Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material. Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 40 hours prior to beginning any work.

Washington and the Potomac Chapter of the American Society of Landscape Architect, latest edition, including all agenda.

utilities shall be repaired at the expense of the Contractor. Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blaze orange safety fence at the drip line.

Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and

Contractor id responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season of completion of site construction

Bid shall be base on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on

the plant list, the quantities on the plan take precedence All shrubs shall be planted in continuous trenches or prepared planting beds and mulched with composted hardwood mulch as details and specified except

where noted on plans.

Positive drainage shall be maintained in planting beds 2 percent slope).

Planting mix shall be as follows: Deciduous Plants - Two parts topsoil, one part well-rotted cow or horse manure. Add 3 lbs. of standard fertilizer per cubic yard of planting mix. Evergreen Plants - two parts topsoil, one part humus or other approved organic material. Add 3 lbs. of evergreen (acidic) fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Guidelines

Weed Control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check the chemical used to assure its adaptability to the specific ground cover to be treated.

All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded. This plan is intended for landscape use only. see other plan sheets for more information on grading, sediment control, layout, etc.

SURETY AMOUNT FOR THIS PLAN IS IN THE AMOUNT OF \$12,600.00

- 1. LANDSCAPING SURETY FOR LOTS 22,23 & 24 15 \$1,200.00 PER LOT. THE LANDSCAPING SURETY FOR LOTS 43,56,57 & 74 IS \$1,500.00 PER LOT.
- THE LANDSCAPING SURETY FOR LOT 42 IS \$1,500.00. STREET TREES ARE NOT INCLUDED IN MODIFIED SCHEDULE C LANDSCAPE CALCULATIONS. 2. TYPE 'B' BUFFER OR PERIMETER LANDSCAPE BUFFER WILL BE CREDITED TOWARDS THE
- 3. LANDSCAPE CAN NOT BE PLANTED IN ANY PUBLIC EASEMENTS.
- 4. FINAL PLANTING TYPE AND LOCATION IS SUBJECT TO APPROVAL BY THE ARCHITECTUAL
- 5. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTING HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE
- WITH HOWARD COUNTY LANDSCPAE MANUAL 6. THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY,
- REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION AND WHEN NECESSARY, REPAIRED OR REPLACED. 7. SIZES OF PLANT MATERIALS MUST CONFORM TO THE REQUIREMENTS OF THE LANDSCAPE

REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE

MANUAL CHAPTER IV AND APPENDIX C KEY PROPERTY DEVELOPMENT CRITERIA, APPROVED 7/1/99 SECTION VII RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING

THE QUANTITY AND GENERAL LOCATION OF TREES REQUIRED FOR INTERNAL LANDSCAPING ARE DETERMINED BY CRITERIA APPLIED BY THE ARCHITECTURAL COMMITTEE. THE COMMITTEE WILL CLASSIFY, DURING ARCHITECTURAL REVIEW, ALL LOTS AND PARCELS AS 1) NON-WOODED; 2) SEMI-WOODED; 3) WOODED. SUCH CLASSIFICATION SHALL TAKE INTO ACCOUNT THE EXISTING TREE COVER AND THE POTENTIAL FOR SAVING TREES IN CONNECTION WITH GRADING AND SITING. THIS CRITERIA ALSO CONSIDER THE SIZE OF THE LOT, AMOUNT OF EXISTING VEGETATION AND THE TYPE AND SITING OF RESIDENTIAL UNITS, IF, DURING OR AFTER CONSTRUCTION, THE COMMITEE DETERMINES THAT A BUILDER HAS VIOLATED ANY PROVISION OF TREE PRESERVATION, THE BUILDER WILL BE REQUIRED TO ADD NEW PLANT MATERIAL. SHADE TREE REQUIREMENTS ARE SPECIFIED BY THE FOLLOWING TABLE, DENSITIES REFER TO THE DENSITY OF THE INDIVIDUAL PARCEL.

SHADE TREE REQUIREMENTS

31 1/ (DL	1722	KEGOIKEI (EN 10			
		NON WOODED	SEMI WOODED	WOODED	
TYPE OF UNIT AND LOT SIZE		MINMUM NUMBER	OF SHADE	TREES REQU	IRED
SMALL RESIDENTIAL LOT (4,000 - 7,000 SQUARE FEET FOR CLUSTER HOUSE)		4.0/LOT	2.25/LOT	1.25/LOT	
MEDIUM RESIDENTIAL LOT (7,000-13,000 SQUARE FEET) 2-4 D.U./ACRE		5.0/LOT	3.0/LOT	2.0/LOT	

SUBSTITUTION OF TWO FLOWERING TREES OR TWO EVERGREEN TREES FOR EACH SHADE TREE MAY BE PERMITTEDFOR UP TO 50% OF THE REQUIRED NUMBER OF SHADE TREES SHOWN IN THE TABLE SUBJECT TO THE APPROVAL OF THE ARCHITECTURAL COMMITTEE. CREDIT MAY ALSO BE GIVEN FOR ANY AREAS REQUIRED TO BE PROVIDED ALONG ROADWAYS, SUBJECT TO THE APPROVAL OF THE ARCHITECTURAL COMMITTEE.

