

GENERAL NOTES

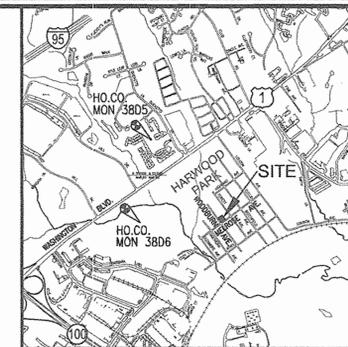
- ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- DEED REFERENCE: 7848/239
- GROSS AREA OF LOT 1275: 0.102 AC
AREA OF 100-YEAR FLOODPLAIN DRAINAGE & UTILITY EASEMENT: 0.00 AC
AREA OF STEEP SLOPES: 0.00 AC
NET AREA OF PROJECT: 0.102 AC

AREA OF OPEN SPACE REQUIRED: N/A
AREA OF OPEN SPACE PROVIDED: N/A
AREA OF PROPOSED RIGHT-OF-WAY: N/A
- 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 TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY FREDERICK WARD & ASSOCIATES DATED DECEMBER 2001. THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PREPARED BY FREDERICK WARD & ASSOCIATES DATED DECEMBER 2001.
- 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. 3805 AND 3806 AND WERE USED FOR THIS PROJECT.
- STORMWATER MANAGEMENT FOR THIS LOT IS PROVIDED BY RAIN GARDENS TO PROVIDE THE REQUIRED W₁₀ AND Rev. C₁₀ IS NOT REQUIRED SINCE THE 1-YR RUNOFF IS LESS THAN 2 CFS. RAINGARDENS ON LOT 1275 WILL BE PRIVATELY OWNED AND MAINTAINED BY OWNER OF LOT 1275.
- EXISTING UTILITIES ARE BASED ON HOWARD COUNTY AS-BUILT DRAWINGS UNDER CONTRACT 23-S & W108B-34744.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- SIC ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE. FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.05.
- WATER AND SEWER FOR THIS PROJECT WILL BE BY PUBLIC WATER AND SEWER LINES.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
- NO HISTORIC STRUCTURES EXIST ON THIS SITE.
- A TRAFFIC STUDY IS NOT REQUIRED FOR THIS SITE.
- STREET LIGHTING IS WITHIN THE METROPOLITAN DISTRICT.
- STREET TREES ARE NOT REQUIRED FOR THIS SUBDIVISION IN ACCORDANCE WITH SECTION 16.124(e)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL.
- PERIMETER LANDSCAPING IS NOT REQUIRED BECAUSE ALL ADJACENT PROPERTIES ARE PART OF THE SAME DEVELOPMENT.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL/CEMETERY LOCATIONS ON SITE.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
A. WIDTH - 12' (16' FOR SERVING MORE THAN ONE RESIDENCE)
B. SURFACE - 6" OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN)
C. GEOMETRY - MAX 15% GRADE, MAX 10% GRADE CHANGE, AND MIN 48" TURNING RADIUS
D. STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)
E. DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT OF DEPTH OVER DRIVEWAY SURFACE
F. MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE
- SUBJECT PROPERTY ZONED R-12 PER 02/02/04 COMPREHENSIVE ZONING PLAN.
- IN ACCORDANCE WITH SUBDIVISION SECTION 16.1202 (b) (vii) THIS PLAN IS EXEMPT FROM COMPLIANCE WITH THE REQUIREMENTS OF THE FOREST CONSERVATION ACT OF HOWARD COUNTY BECAUSE THE LOT SHOWN ON IT IS A PART OF A RESUBDIVISION DONE BY DEED PER WP-04-012 THAT DID NOT CREATE ADDITIONAL LOTS.
- IN ACCORDANCE WITH SECTION 12B 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.
- REQUEST TO WAIVE SECTIONS 16.102, APPLICABILITY AND 16.144, REQUIRING THE SUBMISSION OF A FINAL PLAN WAS APPROVED BY WP-04-12 ON AUGUST 29, 2003 SUBJECT TO THE FOLLOWING CONDITIONS:
I: THE APPLICANT MUST RECORD THE NEW DEEDS OF CONVEYANCE IN THE LAND RECORDS OFFICE OF HOWARD COUNTY, MD. A COPY OF THE CONSOLIDATION DEEDS SHALL BE SUBMITTED TO THIS DEPARTMENT FOR OUR RECORDS. THE APPLICANT IS ADVISED THAT THE ADJOINER DEEDS MUST BE RECORDED PRIOR TO THE SUBMISSION OF ANY SITE DEVELOPMENT PLANS FOR THE SUBJECT LOTS. IN ADDITION, THE EXISTING HOME ON LOT B MUST BE RAZED PRIOR TO THE RECORDATION OF THE CONSOLIDATION DEEDS.
II: THE APPLICANT SHALL IDENTIFY THE NEWLY RECONFIGURED LOTS BY NUMERICAL ORDER UTILIZING THE NEXT CONSECUTIVE LOT NUMBERS WHICH ARE AVAILABLE IN THE PARTICULAR SECTION AND AREA OR BLOCK NUMBER OF THE HARWOOD PARK SUBDIVISION OF WHICH THEY ARE LOCATED, AS APPLICABLE.
III: A SITE DEVELOPMENT PLAN SHALL BE REQUIRED FOR ALL NEW BUILDING LOTS.
IV: WRITTEN VERIFICATION FROM THE HEALTH DEPARTMENT MUST ACCOMPANY THE SITE DEVELOPMENT PLAN SUBMISSION WHICH INDICATES PROPER ABANDONMENT OF THE EXISTING WELL LOCATED ON THE SUBJECT PROPERTY.
- REFERENCE WAIVER PETITION WP-07-104 APPROVED JUNE 20, 2007 TO REACTIVATE SDP-08-152 AND GRANT A 45 DAY EXTENSION TO TO SUBMIT REVISED PLAN (SECTION 16.156 (f) (2)).

