## INDEX OF DRAWINGS

NO.	DESCRIPTION
1	COVER SHEET
2	SITE DEVELOPMENT, SEDIMENT CONTROL PLANS AND SOIL MAP
3	SEDIMENT CONTROL NOTES AND DETAILS

# ADDRESS CHART

LOT #	ADDRESS	
1	5803 MARBUCK WAY	
2	6229 MONTGOMERY ROAD	7777
3	5811 MARBUCK WAY	
4	5815 MARBUCK WAY	
5	5819 MARBUCK WAY	
6	5823 MARBUCK WAY	
7	5827 MARBUCK WAY	
8	5831 MARBUCK WAY	,

	PE	RMIT I	NFORMATI	ON BLO	CK	
SUBDIVISION NAME:  MARBUCK ESTATES		SECTION/AREA: N/A		PARCEL: 47 LOTS 1 THRU 8		
PLAT NO. 21546-47	BLOCK(S) 5	ZONING R-20	TAX MAP NO. 37	ELECTION 1ST		CENSUS TRACT 601101

# **LEGEND**

USE IN COMMON PUBLIC ROAD AND PRIVATE DRIVEWAY

PRIVATE USE-IN-COMMON ACCESS EASEMENT FOR LOTS 3-8 & PRIVATE WATER, SEWER AND UTILITY EASEMENT FOR LOTS 7 & 8. PRIVATE INGRESS & EGRESS EASEMENT TO OPEN SPACE LOT 9 FOR LOTS 1-6. PRIVATE DRAINAGE, STORMWATER MANAGEMENT AND RETAINING WALL EASEMENT.

