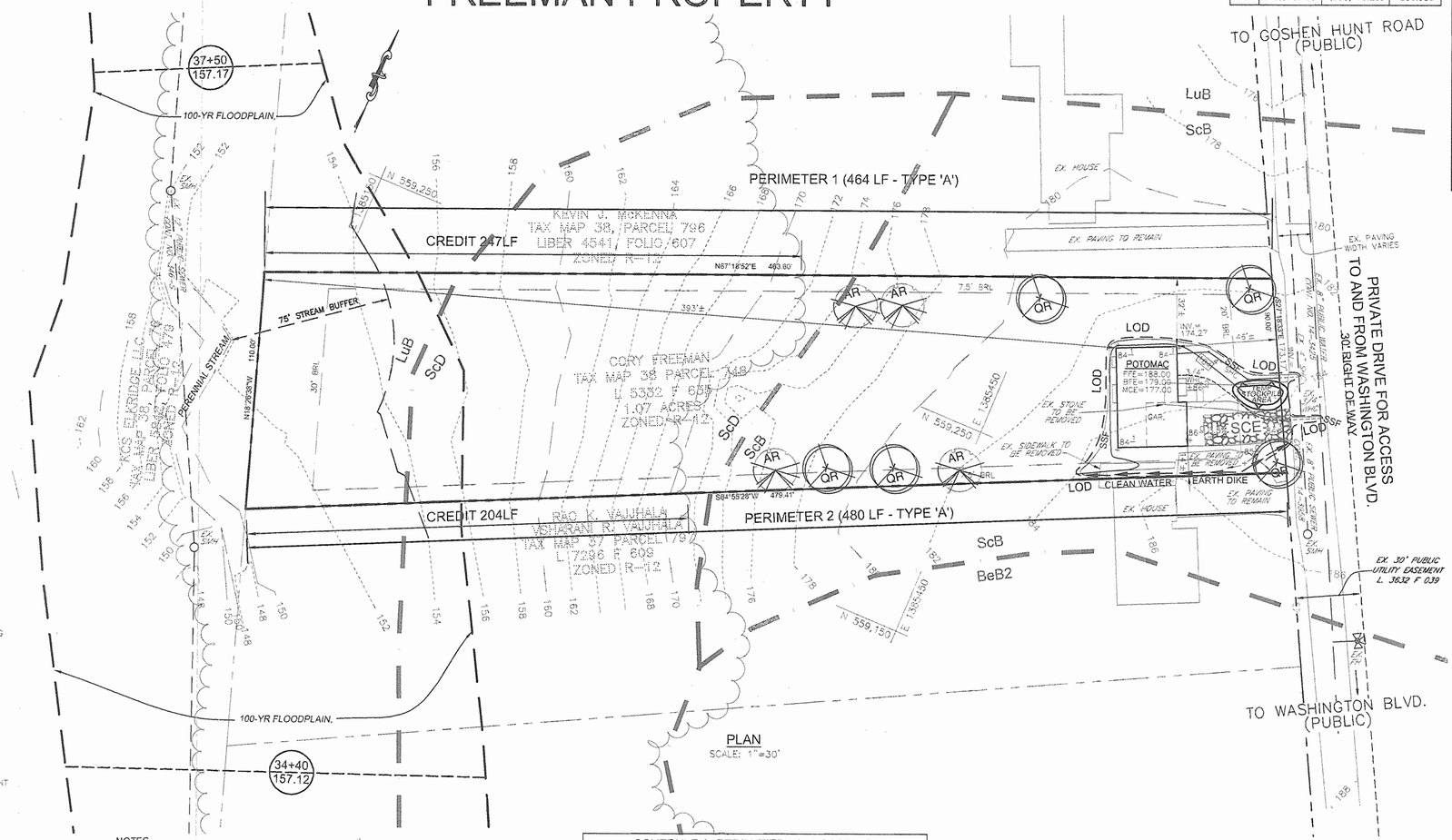
SITE DEVELOPMENT PLAN
FREEMAN PROPERTY

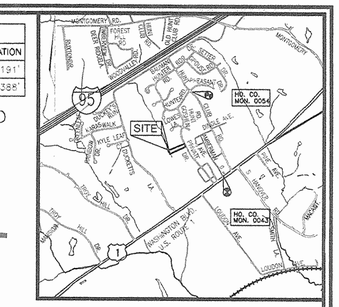
GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
3. THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:

MISS UTILITY	1-800-257-7777
BELL ATLANTIC TELEPHONE CO:	725-9976
HOWARD COUNTY BUREAU OF UTILITIES:	313-2366
AT&T CABLE LOCATION DIVISION:	393-3553
B.G.&E. CO. CONTRACTOR SERVICES:	550-4620
B.G.&E. CO. UNDERGROUND DAMAGE CONTROL:	787-4620
STATE HIGHWAY ADMINISTRATION:	531-5533

5. SITE ANALYSIS:
   TOTAL AREA OF SITE: 1.085 AC
   TOTAL NUMBER OF BUILDABLE LOTS: 1
   TOTAL NUMBER OF OPEN SPACE LOTS: 0
   PRESENT ZONING: R-12
   LIMIT OF DISTURBANCE: 4,992 SF
   PROPOSED USE OF SITE: SINGLE FAMILY DETACHED DWELLING
   TOTAL UNITS ALLOWED: 1
   TOTAL UNITS PROPOSED: 1
6. PROJECT BACKGROUND:
   LOCATION: TAX MAP: 38 PARCEL: 748
   ZONING: R-12
   DEED REFERENCE: LIBER 5332, FOLIO 635
   DPZ REFERENCES: N/A
7. 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 START OF WORK.
8. ANY DAMAGE TO PUBLIC RIGHTS-OF-WAY, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
9. EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE TO THE COUNTY'S RIGHT OF WAY INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE.
10. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
11. ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
12. SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOILS TEST.
13. COORDINATES AND ELEVATIONS ARE BASED ON HOWARD COUNTY MONUMENT NO'S. 0043 AND 0054.
14. THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PERFORMED BY ROBERT H. VOGEL ENGINEERING, DATED FEBRUARY 2006.
15. THE TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN TOPOGRAPHICAL SURVEY PERFORMED BY ROBERT H. VOGEL ENGINEERING, DATED FEBRUARY 2006.
16. THERE ARE NO STEEP SLOPES LOCATED ON THIS PROPERTY.
17. NO BURIAL GROUNDS OR CEMETERIES ARE LOCATED ON THIS PROPERTY.
18. 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.
19. DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
   A) WIDTH - 12 FEET (14 FEET IF SERVING MORE THAN ONE RESIDENCE)
   B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING
   C) GEOMETRY - MAXIMUM 14% GRADE, MAXIMUM 10% GRADE CHANGE, AND MINIMUM 45 FOOT TURNING RADIUS
   D) STRUCTURES (CULVERTS/BRIDGES) - MUST SUPPORT 25 GROSS TON LOADING (H25 LOADING)
   E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD EVENTS WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE
   F) STRUCTURE CLEARANCES - MINIMUM 12 FEET
   G) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE
20. NO STREAMS OR WETLANDS EXIST ON SITE. A FIELD INSPECTION WAS MADE ON AUGUST 30, 2006 BY ECO-SCIENCE PROFESSIONALS, INC., A 75'-FOOT STREAM BUFFER DOES EXIST AT THE REAR OF THIS PROPERTY. A PERENNIAL STREAM IS LOCATED OFF-SITE.
21. 100 YEAR FLOODPLAIN EXISTS ON SITE IN ACCORDANCE WITH HO. CO. FLOODPLAIN MAP 25-46 GENERAL COUNTY PROJECT GC 0119
22. THIS SITE PLAN CONFORMS TO THE 5TH EDITION OF THE AMENDED SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
23. FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.01.
24. THIS PROPERTY IS IN THE METROPOLITAN DISTRICT.
25. STORMWATER MANAGEMENT IS NOT REQUIRED FOR THIS PROJECT BECAUSE THE LIMIT OF DISTURBANCE IS LESS THAN 5,000 SF. TOTAL AREA OF DISTURBANCE IS 4,992 SF.
26. THERE ARE NO HISTORIC SITES ON THE PROPERTY.
27. FOREST CONSERVATION IS NOT REQUIRED SINCE THERE IS 0.0 SF. FOREST TO BE CUT, CLEARED OR GRADED AND A DECLARATION OF INTENT HAS BEEN PROVIDED. FOR A SINGLE LOT CLEARING LESS THAN 40,000 SQUARE FOOT OF FOREST IN ACCORDANCE WITH SECTION 16.1202(b)(2)(i) OF THE HOWARD COUNTY CODE.
28. WATER AND SEWER SERVICE TO THESE LOTS IS GRANTED UNDER THE PROVISIONS OF SECTION 18.122B OF THE HOWARD COUNTY CODE. SERVICE IS PROVIDED BY CONTRACT 14-3425 AND 14-3958.
29. THE SUBJECT PROPERTY IS ZONED R-12 PER THE FEB. 2, 2004 COMPREHENSIVE ZONING PLAN.
30. LANDSCAPING HAS BEEN PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY LANDSCAPE CODE AND THE LANDSCAPE MANUAL. SURETY IN THE AMOUNT OF $2,700.00 WILL BE POSTED WITH THE GRADING PERMIT APPLICATION FOR 9 SHADE TREES.
31. PRIVATE DRIVE (KNOWN AS GRABOWSKI ROAD) PROVIDES ACCESS TO WASHINGTON BLVD.. PRIVATE DRIVE CONSISTS OF A 30' PRIVATE RIGHT-OF-WAY WHICH INCLUDES A 30' PUBLIC UTILITY EASEMENT (L. 3632, F.0391)
32. THERE ARE NO KNOWN EASEMENTS LOCATED ON THE SUBJECT PROPERTY.
33. ANY FURTHER SUBDIVISION OF THIS PROPERTY WILL REQUIRE STORMWATER MANAGEMENT.
34. OWNER/DEVELOPER WILL PROVIDE A HOUSE NUMBER SIGN AT THE DRIVEWAY (GRABOWSKI DRIVE) WHERE IT INTERSECTS WITH WASHINGTON BLVD.



