VICINITY MAP

SCALE: 1"= 2000

BENCHMARKS				
NORTHING	EASTING			
587,380.458	1,352,603.488			
586,956.233	1,356,570.840			
	NORTHING 587,380.458			

				SOI	LS LEC	SEND		
SYMBOL	NAME	/ DESCI	RIPTIC	N				TYPE
M1C2	MANOR	LOAM, 8 T	0 15	PERCENT	SLOPES,	MODERATELY	ERODED	В

	ADDRESS CHART	WHO I WANTED
LOT #	STREET ADDRESS	
7-A	10027 GERMAN ROAD	

PERMIT INFORMATION CHART							
	E CT NAME AN ROAD PROI	SECTION/A	REA	PARCEL NUMBER P/O 281			
PLAT REF. N/A	BLOCK NO. 20	ZONE R-20		ELECT. 2No		CENSUS TR. 6022.00	
WATER CODE: H08 SEWER CODE: 5991000							

SHEET INDEX	
DESCRIPTION	SHEET NO.
SITE DEVELOPMENT AND LANDSCAPE PLAN	1 OF 2
SEDIMENT AND EROSION CONTROL AND LANDSCAPE DETAILS	2 OF 2

OWNER/DEVELOPER MAIN STREET BUILDERS, INC. 5705 LANDING ROAD ELKRIDGE, MARYLAND 21075

NO.	REVISION	DATE
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10027 GERMAN ROAD PROPERTY SECTION 2, LOTS 7 & 7-A SITE DEVELOPMENT AND LANDSCAPE PLAN SINGLE FAMILY DETACHED

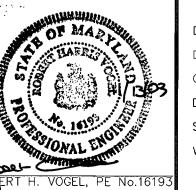
TAX MAP #17 GRID: 20 PARCEL 281 DEED REF: L6800/F.372

SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

7125 RIVERWOOD DRIVE COLUMBIA, MARYLAND 21046-2354 410-720-6900 410-720-6226 fax

REGIONAL OFFICES:

FREDERICK WARD ASSOCIATES, INC. BEL AIR, MARYLAND AND WARRENTON, VIRGINIA ARCHITECTS ENGINEERS PLANNERS SURVEYORS www.frederickward.com



DESIGN BY	: <u>ELG</u>	
DRAWN BY	: ELG	
CHECKED E	BY: RHV	ı
DATE:	JULY, 2003	
SCALE: _	1"=30'	
W.O. NO.:	2019019.00	
		100

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETABLE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER

SLOPES WHERE:

A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.

THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH

THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.

CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.

D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

II. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

I. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEFT THE FOLLOWING:

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 THAT 1 AND 1/2" IN DIAMETER.

II. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY. THISTLE. OR OTHERS AS SPECIFIED.

III. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

II. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:

PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION -SECTION ! - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES: I. ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING: A. PH FOR TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN

6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO 6.5 OR HIGHER. B. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.

TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED. D. NO SOD OR SEED SHALL BE PLACED ON SOIL SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL LINTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF

NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY HE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL. II. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION—SECTION I—VEGETATIVE

STABILIZATION METHODS AND MATERIALS. V. TOPSOIL APPLICATION

PHYTO-TOXIC MATERIALS

WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND

SEDIMENT TRAPS AND BASINS. II. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" 8" HIGHER IN ELEVATION.

III. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" -8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.

IV. TOPSOIL SHALL NOT BE PLACE WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION. WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

B.3.C. SPECIFICATIONS FOR OPEN CHANNELS AND FILTER STRIPS

1. MATERIAI SPECIFICATIONS

THE RECOMMENDED CONSTRUCTION MATERIALS FOR OPEN CHANNELS AND FILTER FOR FILTER STRIPS ARE DETAILED IN TABLE B.3.3.

PERMEABLE SOIL MIXTURE (20" TO 30" DEEP) SHOULD MEET THE BIORETENTION "PLANTING" SOIL SPECIFICATIONS.

CHECK DAMS, IF REQUIRED, SHALL BE PLACED AS SPECIFIED. SYSTEM TO HAVE 6" OF FREEBOARD, MINUMUM ABOVE 2 YEAR WATER SURFACE

SIDE SLOPES TO BE 3:1 MAXIMUM (4:1 OR FLATTER IS PREFERRED). NO GRAVEL OR PERFORATED PIPE IS TO BE PLACED UNDER DRIVEWAYS. BOTTOM OF FACILITY TO BE ABOVE THE SEASONALLY HIGH WATER TABLE PER APPENDIX D.1.