BUILDER/DEVELOPER'S/ CERTIFICATE

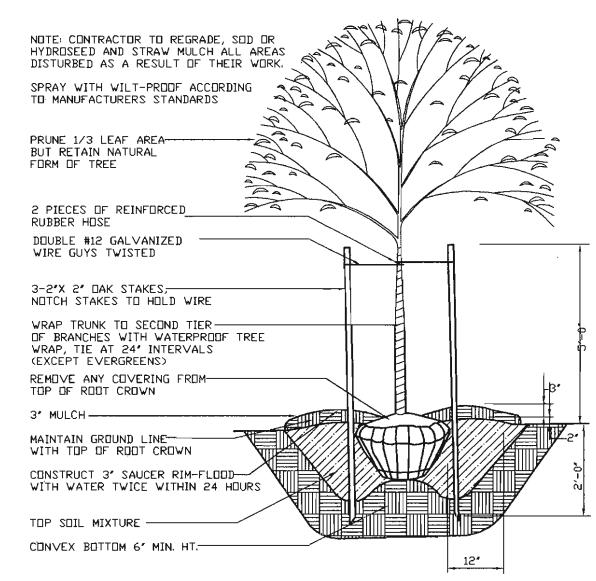
I/WE CERTIFY THAT THE REQUIRED LANDSCAPING WILL BE DONE ACCORDING TO THE

PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT

REGULATIONS AND THE LANDSCAPE MANUAL, I/WE FURTHER CERTIFY THAT UPON

COMPLETION, A LETTER OF NOTICE ACCOMPANIED BY AN EXECUTED ONE YEAR

GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF

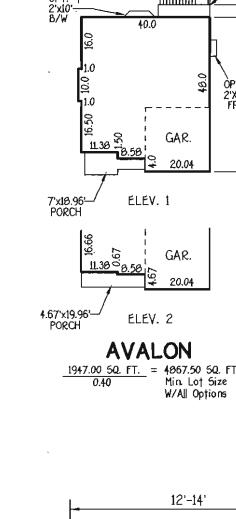


TREE PLANTING DETAIL

	MODIFIED SCHEDULE C LANDSCAPE CHART									
LOT NO.	LOT CLASSIFICATION	INTERNAL LANDSCAPING REQUIRED	TYPE B REQUIRED		SHADE TREE CREDIT *	REMAINING SHADE TREE OBLIGATION	TOTAL TREES REQUIRED			
		(# OF SHADE TREES)	SHADE	EVERGREEN	,		SHADE	EVERGREEN		
LOTS 43,56, 57 & 74	NON-WOODED	DOED 5 TREES PER LOT		N/A	0	0	25	0		
LOTS 22, 23 & 24	NON-WOODED	4 TREES PER LOT	N/A	N/A	0	0	12	0		
LOT 42 CORNER	NON-WOODED	5 TREES	1	2	2	3	4	2		
TOTAL	TOTAL TREES							2		

* THIS NUMBER REFLECTS THE MATHEMATICAL CONVERSION OF EVERGREEN TREES TO SHADE TREES (2:1) FOR THE PURPOSE OF MEETING THE INTERNAL PER LOT SHADE TREE OBLIGATION.

SCHEDULE A PERIMETER LANDSCAPE EDGE							
LOT NO.	PERIMETER		LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE			TOTAL
42	P-1	ROADWAYS) ADJACENT TO ROADWAY	В	PERIMETER 63	TREES	TREES 2	TREES 3



REINFORCED

DOUBLE #12 GALVANIZED~

WIRE GUYS TWISTED

2-2"X 2" DAK STAKES,

REMOVE ANY COVERING-

TOPSOIL MIXTURE-

EVERGREEN PLANTING DETAIL

NOT TO SCALE

HOLD WIRE

RUBBER HOSE

~1/2 OF TREE HEIGHT

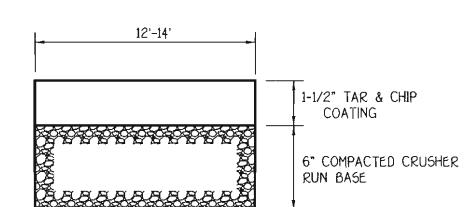
(APPROX, 3 FEET)

CONSTRUCT 3' SAUCER

RIM-FLOOD WITH WATER

TWICE WITHIN 24 HOURS

AS IN NURSERY



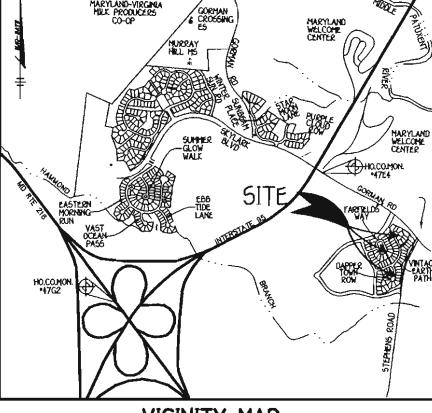
COMMON DRIVEWAY DETAIL

NOT TO SCALE

BENCH MARKS

T.P. 47E4 ELEV 339.00 N. 535,846.148 E. 1,355,431.224 LOC. NEAR I-95 BRIDGE ALONG GORMAN ROAD

> T.P. 47G2 ELEV. 363.53 N. 532,938.964 E. 1,351,224.095 LOC. NEAR MD. RTE 216 WEST NEAR EXIT RAMP TO 1-95



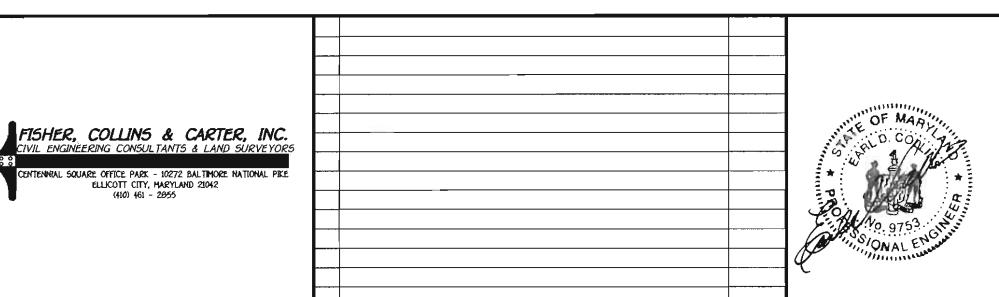
VICINITY MAP 5CALE: 1" = 2000'

