GENERAL NOTES

1. SUBJECT PROPERTY ZONED R-SC PER THE 2-2-04 COMPREHENSIVE ZONING PLAN AND THE COMP LITE ZONING AMENDMENTS EFFECTIVE 7-28-06.

2. THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS EFFECTIVE APRIL 13, 2004.

3. PROJECT BOUNDARY AND TOPOGRAPHY WITHIN THE SUBDIVISION AREA ARE BASED ON FIELD RUN BOUNDARY SURVEY AND TOPO PERFORMED BY BENCHMARK ENGINEERING, INC. DATED NOVEMBER 2011, ALONG WITH RECORD PLATS AND GIS INFORMATION.

4. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM, THEIR REQUIRED BUFFERS OR 100YR FLOODPLAIN EXCEPT THAT ASSOCIATED WITH THE CONNECTION OF WASHINGTON AVENUE WITH HILL STREET AS THIS DISTURBANCE WAS DEEMED AS NECESSARY BY THE DEPARTMENT OF PLANNING AND ZONING.

5. THE 100-YEAR FLOODPLAIN LOCATED ON THIS PROPERTY WAS OBTAINED FROM HOWARD COUNTY RECORDS.

6. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO CEMETERIES LOCATED ON THIS SITE.

7. THERE ARE NO STEEP SLOPES (25% OR GREATER) IN EXCESS 20,000 S.F. ON THIS SITE.

8. IT IS ANTICIPATED THAT THE FOREST CONSERVATION ACT OBLIGATION FOR THIS PROJECT WILL BE MET BY ON-SITE RETENTION.

9. PREVIOUS DPZ FILES: PB 61 PG 470.

10. APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION AND/OR SITE DEVELOPMENT PLAN.

11. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION AND/OR SITE DEVELOPMENT PLAN STAGES. THEREFORE, THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED COMMENTS (INCLUDING THOSE THAT MAY ALTER OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES.

12. THE M-6 MICRO-BIORETENTION DEPTHS MAY NEED TO BE ADJUSTED AT THE NEXT STAGE AFTER SOIL BORING TESTING HAS BEEN COMPLETED. OR AN ALTERNATE PRACTICE MAY NEED TO BE UTILIZED.

13. DISTURBANCE OF WETLANDS AND THIER REQUIRED BUFFERS FOR THE CONNECTION OF WASHINGTON AVENUE HAS BEEN DEEMED A NECESSARY DISTURBANCE BY DPZ ON 5-31-2012.

14. ALL CONSTRUCTION TRAFFIC SHALL ENTER THE SITE FROM HILL STREET.

DESIGN NARRATIVE:

The area of this submission is approximately 6.9 acres. It is defined as part of Parcel 414 and 426 on Tax Map 50 in the 6th Election District of Howard County, Maryland. More specifically, it is located on the south of the North laurel Community Center and west of Washington Boulevard (Route 1) at the end of Meredith Avenue in the North Laurel area. The property is zoned R-SC per the 2-2-2004 comprehensive zoning plan and "Comp Lite" zoning amendments effective 7-28-2006. The site consists of mainly woods. The soils consist of class 'C' and 'D' type soils. The site has moderately sloping land draining toward the eastern and western property boundaries. On the western edge of the property, there is a stream with 100yr floodplain. On the eastern side there is a wetland pocket.

This SWM shall be designed utilizing one (1) site drainage area which shall be established based on the proposed Limit of Disturbance. The intent of the design is to treat enough of the proposed site with ESD features that pre-existing conditions (i.e. woods in good condition) will be approximated. By accomplishing this, volume computations and treatment will become unnecessary. In addition, the water quality and recharge requirements will be met.

The site was analyzed as woods in good condition which established a target RCN of 72. Based on measured impervious a Pe of 1.8 inches was determined. The use ESD practices as outlined in the "Maryland Department of the Environmental Stormwater Management Act of 2007" and the "Howard County Design Manual Volume I, Chapter 5" have been utilized to treat the proposed impervious areas.

The implementation of the 10 (M-6) Micro-Bioretention practices shall handle the required Pe of 1.8 inches. Therefore, this site can be considered "woods" in good condition.

The groundwater recharge requirement has been met and/or exceeded via the stone chambers located beneath (M-6) Micro-Bioretention #1, #7 and #8.

