spreaders.

L. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 265 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to soil contact. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction. iii. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.

Cultipacking seeders are required to bury the seed in such a fashion as to provide at east 1/4 inch of soil covering. Seedbed must be firm after planting. o. Where practical seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

Mulch Specifications (In order of preference) i. Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonable bright in color, and shall not be musty, molity, caked, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.

Wood Cellulose Fiber Mulch (WCFM)
 a. WCFM shall consist of specially prepared wood cellulose processed into a uniform

fibrous physical state.

 WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread surry.
 WCFM, including dye, shall contain no germination or growth inhibiting factors. WCFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous sturry. The mulch material shall form a blotter-like ground cover, on application, having

moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.

WCFM material shall contain no elements or compounds at concentration levels that

f. WCPM must conform to the following physical requirements fiber length to approximately 10 mm., diameter approximately 1 mm., pH range of 4.0 to 8.5, ash content of 1.6% maximum and water holding capacity of 90% minimum. Note: Only sterile straw mulch should be used in areas where one species of grass is desired.

G. Mulching Seeded Areas - Mulch shall be applied to all seeded areas immediately after seeding. If grading is completed outside of the seeding season, mulch along shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.

i. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of between 1" and 2". Much applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.

iii. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water. Securing Straw Mulch Ohluch Anchorings: Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard

A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safety. It used on sloping land, this practice should be used on the contour if possible.

Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and

he mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such a in valleys and crest of banks. The remainder of area should be appear uniform after binder application. Synthetic binders - such as Acrylic DLR (Agro-Tack), DCA-70 Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.

iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long

Incremental Stabilization - Cut Slopes i. All cuts slopes shall be dressed, prepared, seeded and mulched as the work progresses. Slopes shall be excavated and stabilized in equal increments not to exceed 15". ii. Construction sequence (Refer to Figure 3 below):

 Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation. b. Perform Phase 1 excavation, dress, and stabilize c. Perform Phase 2 excavation, dress and stabilize. Overseed Phase 1 areas as

d. Perform final phase excavation, dress and stabilize. Overseed previously seeded Note: Once excavation has begun the operation should be continuous from gnubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mutch. Any interruptions int he operation of completing the operation

out of the seeding season will necessitate the application of temporary stabilization. . Incremental Stabilization of Embankments - Fill Slopes Embankments shall be constructed in lifts as prescribed on the plans.

 Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches 15, or when the grading operation ceases as prescribed in the plans. iii. At the end of each day, femporary berms and pipe slope drains should be constructed along the top edge

à sediment trapping device.

iv. Construction sequence: Refer to Figure 4 (below). a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the fill. Construct slope silt fence on low side of fill as shown in Figure 5, unless other methods shown on the plans address this area.
Place Place 1 embarkment, dress and stabilize.

Place Phase 2 embankment, dress and stabilize. Place final phase embankment, dress and stabilize. Overseed previously seeded

areas as necessary.

Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of and placement of topsoil (if required) grading and permanent seed and mulch. any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

SEDIMENT CONTROL NOTES

1) A MINIMUM OF 40 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LISCENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1055). 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 SPECS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO. 3) FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES. DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER 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. CHAPTER 12. OF THE HOWARD COUNTY DESIGN MANUAL STORM DRAINAGE 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 FOR

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 CONTROL INSPECTOR.

TOTAL AREA OF SITE 0.4132 ACRES 0.4132 ACRES AREA DISTURBED 0.1872 ACRES AREA TO BE ROOFED OR PAVED AREA TO BE VEGETATIVELY STABILIZED 0.2260 ACRES TOTAL CU 347 CU.YD5. 347 CU.YDS. TOTAL FILL

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

1,000 feet

SUPER SILT FENCE, TREE PROTECTION FENCE

NOT TO SCALE

** GEOTEXTILE CLASS 'C' OR BETTER - EXISTING GROUND Construction Specification 1. Length - minimum of 50' (*30' for single residence lot). 2. Width - 10' minimum, should be flared at the existing road to provide a turning 3. 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 - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the 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 ha 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 construction entrance. STABILIZED CONSTRUCTION ENTRANCE

Grass Area Proposed Driveway Equal To Width Of Paving 1.5-3% Slope 2-5% Slope TYPICAL DRIVEWAY SECTION

MOUNTABLE

MINIMUM 6" OF 2"-3" AGGREGATE

OVER LENGTH AND WIDTH OF STRUCTURE

PROFILE

PLAN VIEW

* 50' MINIMUM

LENGTH

EXISTING PAVEMENT

SCE SCE

SHALL NOT EXCEED 10'