SEED WITH FLOOD/DROUGHT RESISTANT GRASSES; SEE APPENDIX A, SECTION 2.4. LONGITUDINAL SLOPE TO BE 4%, MAXIMUM. BOTTOM WIDTH TO BE 8' MAXIMLIM TO AVOID BRAIDING; LARGER WIDTHS MAY BE USED IF PROPER BERMING IS SUPPLIED. WIDTH TO BE 2' MINIMUM.

WET SWALES FOLLOW ABOVE INFORMATION FOR DRY SWALES, WITH THE FOLLOWING EXCEPTIONS; THE SEASONALLY HIGH WATER TABLE MAY INUNDATE THE SWALE; BUT NOT ABOVE THE BOTTOM OF THE CHANNEL [NOTE: IF THE WATER TABLE IS STABLE WITHIN THE CHANNEL, THE WQ, STORAGE MAY START AT THIS POINT—SEE FIGURE 3.19)]

EXCAVATE INTO UNDISTURBED SOILS; DO NOT USE AN UNDERDRAIN SYSTEM.

SEDIMENT CONTROL NOTES

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 (313-1855)

ALL VEGETATION AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. AND REVISIONS THERETO.

FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: (A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3:1, (B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE

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 WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING, AND MULCHING (SEC. G). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

ALL SEDIMENT CONTROL 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.

SITE ANALYSIS :	
TOTAL AREA	0.38 AC
AREA DISTURBED	8,056 SF
AREA TO BE ROOFED OR PAVED	
AREA TO BE VEGETATIVELY STABILIZED	
TOTAL CUT	234 CY
TOTAL FILL	234 CY
OFFSITE WASTE/BORROW AREA LOCATION_	*

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

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

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING. DISCING OR OTHER ACCEPTABLE 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 ACRE DOLOMITIC LIMESTONE (92 LBS/ 100 SQ.FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS./ 1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT THE TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ.FT.)

2) ACCEPTABLE-APPLY 2 TONS PER ACRE DOLOMATIC LIMESTONE (92 LBS/ 1000 SO.FT.) AND APPLY 1000 LBS. PER ACRE 10-10-10- FERTILIZER (23 LBS./1000 SQ.FT.) 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. PER ACRE (1.4 LBS/1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31. SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE '.05 LBS./1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28. PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCÜÉ AND MULCH WITH 2 TONS/ACRE WELL ANCHORED

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

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

TEMPORARY SEEDING NOTES

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT).

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.) FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (.07 LBS./1000 SQ.FT.). FOR THE PERIOD NOVEMBER 1 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH 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./1000 SQ.FT.) OF LINROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MUI CH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

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

4. FILTER STRIPS

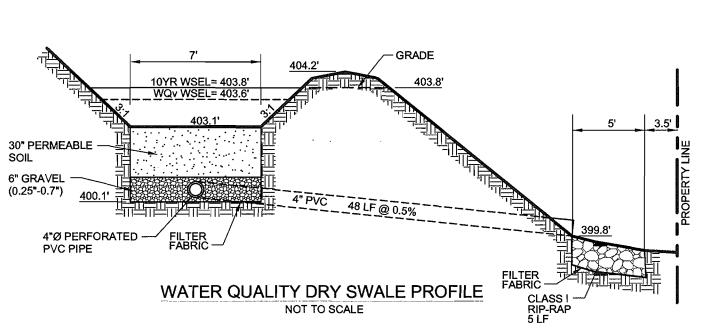
CONSTRUCT PEA GRAVEL DIAPHRAGMS 12" WIDE, MINIMUM, AND 24" DEEP MINIMUM. PERVIOUS BERMS TO BE SAND/GRAVEL MIX [SAND (35-60%), SILT (30-55%),

AND GRAVEL (10-25%) BERMS TO HAVE OVERFLOW WEIRS WITH 6 INCH MINIMUM HEAD.

SLOPE RANGE TO BE 2% MINIMUM TO 6% MAXIMUM.

5. PLANT SELECTION

RECOMMENDED GRASS SPECIES FOR USE IN ESTABLISHING PERMANENT GROUND COVER ARE PROVIDED IN SECTION 2.4 OF APPENDIX A.