GENERAL NOTES

- 1. SUBJECT PROPERTY ZONED PEC-MXD-3 & RSC-MXD-3 AS GRANTED BY THE ZONING BOARD ON 9/3/98 AS CASE NO. ZB-979M.
- 2. TOTAL AREA OF SITE: 1.471 ACRES
- 3. TOTAL NUMBER OF LOTS SUBMITTED: 0 SFD
- 4. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410)313-1880 - AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
- 5. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS
- PRIOR TO ANY EXCAVATION WORK. 6. THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: ZB-979M, WP 99-96, WP 03-088,
- 5 99-12, PB-339, P-02-15, F-04-53, W&S CONT. •24-4120-D.
- 7. THIS PLAN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR
- ABOUT JUNE, 1999 BY DAFT McCUNE WALKER, INC. 8. HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON NAD 83, MARYLAND COORDINATE
- SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS. HOWARD COUNTY MONUMENT 47E4 N 535846.148 E 1355431.224 HOWARD COUNTY MONUMENT 47G2 N 532938.964 E 1351224.095
- 9. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE
- DEVELOPER'S EXPENSE. 10. THIS PLAN IS FOR HOUSE SITING AND GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE
- RIGHTS-OF-WAY OF THIS S.D.P. ARE NOT USED FOR CONSTRUCTION. FOR CONSTRUCTION SEE APPROVED ROAD CONSTRUCTION PLANS F-04-53.
- AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 24-4120-D.
- 11. CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR TO CONSTRUCTION.

AND WILL BE OWNED BY THE PROPERTY OWNERS ASSOCIATION AND MAINTAINED BY

- 12. STORMWATER MANAGEMENT FOR THIS PLAN WILL BE ADDRESSED WITH THE INSTALLATION OF ONE STORMWATER MANAGEMENT FACILITY WHICH WILL CONTROL THE RUNOFF PER THE LATEST APPROVED DESIGN STANDARDS. THE FACILITY WILL BE A WET, EXTENDED DETENTION POND
- HOWARD COUNTY. 13. INTERNAL LOT LANDSCAPING SHALL BE PROVIDED IN ACCORDANCE WITH THE DEVELOPMENT APPROVED BY THE PLANNING BOARD ON 7/1/99 PER PB CASE NO. 339 AND SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. ADDITION TO THE INTERNAL LOT LANDSCAPING, CORNER LOTS SHALL PROVIDE A TYPE "B" PERIMETER LANDSCAPE BUFFER.
- THE FOLLOWING PER LOT SURETY IS REQUIRED TO BE POSTED AS PART OF THE BUILDER'S GRADING PERMIT: LOTS 22,23 & 24: \$1,200.00/LOT FOR 4 SHADE TREES PER LOT.
- LOTS 43,56,57 & 74: \$1,500.00/LOT FOR 5 SHADE TREES PER LOT. CORNER LOT 42: \$1.500 FOR 4 SHADE AND 2 EXERGREEN TREES.
- THE TOTAL LANDSCAPE SURETY REQUIRED FOR THIS 5DP IS \$12,600,00 FOR THE REQUIRED 41
- SHADE TREES AND 2 EVERGREEN TREES. 14. PERIMETER LANDSCAPING AND STREET TREES SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL AND DEVELOPMENT
- CRITERIA APPROVED BY THE PLANNING BOARD 7-1-99 PER CASE NO. PB-339 AS SHOWN ON THE APPROVED ROAD CONSTRUCTION DRAWINGS FILED UNDER F-04-53.
- 15. FOREST CONSERVATION REQUIREMENTS HAVE BEEN ADDRESSED WITH F-04-53. 16. FOR DRIVEWAY ENTRANCE DETAILS REFER TO HO. CODES MANUAL VOL. IV DETAILS R.6.03 & R.6.05.
- 17. THE POA OPEN SPACE SHOWN HEREON AS LOT 99 AND THE POA/COMMON OPEN AREAS SHOWN HEREON AS LOTS 92 AND 98 ARE HEREBY DEDICATED TO A PROPERTY ASSOCIATION FOR THE RESIDENTS OF THIS SUBDIVISION. THE ARTICLES OF INCORPORATION HAVE BEEN FILED WITH THE STATE
- DEPARTMENT OF ASSESSMENTS AND TAXATION WITH INCORPORATION NUMBER D06439459. THE COVENANTS FOR THE EMERSON COMMUNITY ASSOCIATION, INC. WERE RECORDED IN THE LAND
- RECORDS OF HOWARD COUNTY, MARYLAND IN LIBER 5728 FOLIO 464. 18. MINIMUM BUILDING RESTRICTION SETBACKS FROM PROPERTY LINES AND PUBLIC ROAD RIGHTS-OF-WAY ARE TO BE IN ACCORDANCE WITH THE DEVELOPMENT CRITERIA APPROVED
- WITH THE COMPREHENSIVE SKETCH PLAN 5-99-12 AND THE DECISION AND ORDER FOR PB-339 APPROVED ON JULY 1, 1999.
- 19. THE MINIMUM SETBACKS FOR STRUCTURES SHALL BE AS FOLLOWS: FRONT SETBACK 15' FROM THE RIGHT-OF-WAY TO THE HOUSE OR GARAGE. 5' TO THE PROPERTY LINE WITH A MINIMUM OF 15' BETWEEN STRUCTURES SIDE SETBACK
- 10' FROM THE PROPERTY LINE TO AN OPEN DECK 20' FROM THE PROPERTY LINE TO THE HOUSE ANY DEVIATION FROM THESE SETBACK REQUIREMENTS WILL REQUIRE SITE DEVELOPMENT PLAN
- APPROVAL BY THE HOWARD COUNTY PLANNING BOARD. 20. LOT COVERAGE BY BUILDINGS WITHIN SINGLE FAMILY DETACHED LAND USE AREAS SHALL NOT EXCEED 40%. NO LIMITATION IS IMPOSED UPON THE AREA USED FOR SIDEWALKS, PAVED PARKING
- AREAS, PATIOS, DECKS, LANDSCAPING AND SIMILIAR MINOR STRUCTURE. 21. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL NO. 45-2003 AND THE ZONING REGULATIONS AS
- AMENDED UNDER COUNCIL BILL NO. 75-2003. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION OR BUILDING/GRADING PERMIT.
- 22. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16' FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACKS. THE 15' MINIMUM DISTANCE BETWEEN STRUCTURES DOES NOT APPLY TO THOSE REFERENCED FEATURES NOR BETWEEN OPEN DECKS AND A DWELLING STRUCTURE OR ANOTHER DECK. AS AN ADVISORY, THE 15'
- DISTANCE DOES APPLY TO THE SECOND STORY OVERHANG. 23. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING (MINIMUM) REQUIREMENTS:
- A.) WIDTH 12' (14' IF SERVING MORE THAN ONE RESIDENCE) B.) SURFACE - 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.) C.) GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45 FOOT TURNING RADIUS.
- D.) STRUCTURES (BRIDGES/CULVERTS) CAPABLE OF SUPPORTING 25 GROSS TONS (H25-LOADING)
- E.) DRAINAGE ELEMENTS CAPABLE OF SAFETY PASSING 100 YEAR FLOOD WITH NO
- MORE THAN I FOOT DEPTH OVER DRIVEWAY SURFACE.
- F.) STRUCTURE CLEARANCES MINIMUM 12 FEET G.) MAINTENANCE SUFFICIENT TO INSURE ALL WEATHER USE.
- 24. IN ACCORDANCE WITH THE APPROVED DEVELOPMENT CRITERIA FOR SINGLE FAMILY DETACHED LAND USES AREAS, NO LESS THAN TWO (2) OFF-STREET PARKING SPACES SHALL BE PROVIDED ON EACH
- LOT. SUCH SPACES MAYCONSIST OF GARAGE AND/OR DRIVEWAY SPACES. 25. LANDSCAPING REQUIREMENTS MAY NOT BE MET WITHIN EASEMENTS FOR PUBLIC WATER, SEWER
- OR STORM DRAINS.



