

RAIN GARDEN - PLANTING SCHEDULE

1	PANICUM VIRGATUM (SWITCH GRASS)	16
2	VERNONIA NOVEBORACENSIS	5
3	IRIS VERSICOLOR (IRIS)	8
4	HIBISCUS MOSCHEUTOS ROSE MALLOW	15
5	ACER RUBRUM (RED MAPLE)	1

RAIN GARDEN - PLANTING DATA

- PLANTINGS WITHIN THE PONDING AREA OF THE RAIN GARDEN ARE TO BE OF A MEDIUM TO HIGH WATER TOLERANCE.
- PLANTINGS ALONG THE PERIMETER (BERM) AREA OF THE RAIN GARDEN ARE TO BE OF A LOW TO MEDIUM WATER TOLERANCE.
- AVOID PLANTINGS WITH EXCESSIVE ROOT MASS IN POND AREA OF THE RAIN GARDEN NEAR O.B. PIPE AND UNDERDRAIN.

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 18.124 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.

Christopher Brown 2/28/12
CHRISTOPHER BROWN, HARMONY BUILDERS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

16/2/12 3/08/12
CHIEF, DIVISION OF LAND DEVELOPMENT DATE:

3/7/12
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE:

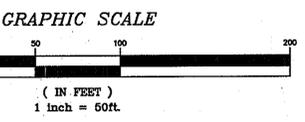


SHC TABLE

LOT NO.	INV. @ MAIN	INV. @ R/W	MIN. CELLAR ELEV.
2	199.30	199.70	205.00
3	192.85	193.30	198.67
4	190.02	190.47	193.60

RAIN GARDEN TABLE

LOT	RG 1	RG 2
ELEV. 1	212.0	208.8
ELEV. 2	212.0	208.8
ELEV. 3	211.5	207.8
ELEV. 4	211.33	207.63
ELEV. 5	208.83	205.13
ELEV. 6	208.33	204.63



PLAN
SCALE: 1" = 50'

OPERATION & MAINTENANCE SCHEDULE FOR RAIN GARDENS

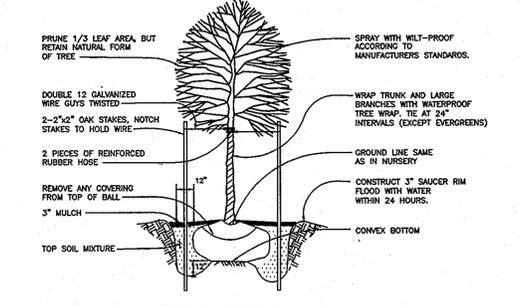
- ANNUAL MAINTENANCE OF PLANT MATERIAL AND MULCH LAYER IS REQUIRED. MAINTENANCE OF MULCH IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH-OUT. ANY REPLACEMENT OF MULCH SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE & INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL & PRUNING.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN THE SPRING AND FALL. THIS INSPECTION WILL INCLUDE: REMOVAL OF DEAD & DISEASED VEGETATION CONSIDERED BEYOND TREATMENT; TREATMENT OF ALL DISEASED TREES & SHRUBS; AND REPLACEMENT OF ALL DEFICIENT STAKES & WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. REMOVE THE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS-NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

MATERIALS AND SPECIFICATIONS FOR RAIN GARDEN

MATERIAL	SPECIFICATION	SIZE	NOTES:
PLANTINGS	SEE APPENDIX A, TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2.5' TO 4.0' DEEP)	SAND: 30-50% SILT: 30-50% CLAY: 0-20%	N/A	USDA SOIL TYPES: LOAMY SAND, SANDY LOAM OR LOAM
MULCH	SHREDDED HARDWOOD	N/A	AGED 6 MONTHS, MINIMUM
GEOTEXTILE (CLASS 5)	APPARENT OPENING SIZE: (ASTM D-4751) GRAB TENSILE STRENGTH: (ASTM D-4752) PUNCTURE RESISTANCE: (ASTM D-4753)	N/A	FOR USE AS NECESSARY BENEATH UNDERDRAINS ONLY
UNDERDRAIN GRAVEL	ASHTO M-43	0.375" TO 0.750"	
UNDERDRAIN PIPING	F758, TYPE PS28 OR ASHTO M-278	4" TO 6" RIGID SCHED 40 PVC SDR35 OR HDPE	3/8" PERF. @ 6" O/C, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES; NOT NECESSARY UNDERDRAIN PIPES

