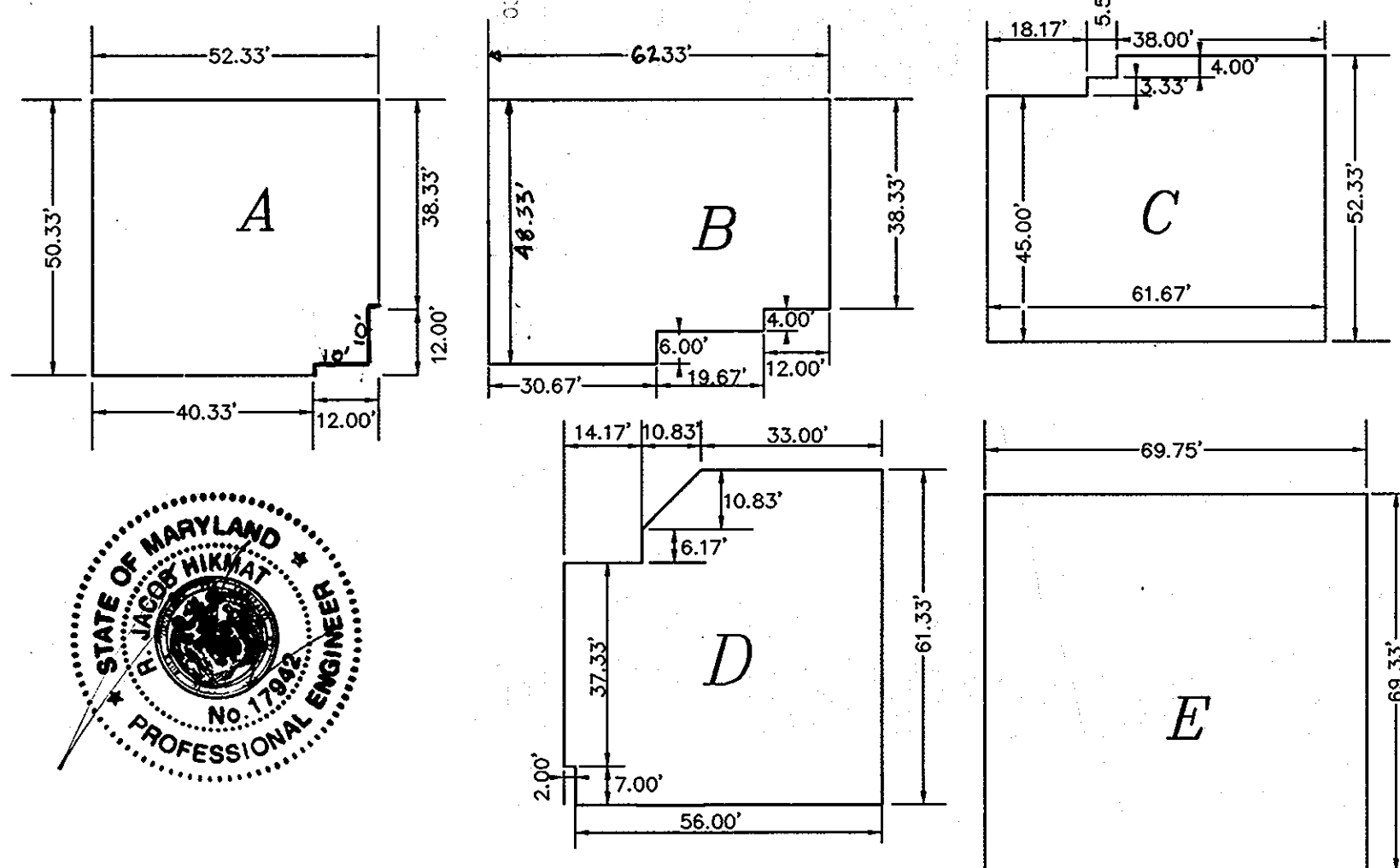


SHEET INDEX	
COVER SHEET	1
SITE DEVELOPMENT PLAN	2
SEDIMENT CONTROL NOTES AND DETAILS	3

**ADDRESS CHART**

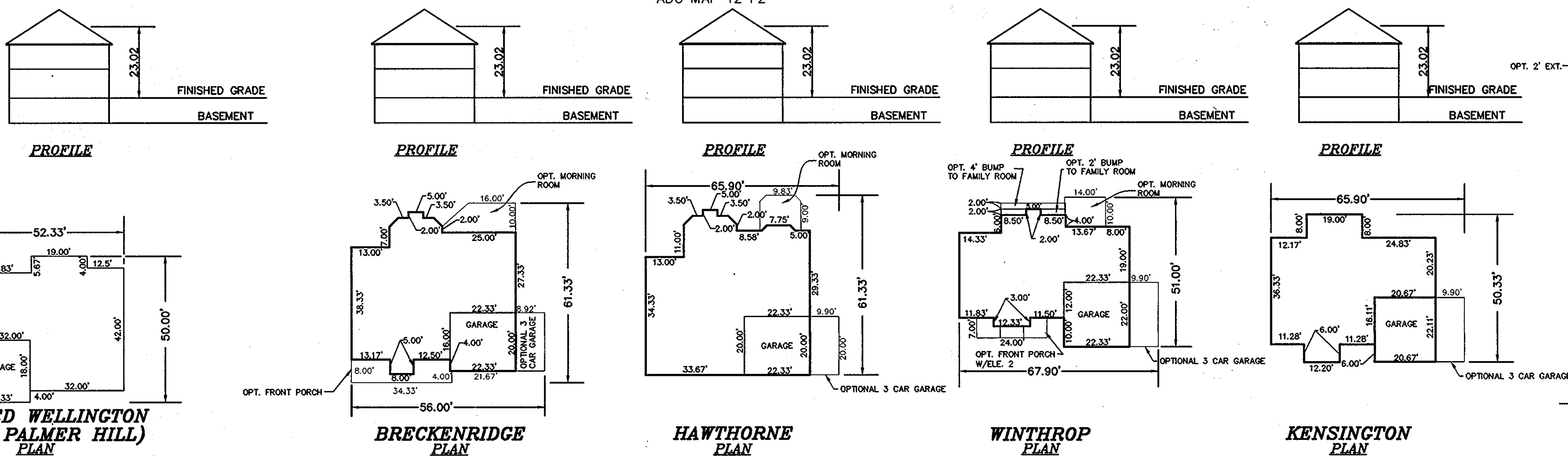
LOT #	ADDRESS
PALMER HILL LOT 1	8307 OLD FREDERICK ROAD
PALMER HILL LOT 2	8311 OLD FREDERICK ROAD
PALMER HILL LOT 3	8315 OLD FREDERICK ROAD
PALMER HILL LOT 4	8319 OLD FREDERICK ROAD
PALMER HILL 2 LOT 1	8335 OLD FREDERICK ROAD
PALMER HILL 2 LOT 2	8331 OLD FREDERICK ROAD
PALMER HILL 2 LOT 3	8327 OLD FREDERICK ROAD
PALMER HILL 2 LOT 4	8323 OLD FREDERICK ROAD

