a. Total Area of Parcel D-4 = 4.6492 Ac Limit of Disturbed Area = 4.6658 Ac.

Present Zoning: PEC MXD-3 Proposed Use of Site or Structure(S): SFA RESIDENTIAL

Proposed Water and Sewer Systems: Public e. Total Number of Residential Units/Lots Allowed for Project by Right: 20 units per gross acre allowed for individual parcels per Emerson Development criteria in the OR zone with the overall density not to exceed 12.1 units per gross acre for entire OR zone. 1. Parcel D-4 = 92 Units

2. Density per gross site acre = 9.7 units

f. Total Number of Residential units/Lots Proposed on this Submission 1. Parcel D-4 = 45

Number of parking spaces required: 104 spaces (45 Units x 2.0 spaces/unit = 90 spaces) (45 x 0.3 spaces/unit Overflow parking = 14 spaces)

Number of parking spaces provided: 194 spaces Garage Spaces = 90

Driveway Spaces = 90 On-Street Common Spaces = 14

ADDRESS CHART

LOT 6

LOT 7

LOT 8 LOT 9

LOT 13

LOT 16

LOT 17

LOT 18

LOT 23

LOT 27

Open Space Tabulation Open Space Required: 35% 2. Open Space Provided: F-02-55 A=6.5 AC.(35.1%)

ADDRESS

9805 GARDEN RANGES 9807 GARDEN RANGES 9809 GARDEN RANGES 9811 GARDEN RANGES

9815 GARDEN RANGES

9817 GARDEN RANGES

9819 GARDEN RANGES

9821 GARDEN RANGES

9823 GARDEN RANGES 9825 GARDEN RANGES 9831 GARDEN RANGES

9833 GARDEN RANGES

9835 GARDEN RANGES 9837 GARDEN RANGES

9843 GARDEN RANGES

9845 GARDEN RANGES

9847 GARDEN RANGES 9849 GARDEN RANGES

9853 GARDEN RANGES 9868 GARDEN RANGES

9866 GARDEN RANGES 9864 GARDEN RANGES 9862 GARDEN RANGES 9860 GARDEN RANGES

9858 GARDEN RANGES

9854 GARDEN RANGES

9850 GARDEN RANGES 9848 GARDEN RANGES

9846 GARDEN RANGES

9844 GARDEN RANGES 9840 GARDEN RANGES 9838 GARDEN RANGES 9836 GARDEN RANGES

9834 GARDEN RANGES

9832 GARDEN RANGES

9814 GARDEN RANGES

9812 GARDEN RANGES

9810 GARDEN RANGES 9808 GARDEN RANGES 9806 GARDEN RANGES 9804 GARDEN RANGES LINE TABLE

LINE BEARING LENGTH LINE BEARING LENGT

LI N08'10'31"E 40.79' L45 N87'16'27"W 6.32'

L2 NB1\*49'29"W 45.00' L46 N02\*43'33"E 6.32'

L3 NIO'53'10"W 42.23' L47 N87'16'27"W 6.32'

L4 NO2\*45'22"W 25.43' L48 NO2\*43'33"E 6.32'

L5 N05'28'14"E 63.99' L49 N87'16'27"W 6.32'

L6 N37\*55'00"E 44.76' L50 N02\*43'33"E 6.32'

L7 N87\*14'38"E 34.76' L51 N87\*16'27"W 6.32' L8 S64\*22'14"W 6.32' L52 N87\*16'27"W 6.32'

L9 S25°37'46"E 6.32' L53 N02°43'33"E 6.32'

L10 \$64\*22'14"W 6.32' L54 N87\*16'27"W 6.32' L11 \$25\*37'46"E 6.32' L55 \$02\*43'33"W 6.32' L12 \$64\*22'14"W 6.32' L56 N87\*16'27"W 6.32'

LI3 S25'37'46"E 6.32' L57 N02'43'33"E 6.32'

L14 S30°45'50"W 6.32' L58 N87°16'27"W 6.32' L15 S59°14'10"E 6.32' L59 N02°43'33"E 6.32'

L16 | 530.45.50"M | 6.32 | L60 | N87.16.27"M | 6.32

L17 | S59°14'10"E | 6.32' | L61 | N02°43'33"E | 6.32'

LIB \$30.45.50.M 6.32, F65 824.14,10.E 6.35

LI9 S5914'10"E 6.32' L63 N30'45'50"E 6.32'

 L20
 S30°45'50"W
 6.32'
 L64
 S59°14'10"E
 6.32'

 L21
 S59°14'10"E
 6.32'
 L65
 N30°45'50"E
 6.32'

L22 S30'45'50"W 6.32' L66 S59'14'10"E 6.32'

L23 S59'14'10"E 6.32' L67 N30'45'50"E 6.32'

L24 N47\*49'42"W 6.32' L68 S59\*14'10"E 6.32'

.25 S42\*10'18"W 6.32' L69 N30\*45'50"E 6.32' L26 N47\*49'42"W 6.32' L70 S59\*14'10"E 6.32'

L27 S42\*10'18"W 6.32' L71 N30\*45'50"E 6.32'

L28 N47'49'42"W 6.32' L72 N64'08'17"E 6.32'

L29 S42'10'18"W 6.32' L73 N25'51'43"W 6.32'

L30 N47'49'42"W 6.32' L74 N64'08'17"E 6.32'

L31 S42\*10'18"W 6.32' L75 N25\*51'43"W 6.32' L32 N87\*16'27"W 6.32' L76 N64\*08'17"E 6.32'

L33 S02'43'33"W 6.32' L77 N25'51'43"W 6.32'

L34 N87'16'27"W 6.32' L78 N64'08'17"E 6.32'

 L35
 SO2\*43'33"W
 6.32'
 L79
 N25\*51'43"W
 6.32'

 L36
 N87\*16'27"W
 6.32'
 L80
 N64\*08'17"E
 6.32'

 L37
 SO2\*43'33"W
 6.32'
 L81
 N25\*51'43"W
 6.32'

L38 N87\*16'27"M 6.32' L82 S73\*04'20"M 0.49'
L39 S02\*43'33"M 6.32' L83 N73\*04'20"E 17.19'
L40 N87\*16'27"M 6.32' L84 N40\*18'43"M 24.29'
L41 S02\*43'33"M 6.32' L85 S72\*37'48"M 11.88'

L42 NO2'43'33"E 6.32' L86 S62'30'05"E 30.45'

L43 N87'16'27"W 6.32' L87 N14'14'10"W 17.72'

L44 N02\*43'33"E 6.32'

22. This project does not include any moderate income dwelling units.
23. All exterior lighting fixtures comply with Section 134 of the Howard County Zoning Regulations by directing all light inwards and downwards on-site away from adjoining public roads.
24. There are no steep slopes of 25% or greater on this site.

All construction shall be in accordance with the latest standards and specifications of Howard

County plus MSHA standards and specifications if applicable.