PUBLIC WATER, SEWER AND UTILITY EASEMENT

EROSION CONTROL MATTING



TREES PROVIDED UNDER F-10-107

DEVELOPERS CERTIFICATE

TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE

ENGINEER'S CERTIFICATE I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT

CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

BEGINNING THE PROJECT. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE

ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF

ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED

TO PERIODIC ON-SITE INSPECTION

SIGNATURE OF ENGINEER

PRINTED NAME OF ENGINEER

R JACOB HIKMAT, PE

EXISTING TREELINE

DENOTES EXISTING POWER POLE

LSSF - EXISTING SUPER SILT FENCE

RAINGARDEN

OWNER/DEVELOPER

DORSEY FAMILY HOMES

10717 BIRMINGHAM WAY SUITE B

WOODSTOCK, MARYLAND 21163

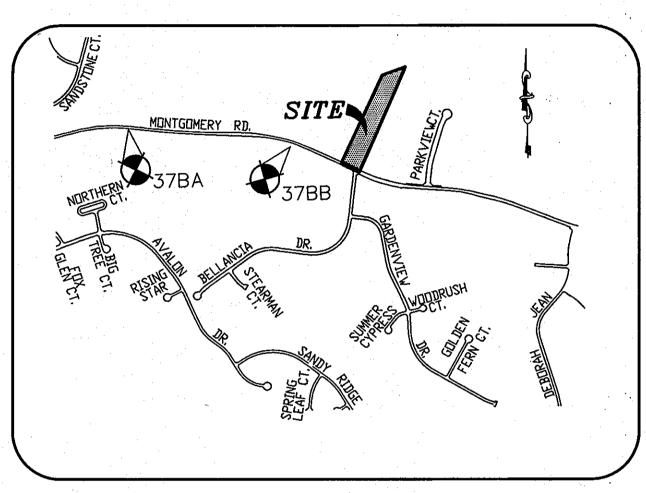
410-465-7200

EXISTING STREET TREES PROVIDED UNDER F-10-107

# SITE DEVELOPMENT PLAN

# MARBUCK ESTATES LOTS 1 THRU 8

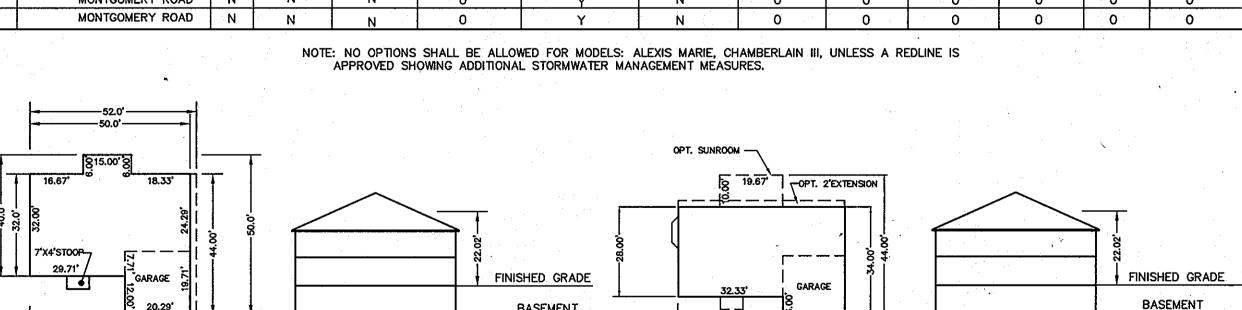
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

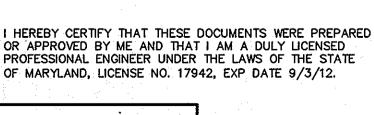


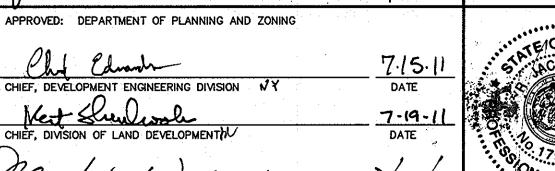
VICINITY MAP

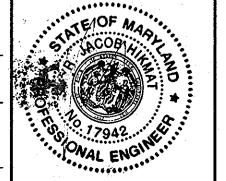
# ADC MAP: 4936 H6

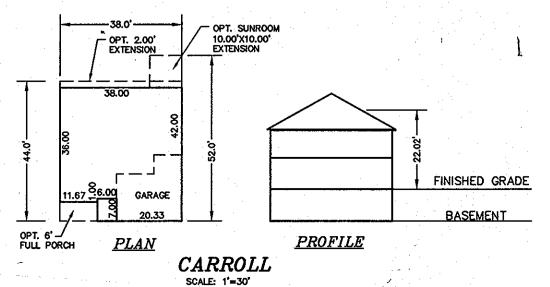
#### STORMWATER MANAGEMENT PRACTICES IGREEN PERMEABLE REINFORCED | DISCONNECTION | SHEETFLOW TO ADDRESS RAINWATER LANDSCAPE INFILTRATION ENHANCE GRAVEL OF ROOFTOP ROOF PAVEMENTS NON-ROOFTOP CONSERVATION HARVESTING BIORETENTION GARDENS INFILTRATION BERMS FILTERS WETLANDS RUNOFF (Y/N)(Y/N) (Y/N) (NUMBER) (Y/N) (Y/N) (NUMBER) (NUMBER) (NUMBER) | (NUMBER) | (NUMBER) (NUMBER) (NUMBER) (NUMBER) (NUMBER) MONTGOMERY ROAD N MONTGOMERY ROAD MONTGOMERY ROAD N MONTGOMERY ROAD N N MONTGOMERY ROAD MONTGOMERY ROAD 0 MONTGOMERY ROAD MONTGOMERY ROAD