SITE DEVELOPMENT PLAN HARWOOD PARK LOT 1275

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 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 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.
 - Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, 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.



VICINITY MAP

SCALE: 1"=2000'

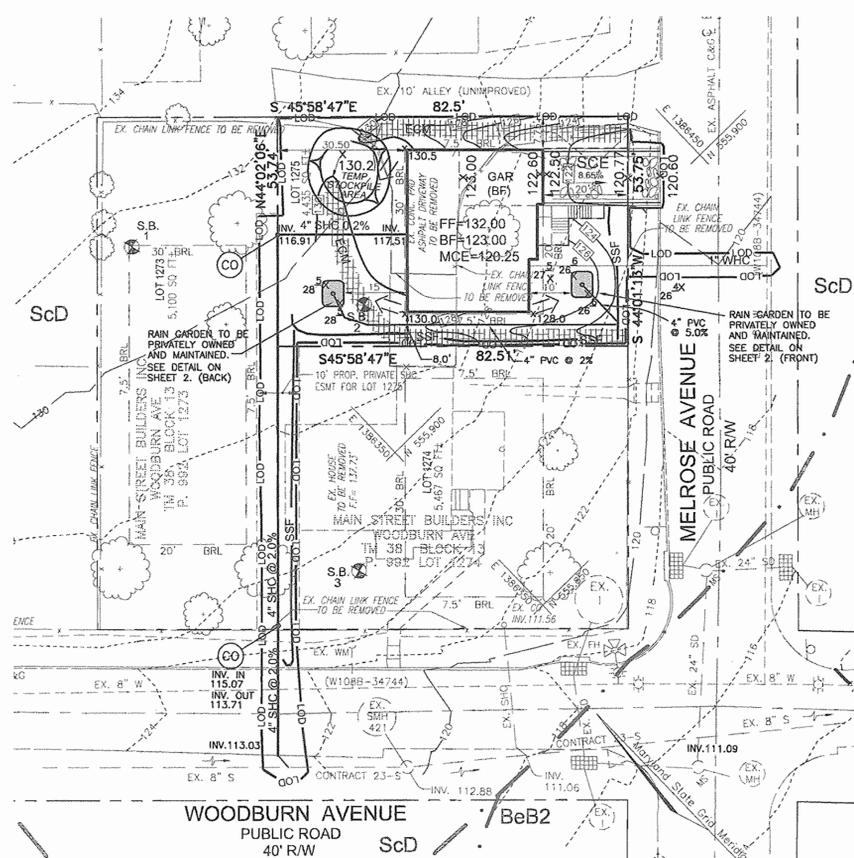
BENCHMARKS			
NO.	NORTHING	EASTING	ELEVATION
3805	558,378.575	1,386,524.158	193.726'
3806	557,155.459	1,384,992.252	175.228'