The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410)313-1880 at least 5 (5) working days prior to the start of work. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any

excavation work being done.

Traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in

place prior to the placement of any asphalt.

All sign posts used for traffic control signs installed in the County right-of-way shall be mounted on a 2" galvanized steel, perforated, square tube post (14 gauge) inserted into a 2-1/2" galvanized steel, perforated, square tube sleeve (12 gauge - 3' long. A galvanized steel pole cap shall be

mounted on top of each post.

All plan dimensions are to face of curb unless otherwise noted.

The existing topography shown hereon is based on a field survey with 2' contour intervals prepared by DeMario Design Consultants, Inc. dated March, 2006.

The coordinates shown hereon are based upon the Howard County Geodetic Control, which is based to coordinates shown hereon are based upon the Howard County Manuscrat Note 47DC & 47EB were

upon the Maryland State Coordinate System. Howard County Monument No's 47DC \$ 47EB were

District Dis

EAST POINT NORTH EAST POINT NORTH EAST

upon the Maryland State Coordinate System. Howard County Monument No's 47DC \$ 47EB were used for this project.

35. Existing utilities shown hereon are based on field surveys and record drawings.

36. There is no floodplain onsite.

37. There are no wetlands onset based on Plat 16078, recorded July 28, 2003.

38. Traffic study prepared by Wells \$ Associates, Inc. dated February, 2006..

39. The geotechnical study for this project was prepared by Hillis Carnes Engineering Associates, Inc. in February, 2006.

40. Project Background Information:

a) Subdivision Name: Emerson Section D4

b) Tax Map/Block/Parcel: 47/8/3

There are no existing structures located on this site.

Tax Map/Block/Parcel: 47/8/3 Zoning: PEC-MXD-3 Election District: 6th

536061.7292 | 1353029.3361 | 312 | 536610.8990 | 1352553.0974 | 324 | 536235.8860 | 1352878.0197 | 336 | 536264.2530 | 1352784.4488

536092.2481 | 1352905.2819 | 313 | 536612.5704 | 1352587.8172 | 325 | 536297.8499 | 1352814.5525 | 337 | 536260.0636 | 1352783.3735

 
 302
 536057.4023
 1352746.6950
 314
 536693.2823
 1352675.1122
 326
 536383.2423
 1352792.8876
 338
 536198.0711
 1352760.9066

 303
 536103.2974
 1352736.6106
 315
 536267.7309
 1353069.5836
 327
 536396.2140
 1352791.6810
 339
 536145.1716
 1352774.3278
 304 | 536228.7220 | 1352630.1979 | 316 | 536291.0058 | 1353108.8207 | 328 | 536418.0444 | 1352793.0575 | 340 | 536159.4600 | 1352830.6449

305 | 536290.3538 | 1352652.3338 | 317 | 536299.7009 | 1353154.7550 | 329 | 536460.7097 | 1352778.0886 | 341 | 536187.4565 | 1352866.0863 536398.2438 | 1352567.4318 | 318 | 536305.4253 | 1353176.6290 | 330 | 536576.5550 | 1352672.7728 | 342 | 536194.5173 | 1352879.5046 536438,6193 1352573,2322 319 536188,5874 1353080,7365 331 536511,6750 1352601,4061 343 536188,7409 1352904,8010

308 536445.0184 1352528.6895 320 536183.5683 1353064.2757 332 536405.5332 1352697.9006 344 536158.1879 1353004.1710

 310
 536511.8890
 1352519.4913
 322
 536194.1293
 1353022.0753
 334
 536373.8009
 1352754.0157
 346
 536135.0659
 1353040.7088

 311
 536575.5876
 1352525.5917
 323
 536227.7371
 1352913.7058
 335
 536288.0132
 1352775.7809
 347
 536119.0041
 1353047.3107

536486.4884 | 1352520.7141 | 321 | 536189.7566 | 1353040.0847 | 333 | 536386.6040 | 1352738.2810 | 345 | 536146.4728 | 1353023.6129

This Plan: 1.0942 Ac. (23.5%) Applicable DPZ File References: S-99-12, PB-339, ZB-979-M, F-03-16 F-04-176, F-03-113, F-01-137, F-02-55, PB-359, F-04-127, P-01-17, WP-01-22, F-05-49, WP-01-14, WP-03-154, P-03-16, WP-04-14 and

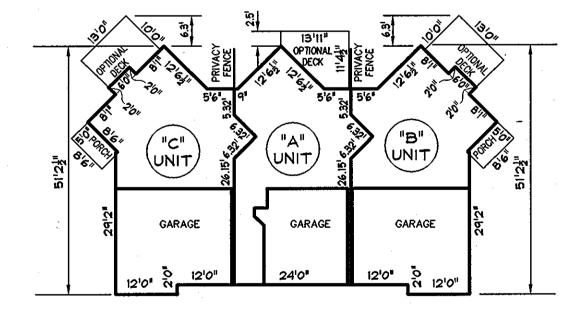
# SITE DEVELOPMENT PLAN EMERSON LOTS 1-45 PARCEL No. 3

A RESUBDIVISION OF EMERSON SECTION 2 PHASE 3 PARCEL D4 LOTS 1 THRU 45 AND OPEN SPACE LOTS 46 THRU 50 TAX MAP 47, GRID 8, PARCEL 3 6TH ELECTION DISTRICT

