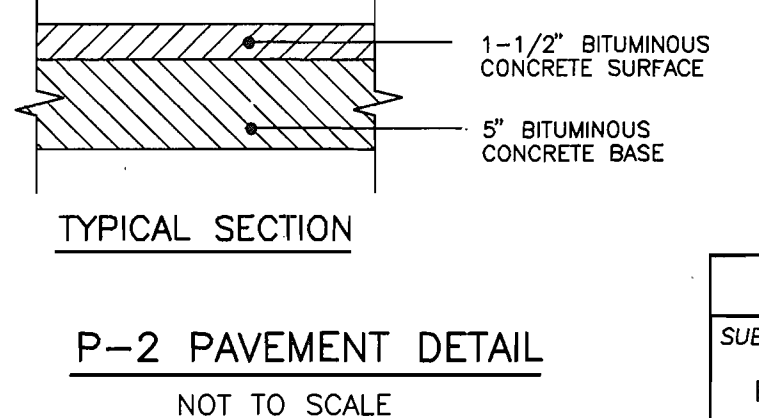
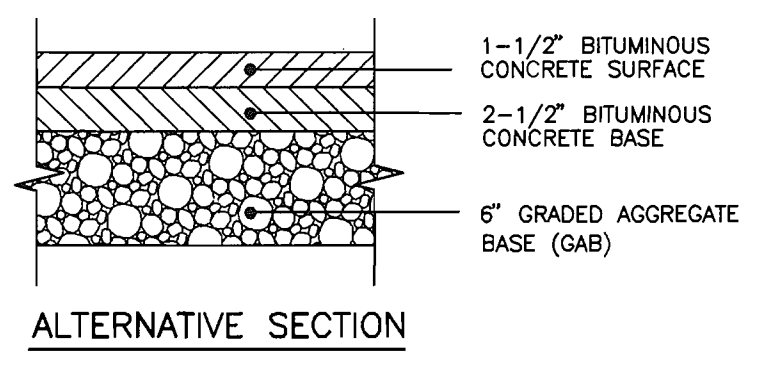
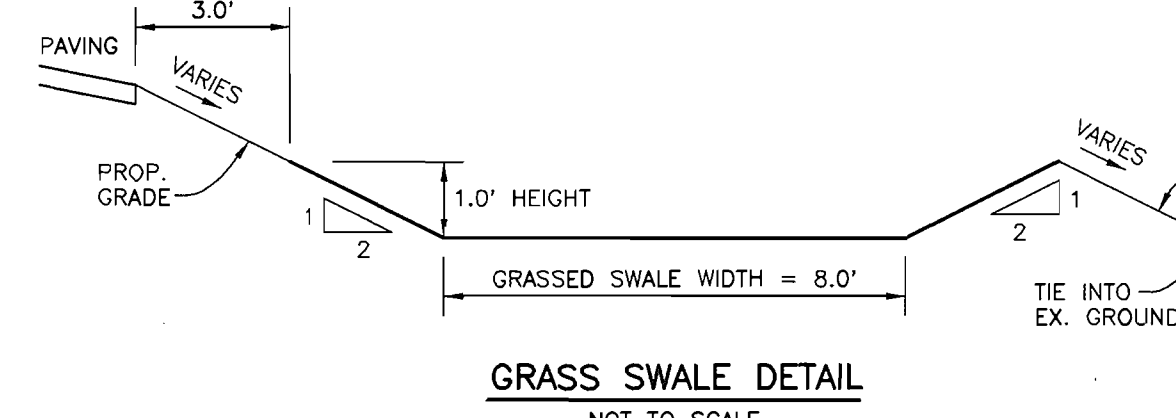
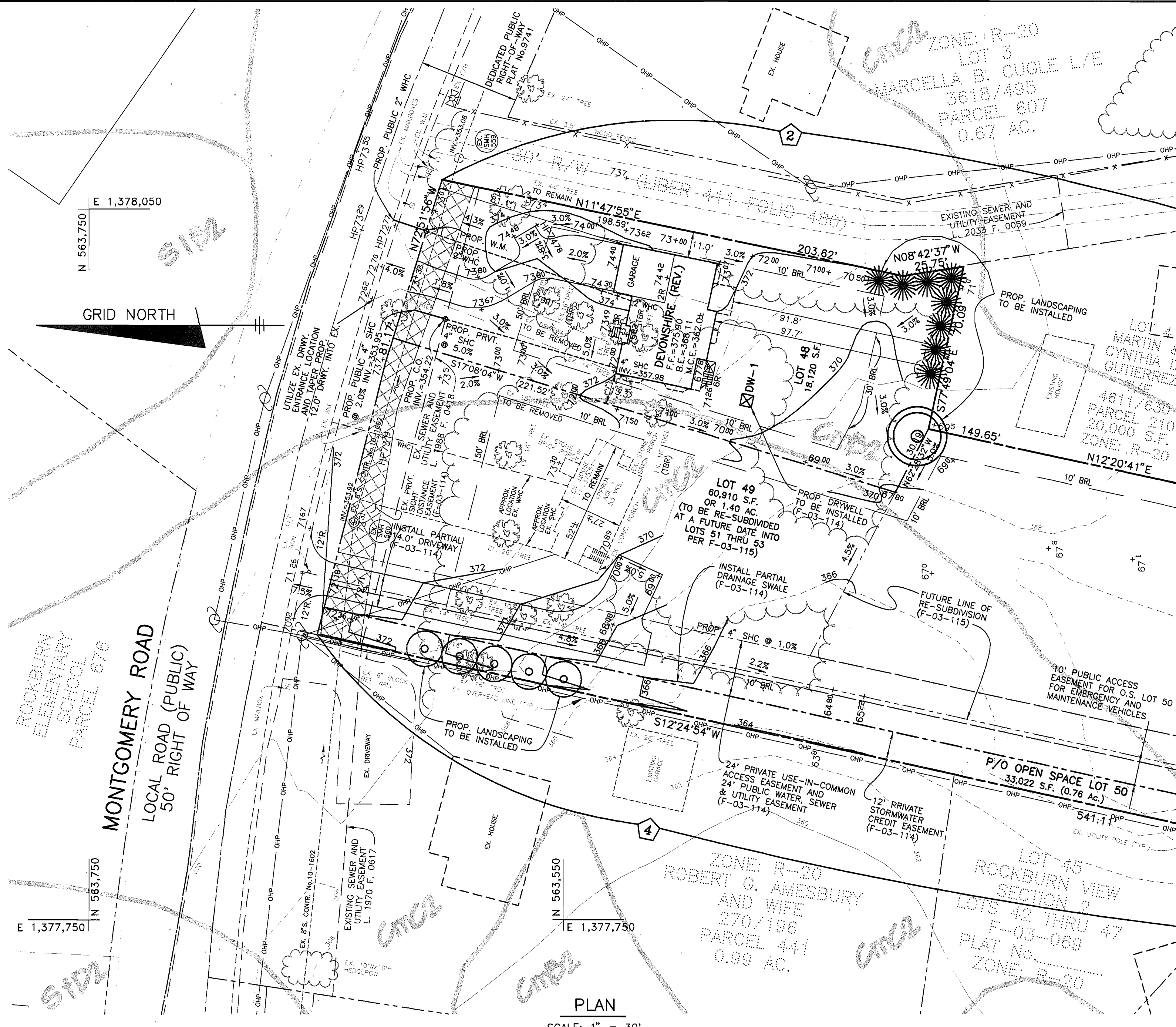