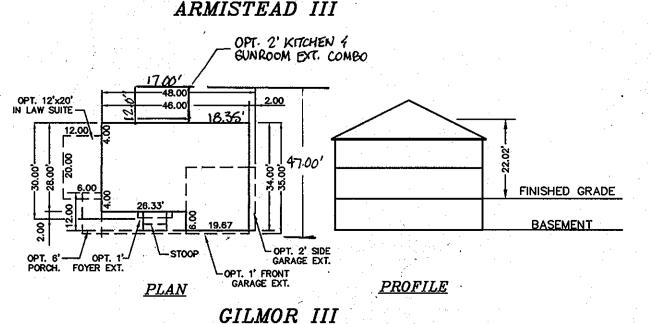












FAM. ROOM

SIDE EXT

### GENERAL NOTES

- 1. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTIONS AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- 2. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- 3. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS
- PREPARED BY MILDENBERG, BOENDER AND ASSOC. INC. PERFORMED ON OR ABOUT SEPTEMBER 2003. 4. COORDINATES BASED ON NAD '83 (HORIZONTAL) AND NGVD '29 (VERTICAL) MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO.37BA & 37BB
- STA. No. 37BB N 563,663.415 E 1,378,040.471 ELEV. 373.822 5. STORMWATER MANAGEMENT REQUIREMENTS HAVE BEEN SATISFIED VIA ON-SITE NON-STRUCTURAL CREDIT. THE ROOFTOP DISCONNECTION CREDIT, THE NON-ROOFTOP DISCONNECTION CREDIT AND USE OF RAINGARDENS IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER DESIGN MANUAL AS APPROVED UNDER F-10-107.
- 6. EXISTING UTILITIES ARE BASED ON ACTUAL FIELD LOCATIONS. IN COMBINATION WITH EXISTING WATER AND SEWER CONTRACTS.
- 7. ANY DAMAGE TO THE COUNTY RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE. 8. SEWER HOUSE CONNECTION ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE OR EASEMENT LINE. 9. FOR DRIVEWAY ENTRANCE DETAILS, REFER TO HOWARD COUNTY DESIGN MANUAL, VOLUME IV,
- STANDARD DETAIL R-6.06. 10. SITE ANALYSIS DATA CHART:

STA. No. 37BA N 563,785.618 E 1,376,343.172 ELEV. 394.786

- LOCATION: TAX MAP 37 PARCEL 47, DEED REFERENCE: L. 9862 F. 52 ZONING: R-20 (ZONING MAP DATED JULY 28, 2006) ELECTION DISTRICT: 1ST AREA OF PLAN SUBMISSION 4.09 ACRES ±
- LIMIT OF DISTURBED AREA: 3.97 AC ± PROPOSED USE FOR SITE: RESIDENTIAL TOTAL NUMBER OF UNITS: 8 TYPE OF PROPOSED UNIT: SFD
- DPZ FILES: SP-05-007, WP-05-78, WP-10-60, F-10-107
- 11. a. SUBJECT PROPERTY ZONED R-20 RESIDENTIAL PER THE 02/02/04 COMPREHENSIVE ZONING PLAN AND PER THE COMP LITE ZONING AMENDMENT EFFECTIVE 7/28/06. b. 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. c. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW PAVING OR
- STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100-YEAR FLOODPLAIN.
- d. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
- WIDTH 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE).
- SURFACE 6 INCHES OF COMPACTED CRUSHER RUN BASE
- WITH TAR AND CHIP COATING (1-1/2 INCH MINIMUM).
- GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45-FOOT TURNING RADIUS. - STRUCTURES (CULVERT/BRIDGES) - CAPABLE OF SAFELY PASSING
- 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE. MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- 12. PUBLIC WATER AND SEWER WILL BE UTILIZED. LOTS 1 THRU 8 WILL BE SERVICED UNDER CONTRACT # 14-4678-D.