PUBLIC STREET TREE PLANTING LIST

SYMBOL	QUANTITY	NAME	REMARKS
(Symbol)	7	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE	2 1/2" - 3" CAL. STREET TREES TO BE PROVIDED BY THE DEVELOPER



LEGEND

SOILS CLASSIFICATION: SJC2

SOILS DELINEATION: ---

EXISTING CONTOURS: - - - -

PROPOSED CONTOURS: - - - -

EXISTING WOODS LINE: [Symbol]

EXISTING STRUCTURE: [Symbol]

PROPOSED STRUCTURE: [Symbol]

TREE PROTECTION FENCE: TF - TF

- 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 ANY STREET LIGHTS.
 - TREES MUST BE PLANTED A MINIMUM OF TEN(10) FEET FROM A DRAINWAY.
 - THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SEC. 18.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE POSTED AS PART OF THE NEW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$1,000.00 AT THE TIME OF SUBMITTAL.

AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.

SITE ANALYSIS DATA CHART

GENERAL SITE DATA

- PRESENT ZONING: R-12
- APPLICABLE DPZ FILE REFERENCES: N/A
- DEED REFERENCE: LIBER 9201 / FOLIO 560
- PROPOSED USE OF SITE: SINGLE-FAMILY DETACHED
- PROPOSED WATER AND SEWER SYSTEMS: PUBLIC

AREA TABULATION

1) GROSS TRACT AREA	0.93 AC.±
2) AREA WITHIN 100-YEAR FLOODPLAIN	0.00 AC.±
3) TOTAL AREA OF 25% OR GREATER STEEP SLOPES	0.00 AC.±
4) AREA NOT IN FLOODPLAIN	0.00 AC.±
5) NET TRACT AREA	0.93 AC.±
6) TOTAL NUMBER OF RESIDENTIAL UNITS/LOTS PROPOSED ON THIS SUBMISSION	3
7) AREA OF ROAD RIGHT-OF-WAY	0.00 AC.±
8) OPEN SPACE ON-SITE TOTAL REQUIREMENTS	12,000
MINIMUM RESIDENTIAL LOT SIZE	NA
OPEN SPACE REQUIRED (10%)	NA
OPEN SPACE REQUIREMENT WILL BE MET THROUGH PAYMENT OF FEE IN LIEU OF OPEN SPACE IN THE AMOUNT OF \$4,500.	

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAY	ADJACENT TO PERIMETER PROPERTIES	NO	YES
PERIMETER NO. / LANDSCAPE TYPE	1	2	A	A
LINEAR FEET OF (FRONTAGE/PERIMETER)	236.88'	155.66'		
CREDIT FOR EXISTING VEGETATION: NO OR YES (4' LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	2	EX.	THREES	NO
CREDIT FOR WALL, FENCE OR BERM: NO OR YES (4' LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO		
NUMBER OF PLANTS REQUIRED: SHADE TREES	2	3		
EVERGREEN TREES	-	-		
OTHER TREES (2:1 SUBSTITUTE) SHRUBS	-	-		
NUMBER OF PLANTS PROVIDED: SHADE TREES	2	3		
EVERGREEN TREES	-	-		
OTHER TREES (2:1 SUBSTITUTE) SHRUBS (10:1 SUBSTITUTE)	-	-		
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	-	-		

BENCHMARKS NAD'83 HORIZONTAL

NO. CO. #38AA STAMPED BRASS DISK SET ON TOP OF CONCRETE BASE N 561158.817' E 1389726.33' ELEVATION: 220.084'
NO. CO. #38BA STAMPED BRASS DISK SET ON TOP OF CONCRETE BASE N 562553.314' E 1390967.86' ELEVATION: 166.184'