LEGEND

EXISTING CONTOUR	---
PROPOSED CONTOUR	---(412)---
SPOT ELEVATION	+25.3
DIRECTION OF FLOW	→
EXISTING TREES TO REMAIN	(Tree symbol)
SUPER SILT FENCE	---SSF---
LIMIT OF DISTURBANCE	---L.D.---
EROSION CONTROL MATTING	(Matting symbol)

SITE ANALYSIS DATA CHART

LOCATION: TAX MAP 38, GRID 13, P/O TM PARCEL 873
1st ELECTION DISTRICT
EXISTING ZONING: R-12
GROSS AREA OF LOT 1275: 0.102 AC
AREA OF 100-YEAR FLOODPLAIN DRAINAGE & UTILITY EASEMENT: N/A
AREA OF STEEP SLOPES OUTSIDE THE FLOODPLAIN: N/A
NET AREA OF PROJECT: 0.102 AC
AREA OF PROPOSED BUILDABLE LOTS: 0.102 AC
AREA OF OPEN SPACE REQUIRED: N/A
AREA OF OPEN SPACE PROVIDED: N/A
AREA OF RECREATIONAL OPEN SPACE REQUIRED: N/A
AREA OF RECREATIONAL OPEN SPACE PROVIDED: N/A
AREA OF PROPOSED RIGHT-OF-WAY: N/A
TOTAL APPROXIMATE LIMIT OF DISTURBANCE: 5,702 SF OR 0.13 AC.



PLAN VIEW

SCALE: 1"=20'

ADDRESS CHART

LOT #	STREET ADDRESS
1275	6690 MELROSE AVENUE

PERMIT INFORMATION CHART

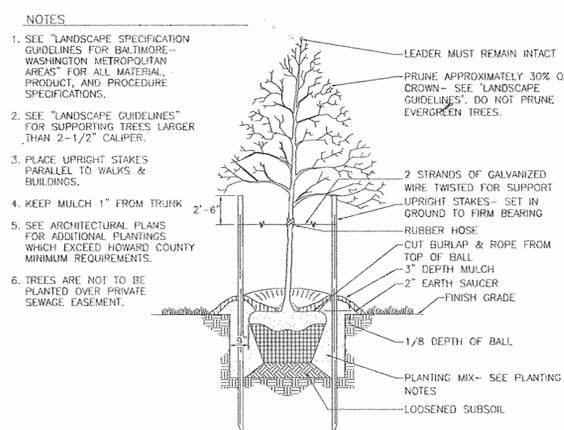
PROJECT NAME	SECTION/AREA	LOT NUMBER
HARWOOD PARK/LOT 1275	N/A	1275

DEED REF.	BLOCK NO.	ZONE	TAX MAP	ELECT. DIST.	CENSUS TR.
7848/239	13	R-12	38	1st	601202

WATER CODE: A-02 SEWER CODE: 2152200

SHEET INDEX

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



TREE PLANTING AND STAKING

DECIDUOUS TREES UP TO 2-1/2" CALIPER
NOT TO SCALE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 Date: 12-28-07

BY THE ENGINEER
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature: Robert H. Vogel, P.E.
 Date: 12/11/07