- 13. FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD
- MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND
- MINIMUM LOT SIZE AND OPEN SPACE REQUIREMENTS SHOWN ABOVE ARE IN ACCORDANCE WITH SECTION 16.121(a)(2) OF THE HOWARD COUNTY SUBDIVISION REGULATIONS, 5th ED.
- BASED ON AVAILABLE COUNTY DATA, NO HISTORIC STRUCTURES OR BURIAL GROUNDS EXIST ON SITE.
- NO STEEP SLOPES OR FLOODPLAINS EXIST ON SITE. THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202 OF THE HOWARD COUNTY
- CODE HAVE BEEN SATISFIED UNDER F-10-107.
- THE LANDSCAPING REQUIREMENTS WERE SATISFIED WITH F-10-107.
- THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING PLANT MATÉRIALS, BERMS, FENCES AND WALLS (AS REQUIRED UNDER F-10-107) ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- 20. STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME I & II. II WAS DETERMINED THAT THIS PROJECT MET THE CRITERIA OUTLINED IN THE MDE STORMWATER MANAGEMENT REGULATION GUIDANCE FOR IMPLEMENTATION FOR ACCEPTANCE OF THE 2000 DESIGN CRITERIA AND GRANTED A WAIVER. THIS PLAN RECEIVED PRELIMINARY APPROVAL (SP-05-007 ON MARCH 10, 2006). THIS PLAN IS ALSO SUBJECT TO THE EXPIRATION OF THIS WAIVER UNLESS ALL STORMWATER MANAGEMENT IS CONSTRUCTED BY MAY 4, 2017.
- 21. A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATES.
- 22. STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH THE 2000 MARYLAND MANUAL VOLUME I AND II. IT WAS DETERMINED THAT THIS PROJECT MET THE CRITERIA OUTLINED IN THE MDE STORMWATER MANAGEMENT REGULATIONS GUIDANCE FOR IMPLEMENTATION FOR ACCEPTANCE OF THE 2000 DESIGN CRITERIA AND GRANTED AS ADMINISTRATION WAIVER. THIS PLAN RECEIVED PRELIMINARY APPROVAL (SP-05-007) ON MARCH 10, 2006. THIS PLAN RECEIVED PLAT APPROVAL (F-10-107) ON APRIL 18, 2011. EXPIRATION OF ADMINISTRATIVE WAIVERS FOR GRANDFATHERING SHALL BE MAY 04, 2013 IF THE DEVELOPER DOES NOT RECEIVE FINAL APPROVAL (SIGNED BY SCD) PRIOR TO THIS DATE SO THAT GRADING PERMIT MAY BE OBTAINED AND THE PROJECT CONTINUES TO CONSTRUCTION COMPLETION. THIS PLAN IS ALSO SUBJECT TO THE EXPIRATION OF THE WAIVER UNLESS ALL STORMWATER MANAGEMENT IS CONSTRUCTED BY MAY 04, 2017.
- THIS PROJECT IS SUBJECT TO A WAIVER TO DESIGN MANUAL, VOLUME III, SECTION 2 APPENDIX A, WHICH REQUIRES THAT "RESIDENTIAL AND USE-IN-COMMON DRIVEWAY ARE THOSE SERVING SINGLE-FAMILY HOUSES WITH NO MORE THAN (G) DWELLING UNITES" WAS APPROVED ON OCTOBER 13, 2011 SUBJECT TO:
- 1. REDUNE SDP-11-0ZZ TO SHOW THE CHANGES OF THE DRIVEWAY AND OF STORMWATER MANAGEMENT FOR LOT 1.
- 2. SUBMIT A PLAT OF REVISION TO ADD LOT I TO THE USE\_IN\_COMMON DRIVEWAY. 3. AMEND THE USE-IN. COMMON MAINTENANCE AGREEMENT TO MYCLUDE