PERMIT INFORMATION BLOCK					
SUBDIVISION NAME		SECTION/AREA	PARCEL:		
PALMER HILL AND PALMER HILL 2		N/A	311&369		
PLAT	GRID(S)	ZONING	TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
19009,19010 19007,19008	7	R-20	18	2ND	602490
WATER CODE		SEWER CODE			
H02		1460000			



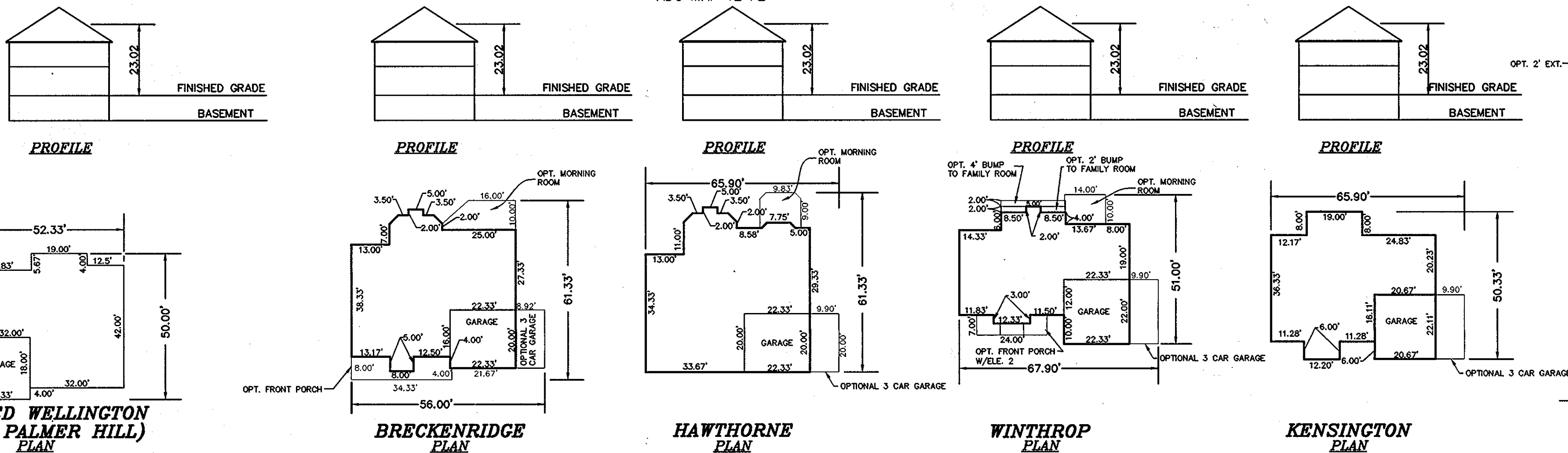
**GENERIC FOOTPRINTS**

SCALE: 1"=30'



**VICINITY MAP**

SCALE: 1"=1000'  
ADC MAP 12 F2



GENERIC TYPE	KENSINGTON	CHARTWELL	WELLINGTON	WINTHROP	HAWTHORNE	BRECKENRIDGE	MANCHESTER	HAMILTON	EMERSON	SONOMA
HOUSE A	NOT AVAILABLE	NOT AVAILABLE	NO 4' FAMILY BUMP NO 2' GARAGE SIDE BUMP NO 4' PORCH NO OPTIONAL 2' EXTENSION NO OPT. MORNING ROOM	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
HOUSE B	NOT AVAILABLE	NOT AVAILABLE	NO 4' FAMILY BUMP NO 2' GARAGE FRONT BUMP NO 4' PORCH NO OPTIONAL 2' EXTENSION NO OPT. MORNING ROOM	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
HOUSE C	NO OPT. 3 CAR GARAGE	NO OPT. 3 CAR GARAGE	NO 2' GARAGE FRONT BUMP NO 4' FAMILY BUMP	NO MORNING ROOM	NOT AVAILABLE	NOT AVAILABLE	NO OPT. 3 CAR GARAGE	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
HOUSE D	NO OPT. 3 CAR GARAGE	NO OPT. 3 CAR GARAGE	NO 2' GARAGE BUMPS NO LIBRARY EXTENSIONS	NO OPT. 3 CAR GARAGE	NO 3 CAR GARAGE EXT.	NOT AVAILABLE	NOT AVAILABLE	NO 3 CAR GARAGE	NOT AVAILABLE	NOT AVAILABLE
HOUSE E	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS

# SITE DEVELOPMENT PLAN PALMER HILL AND PALMER HILL 2 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**GENERAL NOTES**

- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (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.
- THE EXISTING TOPOGRAPHY IS BASED ON A FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS BY MILDENBERG, BOENDER & ASSOC DATED MAY 2006.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 17FB AND 17FA WERE USED FOR THIS PROJECT.
- STORM WATER MANAGEMENT REQUIREMENT WILL BE SATISFIED VIA ON-SITE NON-STRUCTURAL PRACTICES AS APPROVED UNDER F-05-166 & F-03-210. FINANCIAL SURETY FOR THE 8 RAINGARDENS HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$48,000.00.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$12,600.00 FOR 38 SHADE TREES AND 8 EVERGREEN TREES.
- EXISTING UTILITIES ARE BASED ON WATER AND SEWER CONTRACT # 14-4228-D.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.06.
- SITE DATA ANALYSIS CHART:  
SUBDIVISION NAME: PALMER HILL AND PALMER HILL 2  
TAX MAP 18, PARCEL 311 (LOTS 1-4) & 369 (LOTS 1-4) GRID 7.  
ZONING R-20.  
FINAL PLAN APPROVAL DATE JULY 6, 2006.  
DPZ REFERENCE NUMBERS : F-05-166, F-03-210 & WP-04-154  
NUMBER OF LOTS : 8  
TOTAL PROJECT AREA / SUBMISSION AREA : 3.25 AC (141,662 SF)  
IMPROVEMENT TO PROPERTY : SINGLE FAMILY DETACHED.  
TOTAL NUMBER OF UNITS ALLOWED FOR PROJECT AS SHOWN ON FINAL PLATS: 8.  
TOTAL NUMBER OF UNITS PROPOSED ON SUBMISSION : 8.  
OPEN SPACE REQUIREMENTS HAVE BEEN FILLED UNDER F-05-166 & F-03-210.  
BUILDING COVERAGE OF SITE: 0.43 ACRES AND 13.2% OF GROSS AREA.
- THE SUBJECT PROPERTY IS ZONED R-20 PER THE 2/2/07 AND THE 7/28/06 COMPREHENSIVE ZONING PLANS.
- 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 SETBACK.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
- 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:  
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. 14% 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.
- THE FOREST CONSERVATION REQUIREMENTS FOR THESE SITES WERE SATISFIED UNDER THE APPROVED F-03-210 BY RETENTION OF 1.03 ACRES OF FOREST, WHICH EXCEEDS THE BREAK-EVEN POINT OF 0.63 ACRES AND THE APPROVED F-05-166 BY RETENTION OF 1.36 ACRES OF FOREST, WHICH EXCEEDS THE BREAK-EVEN POINT OF 0.9 ACRES. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- THIS SUBDIVISION IS SUBJECT TO WP-04-154 APPROVED ON AUGUST 4, 2004, TO WAIVE SECTION 16.121.G(2), TO ALLOW THE MINIMUM LOT SIZE TO BE 14,000 SQUARE FEET (NET) OR LARGER.
- THIS SUBDIVISION IS SUBJECT TO THE DESIGN MANUAL WAIVER REQUEST FOR THE INTERSECTION SIGHT DISTANCE, APPROVED ON JULY 15, 2004.
- THIS SUBDIVISION IS SUBJECT TO THE DESIGN MANUAL WAIVER REQUEST FOR MORE THAN 6 USERS ON A USE-IN-COMMON AREA APPROVED ON MAY 16, 2005.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. 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 OR BUILDING PERMIT APPLICATION.