		LANDSCAPE SCHEDUL	_E	
KEY	QUAN.	BOTANICAL NAME	SIZE	REM.
\bigcirc	9	ACER RUBRUM 'BOWHALL' BOWHALL FASTIGIATE RED MAPLE	2 1/2"-3" Cal.	B & B AS SHOWN
CONFO WITH L 2. CONTR 3. FINAL TREES 4. CONTR	RM TO THE CAMW PLAN ACTOR SHA LOCATION (SHALL NO' ACTOR SHA	ALS SHALL BE FULL AND HEAVY, BE WELL MOST CURRENT AAN SPECIFICATIONS AND ITING SPECIFICATIONS. LL VERIFY LOCATION OF ALL UNDERGROUN OF PLANT MATERIAL MAY NEED TO VARY TO THE BOTTOM OF DRAINAG LL VERIFY PLAN QUANTITIES PRIOR TO BIDI DULE. THE PLAN SHALL GOVERN.	BE INSTALLED IN AC D UTILITIES PRIOR TO D MEET FINAL FIELD C GE SWALES.	CORDANCE DIGGING. CONDITIONS.

30" PERMEABLE SOIL 6" GRAVEL (0.25"-0.7") 4"Ø PERFORATED FILTER FABRIC -* FOR MATERIAL SPECIFICATON SEE MDE TABLE B.3.1. PVC PIPE WATER QUALITY DRY SWALE SECTION

NOT TO SCALE

SCHEDULE A PERIMETER LANDSCAPE EDGE							
CATEGORY	ADJACENT TO ADJACENT TO PERIMETER PROPERTIES						
LANDSCAPE TYPE	NONE REQUIRED	TYPE 'A'	TYPE 'A'	TYPE 'A'	TYPE 'A'		
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	0	100' (A)	159' B	100' ©	168' D		
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NA	YES* 43'	NO	NO	YES* 24'		
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NA	NO	NO	NO	NO		
NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREEN TREES SHRUBS	NA NA NA	57' 1:60 1 0	159' 1:60 3 0	100' 1:60 2 0 0	144' 1:60 3 0 0		
NUMBER OF PLANTS PROVIDED SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	NA NA NA NA	1 0 0 0	3 0 0 0	2 0 0 0	3 0 0 0		

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT.

2. NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410.313.1880) AT LEAST 24 HOURS BEFORE STARTING ANY WORK.

3. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES. (1 DAY) 4. INSTALL SILT FENCE. (2 DAYS)

5. AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR TO PROCEED, ROUGH GRADE SITE. (4 DAYS)

6. CONSTRUCT HOUSE. (4 MONTHS)

2:1 SLOPE OR FLATTER

GRADE LINE

Seed and cover with straw mulch.

trapping device.

each rain event.

SOIL CONSERVATION SERVICE

functioning of the dike.

7. FINAL LOT GRADE TO BE IN SUBSTANTIAL CONFORMANCE WITH SITE DEVELOPMENT PLAN. (2 DAYS)

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

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

> A. 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL B. 14 CALENDAR DAYS FOR ALL OTHER DISTURBED AREAS. STRUCTURES, DIKES, SWALES, DITCH PERIMETER SLOPES SLOPES AND ALL SLOPES GREATER THAN 3:1

> > DETAIL 1 - EARTH DIKE

CROSS SECTION

POSITIVE DRAINAGE

 $\frac{\sqrt{3}}{\sqrt{3}}$

PLAN VIEW

FLOW CHANNEL STABILIZATION

Construction Specifications

2. Runoff diverted from a disturbed area shall be canveyed to a sediment

3. Runoff diverted from an undisturbed area shall outlet directly into an

4. All trees, brush, stumps, obstructions, and other objectional material

shall be removed and disposed of so as not to interfere with the proper

5. The dike shall be excavated or shaped to line, grade and cross section as

required to meet the criteria specified herein and be free of bank projections

7. All earth removed and not needed for construction shall be placed so that

8. Inspection and maintenance must be provided periodically and after

grade to an outlet. Spat elevations may be necessary for grades less than 1%.

Seed and cover with Erasian Cantrol Matting or line with sad.

3. 4" - 7" stone or recycled concrete equivalent pressed into

1. All temporary earth dikes shall have uninterrupted positive

undisturbed, stabilized area at a non-erosive velocity.

or other irregularities which will impede narmal flow.

it will not interfere with the functioning of the dike

6. Fill shall be compacted by earth moving equipment.

GRADE 0.5% MIN. 10% MAX.