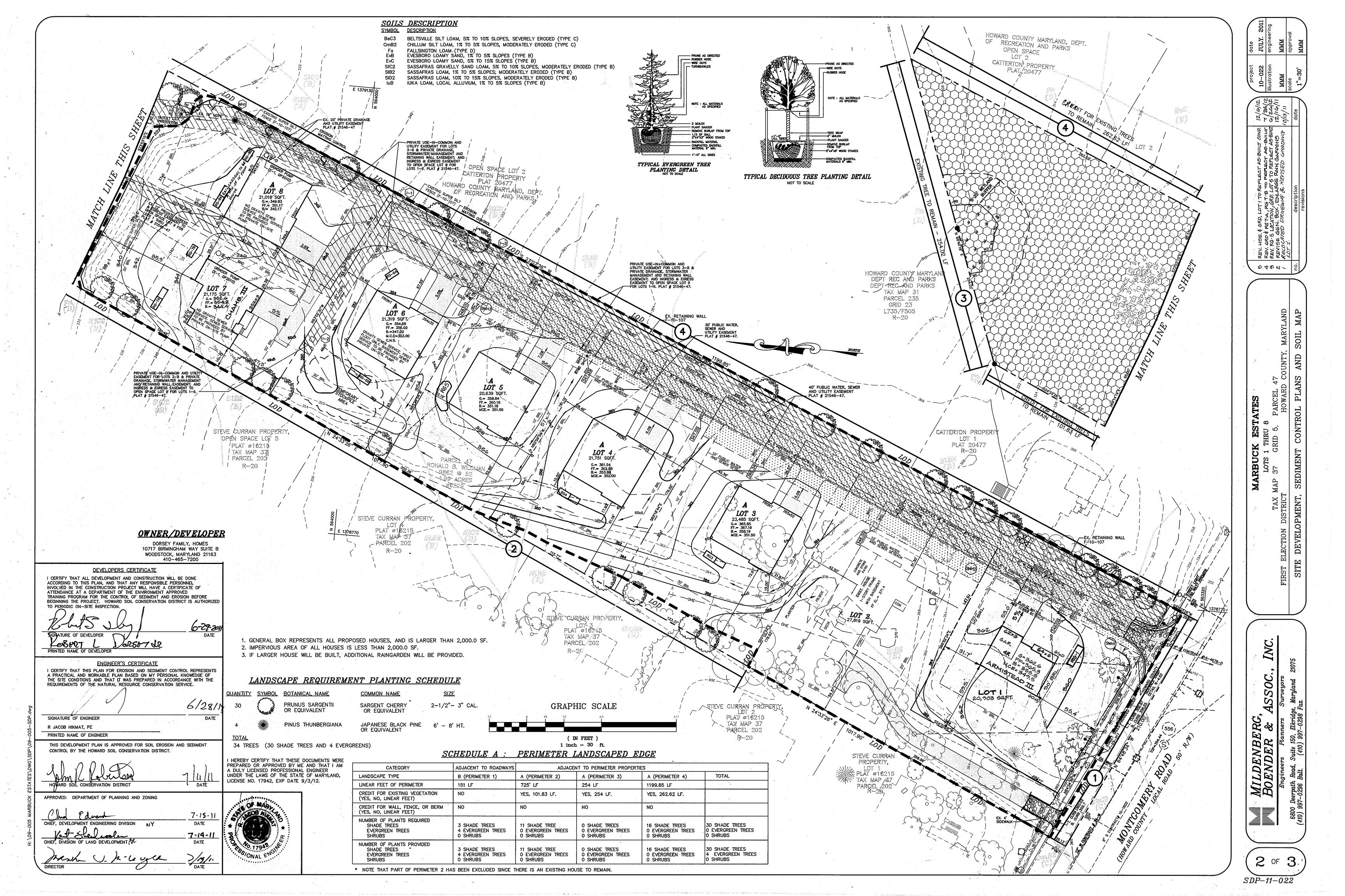
FINISHED GRADE BASEMENT **PROFILE** CHAMBERLAIN III

FITS ALL HOUSES

GENERIC BOX

OF

4004 S



# HOWARD SOIL CONSERVATION DISTRICT

#### PERMANENT SEEDING NOTES

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

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING , DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES: 1) PREFERRED -- APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS/1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY

400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (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 DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE 1.4 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 LOBS. PER ACRE (.05 LBS./1000 SQ.FT.) OF WEEPING LOVEGRASS DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) - 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) - USE SOD. OPTION (3) -SEED WITH 60 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONE/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 USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING. 218 GALLONS PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER,

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

#### TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED. SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, FOR NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.)

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.) 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 16 THRU NOVEMBER 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE

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

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

#### STANDARD SEDIMENT CONTROL NOTES

- 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION,
- (313-1855). 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
- SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", AND REVISIONS THERETO. 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.
- 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
- 5) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (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. SITE ANALYSIS: N/A AREA DISTURBED; AREA TO BE ROOFED OR PAVED: AREA TO BE VEGITATIVELY STABILIZED:
  - TOTAL WASTE/BORROW AREA LOCATION: THESE QUANTITIES ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR IS REQUIRED TO PROVIDE HIS
- OWN QUANTITIES MEASUREMENTS. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF
- UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY
- 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.

# I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNE 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. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO PERIODIC ON-SITE INSPECTION, I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWEDGE OF THE SITE CONDTIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE. SIGNATURE OF ENGINEER R JACOB HIKMAT, PE PRINTED NAME OF ENGINEER THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF. DEVELOPMENT ENGINEERING DIVISION

DEVELOPERS CERTIFICATE

HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 9/3/12.



7 - 15 - 1

DATE

7-19-11

DATE

#### OWNER/DEVELOPER

DORSEY FAMILY, HOMES 10717 BIRMINGHAM WAY SUITE B WOODSTOCK, MARYLAND 21163 410-465-7200

# STANDARD AND SPECIFICATIONS FOR TOPSOIL

#### **DEFINITION**

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

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:
- a. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE
- 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.

THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

d. 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

#### CONSTRUCTION AND MATERIAL SPECIFICATIONS

TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATION. 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 SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CON-TRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN
- ii. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSON-SON GRASS, 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
- III. 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.
- IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:

DISSIPATION OF PHYTO-TOXIC MATERIALS.

- 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 topsoils shall be between 6.0 and 7.5. If the tested soil demonstrates a ph of LESS THAN 6.0, SUFFICIENT LIME SHALL BE PERSCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
- 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 WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT

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

- ii. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.
- V. TOPSOIL APPLLICATION
- WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
- 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" TO 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
- TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER
- VI. ALTERNATIVE FOR PERMANENT SEEDING INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:
- COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
- a. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS WHO ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT LINDER COMAR 26,04,06.
- b. COMPOSTED SLUDGE SHALL CONTAIN AT LEASE 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHOURUS, 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. c. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.
- iv. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILLIZER APPLIED AT THE RATE OF 4 LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

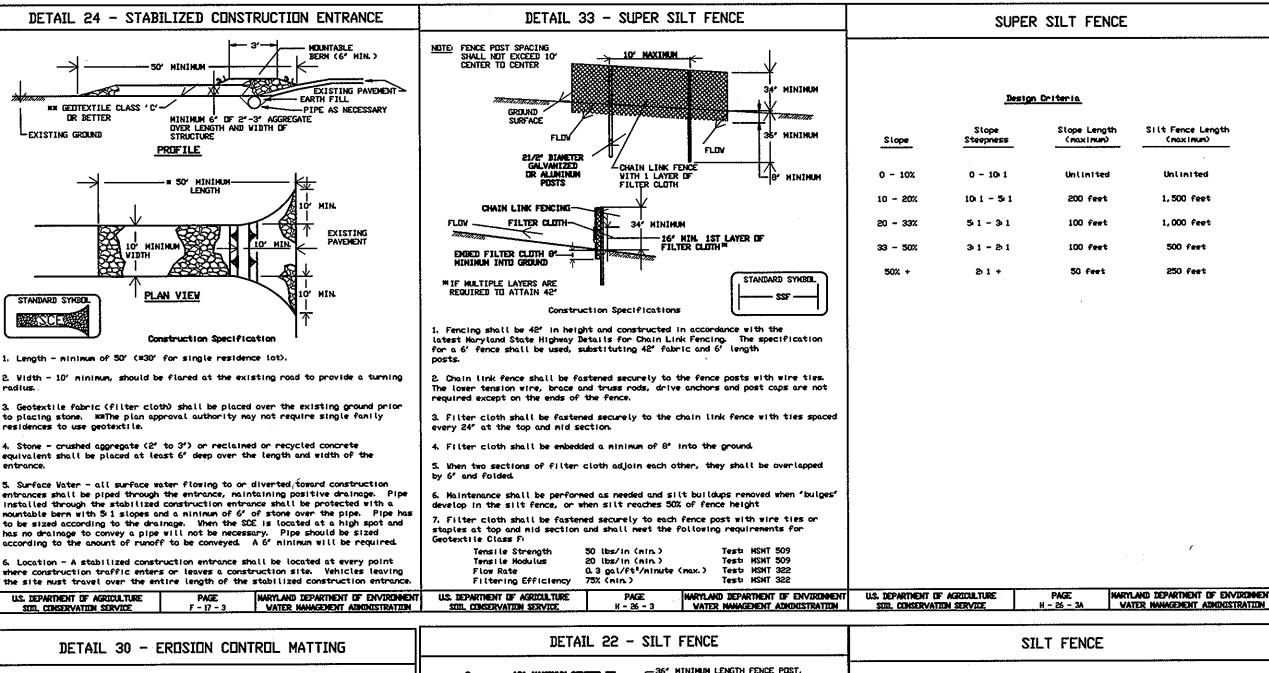
REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.