10/7/04

DATE

INDEX CHART DESCRIPTION SHEET 1 TITLE SHEET, HOUSE TYPES, TEMPLATES SHEET 2 SITE DEVELOPMENT & SEDIMENT/EROSION CONTROL PLAN, LOTS 22-24 SHEET 3 SITE DEVELOPMENT PLAN LOTS 42,43,56,57 & 74 SHEET 4 SEDIMENT/EROSION CONTROL PLAN, LOTS 42,43,56,57 & 74 SHEET 5 SEDIMENT/EROSION CONTROL NOTES & DETAILS

	LEGEND				
SYMBOL	DESCRIPTION				
	EXISTING CONTOUR 2' INTERVAL				
+362.2	SPOT ELEVATION				
CMOR.>	PROPOSED WALKOUT				
—5F—5F —	SILT FENCE				
-55F-55F-	SUPER SILT FENCE				
ECM	EROSION CONTROL MATTING				
LOD	LIMIT OF DISTURBANCE				
*	EXISTING STREET TREE TAKEN FROM F-04-53				

ENGINEER'S CERTIFICATE

BUILDER/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 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

accordance with the requirements of the Howard Soil Conservation District."

EARL D. COLLINS

of Engineer

Conservation District."

bignature of Developer

"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

	74	8672 FAR FIELDS WAY	
U/I.D. Insections This is	ANatural Reservation Servic	RD 5CD and meets Technical Requirements of the sold record of the sold erosion and construct.	
		** ** *	

ADDRESS CHART

STREET ADDRESS

962! DAPPER TOWN ROW

9617 DAPPER TOWN ROW

9619 DAPPER TOWN ROW

EGGS VINTAGE EARTH PATH

8656 VINTAGE EARTH PATH

8629 VINTAGE EARTH PATH

8G25 VINTAGE EARTH PATH

LOT NUMBER

24

43

d SCD	Dave
OWNER	BUILDER/DEVELOPER
THE HOWARD RESEARCH & DEVELOPMENT CORP. 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 410-992-6000	DOUGLAS HOMES P.O. BOX 628 ELLICOTT CITY, MARYLAND 2104 410-750-0522

	Chief, Division of and Development				· MAD			11/8/04 Date		
	mary	partment of 1	Leyle		Mk	<u> </u>	Da	1/16/04 11/16/04		
	PROJECT EMERSON	paj men oj i	aming are	201	SECTION	10N 2	LOTS 2	<u> </u>	1	
S	PLAT	BLOCK NO.	ZONE	T	AX/ZONE	ELEC. (DIST.	CENSUS TR.	1	
-	1 <i>GP9R-</i> 1 <i>GP97</i> 7	9 & 15	PEC-MXD- R5C-MXD-		47	5IXT	4	6069.02		
041	WATER CODI	E.		5EWf		VER CODE			1	
	£-15			76	40000					