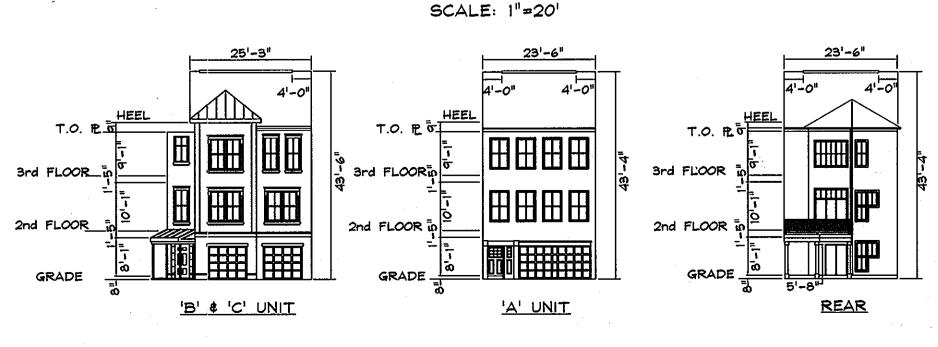
## HOWARD COUNTY, MD GENERAL NOTES

### Existing Zoning: PEC-MXD-3 per 2/02/04 Comprehensive Zoning Plan and ZB Case No. ZB-979M. 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 closed may project not more than 10 feet into the front or No grading, removal of vegetation cover or trees, paving and new structures shall be permitted within the required wetlands, streams or their buffers, forest conservation easement areas and 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 equirements: Width - 12' (16' serving more than one residence); Surface - 6" of compacted crusher run base w/tar and chip coating (1-1/2" min.); Geometry - Max. 15% grade, max. 10% grade change and min. 45' turning radius; Structures (culverts/bridges) - capable of supporting 25 gross tons (H25 loading); Drainage Elements - capable of safely passing 100-year flood with no more than 1 foot depth over driveway surface; Maintenance - sufficient to insure all weather use. Maintenance - sufficient to insure all weather use. This plan has been prepared in accordance with the provisions of Section 16.124 of the Howard County Code, the Landscape Manual and the Emerson Landscape Design Criteria. The parking and internal landscaping will be provided under this SDP. Parking Lot Internal Landscaping Trees Required = 2 Parking Lot Internal Landscaping Trees Provided = 4 (2:1 Substitution) Residential Development Internal Landscaping Trees Required = 113 S.T.V Residential Development Internal Landscaping Trees Provided = 113 S.T.V Total Trees Required = 115 Financial surety for the required landscaping in the amount of \$34,500.00 (115 trees x \$300.00) will be posted as part of the Republic Feature of the prescribed Street Trees and Landscape Perimeters were submitted under the Final Road Construction Plans (F-07-169) and landscaping surety will be provided as part of the Developer's Agreement for F-07-169). Road Construction Plans (F-07-169) and landscaping surety will be provided as part of the Developer's Agreement for F-07-169). This project complies with the forest conservation requirements of Section 16.1200 of the Howard County Code and the Forest Conservation Manual because the obligation was previously addressed under F-05-49 and F-07-169. Deed Reference: 5289/330 Plat Reference: 15752, 17382, 20124, 20125. The Emerson Development Criteria requires the following setbacks: • Front Setback - 5 from the public road R/W line or property line to the house or garage. • Side Setback - 15 from the side property line. Rear Setback - 15' from the rear property line. Setback between structures: 30' front to front 50' back to back 50' front to back This plan is subject to the Amended Fifth Edition of the Subdivision and Land Development Regulations per Council Bill 45-2003, and the Zoning Regulations as amended by CB-75-2003. Development or construction on these lots must comply with the setback and buffer regulations in effect at the time of submission of the site development plan, waiver petition application or building/areding permit building/grading permit. The minimum building setback restrictions from property lines and public road right-of-way lines for the SFA residential lots shall be in accordance with the comprehensive Sketch Plan Development Criteria approved under S-99-12, PB-339 and PB-359. There are no Floodplains, wetlands, streams or buffers on this site. WP 04-14, Emerson 2/3, Bulk Parcel D-1 approved on September 10, 2003 Section 16.1106h.(2) establishes the milestone date by which a sketch plan/preliminary equivalent sketch plan (for fee-simple lots) or a site plan (for condominium development or non-residential development) must be submitted when bulk parcel is recorded on a record plat; and Section 16.144.(a), which provides that when a milestone date is not complied with, the plan shall be voided and all previous approvals and housing unit allocations rescinded. 15. A waiver has been approved on 1/23/06 to waive Section 2.5.2.H of Design Manual, Volume III to reduce the required sight distance from 462' to 330'. 16. Lots designated "OPEN SPACE" lots are to be dedicated to Homeowners' Association. 17. The following DPZ files are applicable for this project, S-99-12, SP-06-05, PB-339, PB-359, ZB Case No. 979M, F-05-49, F-07-182, WP-04-14 and F-07-169. 18. The private use-in-common access maintenance agreement for Lots 9 and 10 are recorded in the Land Records of Howard County, Maryland Liber 11341 Folio 345. 19. Stormwater management for this project will be addressed with the existing Stormwater Management Facilities which will control the runoff per the latest approved Design Standards. The facilities have been approved under F-02-55 and F-04-127. The existing facility is a wet pand located on adjacent HOA Lot 174 Emerson Section 2 Phase IB. 20. Street light placement and the type of fixture and pole shall be in accordance with the Howard County Design Manual, Volume III (1993) and as modified by "Guidelines for Street Lights in Residential Developments June (1993)." A minimum spacing of 20' shall be maintained between any street light and any tree. provides that when a milestone date is not complied with, the plan shall be voided and all PHAME B PARCEL D-9 SONES BO. FT. 4:40 AG E street light and any tree. Water and sewer are public, Contract #24-4495D. Water meters shall be located inside as called for in the final water and sewer plans.

LOCATION PLAN SCALE: 1"=100'



FAIRWOOD TOWNHOUSES BUILDING FOOTPRINTS



FAIRWOOD TOWNHOUSES BUILDING ELEVATIONS SCALE: 1'=20"

(6) EX. 8" S.

DRAWING L	EGEND
682	EXISTING MINOR CONTOUR (2' INTERVAL) EXISTING MAJOR CONTOUR (10' INTERVAL)
	ADJACENT PROPERTY LINE
N 06*45'45"W 120.00'	EXISTING PROPERTY BOUNDARY  EX. ROAD / EDGE OF PAVING
® EX. 8' S.	EX. SEWER LINE & MANHOLES, CLEAN-OUTS EX. OVERHEAD ELECTRIC & UTILITY POLES
682	PROPOSED MINOR CONTOUR (2' INTERVAL)
econo anterior provincia de la compansión de la compansió	PROPOSED MAJOR CONTOUR (10' INTERVAL) PROP. STANDARD CURB & GUTTER / PROP. REVERSE CURB & GUTTER / PROP. MOUNTABLE CURB & GUTTER/ PROP. REVERSE/MOUNTABLE CURB & GUTTER PROPOSED PRIVATE ROAD/DRIVE CENTERLINE
Control of the second	EX. BUILDING

PROPOSED SPOT ELEVATION & FLOW ARROW

PROPOSED HOUSE

BENCHMARK

<u>DESCRIPTION</u>

<u>BENCHMARK #1</u> N. 536615.0157

ELEV. 343.249

ELEV. 354.296

BENCHMARK #2 N. 536212.7456

47EB

1353679,1226

1354833.6403

EXISTING TREES

. CONTROL EXISTING TREELINE EXISTING SHRUB/BRUSH LINE

PROPOSED INLET PROTECTION MEASURES PROPOSED WATER LINE # HYDRANT

APPROVED PLANNING AND ZONING OF HOWARD COUNTY May 22, 200 8 PROFESSIONAL CERTIFICATION

or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State icense No.: 25420 Expiration Date: 7/20/1

MARK R. THAYER, P.E.