SHEET INDEX	
NO.	DESCRIPTION
1	SITE DEVELOPMENT PLAN AND GRADING PLAN
2	SEDIMENT & EROSION CONTROL PLAN, NOTES AND DETAILS

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY, PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE, UNLESS WAIVER(S) HAVE BEEN APPROVED.
- 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.
- THIS PLAN IS SUBJECT TO THE 5th EDITION OF THE HOWARD COUNTY SUBDIVISION REGULATIONS AND THE AMENDED HOWARD COUNTY ZONING REGULATIONS, COUNCIL BILL 50-2001.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL MONUMENTS 37BA & 37BB, WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM.
- EXISTING TOPOGRAPHY SHOWN HEREON WAS FIELD RUN BY BENCHMARK ENGINEERING, INC. DATED NOVEMBER, 2002. CONTOUR INTERVAL IS 2 FEET.
- THE BOUNDARY SHOWN HEREON IS BASED ON A MONUMENTED FIELD-RUN SURVEY PERFORMED BY BENCHMARK ENGINEERING, INC. DATED JUNE, 2002 AS SHOWN ON PLAT 16350 AND APPROVED AS PART OF F-03-114.
- STORMWATER MANAGEMENT SHALL BE PROVIDED FOR THIS PROJECT BASED ON GUIDELINES AS ESTABLISHED BY THE 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUMES I & II. STORMWATER MANAGEMENT SHALL BE PROVIDED BY USE OF ROOFTOP DISCONNECTION CREDITS, NON-ROOFTOP DISCONNECTION CREDITS (INCLUDING GRASS SWALES), NATURAL CONSERVATION AREA CREDIT, SHEET FLOW TO BUFFER CREDIT AND THE USE OF DRYWELLS. THE STORMWATER MANAGEMENT PLAN WAS APPROVED AS PART OF F-03-114.
- EXISTING UTILITIES SHOWN WERE LOCATED BY APPROVED CONTRACT DRAWINGS AND FIELD LOCATIONS.
- THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT. WATER AND SEWER SHALL BE PUBLIC, CONNECTING TO CONTRACTS 10-1602 & 14-3987-D FOR SEWER AND TO CONTRACT 34-W FOR WATER. DRAINAGE AREA IS WITHIN THE PATAPSCO RIVER AREA WATERSHED.
- CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION ACTIVITY AND SHALL ADJUST ALL UTILITIES AND RIM ELEVATIONS AS NEEDED TO MATCH THIS PLAN.
- SHC ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE BUILDERS EXPENSE.
- OPEN SPACE REQUIREMENTS FOR THIS PROJECT WERE MET AND APPROVED UNDER F-03-114.
- THERE ARE NO EXISTING WETLANDS, WETLANDS BUFFERS, STREAMS, STREAM BUFFERS OR 100-YR. FLOODPLAIN ON-SITE.
- THE WETLANDS DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED JANUARY, 2003 AND APPROVED AS PART OF F-03-114.
- THE TRAFFIC STUDY WAS PREPARED BY THE MARS GROUP, INC. DATED OCTOBER, 2002, AND APPROVED AS PART OF F-03-114.
- FOREST CONSERVATION PLAN WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED JANUARY, 2003 AND APPROVED AS PART OF F-03-114.
- FOREST STAND DELINEATION PLAN WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED JANUARY, 2003 AND APPROVED AS PART OF F-03-114.
- ALL LANDSCAPING REQUIREMENTS FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL AND SECTION 16.124(b)(3)(ii) OF THE SUBDIVISION REGULATIONS. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$2,250.00.
- THERE IS AN EXISTING DWELLING LOCATED ON LOT 49 (FUTURE LOT 51) TO REMAIN. NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLING ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATIONS REQUIRE.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO CEMETERY LOCATIONS ON-SITE.
- PORCHES, FIREPLACES, CHIMNEYS, EXTERIOR STAIRWAYS, DECKS AND BAY WINDOWS WHICH EXTEND ACROSS THE BRL SHALL BE IN ACCORDANCE WITH SECTION 128(c)(1) OF THE HOWARD COUNTY ZONING REGULATIONS.
- THE STAKING OF FOUNDATIONS PRIOR TO CONSTRUCTION TO ENSURE COMPLIANCE WITH REGULATORY BUILDING RESTRICTION LINES IS RECOMMENDED.
- UNLESS NOTED AS "PRIVATE", ALL EASEMENTS ARE PUBLIC.
- BRL INDICATES BUILDING RESTRICTION LINE.
- SUBJECT PROPERTY IS ZONED R-20 PER 10-18-93 COMPREHENSIVE ZONING PLAN.
- PREVIOUS APPLICABLE HOWARD COUNTY DPZ FILE REFERENCES FOR THIS PROJECT INCLUDE: F-03-114, F-03-115, WP-03-085.
- FOR DRIVEWAY ENTRANCE DETAILS SEE HOWARD COUNTY STD. R-6.06.
- FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND THE ROAD RIGHT-OF-WAY AND NOT ONTO THE FLAG OR PIPESTEM LOT DRIVEWAY.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS: A) WIDTH - 12' (14' SERVING MORE THAN ONE RESIDENCE) B) SURFACE - 6" OF COMPACT CRUSHER RUN BASE WITH TAR AND CHIP COATING. C) GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE & MIN. 45' TURNING RADIUS. D) STRUCTURES/CULVERTS/BRIDGES - CAPABLE OF SUPPORTING 25 GROSS TONS (HVS LOAD) E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY. F) STRUCTURE CLEARANCES - MINIMUM 12 FEET. G) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.