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

TITLE SHEET

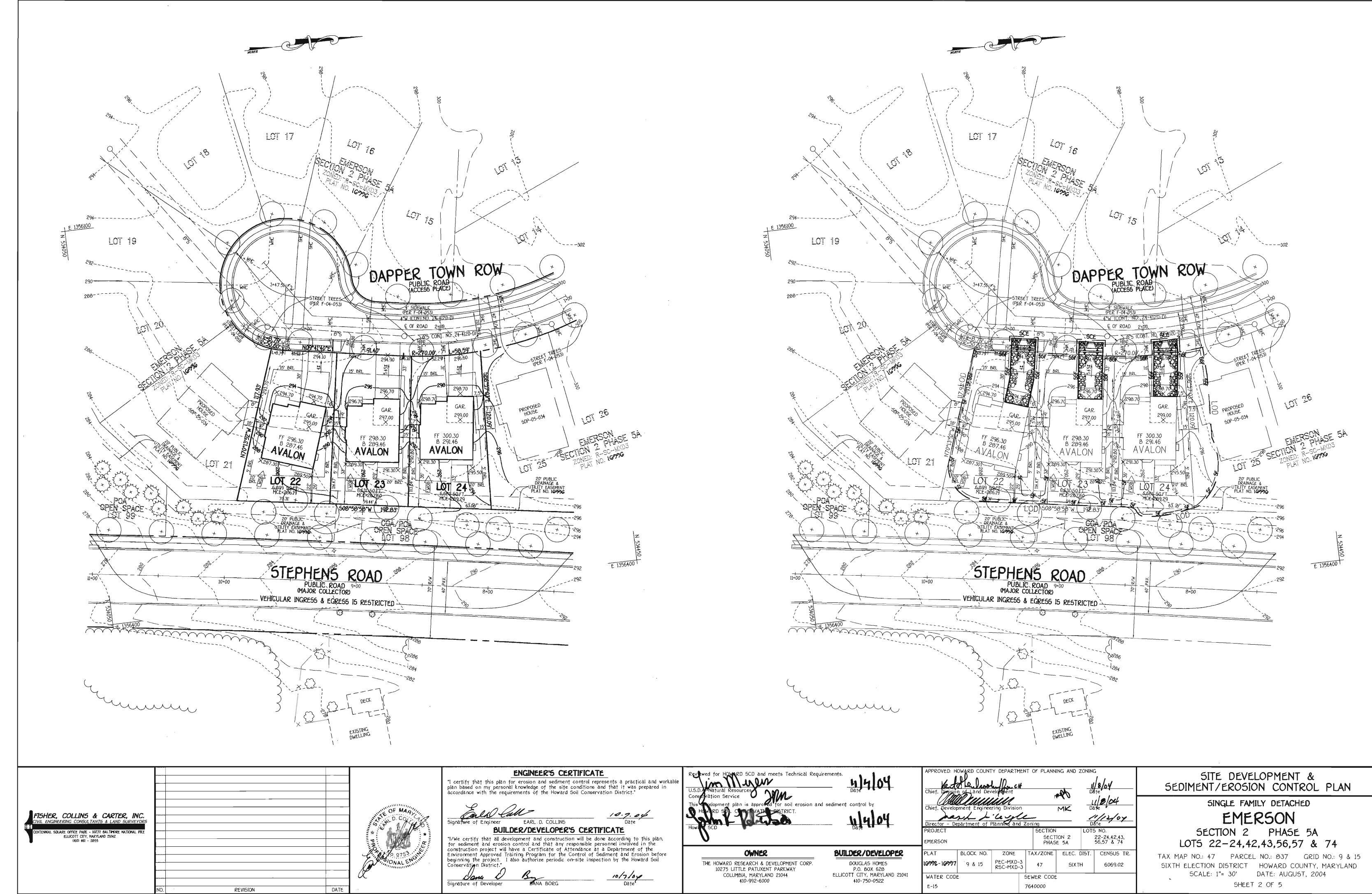
SINGLE FAMILY DETACHED

EMERSON

SECTION 2 PHASE 5A LOTS 22-24,42,43,56,57 & 74

TAX MAP NO.: 47 PARCEL NO.: 837 GRID NO.: 9 & 15 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: 1"= 30' DATE: AUGUST, 2004

SHEET 1 OF 5



Using vegetation as cover for barren soil to protect it from forces that cause erosion. PURPOSE

Vegetative 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

A. Site Preparation 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 fertilizer 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. ii. 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 of the producer. iii. Lime materials shall be ground limestone (hydrated 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 lime and fertilizer into the top 3-5" of soil by disking or other suitable means. Seedbed Preparation

Temporary Seeding 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 be 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 running parallel to the contour of the slope.

Apply fertilizer and lime as prescribed on the plans. in corporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.

Permanent Seeding a. Minimum soil conditions required for permanent vegetative establishment:
 1. Soil pH shall be between 6.0 and 7.0.

Soluble salts shall be less than 500 parts per million (ppm) The soil shall contain less than 40% clay, but enough fine grained material (>30% silt 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 (<30% 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 o the surface area and to create horizontal erosion check slots to prevent topsoil from slidina down a slope. 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 the soil in an irregular condition with ridges 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.

D. Seed Specifications 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 mmediately 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°-80° F. can weaken bacteria and make the inoculant less effective.