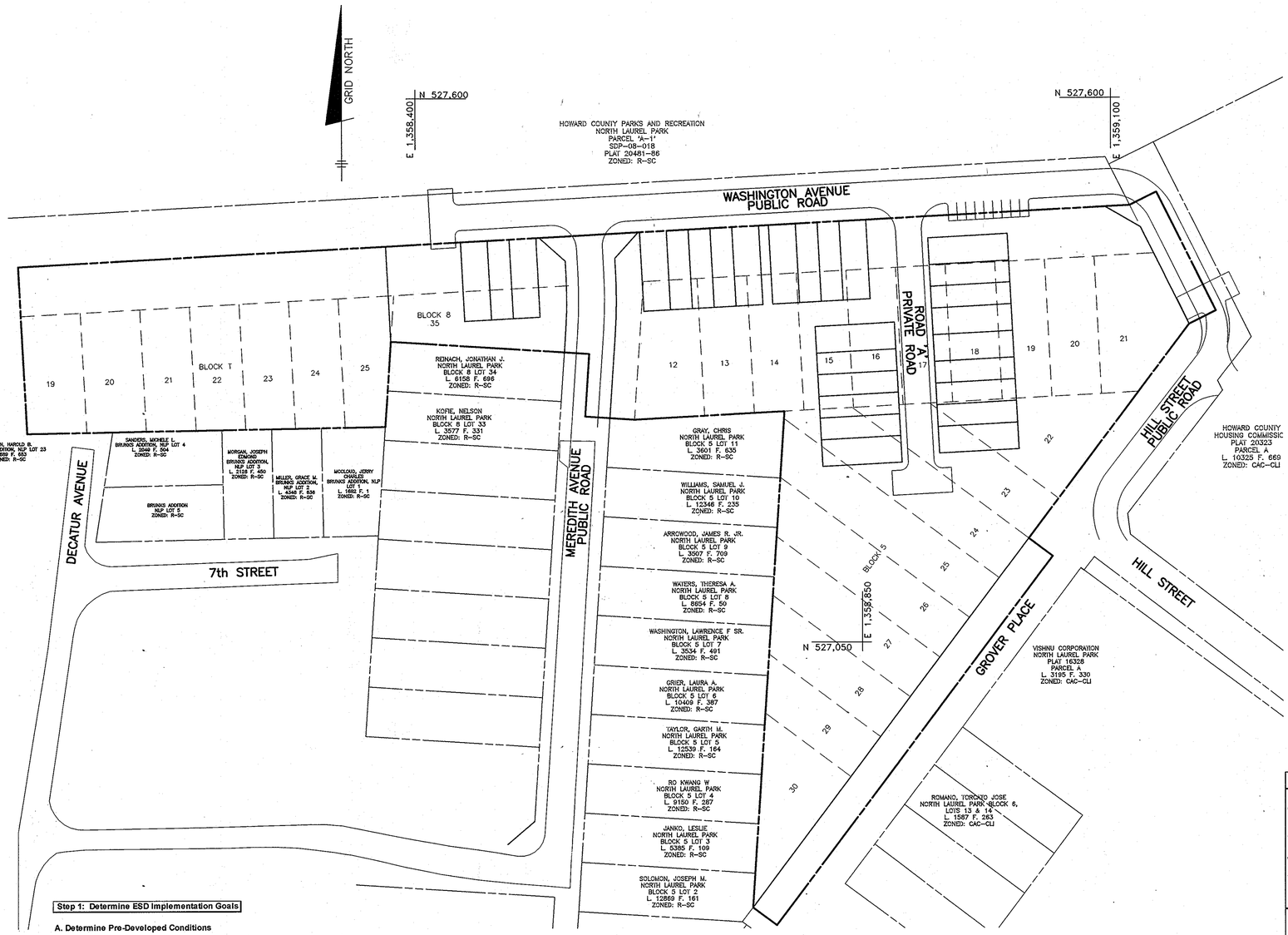
The proposed development will consist of 27 single family attached homes with driveways accessing off of a public and a private road.

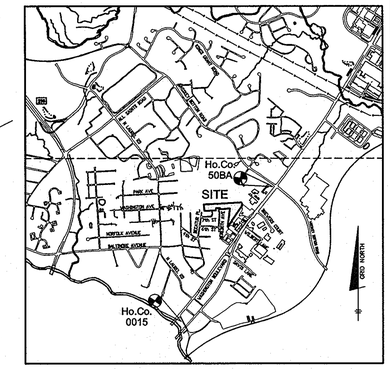
All environmentally sensitive areas to the west (i.e. stream, stream buffer, floodplain) shall remain undisturbed. The wetlands to the east will be disturbed in order to construct a public road connection between Washington Avenue and Hill Street at the request of Howard County.

Natural flow patterns shall be preserved. The practices are generally dispersed along the outer edge of the LOD and shall discharge along this outer edge to mimic the layout of the natural ground as it re-enters the ground as treated.

Reduction of impervious areas has been implemented as best as possible by utilizing the narrowest allowed driveways for double car garages.

As a result of utilizing environmental site design to the maximum extent practical, SWM has been completely addressed without structural practices.