8 PEC MXD-3 47

LOTS 1 THRU 4

DEPARTMENT OF PLANNING AND ZONING

SECTION 2 PHASE 3

PERMIT INFORMATION CHART

EMERSON

ubdivision Name

0124/20125

Vater Code

SITE VICINITY MAP

SHEET INDEX

8. 1.0.	DRAWING TITLE
1	COVER SHEET
2	SITE DEVELOPMENT PLAN
3	SITE DEVELOPMENT PLAN
4	GRADING, SEDIMENT EROSION CONTROL PLAN
5	GRADING, SEDIMENT EROSION CONTROL PLAN
6.	SEDIMENT EROSION CONTROL NOTES & DETAILS
7	LANDSCAPE PLAN

DATA SOURCES:

8 LANDSCAPE PLAN

LOCATIONS OF TREELINES, STREAMS, TOPOGRAPHY, WETLANDS AND FOREST CONSERVATION AREA DERIVED FROM F-01-137, F-02-55, F-04-127 AND F-07-169. BOUNDARY SHOWN PER BOUNDARY SURVEY DATED JUNE, 1999 PREPARED BY DAFT-MACUNE-WALKER, INC. SOILS(IF SHOWN) TAKEN FROM HOWARD COUNTY SOIL SURVEY, 1968. ADDTIONAL TOPO PROVIDED BY SHANNABERGER & LANE, DATED JANUARY



192 East Main Street Westminster, MD 21157 Fax: (410) 386-0564 http://www.demariodesign.us eMail: ddc@demariodesign.us

DEVELOPER: MILLER AND SMITH HOMES, INC. MILLER AND SMITH HOMES, INC. 8401 GREENSBORO DRIVE 8401 GREENSBORO DRIVE MCLEAN, VA 22102 MCLEAN, VA 22102 703-821-2500 703-821-2500

SITE ADDRESS: PALACE HALL DRIVE LAUREL MD, 20723

6TH ELECTION DISTRICT

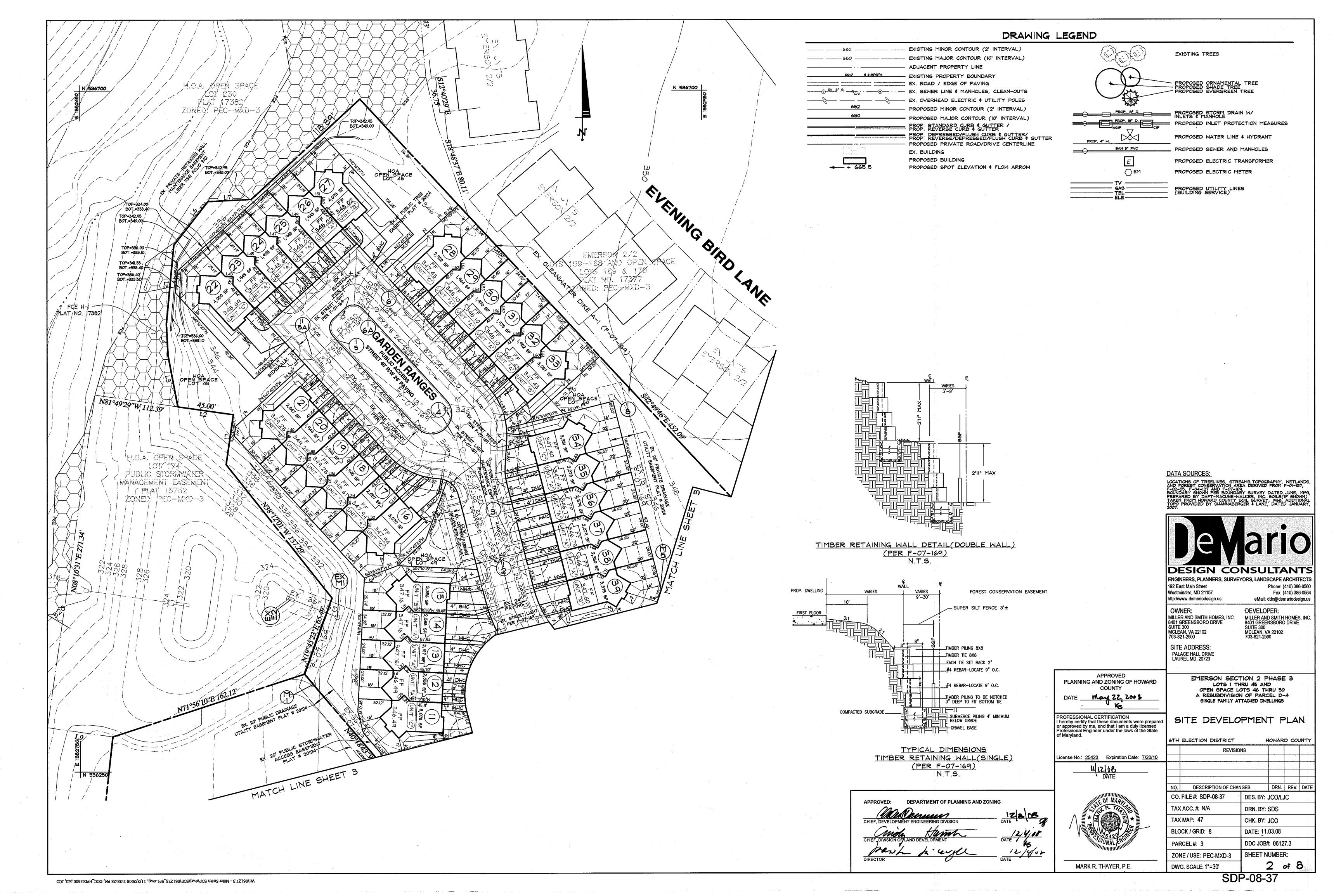
EMERSON SECTION 2 PHASE 3 LOTS I THRU 45 AND OPEN SPACE LOTS 46 THRU 50 A RESUBDIVISION OF PARCEL D-4 SINGLE FAMILY ATTACHED DWELLINGS