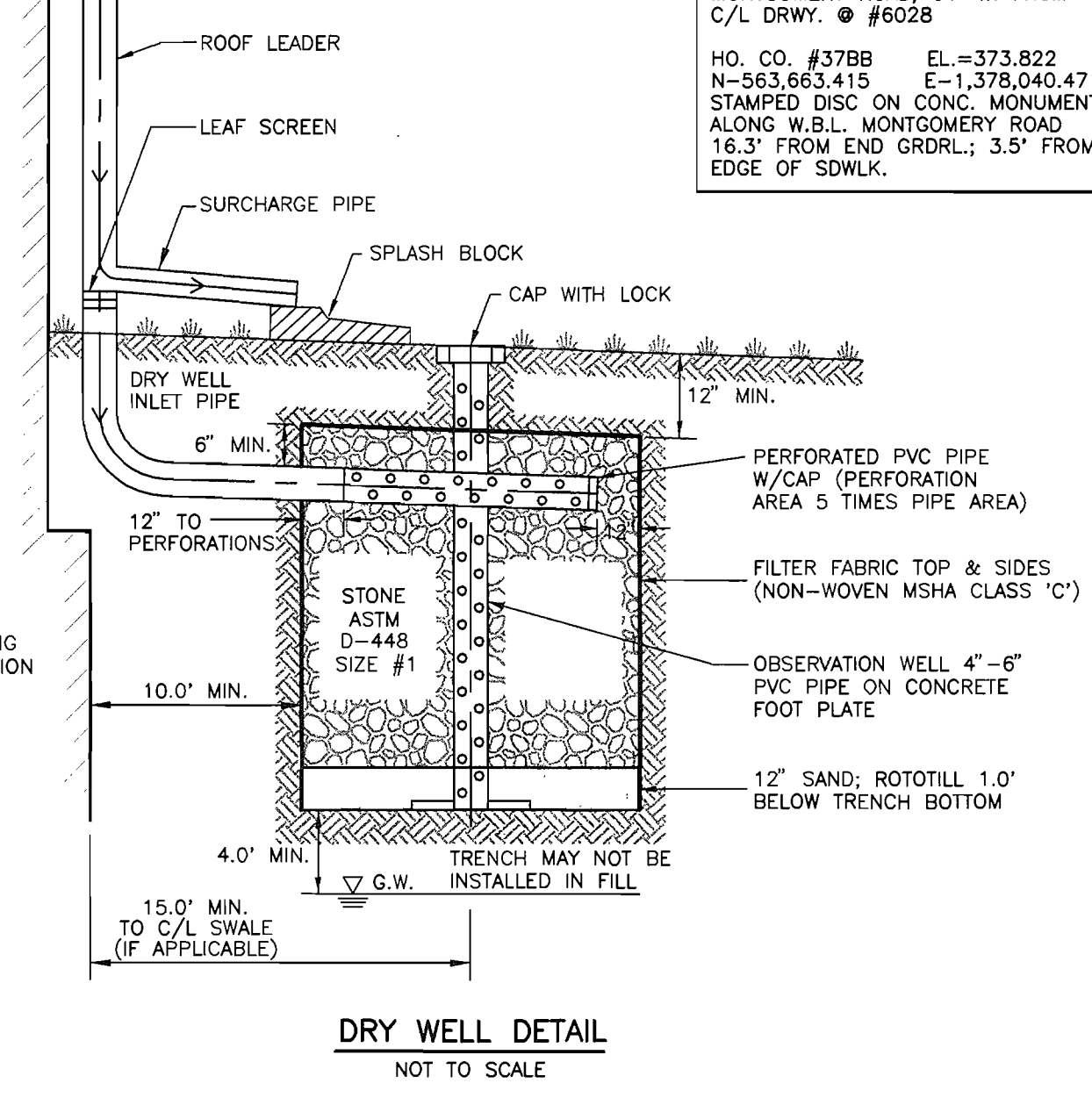


ADDRESS CHART	
LOT NO.	STREET ADDRESS
48	6162 MONTGOMERY ROAD
49 (EX.)	6160 MONTGOMERY ROAD

PERMIT INFORMATION CHART					
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL			
ROCKBURN VIEW	SECTION 3	LOT 48			
PLAT No.	BLOCK No.	ZONING	TAX MAP	ELEC. DIST.	CENSUS
16350	4	R-20	37	1st	6011.01
WATER CODE	D-04	SEWER CODE	215-3800		