2:1 SLOPE OR FLATTER

- FXCAVATE TO PROVIDE

a-DIKE HEIGHT

b-DIKE WIDTH

c-FLOW WIDTH

REQUIRED FLOW WIDTH

AT DESIGN FLOW DEPTH

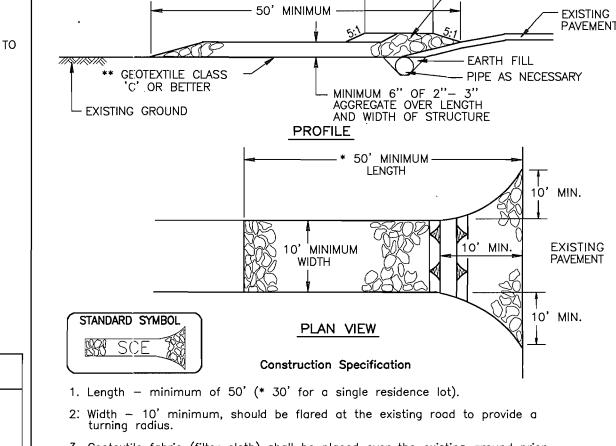
TANDARD SYMBOL

WATER MANAGEMENT ADMINISTRATION

A-2 B-3

DIKE A DIKE B

10. UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES.



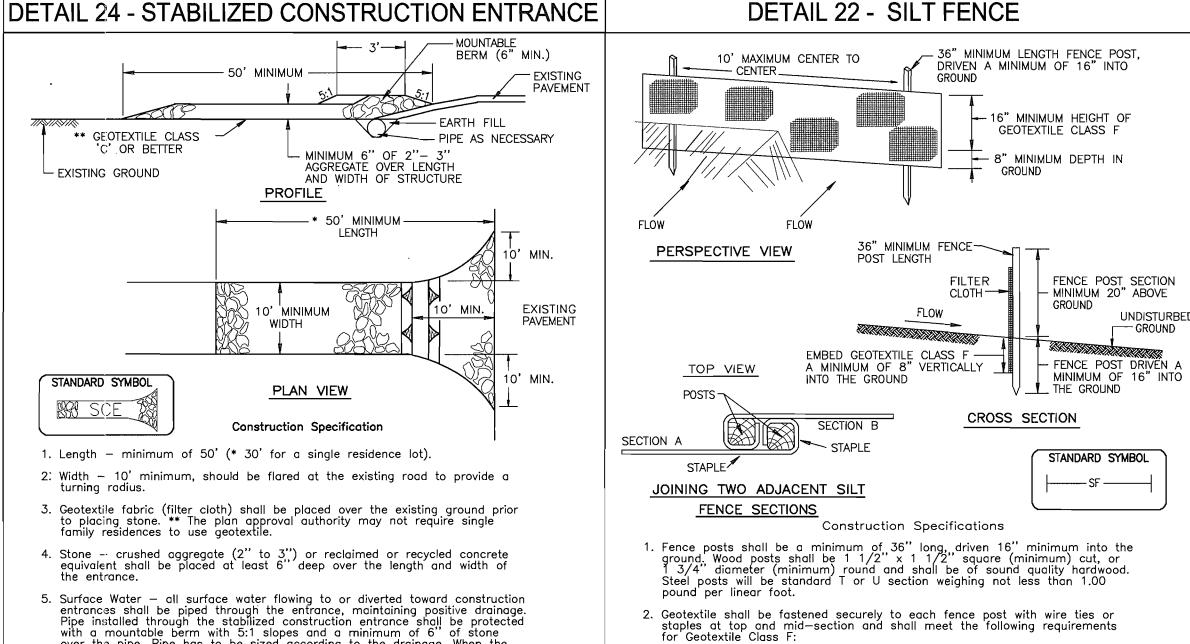
BERM (6" MIN.)