VICINITY MAP

SCALE: 1" = 2000'
ADC MAP 5169; GRID F2

LEGEND

- SOILS DELINEATION
- ChB2 — SOILS CLASSIFICATION
- EXISTING CONTOURS
- LIMIT OF WETLANDS
- EXISTING WOODS LINE
- PROPOSED WOODS LINE
- PROPOSED IMPERVIOUS AREAS
- DRAINAGE AREA DIVIDE
- 100-YEAR FLOODPLAIN
- FOREST CONSERVATION EASEMENT
- LIMIT OF DISTURBANCE
- SSF — SUPER SILT FENCE
- SF — SILT FENCE
- CLEANWATER DIVERSION DIKE
- SCE — STABILIZED CONSTRUCTION ENTRANCE

Site Analysis Data Sheet	
Gross Area	**6.9 ac**
100yr Floodplain	0.3 ac
Steep Slopes 25% or >(outside floodplain)	0.0 ac
Net Area	**6.6 ac**
Wetlands Buffer (outside of floodplain)	1.2 ac
Stream Buffer (outside of floodplain)	0.3 ac
Forested Area (per FSD)	5.9 ac
Erodable Soils	0.0 ac
Limit of Disturbance	4.8 ac
Proposed Impervious Area	2.1 ac
Area of SFA lots	1.2 ac

Step 1: Determine ESD Implementation Goals

A. Determine Pre-Developed Conditions

Soil Conditions for "Woods in Good Condition"

HSG	RCN	*Area (ft2)	Percent
A	38		
B	55		
C	70	136968	65%
D	77	74086	35%
Target RCN	72	211054	

B. Determine Initial Target Pe Using Table 5.3

Soil Conditions Developed Condition

HSG	*Area (ft2)	*Impervious	Percent**	Target Pe
A				
B				
C	136968	57665	45%	1.8
D	74086	32693	45%	1.8
Weighted Pe	211054	90358	45%	**1.8**

* Percent Impervious is rounded to the next higher increment of 5%

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

ESD PRACTICE SUMMARY TABLE

Pe= **1.8** inches Qe= **0.82** inches ESDv= **14404** cf

Practice		DA to practice	Imp Area to practice	Af Required	Af Provided	Af 2% DA?	ESDv Required	ESDv Provided	ESDv 75% ESDv?	REv Required	REv Provided
(M-6) Micro-Bioretention	#1	13,373	8,152	267	500	PASS	1201	1050	PASS		200
(M-6) Micro-Bioretention	#2	15,556	7,436	311	500	PASS	1121	850	PASS		0
(M-6) Micro-Bioretention	#3	8,956	6,902	179	500	PASS	999	850	PASS		0
(M-6) Micro-Bioretention	#4	15,953	8,841	319	650	PASS	1313	1105	PASS		0
(M-6) Micro-Bioretention	#5	9,660	5,352	193	400	PASS	795	680	PASS		0
(M-6) Micro-Bioretention	#6	14,165	3,452	283	300	PASS	572	510	PASS		0
(M-6) Micro-Bioretention	#7	17,192	11,553	344	750	PASS	1689	1275	PASS		300
(M-6) Micro-Bioretention	#8	13,571	13,067	271	850	PASS	1866	1445	PASS		340
(M-6) Micro-Bioretention	#9	19,281	6,502	386	600	PASS	1022	1020	PASS		0
(M-6) Micro-Bioretention	#10	16,102	11,802	322	800	PASS	1714	1360	PASS		0
TOTAL (not including disconnection) =							**12292**	**10145**	PASS	**808**	**840**

SOILS LEGEND		
MAP SYMBOL	SOIL GROUP	SOIL TYPE
Fo	D	FALSINGTON SANDY LOAM, 0 TO 2 PERCENT SLOPES
RsB	C	RUSSETT FINE SANDY LOAM, 2 TO 5 PERCENT SLOPES
RsC	C	RUSSETT FINE SANDY LOAM, 5 TO 10 PERCENT SLOPES

TAKEN FROM NRCS WEB SOILS SURVEY MARCH, 2012

SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	ENVIRONMENTAL CONCEPT PLAN
3	ENVIRONMENTAL CONCEPT PLAN, NOTES AND DETAILS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 8/22/12

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 8/22/12

NO.	DATE	REVISION

BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE ▲ SUITE 418 ▲ ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
60 THOMAS JOHNSON DRIVE ▲ FREDERICK, MARYLAND 21702
(P) 301-371-3505 (F) 301-371-3506
WWW.BEI-CIVILENGINEERING.COM

Professional Certification. 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. 21509, Expiration Date: 07-22-2013.

STATE OF MARYLAND — BRIAN C. DEMENY — No. 21509 — REGISTERED PROFESSIONAL ENGINEER — 8/16/2012

OWNER:
PARK OVERLOOK, LLC
9695 NORFOLK AVENUE
LAUREL, MARLAND 20723
410-792-2565

DEVELOPER:
PARK OVERLOOK, LLC
9695 NORFOLK AVENUE
LAUREL, MARLAND 20723
410-792-2565

PARK OVERLOOK

LOTS 1 thru 27 & OPEN SPACE LOTS 28-30
A RESUBDIVISION OF NORTH LAUREL PARK BLOCK 5,
LOTS 12-30, BLOCK T, LOTS 19-25 AND BLOCK 8, LOT 35

TAX MAP: 50 GRID: 4 PARCEL: p/o 414 & 426
ZONED: R-SC
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND

ENVIRONMENTAL CONCEPT PLAN

DESIGN: DBT	DRAWN: DBT	DATE: AUGUST, 2012	BEI PROJECT NO: 2439
		SCALE: AS SHOWN	SHEET 1 OF 3

ECP-12-056

P:\2439 NLP BLOCK 5 LOTS 12-30\dwg\1000_ECP.dwg, 8/16/2012 9:43:31 AM

MATCH LINE SEE SHEET 3

MATCH LINE SEE SHEET 3

MATCH LINE SEE SHEET 3

LEGEND

- SOILS DELINEATION
- ChB2 SOILS CLASSIFICATION
- EXISTING CONTOURS
- LIMIT OF WETLANDS
- EXISTING WOODS LINE
- PROPOSED WOODS LINE
- PROPOSED IMPERVIOUS AREAS
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- FOREST CONSERVATION EASEMENT
- LIMIT OF DISTURBANCE
- SSF SUPER SILT FENCE
- SF SILT FENCE
- CLEANWATER DIVERSION DIKE
- SCE STABILIZED CONSTRUCTION ENTRANCE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 8/22/12

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 8/28/12

GRAPHIC SCALE

30 0 30 60 120

(IN FEET)

1 inch = 30 ft.

NO.	DATE	REVISION

BENCHMARK

ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS

ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE ▲ SUITE 418 ▲ ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644

60 THOMAS JOHNSON DRIVE ▲ FREDERICK, MARYLAND 21702
(P) 301-371-3505 (F) 301-371-3506

WWW.BEI-CIVILENGINEERING.COM

Professional Certification. 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. 28556, Expiration Date: 07-22-2013.

STATE OF MARYLAND — BRIAN F. CLEARY — No. 28556 — PROFESSIONAL ENGINEER — 8/16/2012

OWNER:

PARK OVERLOOK, LLC
9695 NORFOLK AVENUE
LAUREL, MARLAND 20723
410-792-2565

DEVELOPER:

PARK OVERLOOK, LLC
9695 NORFOLK AVENUE
LAUREL, MARLAND 20723
410-792-2565

PARK OVERLOOK

LOTS 1 thru 27 & OPEN SPACE LOTS 28-30

A RESUBDIVISION OF NORTH LAUREL PARK BLOCK 5, LOTS 12-30, BLOCK T, LOTS 19-25 AND BLOCK 8, LOT 35

TAX MAP: 50 GRID: 4 PARCEL: p/o 414 & 426
ZONED: R-SC
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND

ENVIRONMENTAL CONCEPT PLAN

DESIGN: AAM	DRAWN: AAM/DBT	DATE: AUGUST, 2012	BEI PROJECT NO: 2439
		SCALE: AS SHOWN	SHEET 2 OF 3

ECP-12-056

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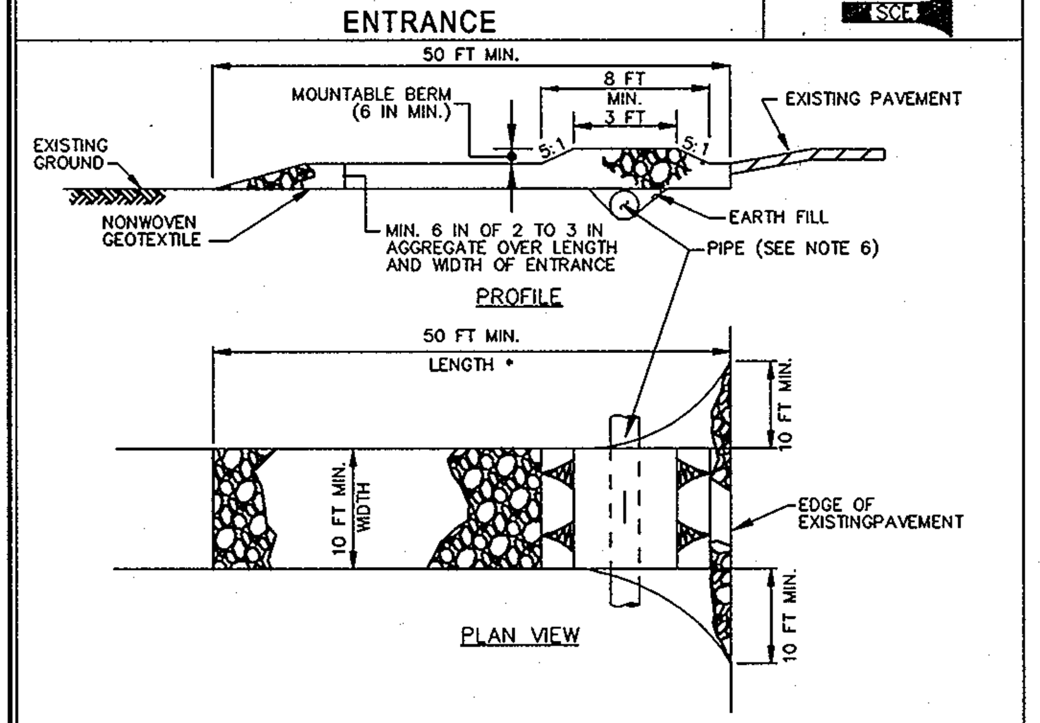
DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL



CONSTRUCTION SPECIFICATIONS

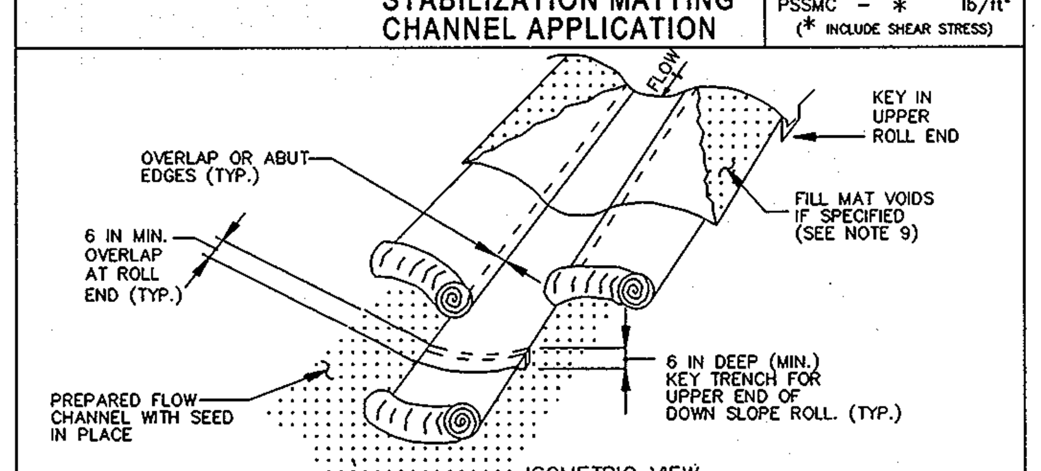
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL B-4-6-C PERMANENT SOIL STABILIZATION MATTING CHANNEL APPLICATION

STANDARD SYMBOL: PSSMC – * lb/ft² (* INCLUDE SHEAR STRESS)



CONSTRUCTION SPECIFICATIONS

1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
2. USE PERMANENT SOIL STABILIZATION MATTING MADE OF OPEN WEAVE SYNTHETIC, NON-DEGRADABLE FIBERS OR ELEMENTS OF UNIFORM THICKNESS AND DISTRIBUTION THROUGHOUT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
3. SECURE MATTING USING STEEL STAPLES OR WOOD STAKES. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1 ½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPE AT THE BOTTOM.
4. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS, UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
5. UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MATTING SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
6. OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT.
7. KEY IN THE TOP OF SLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN THE KEY.
8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
9. IF SPECIFIED BY THE DESIGNER OR MANUFACTURER AND DEPENDING ON THE TYPE OF MAT BEING INSTALLED, ONCE THE MATTING IS KEYED AND STAPLED IN PLACE, FILL THE MAT VOIDS WITH TOP SOIL OR GRANULAR MATERIAL AND LIGHTLY COMPACT OR ROLL TO MAXIMIZE SOIL/MAT CONTACT WITHOUT CRUSHING MAT.
10. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