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 17942 EXPIRATION DATE: 09/01/2008

**OWNER/DEVELOPER**

PALMER PROPERTY L.L.C.  
3230 BETHANY LANE, SUITE 1  
ELICOTT CITY, MD 21042  
(410) 418-8900

**DEVELOPER'S CERTIFICATE**

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 OF THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

Signature of Developer: *S. Paruch Costello*  
Printed Name of Developer: S. Paruch Costello  
Date: 3/10/08

**ENGINEER'S CERTIFICATE**

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

Signature of Engineer: *R. Jacob Hikmat*  
Printed Name of Engineer: R. JACOB HIKMAT  
Date: 3/16/08

DATE: 3/16/08  
NADA - NATURAL RESOURCE CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.  
Signature: *John L. Boster*  
Date: 3/13/08

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Signature: *John L. Boster*  
Date: 3/16/08  
Signature: *Paul J. O'Keefe*  
Date: 3/20/08

date	MARCH 08	approval	RDB
project	07-017	scale	AS SHOWN
illustration	RDB	description	

date	10/24/08	revision	
description	REVISED HOUSE BONES A, B TO ACCOMMODATE ADDITIONAL DRIVEY WELLINGTON MODEL TO LOTS 3, 7, 14, 18	date	7-14-08
no.	1	no.	1

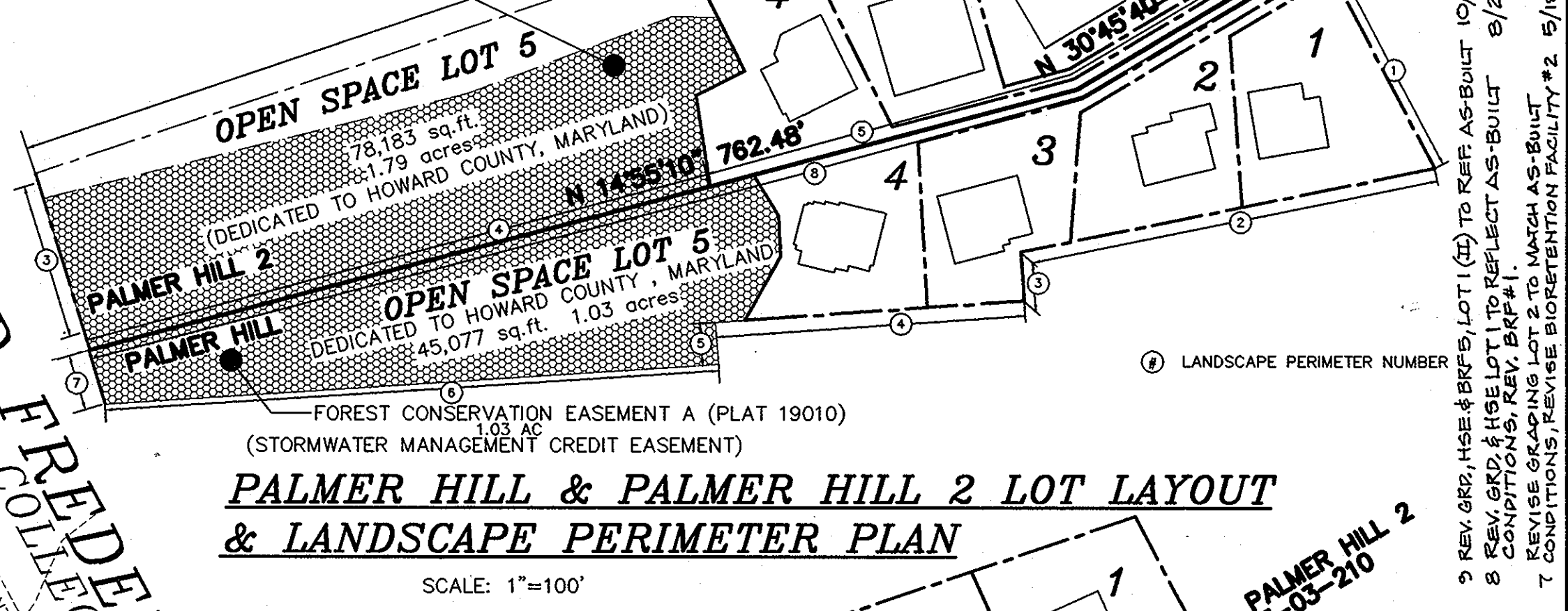
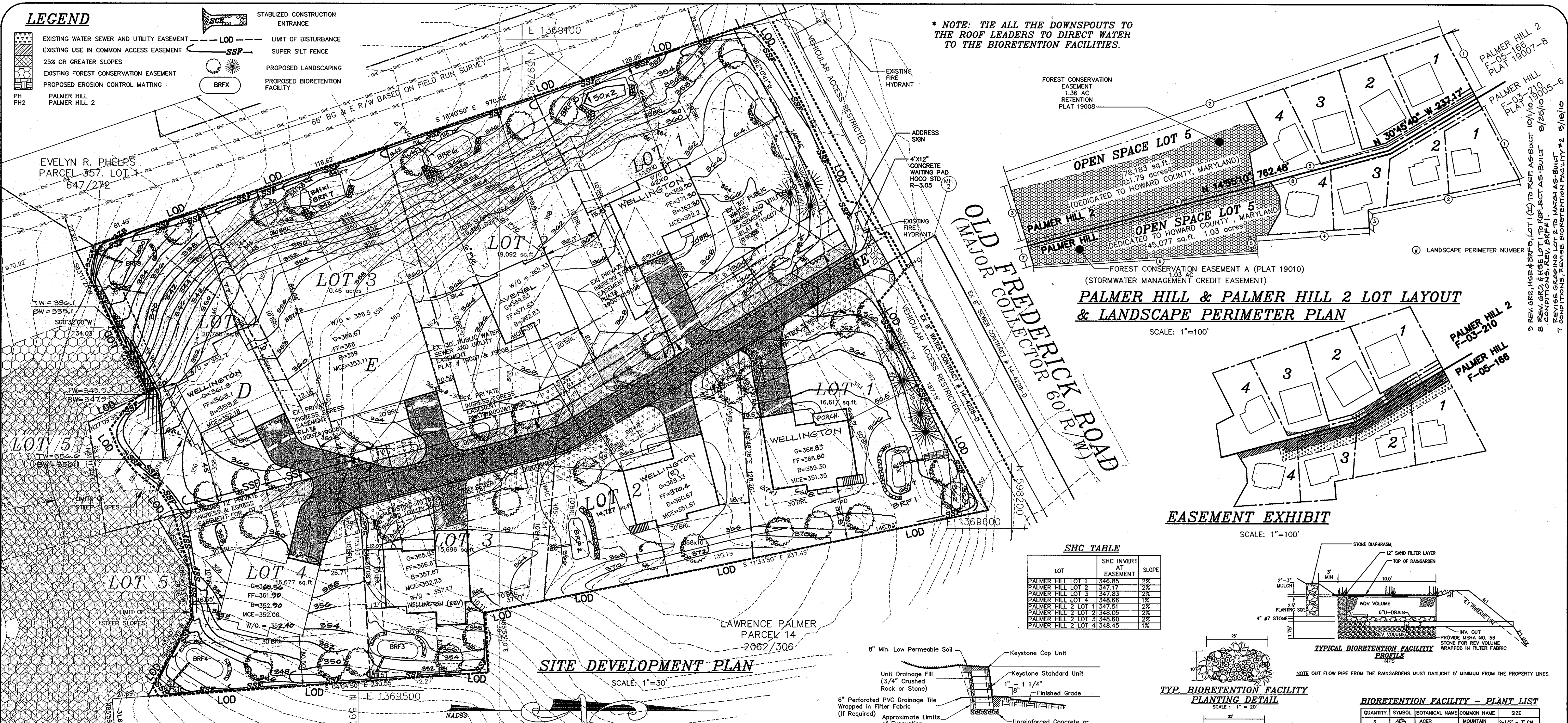
**PALMER HILL AND PALMER HILL II**  
LOTS 1-4 AND LOTS 1-4  
TAX MAP 18, PARCELS: 311 & 369  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
COVER SHEET