TINTINTINTINT

GROUND /

SURFACE

CHAIN LINK FENCING

EMBED FILTER CLOTH 8"

MINIMUM INTO GROUND

* IF MULTIPLE LAYERS ARE

FILTER CLOTH

21/2" DIAMETER

GALVANIZED

OR ALUMINUM

—— CENTER TO CENTER

STANDARD SYMBOL

718/18

NOT TO SCALE RAINGARDEN

PERMANENT SEEDING (SEC. 51). SOD (SEC. 54). TEMPORARY SEEDING (SEC. 50). AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN DNLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER

THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT SITE ANALYSIS:

BY THE INSPECTION AGENCY IS MADE. 11) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGHTS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

Tensile 5 Tensile M Flow Rate Filtering 1	odulus	20 0.: 75% (r		Test: MSMT 509 Test: MSMT 509 ax.) Test: MSMT 322 Test: MSMT 322
		Desi	gn Criteria	
Slope	Slope		Slope Length	Silt Fence Length
	ope Steepness		(maximum)	(maximum)
0 - 10%	0 - 1		Unlimited	Unlimited
10 - 20%	10:1 -		200 feet	1,500 feet

100 feet

50 feet

500 feet

250 feet

FOR NON-ROOFTOP DISCONNECT CREDIT

REQUIRED TO ATTAIN 42" 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.

10' MAXIMUM

∠ CHAIN LINK FENCE

FILTER CLOTH

778778778

WITH 1 LAYER OF

34" MINIMUM

(SLOPE VARIES)

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

FILTER CLOTH

FLOW

NOTE: FENCE POST SPACING

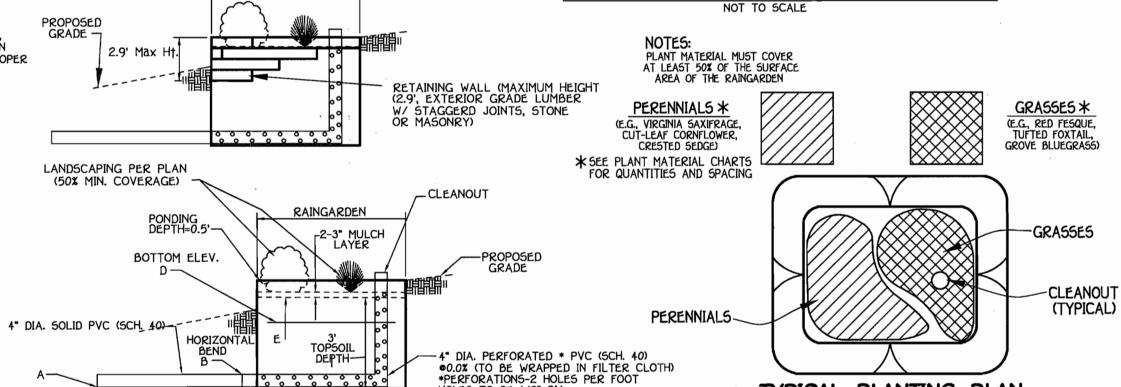
2'± Orange streamers

36" MINIMUM

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 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





TERRACED RAIN GARDEN

NOTE: FOR ADDITIONAL DETAILS SEE HOWARD COUNTY DEPARTMENT OF PLANNIG AND ZONING BULLETIN ENTITLED "RESIDENTIAL RAIN GARDENS" DATED JULY 0, 2003.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATE RAINGARDENS

HOLES TO BE 1/2" DIA.

1. ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH LAYER AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE INSPECTED FOR DISEASE AND INSECT INFESTATION. MAINTENANCE WILL ADDRESS DEAD

AND PRUNING. 2. SHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR, (SPRING AND FALL). THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT. TREATMENT OF ALL DISEASED TREES AND SHRUBS AND

4. SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY

REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES. 3. MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY

SUMMARY TABLE THE FOLLOWING IS A SUMMARY OF THE Rev, WQV AND CPV REQUIREMENTS VOLUME PROVIDED NOTES VOLUME REQUIRED REQUIREMENT 0.013 AC. WITH PERCENT AREA METHOD BY NON-OR 0.0005 AC. FT. ROOFTOP DISCONNECTION WQV0.0080 AC.FT. 0.0080 AC. FT. WITH RAINGARDENS DISCHARGE RATE IS 0.74 N/A cfs: LESS THAN THE 2.0 cfs MANDATED BY MDE

NOTE: BOTH QV (OVERBANK FLOOD PROTECTION OR 10-YEAR STORM AND Qf (EXTREME FLOOD VOLUME OR 100-YEAR STORM) ARE NOT REQUIRED FOR THIS SITE SINCE THIS WATERSHED AREA IS NOT CLASSIFIED AS ONE OF THE SENSITIVE WATERSHED AREAS FOR HOWARD COUNTY.