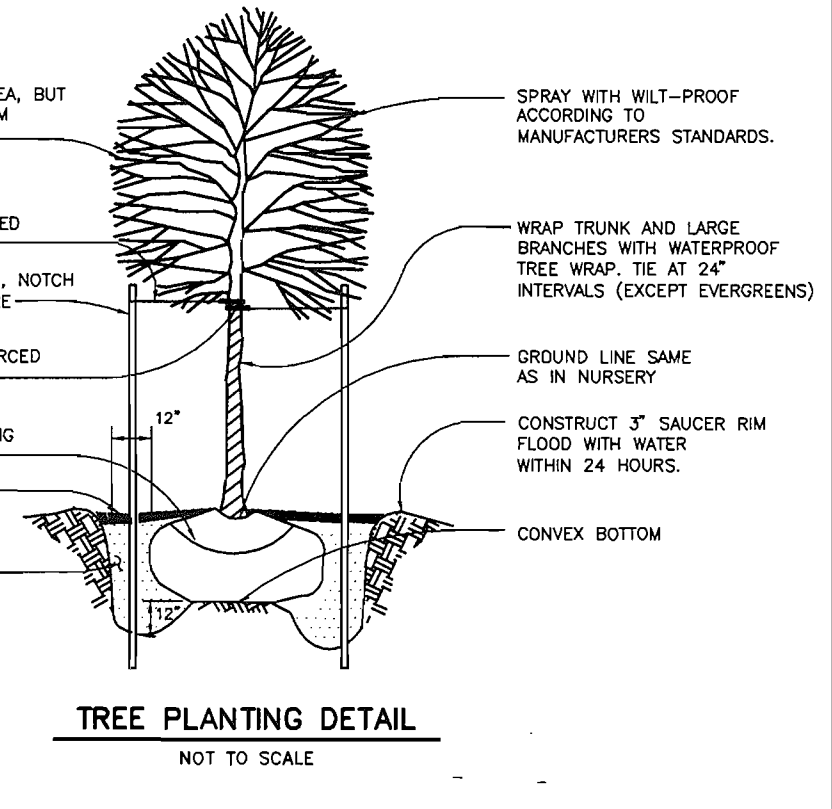
- LANDSCAPING NOTES**
- PERIMETER LANDSCAPING SHALL BE PROVIDED BY THE PLANTINGS AS SHOWN ON THESE PLANS.
 - TREES MUST BE A MINIMUM OF FOUR(4) FEET FROM THE CURB OR SIDEWALK AND MUST BE A MINIMUM OF FIVE(5) FEET FROM ANY STORM DRAIN.
 - A MINIMUM DISTANCE OF TWENTY(20) FEET MUST BE MAINTAINED BETWEEN ANY TREES LOCATED ALONG THE CURB LINE AND FROM ANY STREET LIGHTS.
 - TREES MUST BE PLANTED A MINIMUM OF FIVE(5) FEET FROM AN OPEN SPACE ACCESS STRIP AND TEN(10) FEET FROM A DRIVEWAY.
 - THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SEC-16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$2,250.00.

** SWM PRACTICES SHOWN AS PER F-03-114 **			
DRYWELL NUMBER	DEPTH (FT.)	LENGTH (FT.)	WIDTH (FT.)
DW-1	4.67'	4.33'	4.33'



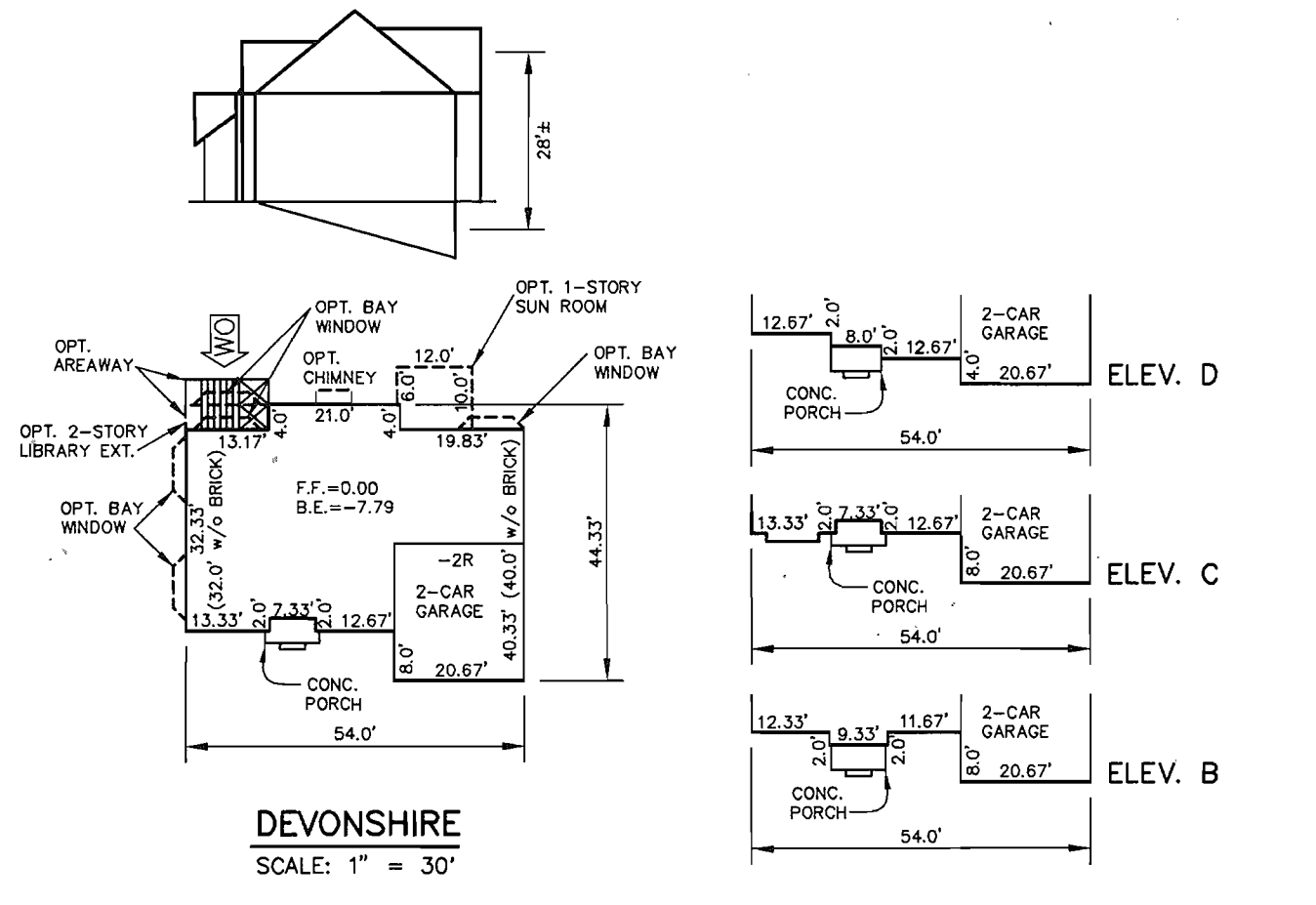
LANDSCAPE PLANTING LIST			
SYMBOL	QUANTITY	NAME	REMARKS
(Symbol)	5	EVERGREEN TREES ILEX OPACA "AMERICAN HOLLY"	5.0'-6.0' HT. UNSHEARED
(Symbol)	1	SHADE TREES QUERCUS RUBRA "NORTHERN RED OAK"	2.5'-3.0' MIN. CAL. B & B FULL HEAD
(Symbol)	8	EVERGREEN TREES PINUS STROBUS "EASTERN WHITE PINE"	6.0'-8.0' HT. UNSHEARED