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Elicott City, Maryland 21042  
(410) 997-0296 Fax: (410) 997-0298 Fax

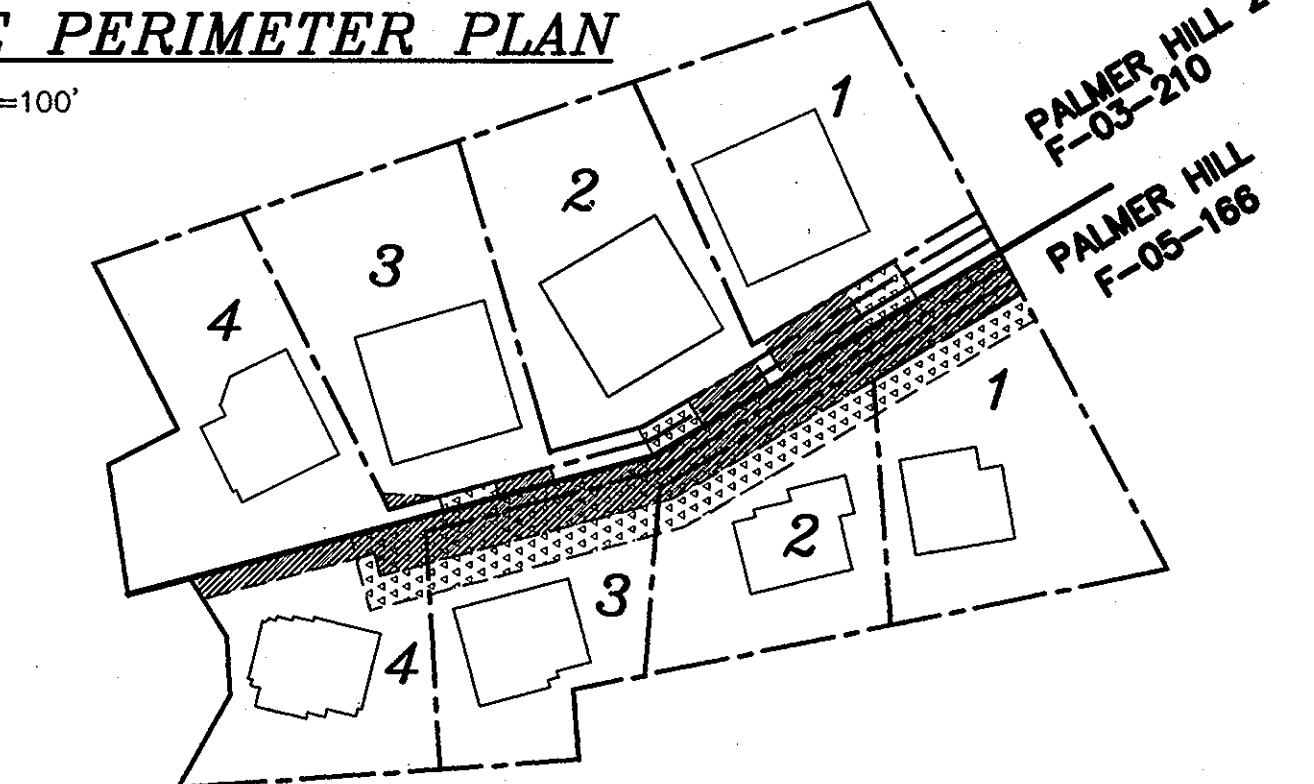
**LEGEND**

- EXISTING WATER SEWER AND UTILITY EASEMENT
- EXISTING USE IN COMMON ACCESS EASEMENT
- 25% OR GREATER SLOPES
- EXISTING FOREST CONSERVATION EASEMENT
- PROPOSED EROSION CONTROL MATTING
- PALMER HILL PALMER HILL 2
- STABILIZED CONSTRUCTION ENTRANCE
- LOD - LIMIT OF DISTURBANCE
- SSF - SUPER SILT FENCE
- PROPOSED LANDSCAPING
- BRFX - PROPOSED BIORETENTION FACILITY

\* NOTE: TIE ALL THE DOWNSPOUTS TO THE ROOF LEADERS TO DIRECT WATER TO THE BIORETENTION FACILITIES.