- II	,,,	BLUEGRASS]					
	45	CRES SED	STED IGE		1 FT.							
ייי												
		RAINGARDEN DATA										
	RAINGARDEN NO.	(.VAI)	В	С	Д	£	F	G				
	361	149.86	149.86	149.86	152.86	153.36	9'	11'				

382 148.57 148.57 148.57 151.57 152.07 9' 14'

363 147.67 147.67 147.67 150.67 151.37 9' 14'

384 147.08 147.08 147.08 150.08 150.08 9' 16'

386 145.50 145.50 145.50 147.00 148.0 3' 13'

146.26 146.26 146.26 149.26 149.76 9' 12'

MAXIMUM SPACING (FT.)

RAIN GARDEN PLANT MATERIAL

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT 2. INSTALL SEDIMENT EROSION CONTROL DEVICES AND TREE PROTECTION FENCE AS SHOWN ON PLAN. 3. CLEAR AND GRUB TO LIMITS OF DISTURBANCE 4. INSTALL TEMPORARY SEEDING

HRISTINE COLLINS

FF 158.20_

LB 149.45

FF 158.20

B_149.45 -

RAIN GARDEN----

SEE DETAIL SHEET 2

HARWOOD PARK

HRISTINE COLLAYS

8"W CONTRACJ-NO. W408B-34740A

EXISTING OAK

TREE TO BE

SAVED

IN 6.54 EA

7 DAYS

2 DAYS

4 DAYS

2 DAYS

60 DAYS

150' P-4 UNIT PLANTINGS

F 159.40

150' P-2 NO LANDSCAPE BUFFER REQUIRED (interior lot)

*6397

EXISTING

HOUSE

B 150.65

8"W CONTRACT ANO! W-108B-34740A

8"5 CONTRACT, NO. 23-5

EXISTING

ELEVATED-

RAIN GARDEN

SEE DETAIL SHEET 2

HOUSE

EXISTING WOOD

RETAINING WALL

LOCATED ON LOT

윟 SCE/

F 160.50

ZONED R-12

EXISTING

HOUSE

WATER CODE

5. CONSTRUCT BUILDINGS 6. FINE GRADE SITE AND INSTALL PERMANENT SEEDING, SWM DEVICES AND LANDSCAPING

14 DAYS 7. REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED AND PERMISSION IS GRANTED BY E/S CONTROL INSPECTOR. 7 DAYS

FISHER, COLLINS & CARTER, INC. 'IL ENGINEERING CONSULTANTS & LAND SURVEYOR QUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIK ELLICOTT CITY, MARYLAND 21042

REVISION DATE

33 - 50%

3:1 - 2:1

2:1 +

STORM EVENTS.

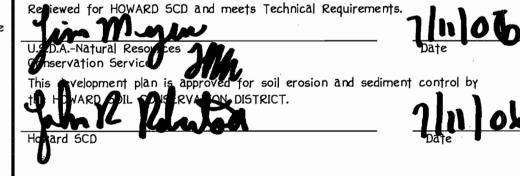
ENGINEER'S CERTIFICATE "I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."



"I/We certify that all development and construction will be done according to this plan, for sediment and erosion control 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 inspection by the Howard Soil Conservation District."

3.29.06

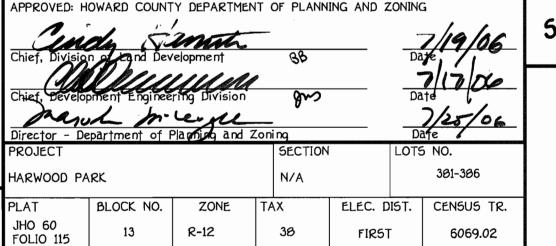
3-29 -06



TYPICAL PLANTING PLAN

FOR RAINGARDENS LOTS 381-386

OWNER/BUILDER/DEVELOPER WOODROW W. GUYTON JR. & BONNIE LEE GUYTON 6624 MELROSE AVENUE ELKRIDGE, MD. 21075-5641 410-730-3940