E. Methods of Seeding 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 lbs. per acre total of soluble nitrogen: P205 (phosphorous); 200 lbs/ac; K20 (potassium): 200 lbs/ac.

b. Lime - use only ground agricultural limestone. (Up 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. a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the emporary 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 least 1/4 inch of soil covering. Seedbed must be firm after planting. b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

F. Mulch Specifications (In order of preference) Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonable bright in color, and shall not be musty, moldy, 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) WCFM shall consist of specially prepared wood cellulose processed into a uniform

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 slurry. 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 slurry. 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. WCFM 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.

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.

. 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". Mulch 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.

H. Securing Straw Mulch (Mulch Anchoring): 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:

the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons

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 safely. It used on sloping land, this practice should be used on the contour it 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

iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such as 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. I. Incremental Stabilization - Cut Slopes

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'.

. Construction sequence (Refer to Figure 3 below): a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation

Perform Phase 1 excavation, dress, and stabilize Perform Phase 2 excavation, dress and stabilize. Overseed Phase 1 areas as

nećessary.
Perform final phase excavation, dress and stabilize. Overseed previously seeded

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

J. Incremental Stabilization of Embankments - Fill Slopes Embankments shall be constructed in lifts as prescribed on the plans.

ii. 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, temporary berms and pipe slope drains should be constructed along the top edge of the embankment to intercept surface runoff and convey it down the slope in a non-erosive manner to à sediment trapping device.
iv. Construction sequence: Refer to Figure 4 (below).

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 Phase 1 embankment, dress and stabilize.

MOUNTABLE

— EARTH FILL

PIPE AS NECESSARY

MINIMUM 6" OF 2"-3" AGGREGATE

OVER LENGTH AND WIDTH OF

STRUCTURE

50' MINIMUM

LENGTH

PROFILE

O, WINIWOW

1. Length - minimum of 50' (*30' for single residence lot).

residences to use geotextile.

PLAN VIEW

Construction Specification

2. Width - 10' minimum, should be flared at the existing road to provide a turning

to placing stone. **The plan approval authority may not require single family

equivalent shall be placed at least 6" deep over the length and width of the

entrances shall be piped through the entrance, maintaining positive drainage. Pipe

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

according to the amount of runoff to be conveyed. A 6" minimum will be required.

where construction traffic enters or leaves a construction site. Vehicles leaving

the site must travel over the entire length of the stabilized construction entrance.

installed through the stabilized construction entrance shall be protected with a

has no drainage to convey a pipe will not be necessary. Pipe should be sized

Location - A stabilized construction entrance shall be located at every point

STABILIZED CONSTRUCTION ENTRANCE

5. Surface Water - all surface water flowing to or diverted toward construction

3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior

4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete

BERM (6" MIN.)

EXISTING PAVEMENT

STANDARD SYMBOL

##SCE##

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

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 (313-1855).

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 SPECIFICATIONS 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. 1

CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE. 5) 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 PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER

GERMINATION AND ESTABLISHMENT OF GRASSES. 6) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE O 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 OF SITE 1.4710 ACRES AREA DISTURBED 1.4434 ACRES AREA TO BE ROOFED OR PAVED 0.4646 ACRES AREA TO BE VEGETATIVELY STABILIZED 1.0064 ACRES TOTAL CUT 3,182 CU.YD5. TOTAL FILL 681 CU.YDS. OFFSITE WASTE/BORROW AREA LOCATION

B) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

9) 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.

10' MAXIMUM

∠CHAIN LINK FENCE

FILTER CLOTH

TIKTIKTIK

Construction Specifications

1. Fencing shall be 42° in height and constructed in accordance with the

for a 6' fence shall be used, substituting 42" fabric and 6' length

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

latest Maryland State Highway Details for Chain Link Fencing. The specification

2. 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

3. Filter cloth shall be fastened securely to the chain link fence with ties spaced

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

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

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

50 lbs/in (min.)

20 |bs/in (min.)

Design Criteria

SUPER SILT FENCE

NOT TO SCALE

WITH 1 LAYER OF

FLOW

- 16" MIN. 15T LAYER OF

Test: MSMT 509

Test: M5MT 509

Test: MSMT 322

Silt Fence Length

(maximum)

Unlimited

1.500 feet

1,000 feet

500 feet

250 feet

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

Slope Length

(maximum)

Unlimited

200 feet

100 feet

100 feet

50 feet

410-992-6000

FILTER CLOTH

NOTE: FENCE POST SPACING

STANDARD SYMBOL

FLOW ----

TIKTIKTIK

SHALL NOT EXCEED 10'

TINTE TINTE

GROUND 1

SURFACE

CHAIN LINK FENCING

EMBED FILTER CLOTH 8" ---

MINIMUM INTO GROUND

* IF MULTIPLE LAYERS ARE

REQUIRED TO ATTAIN 42"

required except on the ends of the fence.

every 24" at the top and mid section.

Tensile Strength

Tensile Modulus

Filtering Efficiency 75% (min.)

5teepness

0 - 10:1

10:1 - 5:1

3:1 ~ 2:1

by 6" and folded.

Geotextile Class F:

10 - 20%

20 - 33%

33 - 50%

FILTER CLOTH

21/2" DIAMETER

GALVANIZED

OR ALUMINUM

CENTER TO CENTER

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.

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 occeptable 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 ocre dolomitic limestone (92 lbs.

per 1000 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs. per ocre 30-0-0 ureaform fertilizer (9 lbs. per 1000 sq.ft.). 2) Acceptable - Apply 2 tons per ocre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into

upper three inches of soil. Seeding: For the period Morch 1 thru April 30 and from August 1 thru October 15, seed with 60 lbs. per ocre (1.4 lbs. per 1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Toll Fescue per acre and 2 lbs. per ocre (0.05 lbs. per 1000 sq.ft.) of weeping lovegrass. During the period October 16 thru February 28, protect site by one of the following

1) 2 tons per ocre of well—anchored mulch strow and seed as soan os possible in the spring.

3) Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per ocre well anchored straw.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrotted small grain strow immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flot areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sa.ft.) for ancharing.

Maintenance: Inspect oil seeded greas and make needed repairs. replacements and reseedings.

36" MINIMUM LENGTH FENCE POST

16" MINIMUM HEIGHT OF

FENCE POST SECTION

KIKIKIKIKIKIK

FENCE POST DRIVEN A

MINIMUM OF 16" INTO

STANDARD SYMBOL

_ THE GROUND

GROUND

MINIMUM 20" ABOVE

GROUND

GEOTEXTILE CLASS I

- 8" MINIMUM DEPTH IN

GROUND

CROSS SECTION

DRIVEN A MINIMUM OF 16" INTO

GROUND

CLOTH ---

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetotive cover is needed. 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 ocre 10-10-10 fertilizer (14

lbs. per 1000 sa.ft.).

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2-1/2 bushels per acre of onnual rye (3.2 lbs. per 1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.07 lbs. per 1000 sq.ft.). For the period November 16 thru February 28, protect site by applying 2 tons per ocre of well onchored 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. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gol. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per ocre (8 gol. per 1000 sq.ft.) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

SEQUENCE OF CONSTRUCTION

. OBTAIN GRADING PERMIT 7 DAYS 2. INSTALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN 7 DAYS 3. CLEAR AND GRUB TO LIMITS OF DISTURBANCE 4 DAYS 4. INSTALL TEMPORARY SEEDING 2 DAYS 60 DAYS

14 DAYS

7 DAYS

5. CONSTRUCT BUILDINGS 6. FINE GRADE SITE AND INSTALL PERMANENT SEEDING AND LANDSCAPE 7. REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED

AND PERMISSION IS GRANTED BY E/S CONTROL INSPECTOR.

TYPICAL STAPLES NO. 11 GAUGE WIRE OVER AP OF MATTING STRIPS WHERE TWO OR MORE STRIP WIDTHS ARE REQUIRED. ATTACH STAPLES ON 18" CENTERS

Construction Specifications 1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot. 2. Geotextile 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 Geotextile Class F: 50 |bs/in (min.) Test: MSMT 509 Tensile Strength Tensile Modulus 20 lbs/in (min.) Test: MSMT 509 Flow Rate 0.3 gal ft / minute (max.)* Test: MSMT 322 75% (min.) Test: MSMT 322 Filtering Efficiency 3. Where ends of geotextile fabric come together, they shall be overlapped,

36" MINIMUM FENCE

FLOW

THE THE THE THE THE THE THE THE

POST LENGTH

EMBED GEOTEXTILE CLASS F

INTO THE GROUND

SECTION B

A MINIMUM OF 8" VERTICALLY

10' MAXIMUM CENTER TO

- CENTER _

PERSPECTIVE VIEW

TOP VIEW

P05T5 🥆

STAPLE 7

JOINING TWO ADJACENT SILT

FENCE SECTIONS

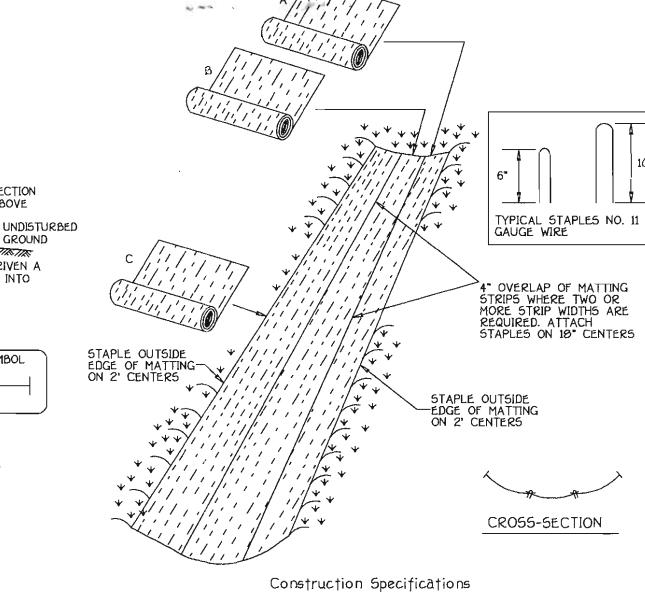
SECTION A

folded and stapled to prevent sediment bypass. 4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height. Silt Fence Design Criteria

(Maximum) Silt Fence Length Slope Steepness Slope Length Flatter than 50:1 unlimited unlimited 1,000 feet 50:1 to 10:1 125 feet 100 feet 750 feet 500 feet 5:1 to 3: 250 feet 3:1 to 2:1 20 feet 2:1 and steeper Note: In areas of less than 2% slope and sandy soils (USDA general classification

system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control SILT FENCE

NOT TO SCALE



Key-in the matting by placing the top ends of the matting in a

narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between staples is 6". 2. Staple the 4" overlap in the channel center using an 10" spacing

Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil. Staples shall be placed 2' apart with 4 rows for each strip, 2

outer rows, and 2 alternating rows down the center. 5. 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.

The discharge end of the matting liner should be similarly secured with 2 double rows of staples. Note: If flow will enter from the edge of the matting then the area effected by the flow must be keyed-in.

EROSION CONTROL MATTING NOT TO SCALE

FISHER, COLLINS & CARTER, INC ellicott ctfy, maryland 21042 (410) 461 - 2855 NO. REVISION DATE

"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."