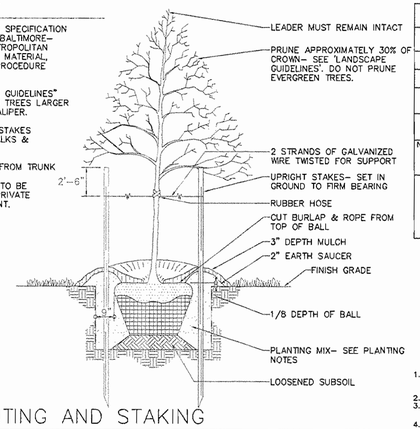


VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS			
NO.	NORTHING	EASTING	ELEVATION
0043	558,478.975	1,336,642.079	190.191'
0054	560,818.408	1,335,770.205	236.388'

NOTES

1. SEE "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS" FOR ALL MATERIAL, PRODUCT, AND PROCEDURE SPECIFICATIONS.
2. SEE "LANDSCAPE GUIDELINES" FOR SUPPORTING TREES LARGER THAN 2-1/2" CALIPER.
3. PLACE UPRIGHT STAKES PARALLEL TO WALKS & BUILDINGS.
4. KEEP MULCH 1" FROM TRUNK
5. TREES ARE NOT TO BE PLANTED OVER PRIVATE SEWAGE EASEMENT.



TREE PLANTING AND STAKING
TREES UP TO 2-1/2" CALIPER NOT TO SCALE

SCHEDULE A: PERIMETER LANDSCAPE EDGE		
CATEGORY	ADJACENT TO PERIMETER PROPERTIES	
PERIMETER/FRONTAGE DESIGNATION	1	2
LANDSCAPE TYPE	A	A
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	464'	480'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	YES 247'	YES 204'
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO
NUMBER OF PLANTS REQUIRED(LF REMAINING)	217	276
SHADE TREES	1:60 4	1:60 5
EVERGREEN TREES	-	-
SHRUBS	-	-
NUMBER OF PLANTS PROVIDED		
SHADE TREES	4	5
EVERGREEN TREES	-	-
OTHER TREES (2:1 SUBSTITUTION)	-	-
SHRUBS (10:1 SUBSTITUTION)	-	-
DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	-	-

PLANT LIST				
KEY	QTY	BOTANICAL NAME/ COMMON NAME	SIZE	ROOT
AR	4	ACER RUBRUM 'OCTOBER GLORY'/ OCTOBER GLORY RED MAPLE	2-1/2"-3" CAL	B & B
QR	5	QUERCUS RUBRA RED OAK	2 1/2"-3" CAL.	B & B

1. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AAN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH LCAMW PLANTING SPECIFICATIONS.
2. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
3. FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
4. CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT.
2. NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410.313.1880) AT LEAST 24 HOURS BEFORE STARTING ANY WORK.
3. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES. (1 DAY)
4. INSTALL SUPER SILT FENCE AND CLEAN WATER EARTH DIKE. (2 DAYS)
5. AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR TO PROCEED, ROUGH GRADE SITE. (1 DAYS) MAINTAIN EXISTING CONTROLS.
6. CONSTRUCT HOUSE. THE FIRST FLOOR ELEVATION CANNOT BE MORE THAN 1' HIGHER OR 0.2' LOWER THAN THE ELEVATIONS SHOWN ON THIS PLAN. THE FOUNDATION FOOTPRINT MUST BE WITHIN THE GENERIC BLOCK. (3 MONTHS)
7. UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES.