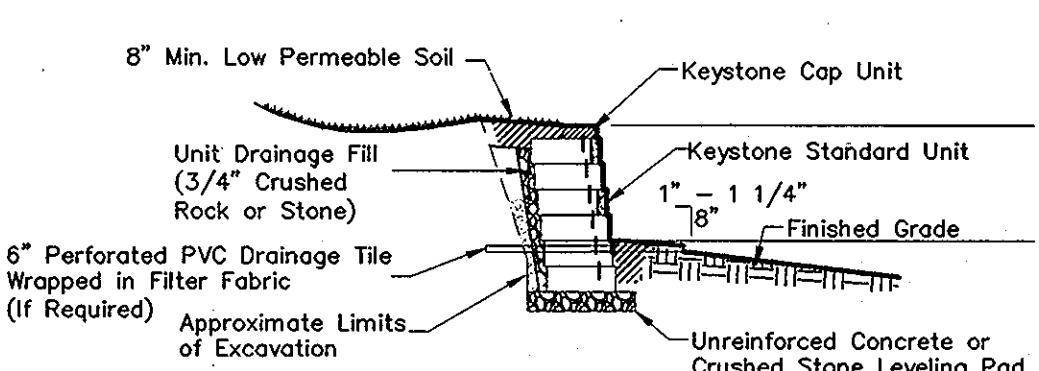
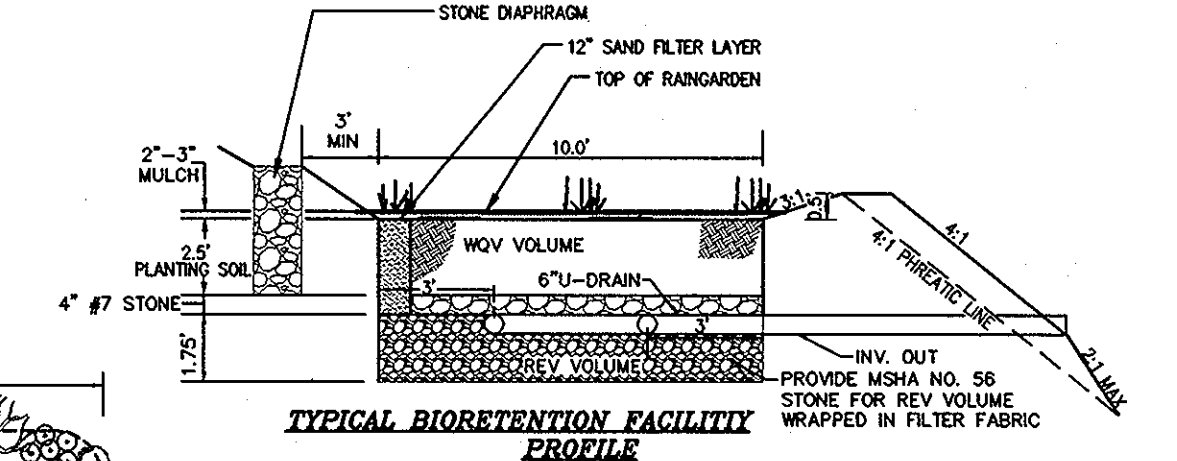


**EASEMENT EXHIBIT**

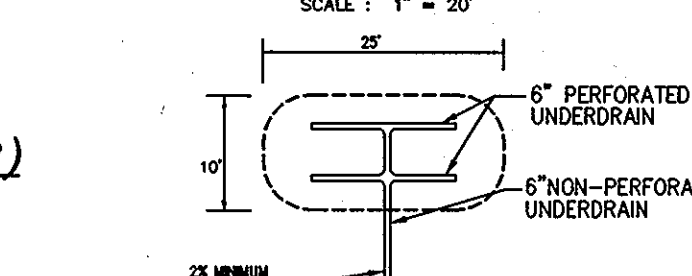


**SHC TABLE**

LOT	SHC INVERT AT EASEMENT	SLOPE
PALMER HILL LOT 1	346.85	2%
PALMER HILL LOT 2	347.17	2%
PALMER HILL LOT 3	347.83	2%
PALMER HILL LOT 4	348.68	1%
PALMER HILL 2 LOT 1	347.51	2%
PALMER HILL 2 LOT 2	348.05	2%
PALMER HILL 2 LOT 3	348.60	2%
PALMER HILL 2 LOT 4	348.45	1%



**TYP. BIORETENTION FACILITY PLANTING DETAIL**

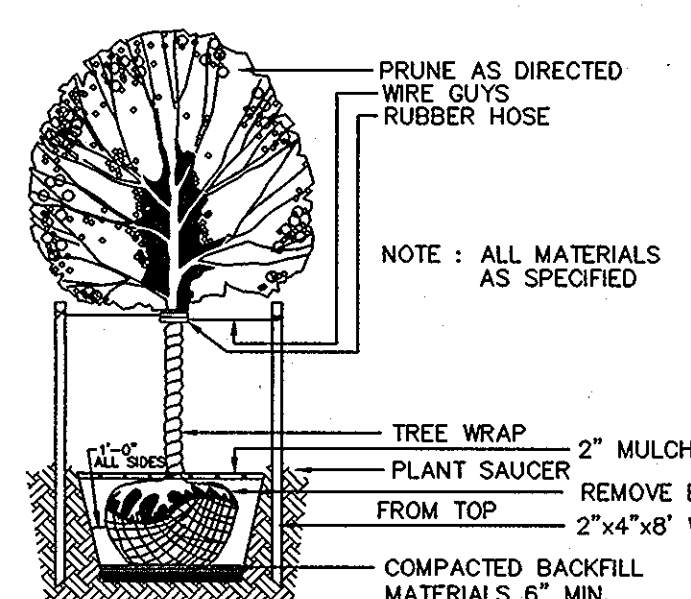


**BIORETENTION FACILITY - PLANT LIST**

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
3	☉	ACER SPICATUM	MOUNTAIN MAPLE	2-1/2" - 3" CAL.
3	○	ILEX GLABRA	INK BERRY	2" - 3" HT.
17	○	LOBELIA SPIRITICA	GREAT BLUE LOBELIA	1 GAL. CONTAINER
17	○	OROXILA SENSIBILIS	SENSITIVE FERN	1 GAL. CONTAINER
8	○	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 GAL. CONTAINER
TOTAL: 02 PERENNIALS, 4 SHRUBS, 4 TREES				

**BIORETENTION FACILITY INFORMATION**

BIORETENTION	TOP OF RAINGARDEN ELEVATION	PONDING DEPTH	DEPTH OF GRAVEL	UNDERDRAIN INVERT	WEIR ELEVATION	RAINGARDEN AREA
1	346.4	0.5'	1.75'	344.8	345.7	250 sq.ft.
2	347.4	0.5'	1.75'	345.8	346.7	250 sq.ft.
3	348.3	0.5'	1.75'	346.8	347.7	250 sq.ft.
4	349.3	0.5'	1.75'	347.8	348.7	250 sq.ft.
5	348.2	0.5'	1.75'	346.7	347.6	250 sq.ft.
6	349.5	0.5'	1.75'	347.9	348.9	250 sq.ft.
7	348.5	0.5'	1.75'	346.9	347.9	250 sq.ft.
8	349.5	0.5'	1.75'	347.9	348.9	250 sq.ft.