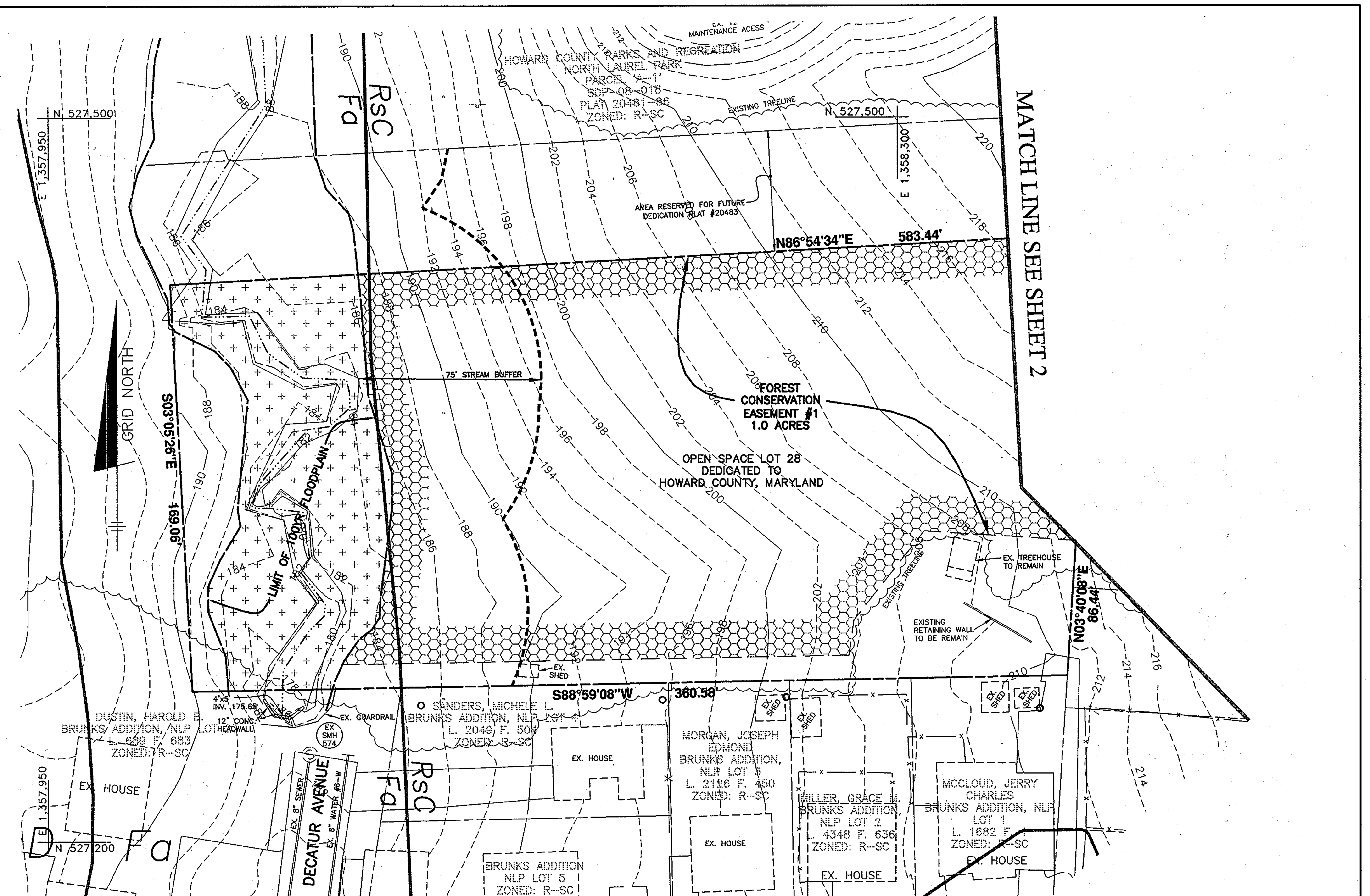
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SEDIMENT CONTROL NOTES

1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION, (313-1850).
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 SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL", REVISIONS THERETO.
3. 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 PROJECT SITE.
4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:

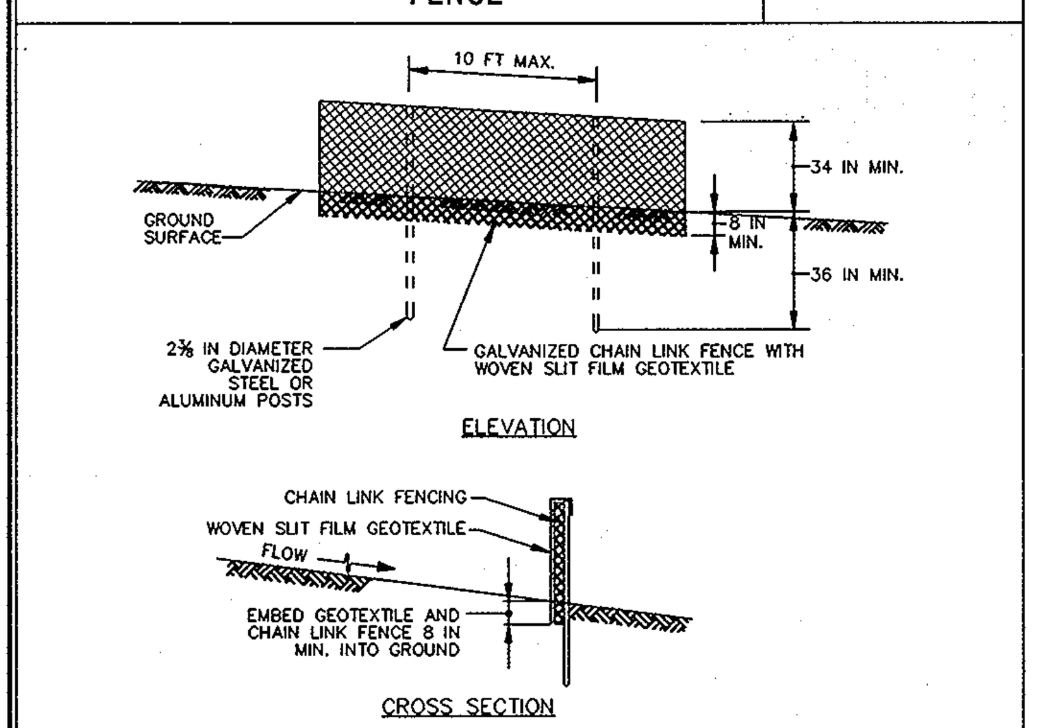
TOTAL AREA OF SITE	6.9	ACRES
AREA DISTURBED	4.8	ACRES
AREA TO BE ROOFED OR PAVED	2.1	ACRES
AREA TO BE VEGETATIVELY STABILIZED	2.7	ACRES
TOTAL CUT	13,000	CY
TOTAL FILL	11,000	CY
OFFSITE WASTE AREA LOCATION	A SITE WITH AN ACTIVE GRADING PERMIT	

8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROL 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.
11. 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.