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

NO.	REVISION	DATE

LEGEND

585	EXISTING 2 FT CONTOUR
580	EXISTING 10 FT CONTOUR
582	PROPOSED 2 FT CONTOUR
580	PROPOSED 10 FT CONTOUR
SSF SSF	SUPER SILT FENCE
LOD	LIMIT OF DISTURBANCE
SCE	STABILIZED CONSTRUCTION ENTRANCE
	EX. TREE LINE
LuB / ScB	SOIL LINE
	EARTH DIKE

ADDRESS CHART	
LOT #	STREET ADDRESS
1	6684 WASHINGTON BLVD

PERMIT INFORMATION CHART						
PROJECT NAME FREEMAN PROPERTY			SECTION/AREA N/A		PARCEL NUMBER 748	
PLAT REF. 5332/ 635	BLOCK NO. 7	ZONE R-12	TAX MAP 38	ELECT. DIST. 1ST	CENSUS TR. 6012.02	
WATER CODE: D-08			SEWER CODE: 2152215			

SEWER CONNECTION TABULATION				
LOT NO	TYPE	ELEVATION @ MAIN	ELEVATION @ R/W	M.C.E.
1	S.H.C.	172.99'	173.17'	177.00

HOWARD COUNTY MAP NO. 26

SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	GROUP
LuB	LUKA LOAM, LOCAL ALLUVIUM, 1 TO 5 PERCENT SLOPES	C
ScB	SANDY AND CLAYEY LAND, GENTLY SLOPING	C
ScD	SANDY AND CLAYEY LAND, MODERATELY SLOPING	C

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 1/9/07

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 1/12/07

DIRECTOR — DATE 1/12/07

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA-NATURAL RESOURCES CONSERVATION SERVICE — DATE 12/28/06

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

HOWARD SCD — DATE 12/28/06

ENGINEERS CERTIFICATE

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

SIGNATURE OF ENGINEER — DATE 12/16/06

ROBERT H. VOGEL, PE 16193

DEVELOPER'S CERTIFICATE

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

SIGNATURE OF DEVELOPER — DATE 12/18/06

OWNER/DEVELOPER
CORY FREEMAN
3750 COLLEGE AVE.
ELLICOTT CITY, MD 21043

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELLICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

STATE OF MARYLAND — ROBERT HARRIS VOGEL — No. 16193 — PROFESSIONAL ENGINEER — 12/16/06

ROBERT H. VOGEL, PE No.16193

SITE DEVELOPMENT, LANDSCAPE PLAN AND SEDIMENT CONTROL PLAN
FREEMAN PROPERTY

TAX MAP 38 BLOCK 13
1ST ELECTION DISTRICT

PARCEL 748
HOWARD COUNTY, MARYLAND

DESIGN BY:	MY
DRAWN BY:	MY
CHECKED BY:	RHV
DATE:	MAY 19, 2006
SCALE:	1"=30'
W.O NO.:	05-33

SHEET 1 OF 2

SDP-06-144

21.0 STANDARDS 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 vegetable growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

CONDITIONS WHERE PRACTICE APPLIES

I. This practice is limited to areas having 2:1 or flatter slopes where:

a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.

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.

II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. 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:

i. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or a soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 and 1/2" in diameter.

ii. Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.

iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

II. For sites having disturbed areas under 5 acres:

i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization -- Section I -- Vegetative Stabilization Methods and Materials.

III. 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 soil which has been treated with soil sterilants or chemicals used as a 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.

ii. Spread topsoil (if required) and apply soil amendments specified in 20.0 Vegetative Stabilization-Section I-Vegetative Stabilization Methods and Materials.

V. Topsoil Application

i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Sloce Silt Fence and Sediment Traps and Basins.

ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" -- 8" higher in elevation.

iii. Topsoil shall be uniformly distributed in a 4" -- 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.

iv. Topsoil shall not be place while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

PERMANENT SEEDING NOTES

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

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

1) Preferred--Apply 2 tons per acre dolomitic limestone (92 lbs/ 100 sq.ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs./ 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq.ft.)
2) Acceptable--Apply 2 tons per acre dolomatic limestone (92 lbs/ 1000 sq.ft.) and apply 1000 lbs. per acre 10-10-10- fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 5, seed with 60 lbs. per acre (1.4 lbs/1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 6 thru February 28, protect site by: Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall 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 small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

MAINTENANCE: Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft).

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.) For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq.ft.) For the period November 1 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

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

SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (313-1855).
2. All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
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 7, HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
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
Total Area	1.085 AC
Area Disturbed	4,881 SF
Area to be roofed or paved	3,081 SF
Area to be vegetatively stabilized	1,800 SF
Total Cut	70 CY
Total Fill	70 CY
Offsite waste/borrow area location	N/A

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 controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.
12. Estimates of earthwork quantities are provided solely for the purpose of calculating fees.

* To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit

SEQUENCE OF CONSTRUCTION

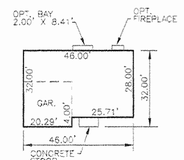
1. Obtain grading permit.
2. Notify Howard County Bureau Of Inspections and Permits (410.313.1880) at least 24 hours before starting any work.
3. Construct Stabilized Construction Entrances. (1 day)
4. Install silt fence and erosion control matting. (2 days)
5. After obtaining permission from the sediment control inspector to proceed, rough grade site. (4 days)
6. Construct house. The first floor elevation cannot be more than 1' higher or 0.2' lower than the elevations shown on this plan. The foundation footprint must be within the generic block. (3 months)
7. Upon stabilization of all disturbed areas and with the approval of the sediment control inspector, remove all sediment control devices.

NOTES

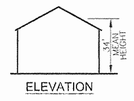
1. DURING GRADING AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE THE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN HEREON.
2. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLIED WITH.

AFFORESTATION NOTES

1. AT COMPLETION OF HOUSE CONSTRUCTION, ANY DISTURBED AREAS WITHIN THE CONSERVATION EASEMENT WILL BE VEGETATIVELY STABILIZED WITH ANNUAL RYE AND BIRDSFOOT TREFOIL.
2. ANY EXISTING TALL GRASSES WITHIN THE CONSERVATION EASEMENT SHALL BE MOWED TO A HEIGHT OF 3 INCHES.
3. RANDOMLY SPACE SEEDLINGS/WHIPS SO THAT NO MORE THAN 5 OF ANY PARTICULAR SPECIES ARE PLANTED IN SUCCESSION.
4. ALL PROPOSED PLANT MATERIAL TO BE NATIVE PLANT SPECIES. NO ORNAMENTAL CULTIVARS TO BE USED. USE LOCAL GENETIC STOCK UP TO A 100-MILE RADIUS.
5. AFFORESTATION MANAGEMENT RECORDS SHOULD BE KEPT FOR HOWARD COUNTY REVIEW.
6. YEAR 1: INSPECT TREES FOR HEALTH AND VIGOR AT: A. BEGINNING OF GROWING SEASON, B. MIDSUMMER AND C. FALL. ADJUST WATERING, PEST CONTROL, WEEDING AND FEEDING AS NEEDED. AFTER ONE YEAR, REPLACE ANY WHIP-SIZED PLANTS THAT DID NOT SURVIVE DURING THE NEXT PLANTING SEASON.
7. YEAR 2: INSPECT TREES FOR HEALTH AND VIGOR IN APRIL AND OCTOBER. ADJUST WATERING, PEST CONTROL, WEEDING, AND FEEDING AS NEEDED. REPLACE ANY WHIP-SIZED PLANTS THAT DID NOT SURVIVE YEAR 2 DURING THE NEXT PLANTING SEASON.
8. CONTRACTOR TO FOLLOW ALL STATE AND COUNTY GUIDELINES FOR AFFORESTATION.
9. IN ORDER TO INSURE SURVIVABILITY, THE PERSON RESPONSIBLE FOR INSTALLATION SHALL INSPECT AND AMEND THE SOILS PRIOR TO PLANTING, PROVIDE WATER DURING DROUGHT PERIODS, AND REMOVE ANY PESTS OR WEEDS DURING THE 2-YEAR MAINTENANCE PERIOD.