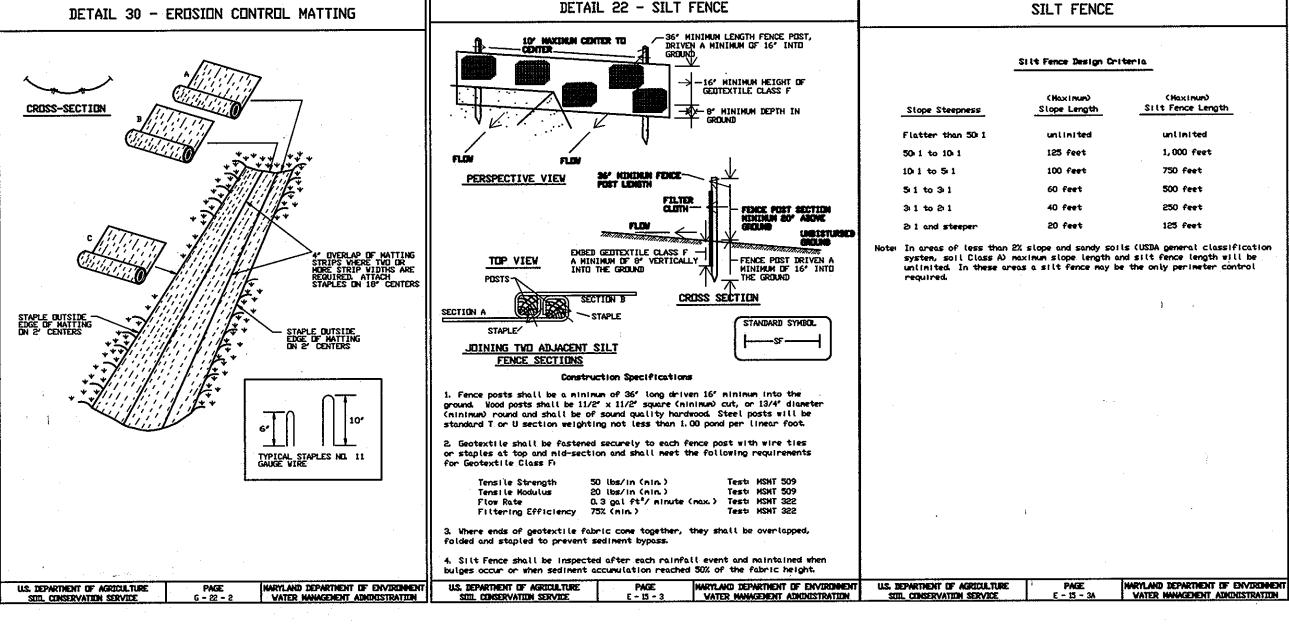
### EROSION AND SEDIMENT CONTROL NOTES

- 1. ALL SEDIMENT CONTROL OPERATIONS ARE TO BE DONE IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY VOLUME IV DESIGN MANUAL AND THE STANDARDS AND SPECIFICATIONS FOR SEDIMENT CONTROL IN DEVELOPING AREAS.
- 2. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS THE FIRST ORDER OF BUSINESS.
- 3. ALL EXCAVATED MATERIALS SHALL BE STOCKPILED ON THE UPGRADE SIDE OF THE MAIN TRENCH.
- 4. EXCAVATION AND BACKFILL SHALL BE LIMITED TO THAT WHICH CAN BE STABILIZED WITHIN ONE WORKING DAY.
- 5. IMMEDIATELY FOLLOWING BACKFILL OF THE SEWER TRENCH, ALL DISTURBED AREAS ARE TO BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES SHOWN
- 6. THROUGHOUT THE PROJECT, THE CONTRACTOR SHALL REGULARLY INSPECT ALL SEDIMENT CONTROL DEVICES AND PROVIDE ALL NECESSARY MAINTENANCE TO INSURE THAT ALL DEVICES ARE IN
- 7. ALL SEDIMENT CONTROL FACILITIES SHALL REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