DETAIL E-3 SUPER SILT FENCE

STANDARD SYMBOL: SSF



CONSTRUCTION SPECIFICATIONS

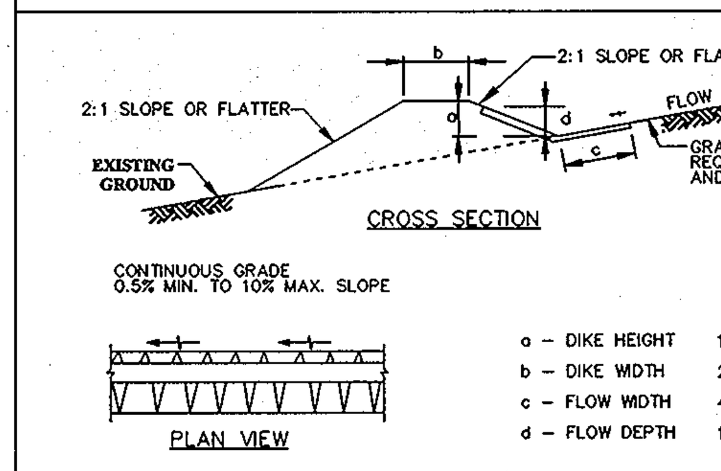
1. INSTALL 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2⅜ INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL C-1 EARTH DIKE

STANDARD SYMBOL: A-1 — PLACE DESIGNATION (e.g. A-1) ON FLOW CHANNEL SIDE OF DIKE.



DIKE TYPE

	A	B
a – DIKE HEIGHT	18 IN MIN.	30 IN MIN.
b – DIKE WIDTH	24 IN MIN.	36 IN MIN.
c – FLOW WIDTH	4 FT MIN.	6 FT MIN.
d – FLOW DEPTH	12 IN MIN.	24 IN MIN.

FLOW CHANNEL STABILIZATION

A-1 SEED WITH STRAW MULCH AND TACK. (NOT ALLOWED FOR CLEAR WATER DIVERSION.)

A-2/B-2 SEED WITH SOIL STABILIZATION MATTING OR LINE WITH SOD.

A-3/B-3 4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE PRESSED INTO SOIL A MINIMUM OF 7 INCHES AND FLUSH WITH GROUND.

CONSTRUCTION SPECIFICATIONS

1. REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF EARTHDIKE.
2. EXCAVATE OR SHAPE EARTH DIKE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED.
3. COMPACT FILL.
4. CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
5. PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.
6. STABILIZE EARTH DIKE WITHIN THREE DAYS OF INSTALLATION. STABILIZE FLOW CHANNEL FOR CLEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION.
7. MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP EARTH DIKE AND POINT OF DISCHARGE FREE OF EROSION, AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.
8. UPON REMOVAL OF EARTH DIKE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS OF REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON APPROVED PLAN.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