PLAN VIEW

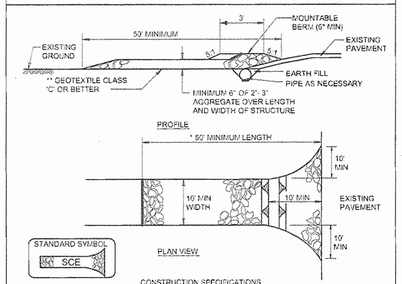


ELEVATION

THE POTOMAC

SCALE: 1"=30'

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

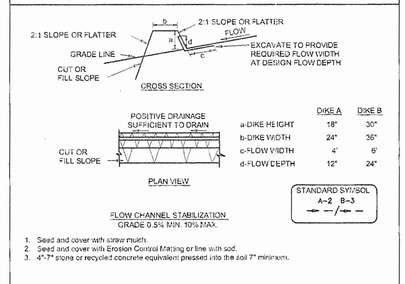


CONSTRUCTION SPECIFICATIONS

1. Length - Minimum of 50' (* 30' for a single residence lot).
2. Width - 10' minimum. Should be flared at the existing road to provide a turning radius.
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. ** The plan approval authority may not require single family residences to use geotextile.
4. Stone - Crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" over the length and width of the entrance.
5. Surface Water - All surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the Stabilized Construction Entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey, a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
6. Location - A Stabilized Construction Entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the Stabilized Construction Entrance.

US DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F-17-3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 1 - EARTH DIKE



	DIKE A	DIKE B
a-DIKE HEIGHT	18"	30"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	12"	24"

FLOW CHANNEL STABILIZATION
GRADE 0.5% MIN. 10% MAX.

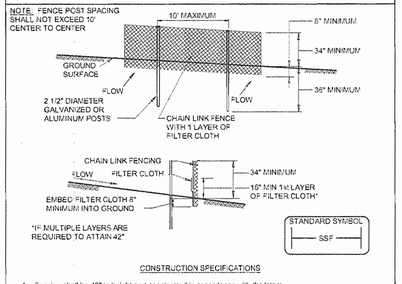
1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4"-7" stone or recycled concrete equivalent pressed into the soil 7" minimum.

CONSTRUCTION SPECIFICATIONS

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.
4. All trees, brush, stumps, obstructions, and other objectional material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criterial specified herein and be free of bank projections or otherirregularities which will impede normal flow.
6. Fill shall be compacted by earth moving equipment.
7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
8. Inspection and maintenance must be provided periodically and after each rain event.

US DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE A-1-6	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 33 - SUPER SILT FENCE



CONSTRUCTION SPECIFICATIONS

1. 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 posts.
2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and midsection.
4. Filter cloth shall be embedded a minimum of 8" into the ground.
5. When two sections of filter cloth adjoin each other, they shall be overlapped by 8" and folded.
6. 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 midsection and shall meet the following requirements for Geotextile Class F:

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

US DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE H-28-3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 1/9/07

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 1/12/07

DIRECTOR — DATE 1/12/07

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

USDA--NATURAL RESOURCES CONSERVATION SERVICE — DATE 12/28/06

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

HOWARD SCD — DATE 12/28/06

ENGINEERS CERTIFICATE

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

SIGNATURE OF ENGINEER — DATE 12/16/06

ROBERT H. VOGEL

DEVELOPER'S CERTIFICATE

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

SIGNATURE OF DEVELOPER — DATE 12/18/06

OWNER/DEVELOPER
CORY FREEMAN
3750 COLLEGE AVE.
ELLICOTT CITY, MD 21043

NO.	REVISION	DATE

SEDIMENT CONTROL PLAN, HOUSE TYPES AND DETAILS

FREEMAN PROPERTY

TAX MAP 38 BLOCK 13 — PARCEL 748
1ST ELECTION DISTRICT — HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET, ELLICOTT CITY, MD 21043
TEL: 410.461.7666 FAX: 410.461.8961

STATE OF MARYLAND — ROBERT HARRIS VOGEL — No. 16193 — PROFESSIONAL ENGINEER — 12/16/06

ROBERT H. VOGEL PE No.16193

DESIGN BY:	MY
DRAWN BY:	MY
CHECKED BY:	RHV
DATE:	MAY 19, 2006
SCALE:	1"=30'
W.O. NO.:	05-33

SHEET 2 OF 2

SDP-06-144