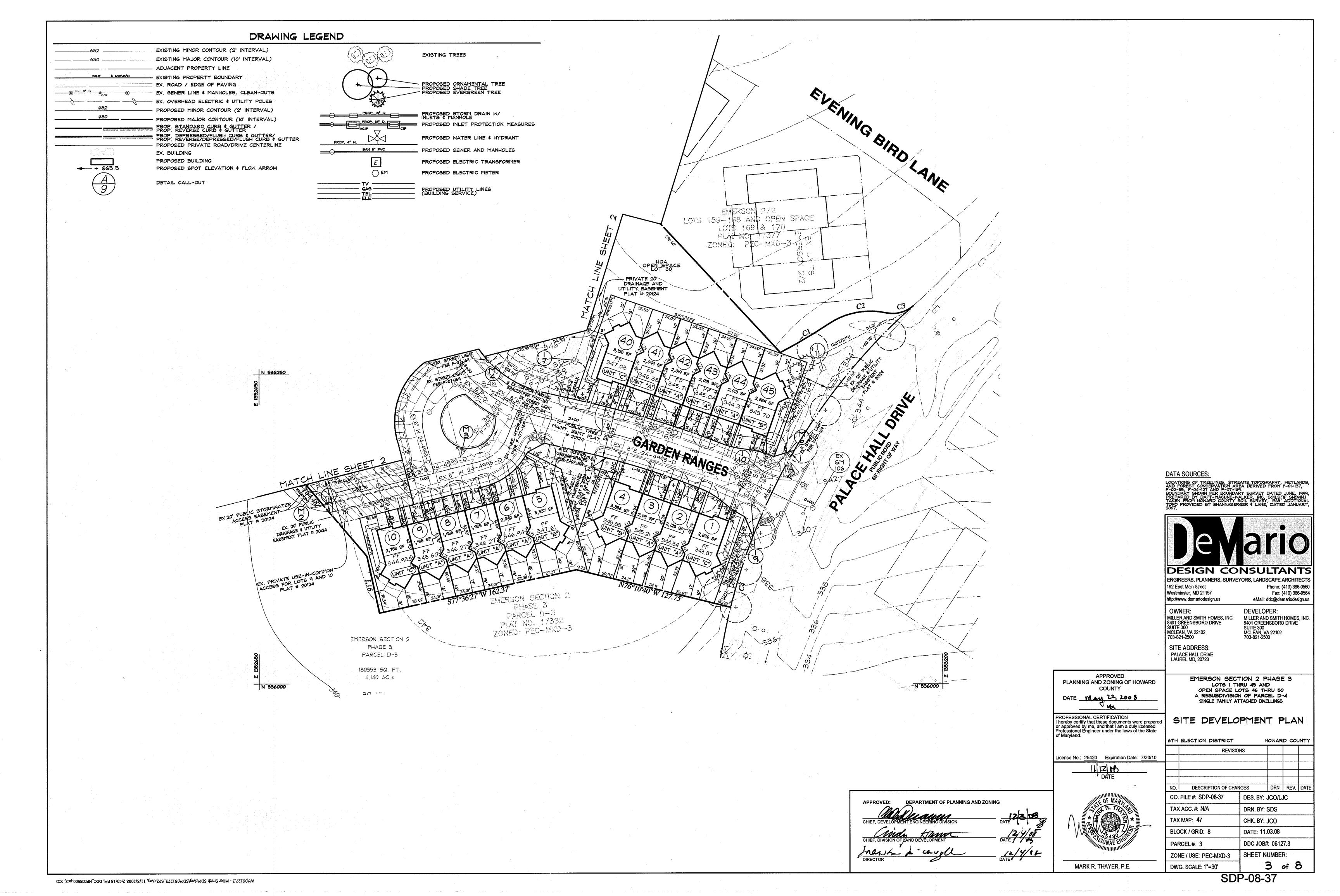
HOWARD COUNT

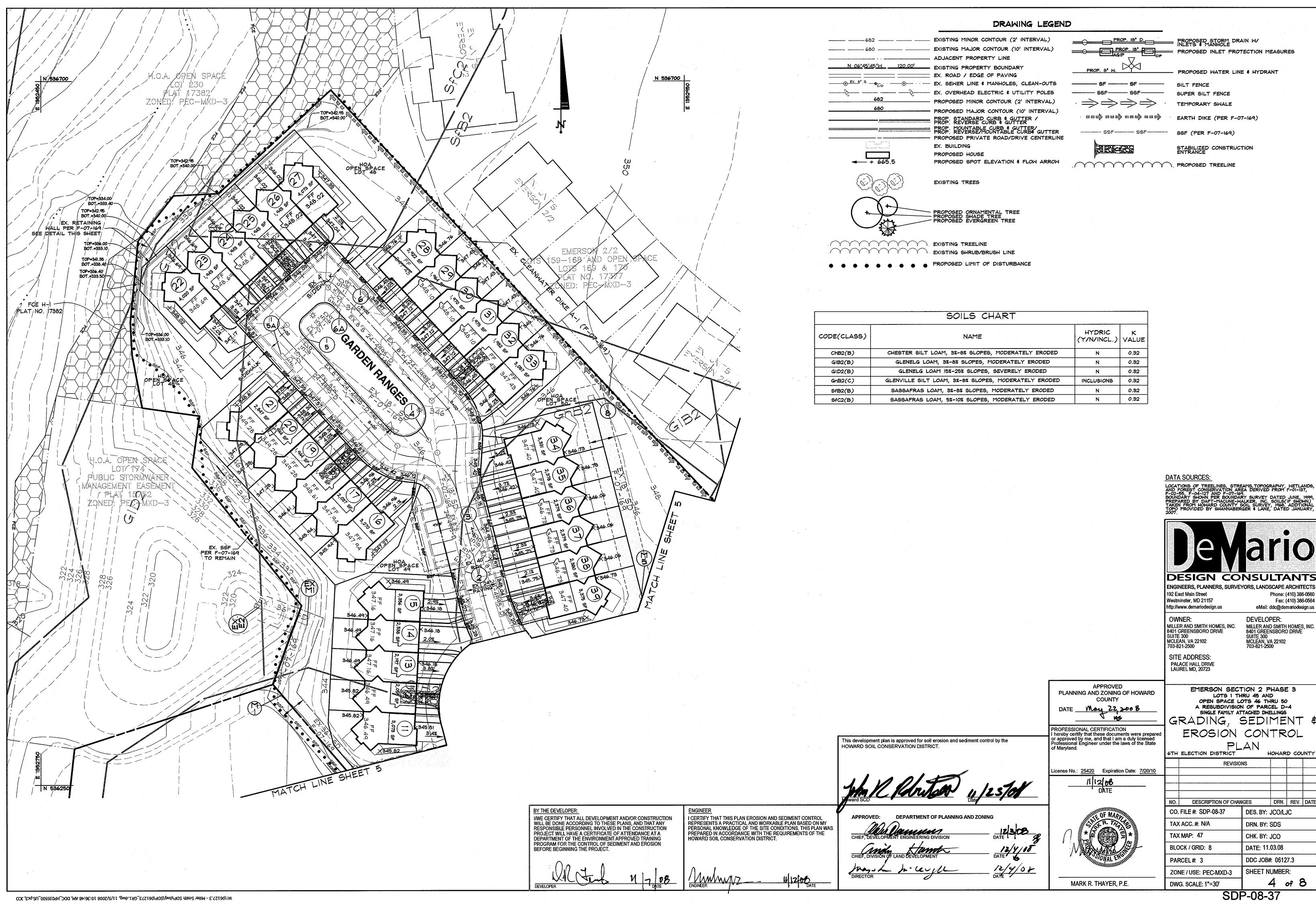
COVER SHEET

i		REVISIO	NS							
	NO.	DESCRIPTION OF CHAN	IGES	DRN.	REV.	DATE				
	CO.	FILE #: SDP-08-37	DES. BY:	JCO/L	IC					
	TΑΣ	( ACC. #: N/A	DRN. BY: SDS							
	TAX	(MAP: 47	CHK. BY: JCO DATE: 11.03.08							
	BLC	OCK / GRID: 8								
	PAI	RCEL# 3	DDC JOB#	DDC JOB#: 06127.3						
	ZOI	NE / USE: PEC-MXD-3	SHEET N	UMBE	₹:					
	DW	G. SCALE: 1"=100'		(	of E	3				