BY THE DEVELOPER
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.
 Signature: Joseph Snodgrass
 Date: 12/10/07

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.
 USDA - NATURAL RESOURCES CONSERVATION SERVICE
 Signature: [Signature]
 Date: 12/20/07

OWNER/DEVELOPER
 MAIN STREET BUILDERS, INC.
 5705 LANDING ROAD
 ELKRIESE, MARYLAND 21075
 (410) 796-2003



DESIGN BY: DRNMY
 DRAWN BY: DRNMY
 CHECKED BY: RHV
 DATE: OCTOBER 2007
 SCALE: AS SHOWN
 W.O. NO.: 04-33

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./1000 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 dolomitic 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 15, seed with 60 lbs. per acre (1.4 lbs./1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall 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 for 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. 6). 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	0.102 AC
Area Disturbed	5,702 SF
Area to be roofed or paved	1,519 SF
Area to be vegetatively stabilized	2,916 SF
Total Cut	180 CY
Total Fill	190 CY
Offsite waste/borrow area location	*
 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.

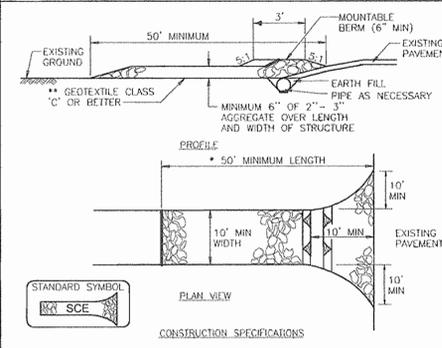
SEQUENCE OF CONSTRUCTION

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.

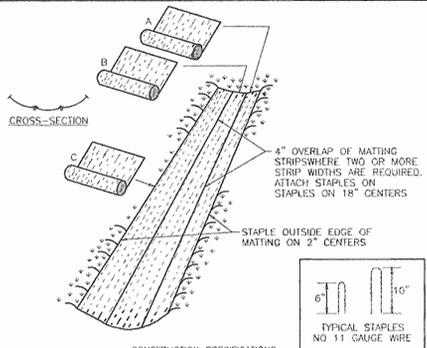
NOTES

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.

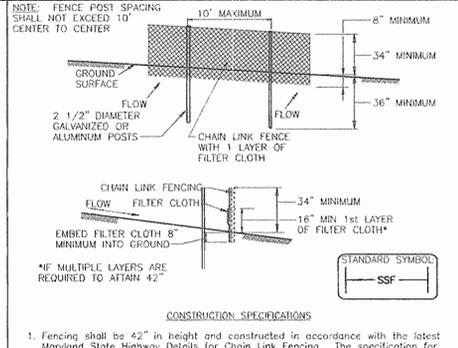
DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



DETAIL 30 - EROSION CONTROL MATTING



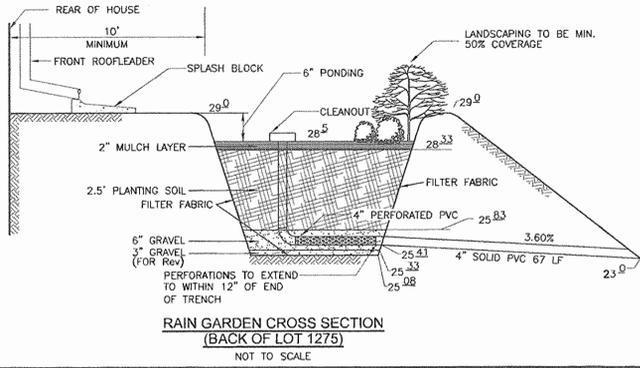
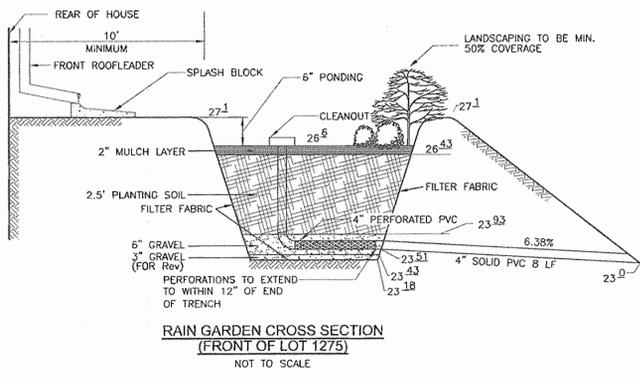
DETAIL 33 - SUPER SILT FENCE