GENERAL NOTES

- EXISTING TOPOGRAPHY SHOWN HEREON WAS FIELD RUN BY BENCHMARK ENGINEERING, INC. DATED MARCH, 2005. CONTOUR INTERVAL IS 2 FEET.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL MONUMENTS 38AA & 38BA, WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM.
- THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT. WATER AND SEWER SHALL BE PUBLIC, CONNECTING TO CONTRACTS 44-0906 FOR SEWER AND TO CONTRACTS 44-0906 FOR WATER. DRAINAGE AREA IS WITHIN THE PATAPSCO RIVER AREA WATERSHED.
- STORMWATER MANAGEMENT SHALL BE PROVIDED FOR THIS PROJECT BASED ON GUIDELINES ESTABLISHED BY THE 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUMES 1 & II. STORMWATER MANAGEMENT SHALL BE PROVIDED BY USE OF ROOFTOP DISCONNECTION CREDITS, RAIN GARDENS AND NON-ROOFTOP DISCONNECTION CREDITS.
- EXISTING UTILITIES SHOWN WERE LOCATED BY APPROVED CONTRACT DRAWINGS AND FIELD LOCATIONS.
- THERE ARE NO EXISTING WETLANDS, WETLANDS BUFFERS, STREAMS, STREAM BUFFERS OR 100-YR. FLOODPLAIN ON-SITE.
- LANDSCAPING FOR THIS PROJECT WILL BE PROVIDED AS PART OF THE SITE DEVELOPMENT PLANS.
- THERE IS AN EXISTING DWELLING LOCATED ON LOT 1 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.
- UNLESS NOTED AS "PRIVATE", ALL EASEMENTS ARE PUBLIC.
- 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:
 - WIDTH - 12' (16' SERVING MORE THAN ONE RESIDENCE).
 - SURFACE - 6" OF COMPACT CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN).
 - GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE & MIN. 45' TURNING RADIUS.
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOAD)
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 - STRUCTURE CLEARANCES - MINIMUM 12 FEET
 - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- THIS PLAN IS SUBJECT TO THE 9th EDITION OF THE HOWARD COUNTY SUBDIVISION REGULATIONS AND THE AMENDED HOWARD COUNTY ZONING REGULATIONS, COUNCIL BILL 50-2001
- SUBJECT PROPERTY IS ZONED R-12 PER 7/28/06 COMPREHENSIVE ZONING PLAN.
- THE FOREST CONSERVATION OBLIGATION HAS BEEN FULFILLED UNDER F-08-237 BY PAYMENT OF A FEE IN LIEU FOR 0.25 ACRES OF FOREST CONSERVATION PLANTINGS IN THE AMOUNT OF \$5445.00.

PERIMETER LANDSCAPE PLANTING LIST

SYMBOL	QUANTITY	NAME	REMARKS
(Symbol)	5	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE	2 1/2" - 3" CAL.

SOILS LEGEND

SOIL GROUP	SOIL TYPE
SJC2	B SASSAFRAS GRAVELLY SAND LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED
SD2	B SASSAFRAS LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED

* INDICATES HYDRIC SOILS
TAKEN FROM SOILS SURVEY, ISSUED JULY 1988, MAP NO. 26

BENCHMARK ENGINEERING, INC.

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ELLICOTT CITY, MARYLAND 21043
PHONE: 410-465-8105 FAX: 410-465-8644
www.bel-civilengineering.com

ENGINEERS LAND SURVEYORS PLANNERS

BUILDER: HARMONY BUILDERS
4228 COLUMBIA ROAD
ELLICOTT CITY, MARYLAND 21042
410-461-0833

OWNER: CHRISTOPHER L. BROWN
4228 COLUMBIA ROAD
ELLICOTT CITY, MARYLAND 21042

PROJECT: BAKER PROPERTY
LOT 2 THRU LOT 4
A RESUBDIVISION OF BAKER PROPERTY NON-BUILDABLE BULK PARCEL "A", PLAT NO. 118966

LOCATION: TAX MAP 38 - GRID 9
PARCEL 20
9th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: SUPPLEMENTAL SHEET
GRADING PLAN AND
LANDSCAPE PLAN

DATE: SEPTEMBER, 2006 PROJECT NO. 1853
FEBRUARY, 2012

SCALE: AS SHOWN DRAWING 1 OF 1

Design: MAN Draft: EDD Check: DAM