//8///8///8

** GEOTEXTILE CLASS 'C'

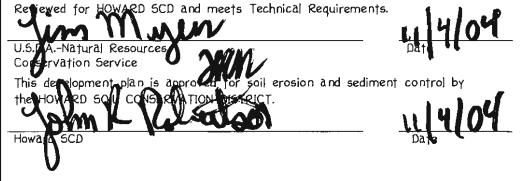
OR BETTER

- EXISTING GROUND

10.7. Def EARL D. COLLINS innature of Engineer 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 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

ENGINEER'S CERTIFICATE

Conservation District." 10/7/04 Signature of Developer DANA BORG



BUILDER/DEVELOPER OWNER THE HOWARD RESEARCH & DEVELOPMENT CORP. DOUGLAS HOMES 10275 LITTLE PATUXENT PARKWAY P.O. BOX 628 ELLICOTT CITY, MARYLAND 21041 COLUMBIA, MARYLAND 21044

410-750-0522

£-15

Director - Department of Planning and Zoning PROJECT 22-24,42,43, 56,57 & 74 MERSON PHASE 5A ZONE TAX/ZONE | ELEC. DIST BLOCK NO. CENSUS TR PEC-MXD-3 9 & 15 6069.02 WATER CODE SEWER CODE

7640000

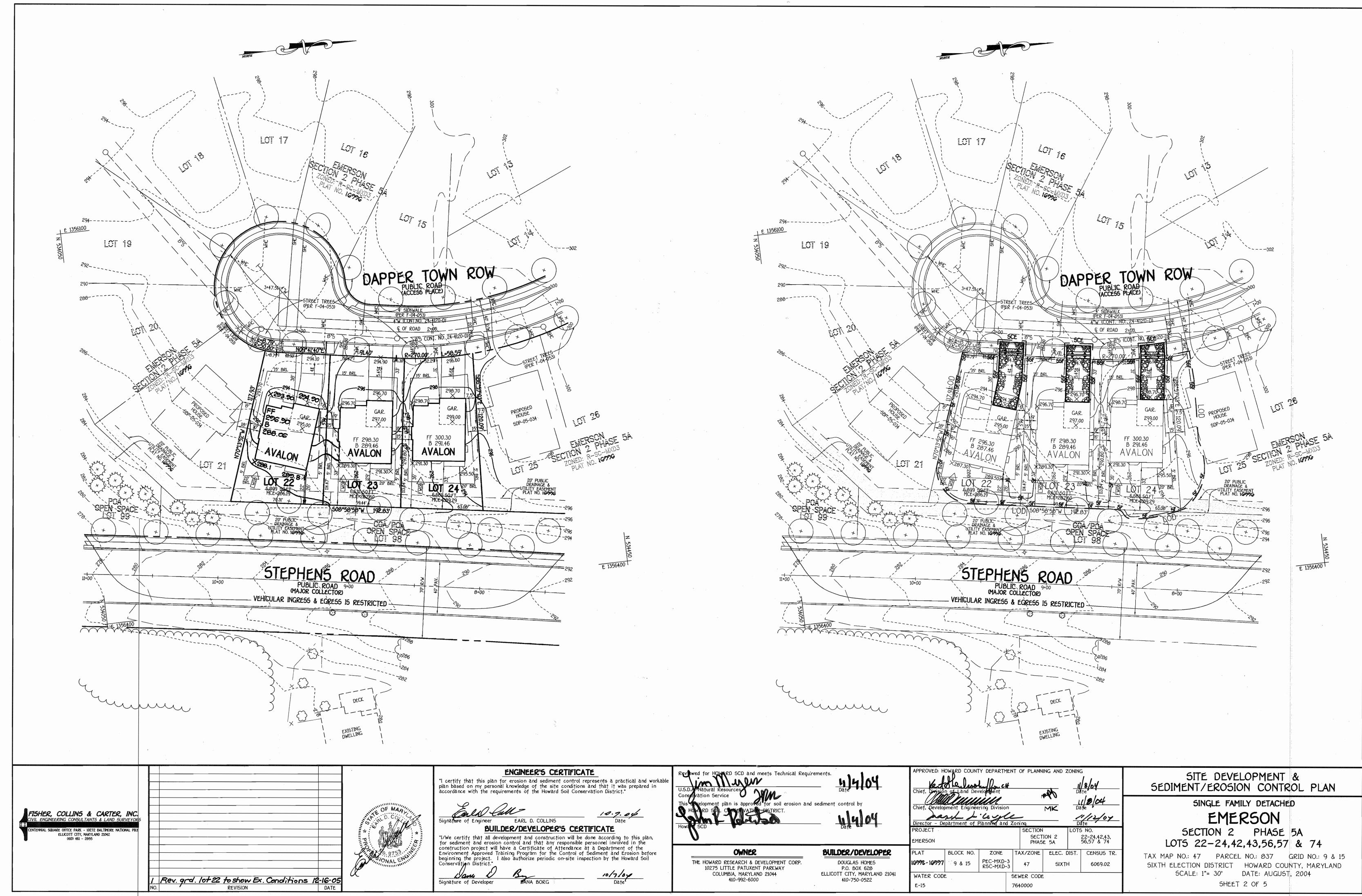
(PPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

SEDIMENT/EROSION CONTROL NOTES & DETAILS

SINGLE FAMILY DETACHED PHASE 5A

LOTS 22-24,42,43,56,57 & 74

TAX MAP NO.: 47 PARCEL NO.: 037 GRID NO.: 9 & 15 SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: AUGUST, 2004 SHEET 5 OF 5



SDP-05-024

J:\50001 Emerson Property\dwg\Sec2Phase5A\04092-6005 Sdp Lots 42,43,56-58 & 74.dwg, 1