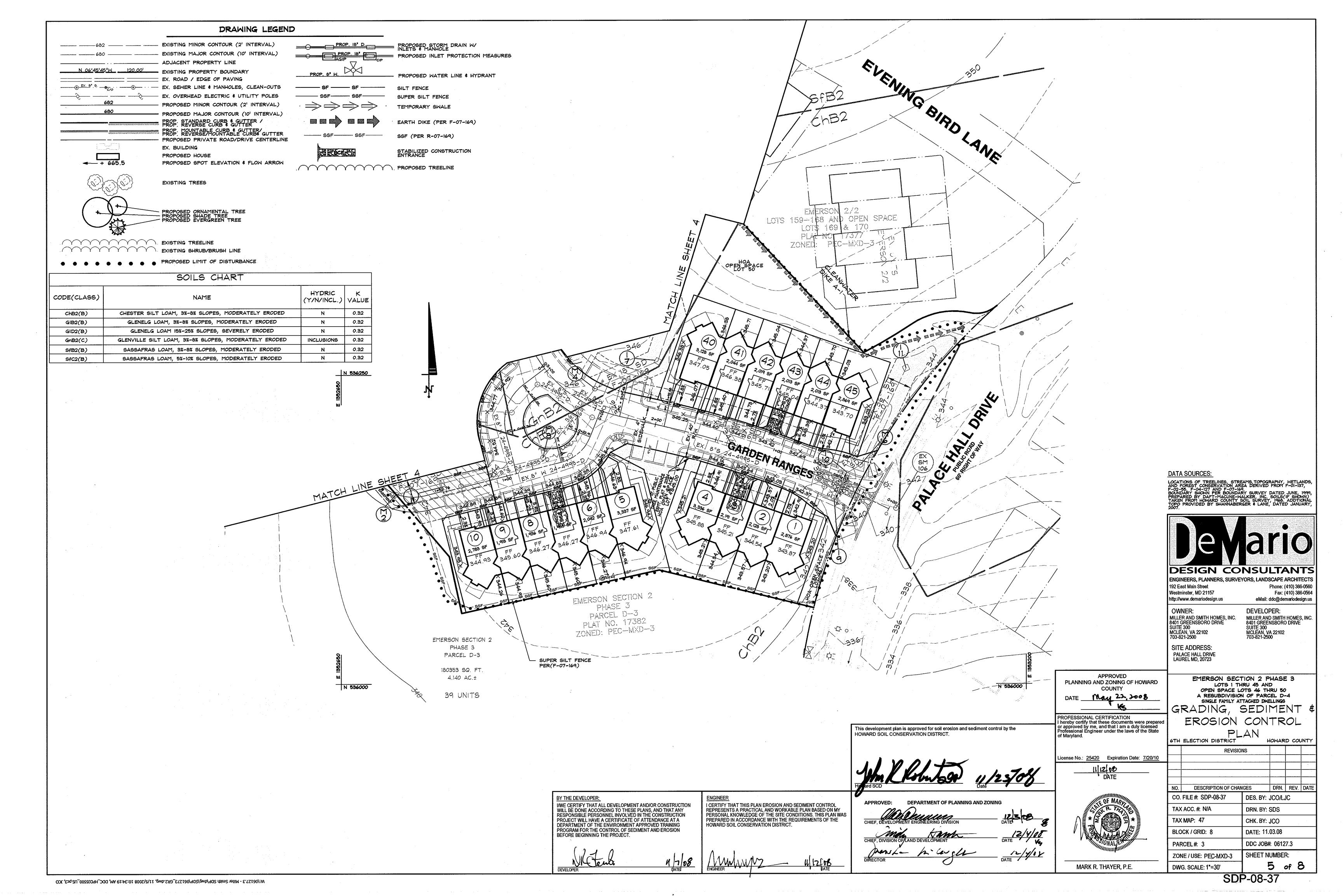
W:/06127.3 - Miller Smith SDP/dwg/5DP/061273\_CVR.dwg, 11/5/2008 10:44:07 AM, DDC\_HPDJ5500\_US.pcg, JCO







Fax: (410) 386-0564



#### A/ USED BY SHA ON SLOPED AREAS. ADD A LEGUME FOR SLOPES > THAN 3:1 B/ USED IN MEDIAN AREAS BY SHA. SHADE TOLERANT

- C/ POPULAR MIX PRODUCES PERMANENT GROUNDCOVER QUICKLY. BLUEGRASS QUICKENS STAND.
- D/ BEST USE ON SHADY SLOPES NOT ON POORLY DRAINED CLAYS. E/ USE ON LOW MAINTENANCE, STEEP SLOPES. USE TALL FESCUE IN DRAUGHT CONDITIONS. CROWN
- VETCH BEST FOR 5b, 6a, 6b. F/ SUITABLE FOR SEEDING IN MIDSUMMER.
- G/ WEEPING LOVEGRASS MAY BE SEEDED WITH TALL FESCUE IN MID—SUMMER. SERECIA LESPEDEZA IS BEST SUITED FOR ZONES 7a & 7b.
- H/ USE ON POORLY DRAINED SOILS DITCHES OR WATERWAYS. BIRDSFOOT TREEFOIL IS BEST FOR ZONES
- I/ USE IN AREAS OF MOIST SHADE. POA TRIVIALIZE THRIVES IN WET SHADY AREAS. J/ TALL FESCUE MAY BE SEEDED ALONE. THE HARD FESCUE PROVIDES BETTER SHADE TOLERANCE AND
- PRODUCES A BETTER STAND. K/ LOW FERTILITY GRASS. REQUIRES INFREQUENT MOWING. GOOD COMPANION FOR WILDFLOWERS.

	TABLE 26	TEMPOR	ARY SE	EDING	RATE	S, DE	<u>PTHS,</u>	AND	DATE	S		
			PLANTING DEPTH									
SPECIES	RAIL	RATES		7a and 7b		6b			6a and 5b			
31 20123	PER ACRE	LBS/1000 SQ.FT.	INCHES	_,	-,	8/15- 11/30		•		3/15- 5/31		10/31
CHOOSE ONE: BARLEY	122 lbs	2.80	1-2	х		BY 10/15	Х	_	BY 10/15	х		BY 10/1
OATS	96 lbs	2.21	1-2	Х	_	-	x	_	-	X	-	-
RYE	140 lbs	3.22	1-2	. X		X	X		X	Х	_	X
BARLEY OR RYE PLUS	150 lbs	3.45	1	X	×	10/15 X	X	X	10/15 X	X	X	10/1 X
FOXTAIL MILLET				· ·								
WEEPING LOVEGRASS	4 lbs	.09	1/4-1/2	-	X	_	_	Х	-	ŧ	×	_
ANNUAL RYEGRASS	50 lbs	1.15	1/4-1/2	X	1	11/1	Х	-	11/1	Х	1	8/15
MILLET	50 lbs	1.15	1/2	·	Χ	<b>–</b>	-	X		-	· x	

Note: Select one or more of the species or mixtures listed on Table 26 for the appropriate plant

Note: Select one or more of the species or mixtures listed in Table 25 and enter in the Permanent Seeding Summary Below, along with application rates and dates. For special lawn maintenance areas, see Sections IV, Sod and V, Turfgrass.