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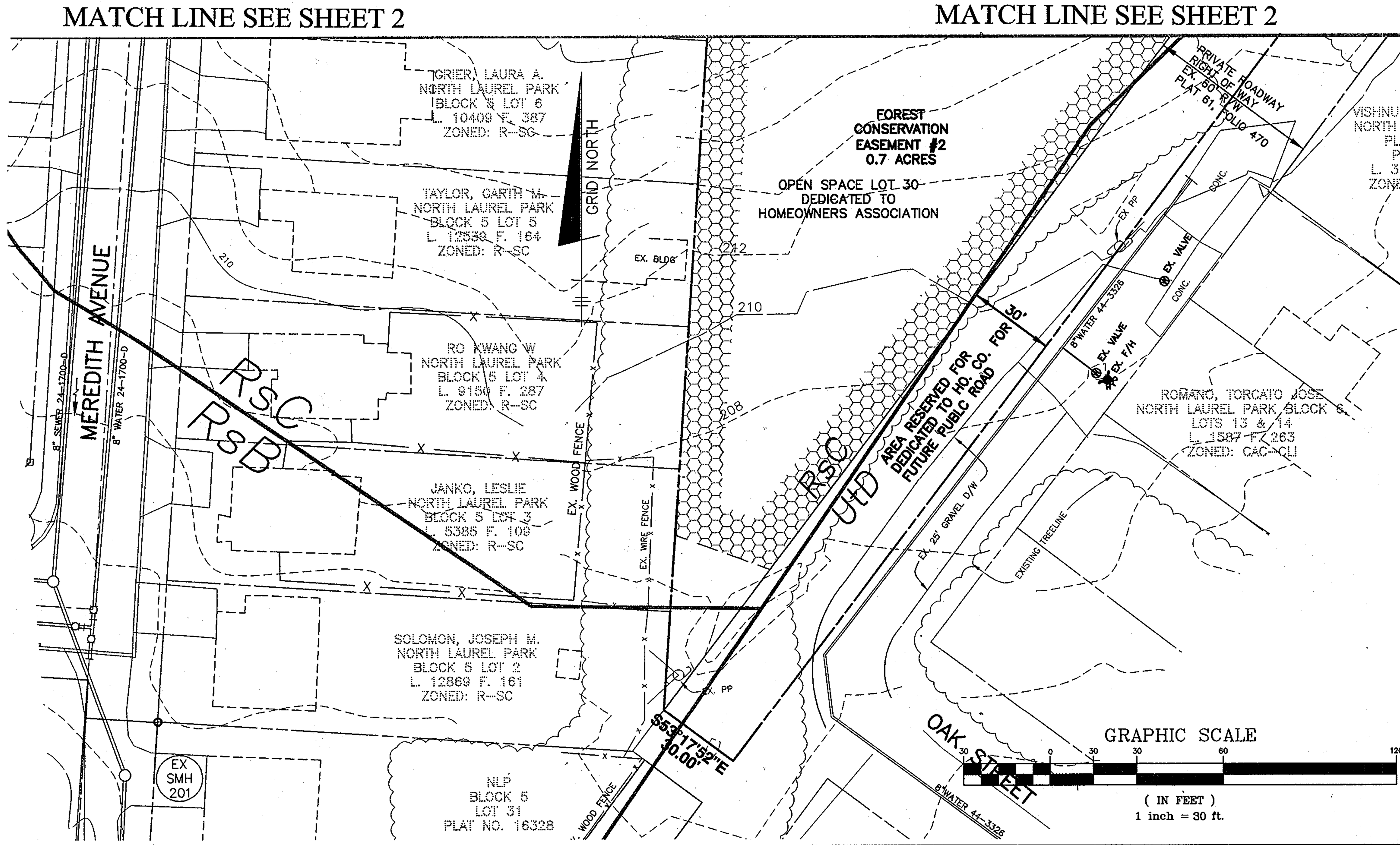

SEQUENCE OF CONSTRUCTION

NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF CONSTRUCTION

DAY 1	1.) OBTAIN GRADING PERMIT.
DAY 2-5	2.) INSTALL SEDIMENT CONTROLS AS SHOWN ON FINAL CONSTRUCTION PLANS.
DAY 6-35	3.) GRADE ROAD BEDS, DRIVEWAYS AND HOUSE PADS. PAVE ROADS.
DAY 36-40	4.) FINAL GRADE AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDBED NOTES.
DAY 41-55	5.) WHEN CONTRIBUTING AREAS ARE STABILIZED, CONSTRUCT STORMWATER MANAGEMENT FACILITIES.
DAY 56-60	6.) WITH THE APPROVAL OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE ANY REMAINING DISTURBED AREAS.

NOTE:

1. EROSION CONTROL MATTING SHALL BE PLACED IN SWALES WHERE DEEMED NECESSARY UNTIL VEGETATION IS ESTABLISHED OR SOLID SOD SHOULD BE USED.
2. ON-LOT STORMWATER MANAGEMENT FACILITIES SHALL BE CONSTRUCTED AS A PART OF THE HOUSE CONSTRUCTION AND LOT DEVELOPMENT.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 8/22/12
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 8/23/12

NO.	DATE	REVISION

BENCHMARK ENGINEERING, INC.
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
8480 BALTIMORE NATIONAL PIKE ▲ SUITE 418 ▲ ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
60 THOMAS JOHNSON DRIVE ▲ FREDERICK, MARYLAND 21702
(P) 301-371-3505 (F) 301-371-3506
WWW.BEI-CIVILENGINEERING.COM

Professional Certification. 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. 28559, Expiration Date: 07-22-2013.

STATE OF MARYLAND · BRIAN F. CLEARY · No. 28559 · REGISTERED · PROFESSIONAL ENGINEER

8/16/2012

OWNER:
PARK OVERLOOK, LLC
9695 NORFOLK AVENUE
LAUREL, MARLAND 20723
410-792-2565

DEVELOPER:
PARK OVERLOOK, LLC
9695 NORFOLK AVENUE
LAUREL, MARLAND 20723
410-792-2565

PARK OVERLOOK

LOTS 1 thru 27 & OPEN SPACE LOTS 28-30

A RESUBDIVISION OF NORTH LAUREL PARK BLOCK 5, LOTS 12-30, BLOCK T, LOTS 19-25 AND BLOCK 8, LOT 35

TAX MAP: 50 GRID: 4 PARCEL: p/o 414 & 426
ZONED: R-SC
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND

ENVIRONMENTAL CONCEPT PLAN, NOTES & DETAILS

DATE: AUGUST, 2012		BEI PROJECT NO: 2439	
DESIGN: DBT	DRAWN: DBT	SCALE: AS SHOWN	SHEET 3 OF 3

ECP-12-056

P:\2439 NLP BLOCK 5 LOTS 12-30\dwg\1000_ECP.dwg, 8/16/2012 9:43:22 AM