SCHEDULE A PERIMETER LANDSCAPE EDGE			
CATEGORY	ADJACENT TO ROADWAY	NO	YES
PERIMETER NO. / LANDSCAPE TYPE		(A)	(B)
LINEAR FEET OF ROADWAY (FRONTAGE/PERIMETER)		735.41'	671.06'
CREDIT FOR EXISTING VEGETATION: NO OR YES (4/LINEAR FEET) (DESCRIBE BELOW IF NEEDED)		YES	YES
		183.56'	181.76'
CREDIT FOR WALL-FENCE OR BERM: NO OR YES (4/LINEAR FEET) (DESCRIBE BELOW IF NEEDED)		NO	NO
NUMBER OF PLANTS REQUIRED:			
SHADE TREES	10	9	
EVERGREEN TREES	-	-	
OTHER TREES (2:1 SUBSTITUTE)	-	-	
SHRUBS	-	-	
NUMBER OF PLANTS TO BE PROVIDED TOTAL:			
SHADE TREES	12	10	
EVERGREEN TREES	4	5	
OTHER TREES (2:1 SUBSTITUTE)	-	-	
SHRUBS (10:1 SUBSTITUTE)	-	-	
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)			
NUMBER OF PLANTS TO BE PROVIDED THIS PLAN:			
SHADE TREES	1	0	
EVERGREEN TREES	8	5	
OTHER TREES (2:1 SUBSTITUTE)	-	-	
SHRUBS (10:1 SUBSTITUTE)	-	-	
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)			
NUMBER OF PLANTS TO BE PROVIDED ON FUTURE PLANS:			
SHADE TREES	3	0	
EVERGREEN TREES	4	13	
OTHER TREES (2:1 SUBSTITUTE)	-	-	
SHRUBS (10:1 SUBSTITUTE)	-	-	
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)			



SITE ANALYSIS DATA CHART

GENERAL SITE DATA	
1) PRESENT ZONING:	R-20
2) APPLICABLE DPZ FILE REFERENCES:	F-03-114, F-03-115, WP-03-085
3) PROPOSED USE OF SITE:	SINGLE-FAMILY DETACHED
4) PROPOSED WATER AND SEWER SYSTEMS:	PUBLIC
AREA TABULATION	
1) TOTAL PROJECT AREA (LOT 48 & LOT 49)	1.82 AC.±
2) AREA OF THIS PLAN SUBMISSION	1.82 AC.±
3) APPROXIMATE LIMIT OF DISTURBANCE	1.05 AC.±
4) TOTAL NUMBER OF LOTS ALLOWED AS SHOWN ON FINAL PLAT(S)	2 (4 FUTURE)
5) TOTAL NUMBER OF RESIDENTIAL UNITS/LOTS PROPOSED ON THIS SUBMISSION	2 (4 FUTURE)
6) OPEN SPACE ON-SITE TOTAL REQUIREMENTS	
MINIMUM RESIDENTIAL LOT SIZE	18,000 S.F.
OPEN SPACE REQUIRED (10%)	0.26 AC.±
AREA OF PROPOSED OPEN SPACE LOTS	0.76 AC.±
AREA OF PROPOSED NON-CREDITED O.S. LOTS	0.14 AC.±
AREA OF CREDITED OPEN SPACE PROVIDED	0.62 AC.±
AREA OF RECREATIONAL OPEN SPACE REQUIRED	0.00 AC.±
AREA OF RECREATIONAL OPEN SPACE PROVIDED	0.00 AC.±
7) AREA OF FOREST CONSERVATION	0.60 AC.±