TYPICAL DECIDUOUS TREE PLANTING DETAIL

**LANDSCAPE REQUIREMENT PLANTING SCHEDULE**

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
38	○	ACER SPICATUM	MOUNTAIN MAPLE	2 1/2" - 3" CAL.
8	○	PINUS STROBUS	EASTERN WHITE PINE	6" - 8" HT.
<b>TOTAL</b>				
46 TREES (38 SHADE TREES AND 8 EVERGREEN TREES)				

**DEVELOPER'S CERTIFICATE**

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 OF THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

Signature of Developer: *S. Rafael Costello* 3/16/08  
 PRINTED NAME OF DEVELOPER: S. Rafael Costello

**ENGINEER'S CERTIFICATE**

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

Signature of Engineer: *R. Jacob Hikmat* 3/16/08  
 PRINTED NAME OF ENGINEER: R. JACOB HIKMAT

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

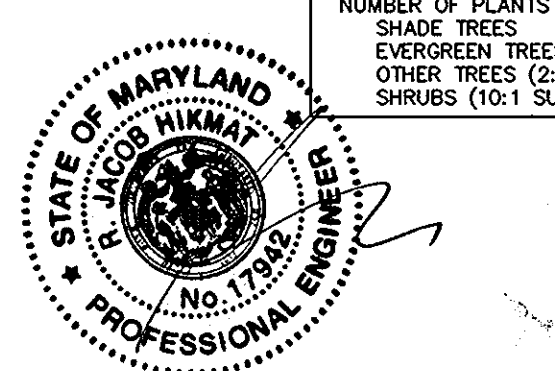
USDA - NATURAL RESOURCE CONSERVATION SERVICE DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING DATE: 3/19/08

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 3/24/08

CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 3/27/08

DIRECTOR DATE



**OWNER/DEVELOPER**

PALMER PROPERTY L.L.C.  
 3230 BETHANY LANE, SUITE 1  
 ELLICOTT CITY, MD 21042  
 (410) 418-8900

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 17942 EXPIRATION DATE: 09/01/2008

**SCHEDULE A : PALMER HILL PERIMETER LANDSCAPED EDGE (F-03-210)**

CATEGORY	ADJACENT TO PERIMETER PROPERTIES								TOTAL
	A (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)	A (PERIMETER 6)	A (PERIMETER 7)	A (PERIMETER 8)	
LANDSCAPE TYPE	B (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)	A (PERIMETER 6)	A (PERIMETER 7)	A (PERIMETER 8)	
LINEAR FEET OF PERIMETER	163.13 LF	315.22 LF	36.62 LF	230.55 LF	31.64 LF	458.58 LF	42.01 LF	972.06 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	NO	NO	YES, 21.69 LF OF EX. TREES	YES, 31.64 LF OF EX. TREES	YES, 458.58 LF OF EX. TREES	YES, 42.01 LF OF EX. TREES	YES, 512.63 LF OF EX. TREES	
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET)	NO	NO	NO	NO	NO	NO	NO	NO	
NUMBER OF PLANTS REQUIRED									
SHADE TREES	3 SHADE TREES	5 SHADE TREES	1 SHADE TREE	3 SHADE TREES	0 SHADE TREES	0 SHADE TREES	0 SHADE TREES	8 SHADE TREES	20 SHADE TREES
EVERGREEN TREES	4 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	4 EVERGREEN TREES	4 EVERGREEN TREES
SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS
NUMBER OF PLANTS PROVIDED									
SHADE TREES	3 SHADE TREES	5 SHADE TREES	1 SHADE TREE	3 SHADE TREES	0 SHADE TREES	0 SHADE TREES	0 SHADE TREES	8 SHADE TREES	20 SHADE TREES
EVERGREEN TREES	4 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	4 EVERGREEN TREES	4 EVERGREEN TREES
OTHER TREES (2:1 SUBSTITUTION)	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES
SHRUBS (10:1 SUBSTITUTION)	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS

**SCHEDULE A : PALMER HILL 2 PERIMETER LANDSCAPED EDGE (F-05-166)**

CATEGORY	ADJACENT TO PERIMETER PROPERTIES					TOTAL
	B (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)	
LANDSCAPE TYPE	B (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)	
LINEAR FEET OF PERIMETER	146.46 LF	937.08 LF	138.37 LF	478.41 LF	491.86 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	YES, 511.89 LF OF EX. TREE	YES, 138.37 LF OF EX. TREE	YES, 478.41 LF OF EX. TREES	NO	
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET)	NO	NO	NO	NO	NO	
NUMBER OF PLANTS REQUIRED						
SHADE TREES	3 SHADE TREES	7 SHADE TREES	0 SHADE TREE	0 SHADE TREES	8 SHADE TREES	18 SHADE TREES
EVERGREEN TREES	4 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	4 EVERGREEN TREES
SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS
NUMBER OF PLANTS PROVIDED						
SHADE TREES	3 SHADE TREES	7 SHADE TREES	0 SHADE TREE	0 SHADE TREES	8 SHADE TREES	18 SHADE TREES
EVERGREEN TREES	4 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	4 EVERGREEN TREES
OTHER TREES (2:1 SUBSTITUTION)	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES	0 SUBSTITUTION TREES
SHRUBS (10:1 SUBSTITUTION)	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS

project	07-017	date	03/08
illustration	RDB	engineering	RDB
scale	1"=30'	approval	RIH

no.	description	date
1	REV. GR2, HSE & BRFX, LOT 1 (2) TO REF AS-BUILT 10/10/07	8/18/08
2	REV. GR2, HSE & BRFX, LOT 1 (2) TO REF AS-BUILT 10/10/07	8/18/08
3	REV. GR2, HSE & BRFX, LOT 1 (2) TO REF AS-BUILT 10/10/07	8/18/08
4	REV. GR2, HSE & BRFX, LOT 1 (2) TO REF AS-BUILT 10/10/07	8/18/08
5	REV. GR2, HSE & BRFX, LOT 1 (2) TO REF AS-BUILT 10/10/07	8/18/08
6	REV. GR2, HSE & BRFX, LOT 1 (2) TO REF AS-BUILT 10/10/07	8/18/08
7	REV. GR2, HSE & BRFX, LOT 1 (2) TO REF AS-BUILT 10/10/07	8/18/08
8	REV. GR2, HSE & BRFX, LOT 1 (2) TO REF AS-BUILT 10/10/07	8/18/08
9	REV. GR2, HSE & BRFX, LOT 1 (2) TO REF AS-BUILT 10/10/07	8/18/08

**PALMER HILL AND PALMER HILL II**  
 LOTS 1-4 AND LOTS 1-4  
 TAX MAP 18, PARCELS: 311 & 369  
 HOWARD COUNTY, MARYLAND  
 SECOND ELECTION DISTRICT  
 SITE DEVELOPMENT PLAN

**MILDENBERG, BOENDER & ASSOC., INC.**  
 Engineers Planners Surveyors  
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
 (410) 997-0286 Fax

**HOWARD SOIL CONSERVATION DISTRICT**

**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, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED - APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (LBS./1000 SQ.FT.).
- ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK 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 1-1/2 TONS PER ACRE OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE OF 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 OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING; OPTION (2) - USE SOIL; OPTION (3) - SEED WITH 60 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED WEED FREE 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 SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

**TEMPORARY SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING 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 OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.) OR 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 16 THRU NOVEMBER 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 SOIL.