SEWER CODE

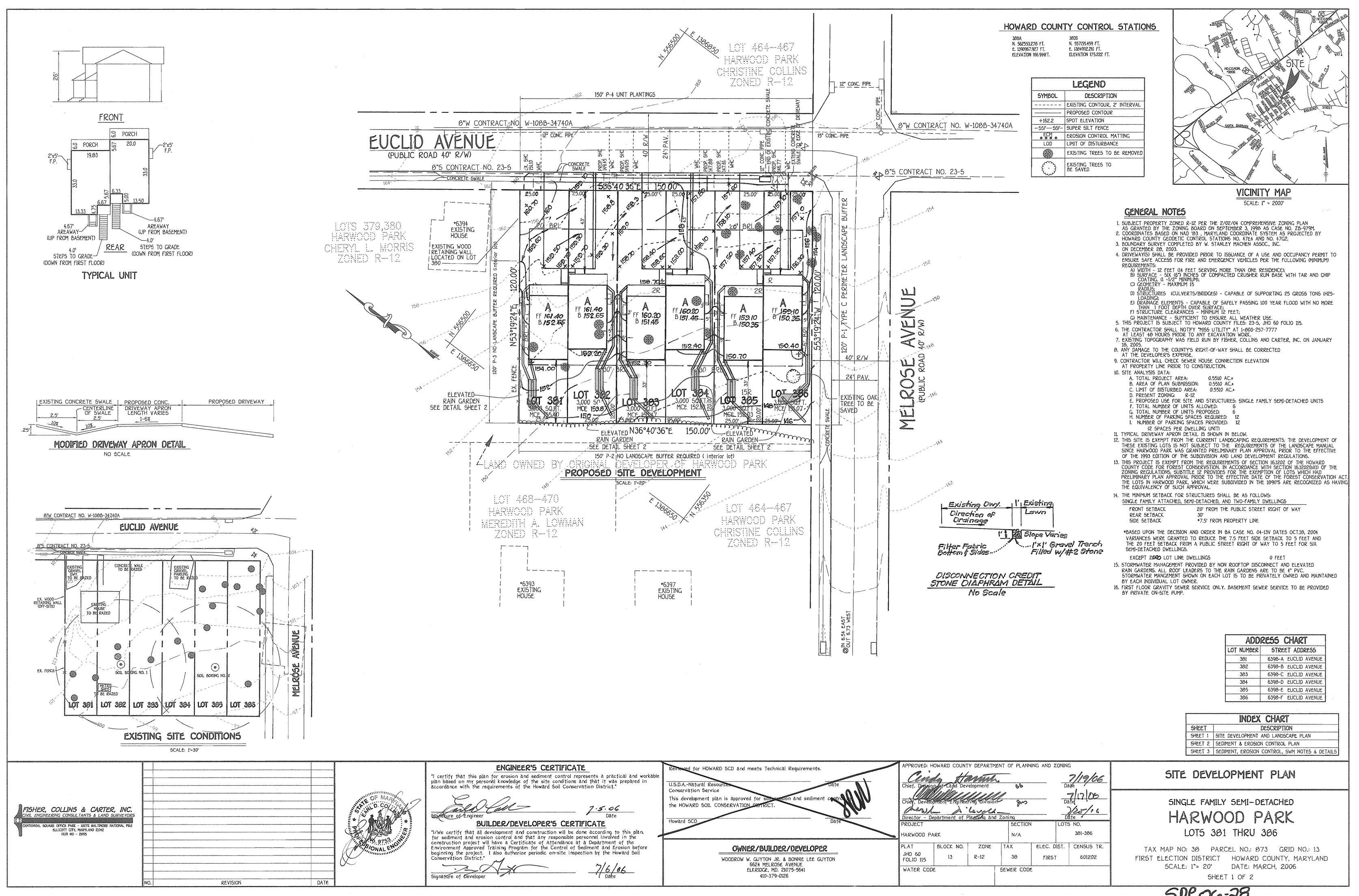
SEDIMENT/EROSION CONTROL PLAN, NOTES & DETAILS

SINGLE FAMILY SEMI-DETACHED

HARWOOD PARK LOTS 381 THRU 386

TAX MAP NO: 38 PARCEL NO.: 873 GRID NO.: 13 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: 1"= 20' DATE: MARCH, 2006

> SHEET 2 OF 2 SDP-06-28



50P06-28