DEVELOPER'S/BUILDER'S CERTIFICATE
I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DEVELOPER: *Brian D. Boy* DATE: 11/10/03

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 11/19/03
CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 12/14/03
DIRECTOR DATE: 12/10/03

BENCHMARK ENGINEERING, INC.
ENGINEERS • LAND SURVEYORS • PLANNERS
8480 BALTIMORE NATIONAL PIKE & SUITE 418
ELlicott CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6644
E-MAIL: benchmrk@oasis.com

PROJECT: ROCKBURN VIEW - SEC. 3 LOT 48 AND GRADING ONLY FOR LOT 49 AND O.S. LOT 50 SINGLE FAMILY DETACHED

LOCATION: TAX MAP 37 - GRID 4 PARCEL 213 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: **SITE DEVELOPMENT PLAN AND GRADING PLAN**

DATE: AUGUST 8, 2003 PROJECT NO. 1565
NOVEMBER 5, 2003

SCALE: AS SHOWN DRAWING 1 OF 2

Design: DAM Draft: MCR Check: DAM

SDP-04-028

SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION AND PERMITS SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION.
- ALL VEGETATIVE 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 THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN A 7 CALENDAR DAYS FOR ALL PERMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERMETER SLOPES AND ALL SLOPES GREATER THAN 3:1. TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 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 PERMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) SOOD (SEC. 54), TEMPORARY SEEDINGS (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: 1.82 ACRES
TOTAL AREA DISTURBED: 1.05 ACRES
AREA TO BE ROOFED OR PAVED: 0.05 ACRES
AREA TO BE VEGETATIVELY STABILIZED: 0.85 ACRES
TOTAL CUT: 1000 CU YDS.
TOTAL FILL: 5000 CU YDS.
SOIL SITE STABILITY: STABLE
- 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 CONTROLS 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 PERMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER GRADING, OTHER BUILDING OR GRADING INSPECTED UNDER ANY OTHER APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES ARE LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY AN OFF-SITE FILL AREA WITH AN APPROVED SEDIMENT & EROSION CONTROL PLAN.

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

Definition
Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose
To provide a suitable 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. II. For the purpose of this Standard 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 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 Experiment 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. Topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, silt, coarse fragments, gravel, sticks, roots, trash, or other materials greater than 1" in diameter.
 - Topsoil must be free of plants or plant parts such as Bermuda grass, quack grass, johnson grass, nutcase, 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 over 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - 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 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.
 - 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 phytotoxic materials.
- Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
- Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

Topsoil Application

- When topsoiling, maintain needed erosion and sediment control practices such as diversion, 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, albeit 4" - 6" higher in elevation.
- 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 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. 5-21-2
- Alternative to 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 prescribed amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of application of the compost) by the Maryland Department of the Environment under COMAR 26.06.04.
 - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
 - 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. #8, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institute, Revised 1973.

TEMPORARY SEEDBED PREPARATION

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

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISING 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 PERIOD MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (32 LBS/1000 SQ FT) FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (87 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THROUGH 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 GRASS 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 5 FT OR HIGHER, USE 348 GALLONS PER ACRE (6.9 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.

PERMANENT SEEDBED PREPARATION

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISING 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 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 TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 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 DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THROUGH APRIL 30 AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.6 LBS/1000 SQ FT) OF KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (0.5 LBS/1000 SQ FT) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH 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 OR OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS PER ACRE OF KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE OF WELL ANCHORED STRAW.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRASS 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 5 FT OR HIGHER, USE 348 GALLONS PER ACRE (6.9 GAL/1000 SQ FT) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDBED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

SEQUENCE OF CONSTRUCTION

NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF CONSTRUCTION -

DAY 1 OBTAIN GRADING PERMIT.

DAY 2-8 INSTALL SEDIMENT CONTROLS THAT ARE NOTED TO BE INSTALLED UNDER THIS SDP.

DAY 9-12 EXCAVATE FOR FOUNDATIONS, ROUGH GRADE AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDBED NOTES.

DAY 13-82 CONSTRUCT HOUSE, BACKFILL AND CONSTRUCT DRIVEWAYS.