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

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

**STANDARD SEDIMENT CONTROL NOTES**

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION. (313-1855).
  - 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.
  - FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
    - 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
    - 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
  - 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.
  - DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOIL (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:	3.25 ACRES
AREA DISTURBED:	2.97 ACRES
AREA TO BE ROOFED OR PAVED:	0.70 ACRES
AREA TO BE VEGETATIVELY STABILIZED:	2.27 ACRES
TOTAL CUT:	7,000 CU. YDS.
TOTAL FILL:	7,000 CU. YDS.
TOTAL WASTE/BORROW AREA LOCATION:	-
- THESE QUANTITIES ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR IS REQUIRED TO PROVIDE HIS OWN QUANTITIES MEASUREMENTS.
- 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 CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
  - 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 CONTROL STRUCTURES, BUT BEFORE PROCEEDING WITH 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 CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

**OWNER/DEVELOPER**

PALMER PROPERTY LLC  
3230 BETHANY LANE, SUITE 1  
ELLCOTT CITY, MD 21042  
(410) 418-8900

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.: 17942 EXPIRATION DATE: 09/01/2008



**DEVELOPER'S CERTIFICATE**

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 SOIL EROSION AND SEDIMENT BEGINNING OF THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

Signature: *S. Paragel* Date: 3/14/08  
PRINTED NAME OF DEVELOPER: S. Paragel

**ENGINEER'S CERTIFICATE**

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

Signature: *R. Jacob Himat* Date: 3/16/08  
PRINTED NAME OF ENGINEER: R. JACOB HIMAT

Signature: *[Signature]* Date: 3/13/08  
USDA - NATURAL RESOURCE CONSERVATION SERVICE

Signature: *[Signature]* Date: 3/13/08  
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Signature: *[Signature]* Date: 3/13/08  
CHIEF, DIVISION OF LAND DEVELOPMENT

Signature: *[Signature]* Date: 3/26/08  
DIRECTOR

**STANDARD AND SPECIFICATIONS FOR TOPSOIL**

**DEFINITION**

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

**PURPOSE**

TO PROVIDE A SUITABLE SOIL MEDIUM FOR 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**

- THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
  - 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 CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
  - THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
  - THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
- FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

**CONSTRUCTION AND 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.
- 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, QUACKGRASS, JOHNSONSON GRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
  - 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.
- FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
  - PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
  - ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
    - PH FOR TOPSOILS SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PERSCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
    - 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.
    - 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.
  - PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

- TOPSOIL APPLICATION
  - 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.
  - GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBERT 4" - 8" HIGHER IN ELEVATION.
  - TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" TO 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.
  - 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.
- ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:
  - 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 AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
    - COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS WHO ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.
    - COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHOROUS, 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.
    - COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.
  - 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.