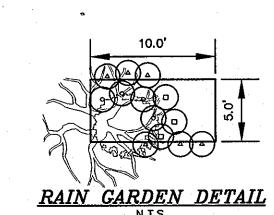
#### SEQUENCE OF CONSTRUCTION

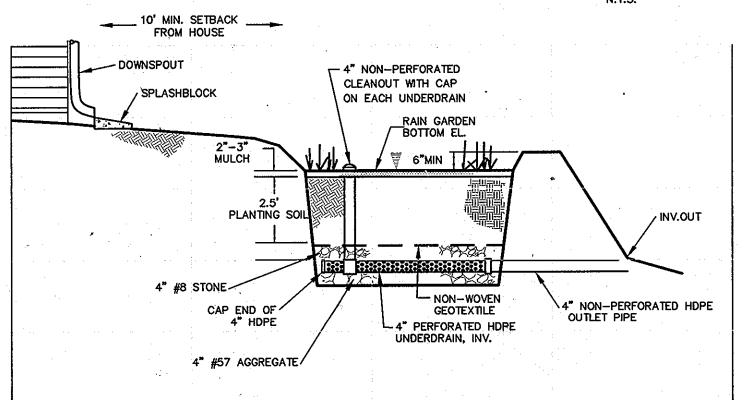
- 1. OBTAIN GRADING PERMIT. (1 DAY)
- 2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AT LOCATION SHOWN (1 DAY)
- 3. SILT FENCE AND SUPER SILT FENCE INSTALLED UNDER F-10-107 TO UTILIZED. (3 DAYS)
- 4. CONSTRUCT SITE TO GRADES INDICATED WITH PERMISSION FROM INSPECTOR BEFORE
- PRECEDING. (30 DAYS) 5. CONSTRUCT HOUSES. (90 - 180 DAYS)
- 6. CONSTRUCT STORM WATER MANAGEMENT FEATURES (RAIN GARDENS) (5 DAYS).
- 7. COMPLETE FINE GRADING OF SITE TO GRADES INDICATED. (2 DAYS PER HOUSE)
- 8. SEED AND MULCH ALL REMAINING DISTURBED AREAS. (1 DAY PER HOUSE).
- WHEN ALL CONTRIBUTING DRAINAGE AREAS TO SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED, AND WITH PERMISSION OF SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS (1 DAY).





#### PLANT LIST QUANTITY SYMBOL BOTANICAL NAME COMMON NAME SIZE |2-1/2**" -** 3" CAL SYCAMORE ILEX GLABRA INK BERRY 2' -- 3' HT. GREAT BLUE 1 GAL CONTAINER 1 GAL. CONTAINER ASTER NEW ENGLAND 1 GAL. CONTAINER TOTAL: 13 PERENNIALS, 1 SHRUB, 1 TREE (PER EACH RAIN GARDEN)





TYPICAL 5' - 10' RAIN GARDEN PROFILE

# RAIN GARDEN DESIGN DATA

RAIN GARDEN#	DIMENSIONS	RAIN GARDEN BOTTOM EL.	MAX. PONDING DEPTH	DEPTH OF GRAVEL	WER ELEVATION	UNDERDRAIN INV.	OUTLET INV.
1	5'x26	359.93	6"	6"	360.43	356.73 <sup>°</sup>	356.4
3	5'X 20	364.5	6"	6"	365.Q	361.3	361.1
4	5'X 20'	359.5	6*	6"	360.0	356.3	356.1
5	5'x 20 <sup>t</sup>	355.5	6"	6"	356.0	352.3	352.1
6A	5'X10'	352.5	6"	6"	353.0	<sub>=</sub> 349.3	349.2
6B	5'X20	352.9	6"	6"	353.4	349.7	349.5
7A	5'X 20'	343.0	6"	6"	343.5	339.8	338.1
78	5'X10'	343.0	6"	6"	343.5	339.8	339.0
8A	5'X20'	340.5	6 <b>*</b>	- 6*	341.0	337.3	337.0
8B	5'X10'	339.5	6"	6"	340.0	336.3	336.2

\* USE AASHTO NO. 2 STONE

#### OPERATION AND MAINTENANCE SCHEDULE FOR RAINGARDENS (M-7)

- A. THE OWNER SHALL MAINTAINTHE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCHAND SOIL IS UMITED TO CORRECTING AREAS OF ECOSION OR WAS HOOT. ANY MULCH REPLACEMENT SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AN MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRONING ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARHLAND STORMWATER DESIGN MANUAL VOL II, TABLE
- B. THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND BALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED REYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE PLANT MATERIAL, TREAT DISEASED TREES AND SHEURS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.

C. THE OWNER SHALL INSPECT THE MULCH EACH SPEING. THE MULCH SHALL BE REPLACED EVERY

TWO TO TARED YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED REPORT THE NEW

O. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF SUCE PER MONTH AND AFTER EACH HEMY STORM.

SDP-11-022

OF