SEED MIXTURE (HARDINESS ZONE) FROM TABLE 26			FERTILIZER RATE	LIME RATE		
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS		
1						
2						
-						

#### SEQUENCE OF CONSTRUCTION

- 1. OBTAIN A GRADING PERMIT.
- 2. NOTIFY "MISS UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777 NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION DIVISION AT 410-313-1870 AT LEAST 24 HOURS BEFORE STARTING ANY WORK.
- 3. INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON PLAN. (3 DAYS)
- 4. BEGIN CONSTRUCTION OF BUILDINGS. (ONGOING)
- 5. Fine grade site and install perimeter seeding and landscaping. (2 weeks)
- 6. WITH THE INSPECTORS APPROVAL REMOVE SEDIMENT CONTROL DEVICES
- 7. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL DEVICES SHOWN ON THE PLAN. THE INSPECTION SHALL BE ON A DAILY
- 8. NOTIFY HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS FOR A FINAL INSPECTION OF THE COMPLETED SITE.

**ENGINEER** 

CERTIFY THAT THIS PLAN EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

BY THE DEVELOPER: I/ WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, 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.

### STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION Section I - Vegetative Stabilization Methods and Materials

#### A. Site Preparation

- Install erosion and sediment control structures (either temporary or 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 test to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.
- B. Soil Amendments (Fertilizer and Lime Specifications)
- i. Soil test 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 increase 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. C. Seedbed Preparation

#### i. 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 chief 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 counter of the slope.
- b. Apply fertilizer and lime as prescribed on the plans.
- c. Incorporate lime and fertilizer into the top 3 5" of soil by disking or other suitable means.
- ii. Permanent Seeding
- a. Minimum soil conditions required for permanent vegetative establishment:
  - 1. Soil pH shall be between 6.0 and 7.0 2. Soluble salts shall be less than 500 parts per million (ppm).
- 3. 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 lespedeza is to be planted, then a sandy soil (< 30% silt plus clay) would be acceptable.
- 4. Soil shall contain 1.5% minimum organic matter by weight.
- 5. Soil must contain sufficient pore space to permit adequate root penetration. If these conditions cannot be met by the soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.
- b. 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 from sliding down a slope.
- c. Apply soil amendments as per soil test or as included on the plans.
- d. 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 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 immediately preceding the date of sowing such material on this job.
- 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 weeken 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 seeder, 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 hydroted lime when hydroseeding.
- c. 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 Temporary or Permanent Seeding Summaries or Tables 25 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed soil contact.
- b. 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. a. 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 directions
- F. Mulch Specifications (In order of preference) i. Straw shall consist of thoroughly threshed wheat, rye or out straw, reasonably 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.
- ii. Wood Cellulose Fiber Mulch (MCFM)
- a. MCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous
- b. 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.
- c. WCFM, including dye, shall contain no germination or growth inhibiting factors.
- d. 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 seedings.
- e. WCFM material shall contain no elements or compounds at concentration levels that will f. WCFM must conform to the following physical requirements: fiber length to approximate 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 much 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 alone 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.
- ii. 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.
- 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: i. 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. If 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 the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of
- iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys or on crest of banks. The remainder of area should appear uniform after binder application. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terra Tack AR or other approved equal may be used at rates recommended by the
- 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 -- See G-20-6 Incremental Stabilization -- Fill Slopes -- See G-20-7

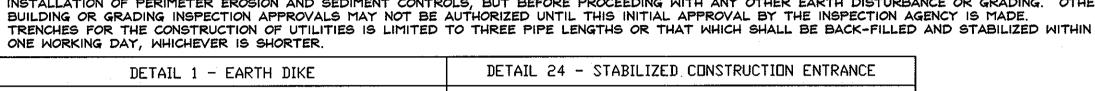
#### 21.0 STANDARDS & SPECIFICATIONS FOR TOPSOIL

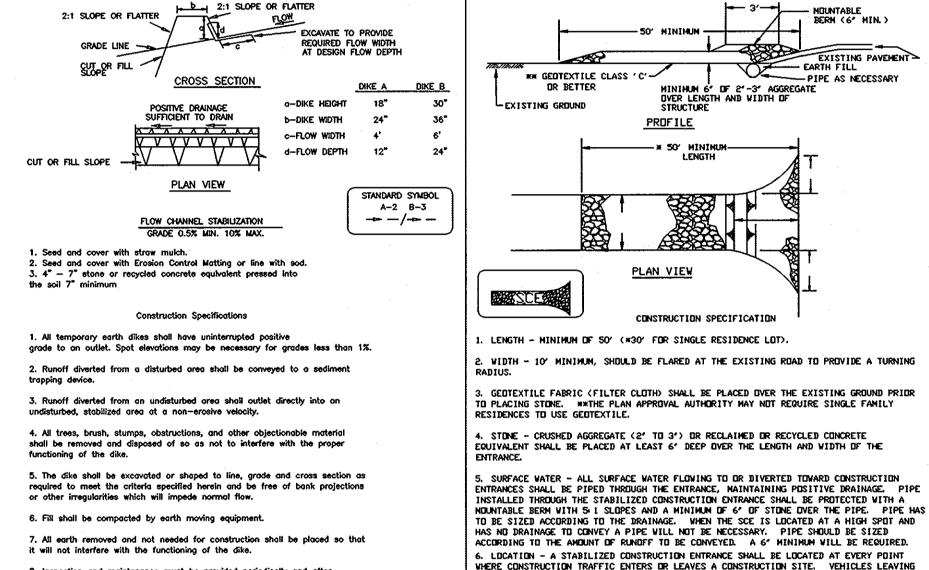
Construction and Material Specifications