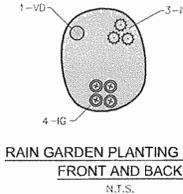
- CONSTRUCTION SPECIFICATIONS**
1. Length - Minimum of 50' (* 30' for a single residence lot).
 2. Width - 10' minimum. Should be flared at the existing road to provide a turning radius.
 3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. ** The plan 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 mounded 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.

- CONSTRUCTION SPECIFICATIONS**
1. Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Rockfill the trench and tamp firmly to conform to the channel cross-section. Secure with row of staples, about 4" down from the trench. Spacing between staples is 6".
 2. Staple the 4" overlap in the channel center using an 18" spacing between staples.
 3. Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
 4. Staples shall be placed 2" apart with 4 rows for each strip, 2 outer row, and 2 alternating rows down the center.
 5. Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4", shiplap fashion. Reinforce the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side.
 6. The discharge end of the matting liner should be similarly secured with 2 double rows of staples.
- Note: If flow will enter from the edge of the matting then the area effected by the flow must be keyed-in.

- 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 F¹
- | | | |
|----------------------|---------------------------------------|----------------|
| Tensile Strength | 50 lbs/in (min) | Test: MSMT 509 |
| Tensile Modulus | 20 lbs/in (min) | Test: MSMT 509 |
| Flow Rate | 0.3 gal/ft ² /minute (max) | Test: MSMT 322 |
| Filtering Efficiency | 75% (min) | Test: MSMT 322 |

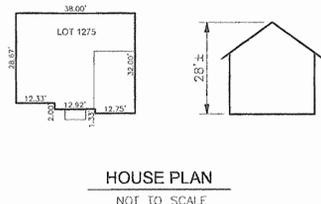


- OPERATION AND MAINTENANCE SCHEDULE FOR BIO-RETENTION AREAS**
1. ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
 2. 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 DEFICIENT STAKES AND WIRES.
 3. MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
 4. SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.



(2) RAIN GARDEN PLANT LIST (SIZE 6'x5')

KEY	QTY	BOTANICAL NAME/COMMON NAME	SIZE	ROOT
IV	3	ILEX VERTICILLATA WINTERBERRY	2'-3" HEIGHT	B & B OF CONT
VD	1	VIBURNUM DENTATUM ARROW WOOD	3'-4" HEIGHT	B & B OF CONT
IG	4	ILEX GLABRA INKBERY	18"-24" HEIGHT	B & B OR CONT



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 Chad Edwards
 DATE: 12-28-07

BY THE ENGINEER
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature of Engineer: Robert H. Vogel, PE.
 DATE: 12/11/07

BY THE DEVELOPER
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.
 Signature of Developer: Joseph S. Snodgrass
 DATE: 12-18-07

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.
 USDA - NATURAL RESOURCES CONSERVATION SERVICE
 Signature of Reviewer: John C. Labovian
 DATE: 12/20/07

SITE DEVELOPMENT PLAN
 LOT 1275
HARWOOD PARK
 DEED REFERENCE: 7848/239
 TAX MAP 38 GRID 13 P/O TM PARCEL 873
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET ELICOTT CITY, MD 21043 TEL: 410-461-7666 FAX: 410-461-8561

DESIGN BY: DRNRYM
 DRAWN BY: DRNRYM
 CHECKED BY: RHV
 DATE: OCTOBER 2007
 SCALE: AS SHOWN
 W.O. NO.: 04-33

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