3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. ** The plan approval authority may not require single

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

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 has to be sized according to the drainage. 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 he pipe. Pipe has to be sized according to the drainage. When the

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



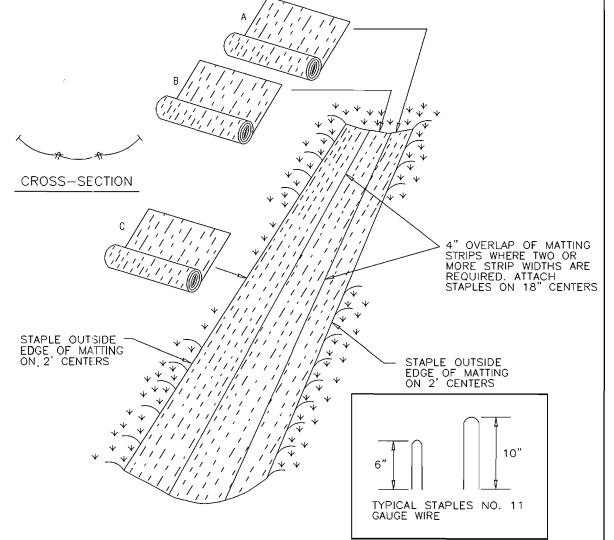
Tensile Strength Test: MSMT 509 50 lbs/in (min.) Tensile Modulus 20 lbs/in (min.) Test: MSMT 509 Flow Rate 0.3 gal ft /minute (max.) Test: MSMT 322 Filtering Efficiency 75% (min.) Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, 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 reaches 50% of the fabric

MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE F - 17 - 3 WATER MANAGEMENT ADMINISTRATION SOIL CONSERVATION SERVICE E - 15 - 3WATER MANAGEMENT ADMINISTRATION

DETAIL 30 - EROSION CONTROL MATTING



Construction Specifications

1. 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 obout 4" down slope from the trench. Spocing between staples is 6".

between staples. 3. Before stapling the outer edges of the matting, make sure the marting is smooth and in firm contact with the soil.

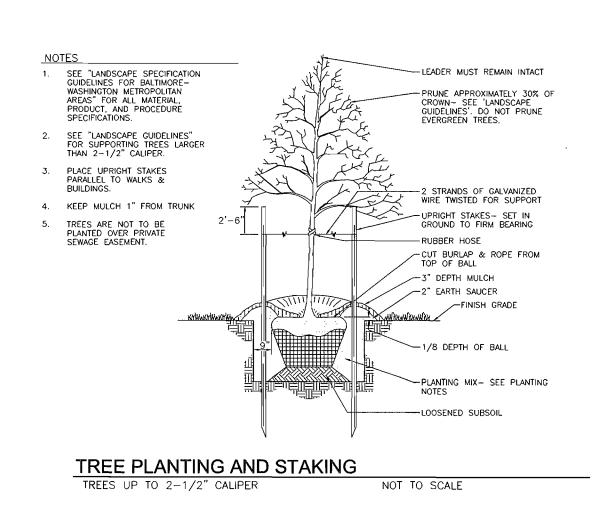
2. Staple the 4" overlap in the channel center using an 18" spacing

4. 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.

6. The discharge end of the matting liner should be similarly secured with 2 dauble rows of staples. Note: If flow will enter from the edge of the matting then the area

effected by the flow must be keved-in. U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION



REVISION DATE

> **GERMAN ROAD** SECTION 2, LOTS 7 & 7-A SEDIMENT EROSION CONTROL AND

LANDSCAPE PLAN DETAILS TAX MAP #41 GRID: 11 PARCEL 420 DEED REF: L1200/F.352

HOWARD COUNTY, MARYLAND 7125 RIVERWOOD DRIVE COLUMBIA, MARYLAND 21046-2354 410-720-6900

410-720-6226 fax

FIFTH ELECTION DISTRICT

REGIONAL OFFICES: FREDERICK WARD ASSOCIATES, INC. BEL AIR, MARYLAND AND WARRENTON, VIRGINIA ARCHITECTS ENGINEERS PLANNERS SURVEYORS www.frederickward.com



DESIGN BY: CHECKED BY: AS SHOWN SCALE 2024052.00

2___SHEET__2

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

WITH AN APPROVED AND ACTIVE GRADING PERMIT

DEVELOPMENT ENGINEERING DIVISION

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

SIGNATURE OF ENGINEER

REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

11/13/03 ROBERT H. VOGEL

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL. AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL. CONSERVATION DISTRICT

*CREDIT FOR EXISTING WOODS

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

-NATURAL RESOURCES DATERVATION SERVICE S DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMEN CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

"I CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN AND SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. I FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING."

11-13.03 DATE