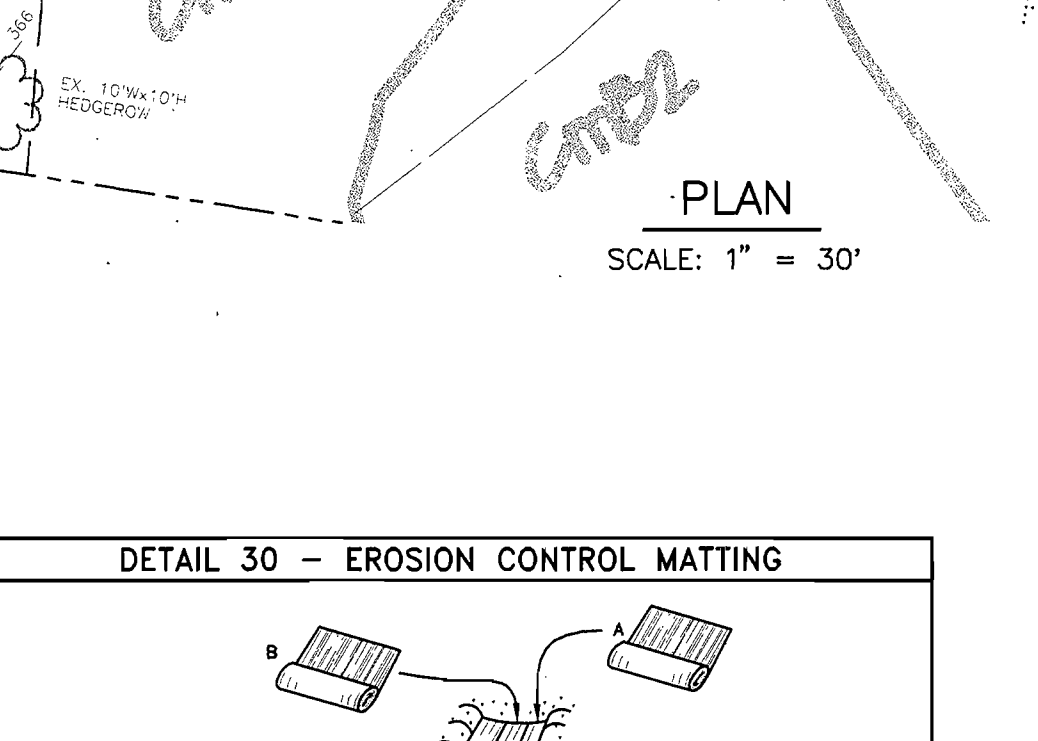
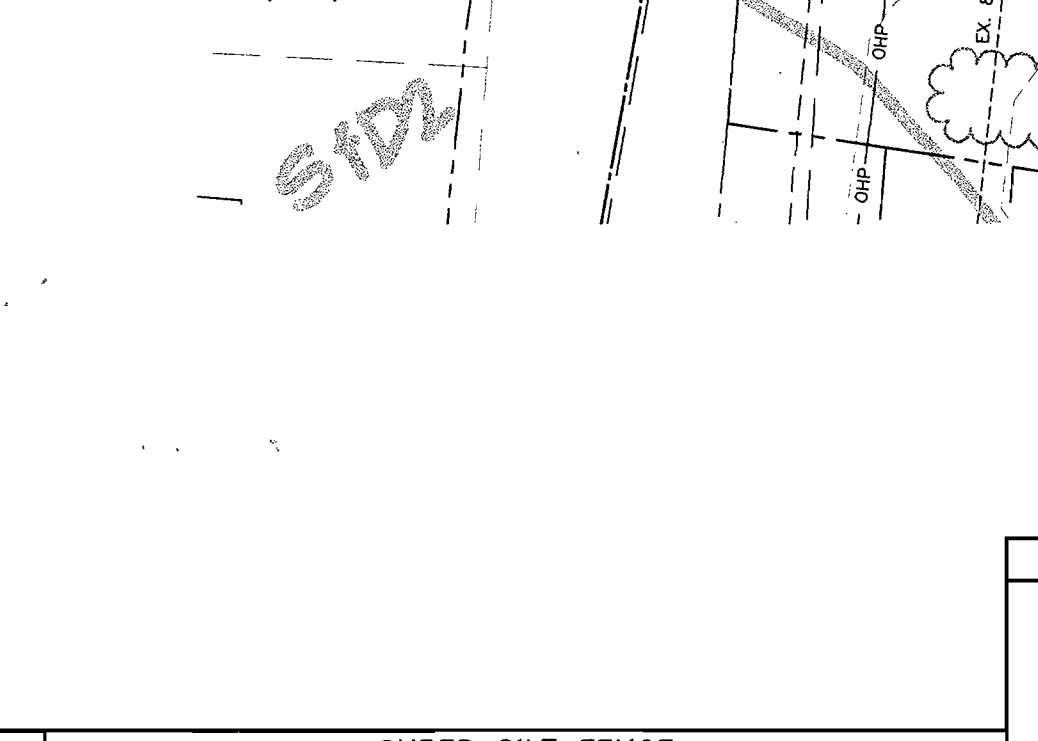
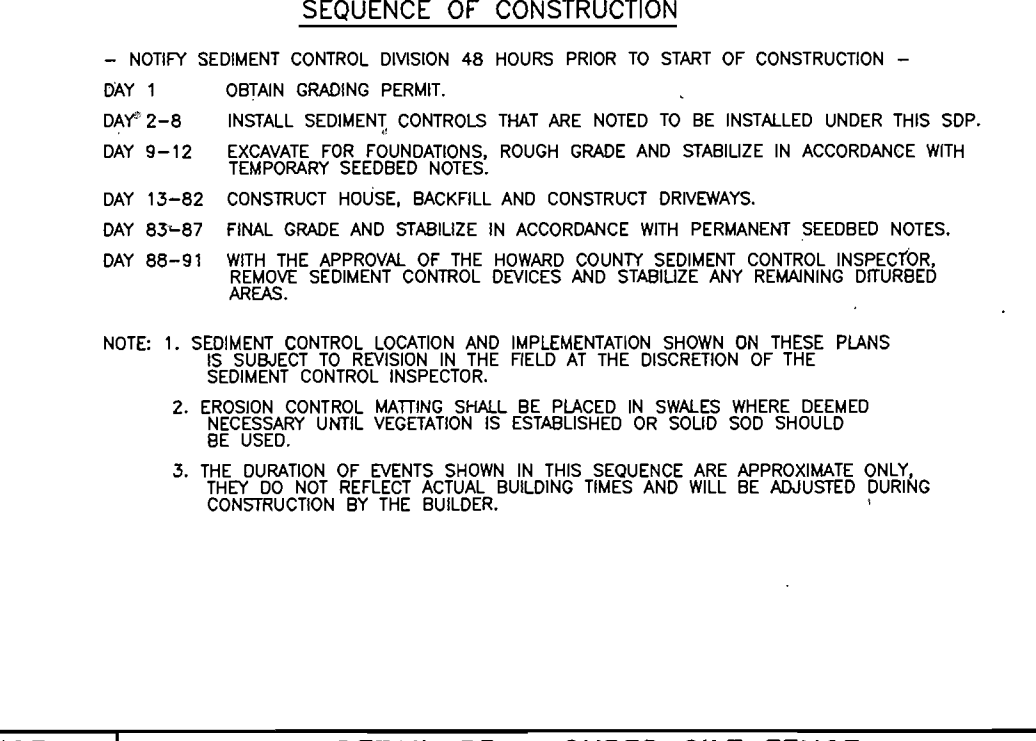
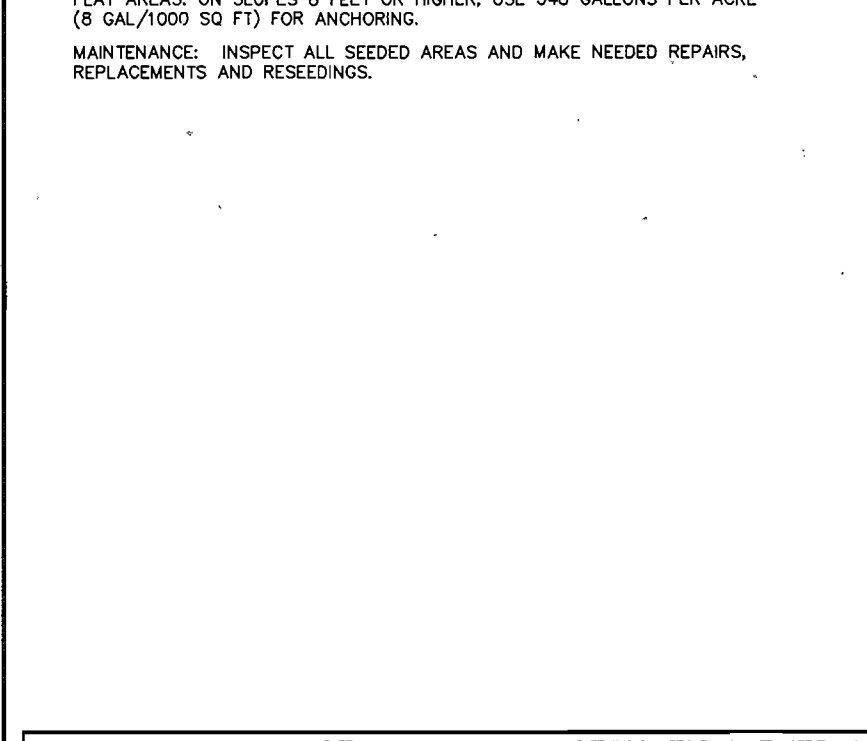
DAY 83-87 FINAL GRADE AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDBED NOTES.