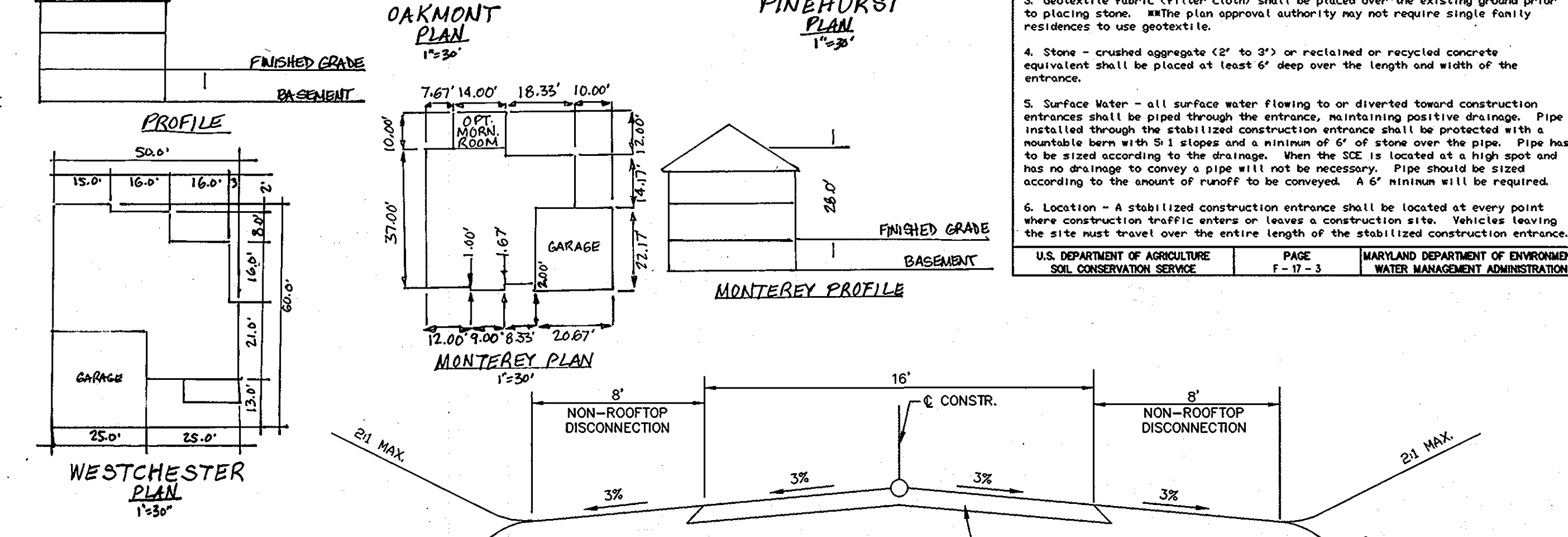
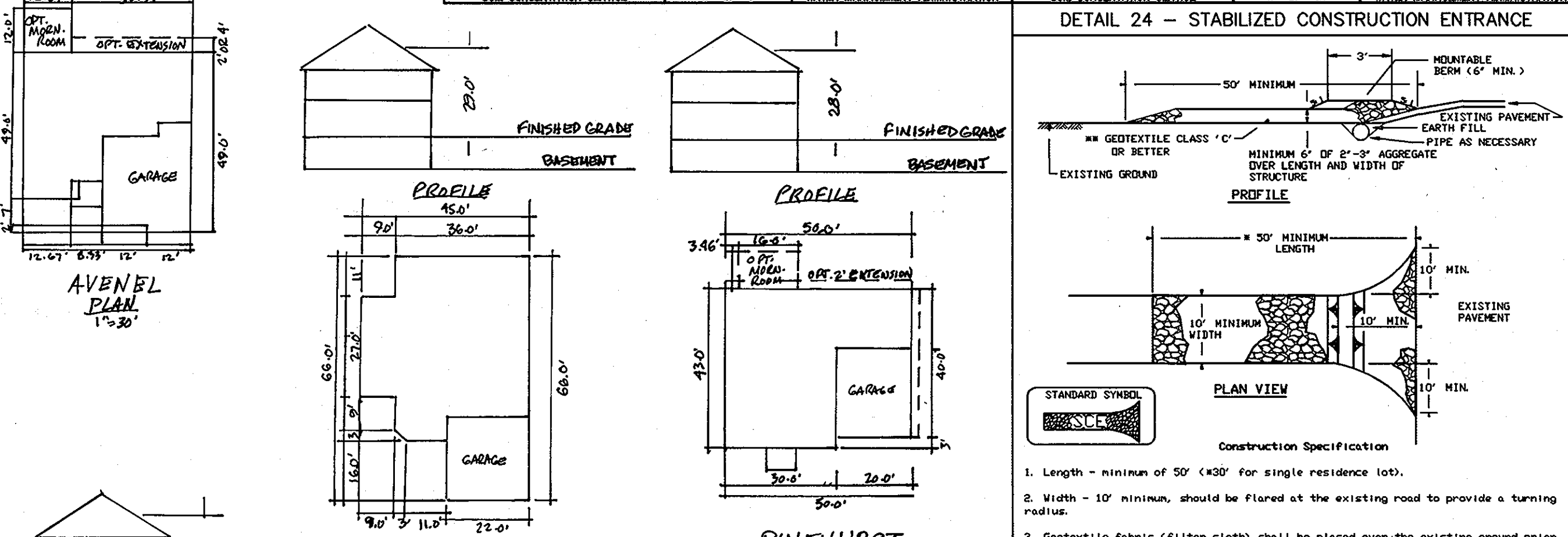
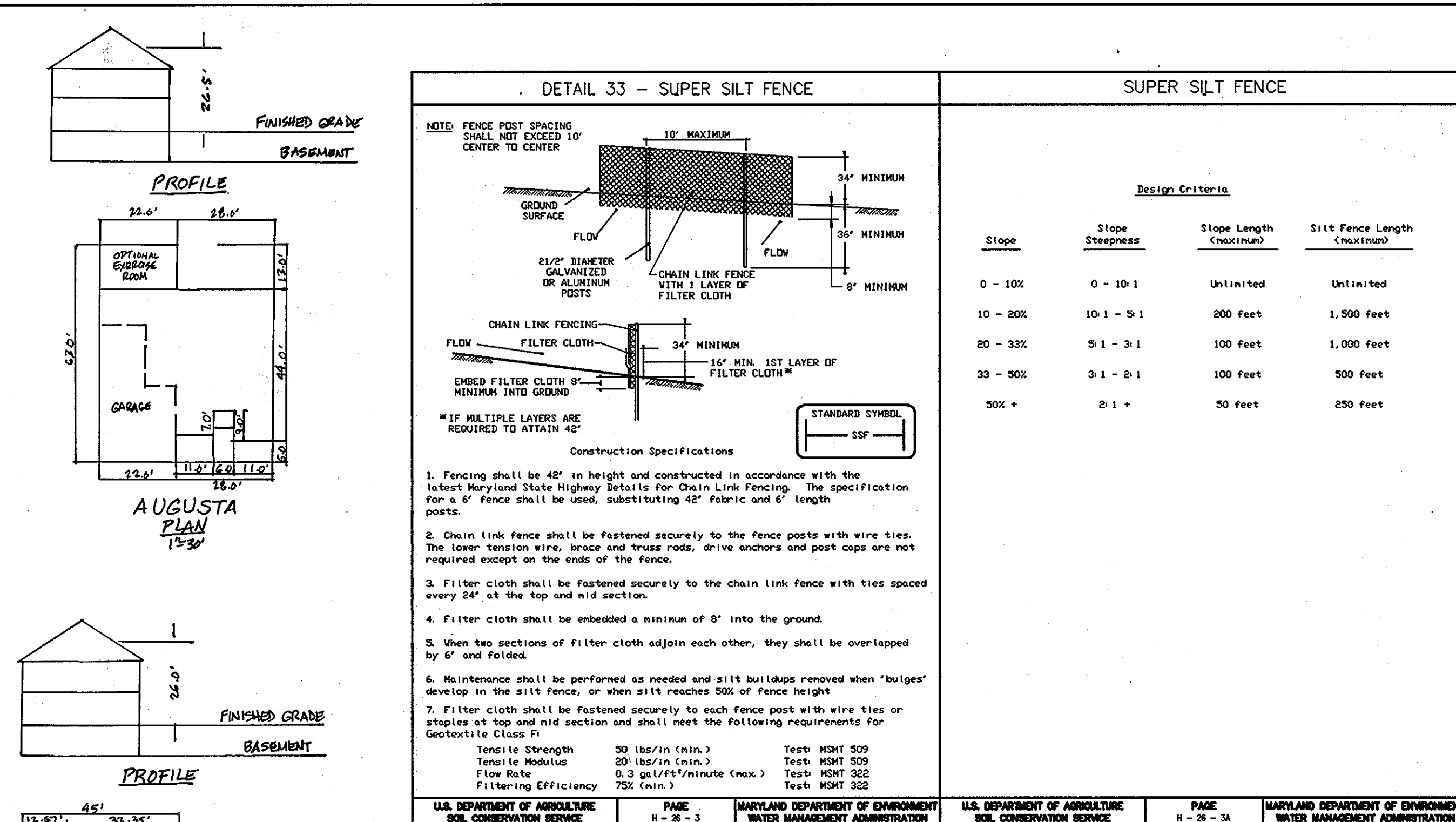
REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING, MD-VA, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES, REVISED 1973.

**SEQUENCE OF CONSTRUCTION**

- OBTAIN A GRADING PERMIT (1 DAY).
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AT LOCATION SHOWN (1 DAY).
- CONSTRUCT SILT FENCE (2 DAYS).
- COMPLETE CONSTRUCTION AS SHOWN (90 DAYS).
- COMPLETE FINE GRADING OF SITE TO GRADES INDICATED (7 DAYS).
- SEED AND MULCH ALL REMAINING DISTURBED AREAS (1 DAY).
- CONSTRUCT HOUSES (120 DAYS).
- CONSTRUCT RAINGARDENS (7 DAYS).
- UPON STABILIZATION OF THE SITE AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS (2 DAYS).

**OPERATION AND MAINTENANCE SCHEDULE FOR RAIN GARDENS**

- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENT.



GENERIC TYPE	AUGUSTA	AVENEL	DAKMONT	PINEHURST	WESTCHESTER
HOUSE A	NO EXCESS ROOM	NO HOURL ROOM OR EXTS.	NOT AVAILABLE	NO HOURL ROOM OR EXTS.	NOT AVAILABLE
HOUSE B	N/A	N/A	N/A	NO HOURL ROOM OR EXTS.	N/A
HOUSE E	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS	ALL OPTIONS

Project	07-017	Illustration	RDB	Scale	RDB	Approval	AS SHOWN
Date	MARCH 08	Engineering	RDB	Approval	RDB	Approval	RH

ADD MARYLAND HOUSE TYPE	1/2/09	revision	gate
ADD FIVE NEW HOUSE TYPES		description	
revisions			

**PALMER HILL AND PALMER HILL II**  
LOTS 1-4 AND LOTS 1-4  
TAX MAP 18, PARCELS: 311 & 369  
SECOND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
SEDIMENT CONTROL NOTES AND DETAILS

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0236 Fax (410) 997-0236