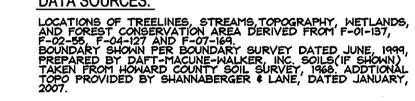
- Definition Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation Purpose - To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
- Conditions Where Practice Applies
- a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
- 1. This practice is limited to areas having 2:1 or flatter slopes where:
- b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
- c. The original soil to be vegetated contains material toxic to plant growth.
- d. The soil is so acidic that treatment with limestone is not feasible. . 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.
- 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.
- II. Topsoil Specifications Soil to be used as topsoil must meet 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 soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
- Topsoil must be free of plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, 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 fed) 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.
- 111. 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
  - c. 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 which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic. materials.
- Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization -Section I - Vegetative Stabilization Methods and 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 placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
- i. Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
- a. Composted sludge: shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
- b. Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a Ph of 7.0 to 8.0. If compost does not meet these requirements the appropriate constituents must be added to meet the requirements prior to use.
- c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet ii. Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate. References: Guideline Specifications, Soil Preparation and Sodding. MD-V A, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.
- <u>SECTION V TURFGRASS ESTABLISHMENT</u> Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which userevive a medium high level of maintenance. Areas to receive seed shall be tilled by disking or other approved methods to a depth of 2 to 4 inches, leveled and raked to prepare a proper seedbed. Stones and debris over 1 1/2 inches in diameter shall be removed. The resulting seedbed should be in such condition that future mowing of grasses will pose no difficulty.
- Note: Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line. A. Turfgrass Mixtures
- i. Kentucky Bluegrass Full sun mixture For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and eastern shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds/1000 square feet. A minimum of bluegrass cultivars should be chosen ranging from a minimum of 10% to a maximum of 35% of t mixture by weight.
- ii. Kentucky Bluegrass/Perennial Rye Full sun mixture For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding rate: 2 pounds mixture/1000 square feet. A minimum of 3 Kentucky Bluegrass Cultivars must be chosen, with each cultivar ranging from 10% to 35% of the mixture by weight.
- iii. Tall Fescue/Kentucky Bluegrass Full sun mixture For use in drought prone areas and/or fo areas receiving low to medium management in full sun to medium shade. Recommended mixture includes; certified Tall Fescue Cultivars 95 100%, certified Kentucky Bluegrass Cultivars 0 5%. Seeding rate: 5 to 8 lb/1000 sf. One or more cultivars may be blended.
- iv. Kentucky Bluegrass/Fine Fescue Shade Mixture For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes; certified Kentucky Bluegrass Cultivars 30-40% and certified Fine Fescue and 60-70%. Seeding rate: 1 1/2 3 lbs/1000 square feet. A minimum of 3 Kentucky Bluegrass cultivars must be chosen, with each cultivar ranging from a minimum of 10% to a maximum of 35% of the mixture by weight. Note: Turfgrass varieties should be selected from those listed in the most current University of Maryland Publication, Agronomy Mimeo #77, "Turfgrass Cultivar Recommendations for Maryland".
- MD: March 15 June 1, August 1 October 1 (Hardiness Zones 5b, 6a) 1D: March 1 May 15, August 15 October 15 (Hardiness Zone 6b) MD, Eastern Shore: March 1 May 15, August 15 October 15 (Hardiness Zones 7a, 7b)
- If soil moisture is deficient, supply new seedlings with adequate water for plant growth (1/2" 1" every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.
- D. Repairs and Maintenance Inspect all seeded areas for failures and make necessary repairs, replacements, and reseedings within the
- ii. If the stand provides less than 40% ground coverage, reestablish following original lime, fertilizer, seedbed preparation and seeding recommendations. iii. If the stand provides between 40% and 94% ground coverage, overseeding and fertilizing using half c the rates originally applied may be necessary.
- iv. Maintenance fertilizer rates for permanent seedings are shown in Table 24. For lawns and other medium high maintenance turfarass areas, refer to the University of Maryland publication "Lawn Care in Maryland" Bulletin No. 171.

#### <u>SEDIMENT CONTROL GENERAL NOTES</u>

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855).
- 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 FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
  - A. SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPE AND ALL SLOPES STEEPER THAN
- B. FOURTEEN 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 AREA 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 SEEDINESS (SEC. 51), SODS (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.
- . 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 OF SITE AREA DISTURBED = 4.67 ocres = 2.31 acres
- AREA TO BE ROOFED OR PAVED AREA TO BE VEGETATIVELY STABILIZED = 2.56 acres TOTAL CUT = 3.000 cu ya TOTAL FILL = 3,000 cu yd
- (LOCATION TO BE DETERMINED BY CONTRACTOR. LOCATION POINT MUST HAVE OPEN GRADING PERMIT. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF
- 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









http://www.demariodesign.us MILLER AND SMITH HOMES, INC. 8401 GREENSBORO DRIVE SUITE 300 MCLEAN, VA 22102 703-821-2500

DEVELOPER: MILLER AND SMITH HOMES, INC 8401 GREENSBORO DRIVE SUITE 300 MCLEAN, VA 22102 703-821-2500 SITE ADDRESS: PALACE HALL DRIVE **LAUREL MD, 20723** 

EMERSON SECTION 2 PHASE 3

LOTS I THRU 45 AND

OPEN SPACE LOTS 46 THRU 50

A RESUBDIVISION OF PARCEL D-4

SINGLE FAMILY ATTACHED DWELLINGS

REVISIONS

eMail: ddc@demariodesign.u

HOWARD COUNTY

May 22, 2008 PROFESSIONAL CERTIFICATION ereby certify that these documents were prepare

APPROVED

PLANNING AND ZONING OF HOWARD

COUNTY

SEDIMENT & EROSION control notes & details or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State 6TH ELECTION DISTRICT

THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE

icense No.: 25420 Expiration Date: 7/20/10

DRN, REV. DATE NO. DESCRIPTION OF CHANGES CO. FILE#: SDP-08-37 DES. BY: JCO/LJC TAX ACC. # N/A DRN. BY: SDS TAX MAP: 47 CHK. BY: JCO BLOCK / GRID: 8 DATE: 11.03.08 PARCEL# 3 DDC JOB#: 06127.3 SHEET NUMBER: ZONE / USE: PEC-MXD-3 6 of 8 DWG. SCALE: AS SHOWN

W:\06127.3 - Miller Smith SDP\dwg\SDP\061273\_SC1.dwg, 11/5\2008 10:41:36 AM, DDC\_HPDJS500\_US.pc3, JCO

each rain event. U.S. DEPARTMENT DE AGRICULTURE PAGE SOIL CONSERVATION SERVICE A - 1 - 6 WATER MANAGEMENT ADMINISTRATION SUIL CONSERVATION SERVICE DETAIL 33 - SUPER SILT FENCE

NOTE: FENCE POST SPACING SHALL NOT EXCEED 10' CENTER TO CENTER GROUND / 6' MINIMUM

CONSTRUCTION SPECIFICATIONS 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.

\* IF MULTIPLE LAYERS ARE REQUIRED TO ATTAIN 42'

THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT 3. FILTER CLUTH SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED . Once the vegetation is established, the site shall have 95% groundcover to be considered adequately EVERY 24" AT THE TOP AND MID SECTION.

> . WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED 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 GEOTEXTILE CLASS FI 50 LBS/IN (MIN.) TENSILE MODULUS 20 LBS/IN (MIN.) TEST: MSMT 509 0. 3 GAL/FT\*/HINUTE (HAX.) TEST: NSMT 322 FILTERING EFFICIENCY 75% (MIN.) U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMEN

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

. FILTER CLOTH SHALL BE EMBEDDED A MINIMUM OF 8' INTO THE GROUND.

APPROVED: **DEPARTMENT OF PLANNING AND ZONING** DATE DATE

STANDARD SYMBOL

---- SSF ----

MARK R. THAYER, P.E