DAY 88-91 WITH THE APPROVAL OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE ANY REMAINING DISTURBED AREAS.

NOTE: 1. SEDIMENT CONTROL LOCATION AND IMPLEMENTATION SHOWN ON THESE PLANS IS SUBJECT TO REVISION IN THE FIELD AT THE DISCRETION OF THE SEDIMENT CONTROL INSPECTOR.

2. EROSION CONTROL MATTING SHALL BE PLACED IN SWALES WHERE DEEMED NECESSARY UNTIL VEGETATION IS ESTABLISHED OR SOD SOIL SHOULD BE USED.

3. THE DURATION OF EVENTS SHOWN IN THIS SEQUENCE ARE APPROXIMATE ONLY. THEY DO NOT REFLECT ACTUAL BUILDING TIMES AND WILL BE ADJUSTED DURING CONSTRUCTION BY THE BUILDER.



SOIL STABILIZATION MATTING CONSTRUCTION SPECIFICATIONS

- KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH, 6" IN DEPTH. BACKFILL THE TRENCH AND TAMP FIRMLY TO CONFORM TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH. SPACING BETWEEN STAPLES IS 6".
- STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.
- BEFORE STAPLING THE OUTER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.
- STAPLES SHALL BE PLACED 2" APART WITH 4 ROWS FOR EACH STRIP, 2 OUTER ROWS AND 2 ALTERNATING ROWS DOWN THE CENTER.
- 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", SHIRAP FASHION. REINFORCE THE OVERLAP WITH A DOUBLE ROW OF STAPLES SPACED 6" APART IN A STAGGERED PATTERN ON EITHER SIDE.
- 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 KEPT-IN.

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 33 - SUPER SILT FENCE

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SUPER SILT FENCE

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SOIL STABILIZATION MATTING

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

BY THE DEVELOPER:
I/WE 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 THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

DEVELOPER: *John K. Roberts* DATE: 10/31/03

BY THE ENGINEER:
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 HOWARD COUNTY SOIL CONSERVATION DISTRICT.

ENGINEER: *Donald Maan* DATE: 10/29/03

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

APPROVED: *John K. Roberts* DATE: 11/17/03

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS:
Jim Meyer DATE: 11/17/03

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Christina... DATE: 11/19/03

CHIEF, DEVELOPMENT ENGINEERING DIVISION

CHIEF, DIVISION OF LAND DEVELOPMENT
Mark... DATE: 12/14/03

DIRECTOR DATE: 12/16/03

BENCHMARK ENGINEERING, INC.

ENGINEERS • LAND SURVEYORS • PLANNERS

8480 BALTIMORE NATIONAL PIKE • SUITE 418
ELLCOTT CITY, MARYLAND 21043
PHONE: 410-465-6105 FAX: 410-465-6644
E-MAIL: benchmark@cois.com

PROJECT: ROCKBURN VIEW - SEC. 3
LOT 48 AND GRADING ONLY
FOR LOT 49 AND O.S. LOT 50
SINGLE FAMILY DETACHED

LOCATION: TAX MAP 37 - GRID 4
PARCEL 213
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND.

TITLE: SEDIMENT & EROSION CONTROL
PLAN, NOTES AND DETAILS

DATE: AUGUST 8, 2003
NOVEMBER 5, 2003

PROJECT NO. 1565

SCALE: AS SHOWN DRAWING 2 OF 2

Design: DAM Draft: MCR Check: DAM