

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
 STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES

SHOULDER WORK/2-LANE, 2-WAY
 EQL/LESS THAN 40 MPH

STANDARD NO. MD 104.02-02

TRAFFIC MAINTENANCE PLAN

Centerline Control Data

DESCRIPTION	STATION	NORTH	EAST
INT. MT. HEBRON & CALVIN	1+71.9 BK	596,705.35	1,360,413.44
P&B & CALVIN CIRCLE	0+00.00	596,651.51	1,360,251.03
POB - DRIVEWAY	0+00.00	596,651.80	1,360,250.18
PT - DRIVEWAY	0+29.54	596,678.7651	1,360,241.8859
PI - DRIVEWAY & BYPASS	1+78.40 = 0+00.00	596,822.3641	1,360,198.8194
PC - DRIVEWAY	2+53.57	596,894.3965	1,360,177.5165
PRC - DRIVEWAY	2+65.30	596,905.7679	1,360,178.4650
PCC - DRIVEWAY	2+73.56	596,913.6415	1,360,180.7729
PI - DRIVEWAY & BYPASS	3+17.65 = 1+40.40	596,957.5585	1,360,175.1995
END - DRIVEWAY	4+84.56	597,023.4565	1,360,040.1599
PI - BYPASS & DRIVEWAY	0+00.00 = 1+78.40	596,822.3641	1,360,198.8194
PRC - BYPASS LANE	0+25.93	596,847.4970	1,360,201.4110
PT - BYPASS LANE	0+45.57	596,865.5372	1,360,203.3743
AD - BYPASS LANE	1+15.12	596,933.1844	1,360,183.4790
PI - BYPASS & DRIVEWAY	1+40.40 = 3+17.65	596,957.5585	1,360,175.1995

Centerline Curve Data

CURVE	STATION	RADIUS	ARC	DELTA	TANGENT	CHORD
C1 - DRIVEWAY	PC=2+53.57 PRC=2+65.30	15.00'	11.73'	44°17'13"	6.18'	505'48.207"
C2 - DRIVEWAY	PRC=2+65.30 PCC=2+73.56	20.00'	8.26'	23°40'24"	4.12'	116'19.142"
C3 - DRIVEWAY	PCC=2+73.56 END=4+84.56	100.00'	211.00'	112°59'13"	161.92'	NS2°00'03"
C4 - BYPASS LANE	PC=0+00.00(POB) PRC=0+25.93	33.00'	25.93'	45°01'01"	13.67'	505'5.147"
C5 - BYPASS LANE	PRC=0+25.93 PI=0+45.57	25.00'	19.64'	45°01'02"	10.36'	N05°5.147"

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature]

CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature]

DIRECTOR: [Signature]

DATE: 11/16/06

DATE: 11/16/06

DATE: 11/16/06

NOTE: ALL STORMWATER MANAGEMENT BMP'S SHOWN ON THESE PLANS ARE TO BE PRIVATELY OWNED AND MAINTAINED.

NOTE: ALL STORM DRAINS SHOWN ON THESE PLANS ARE TO BE PRIVATELY OWNED AND MAINTAINED.

NOTE: ALL STORM DRAINS LABELED AS HDPE SHALL HAVE A SMOOTH-BORE INTERIOR FINISH.

BENCHMARK
 ENGINEERS & LAND SURVEYORS & PLANNERS

ENGINEERING, INC.

8490 BALTIMORE NATIONAL PIKE & SUITE 418
 ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-6105 FAX: 410-465-6644
 www.bei-civilengineering.com

OWNER: THE TRUSTEES OF THE PRESBYTERY OF BALTIMORE, INC.
 5400 LOCH RAVEN DRIVE
 BALTIMORE, MARYLAND 21239
 PHONE: 410-433-2012

PROJECT: MT. HEBRON PRESBYTERIAN CHURCH

LOCATION: TAX MAP 17 - GRID 10
 PARCEL 400
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: SITE DEVELOPMENT PLAN NOTES AND DETAILS

DATE: JUNE 13, 2005 PROJECT NO. 1655
 OCTOBER 20, 2006

SCALE: AS SHOWN DRAWING 2 OF 6

Design: MCR Draft: MAN/MCR Check: DAM

SDP-05-152

IN-SITU INFILTRATION		
BORING NO.	DEPTH OF TEST	MEASURED RATE (IN./HR.)
B-1	6'	0.375
B-2	6'	-
B-3	6'	0.6875

NOTE: ALL STORM DRAINS LABELED AS HDPE SHALL HAVE A SMOOTH-BORE INTERIOR FINISH

NOTE: ALL STORM DRAINS SHOWN ON THESE PLANS ARE TO BE PRIVATELY OWNED AND MAINTAINED

NOTE: ALL STORMWATER MANAGEMENT BMP'S SHOWN ON THESE PLANS ARE TO BE PRIVATELY OWNED AND MAINTAINED

SUPER SILT FENCE IS TO BE INSPECTED FREQUENTLY AND CLEANED, REPAIRED, AND/OR RE-INSTALLED IMMEDIATELY AS NECESSARY

SEDIMENT CONTROL LOCATION AND IMPLEMENTATION SHOWN ON THIS PLAN IS SUBJECT TO REVISIONS IN THE FIELD AT THE DISCRETION OF THE SEDIMENT CONTROL INSPECTOR

ALL SEDIMENT CONTROL FEATURES SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS SHOWN IN THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

LEGEND

SOILS CLASSIFICATION	AbC1
SOILS DELINEATION	---
EXISTING CONTOURS	999
PROPOSED CONTOURS	999
EXISTING STRUCTURE	---
LIMIT OF DISTURBANCE	---
STABILIZED CONSTRUCTION ENTRANCE	---
SILT DIVERSION FENCE	SDF
SILT FENCE	SF
SUPER SILT FENCE	SSF
EROSION CONTROL MATTING	---

SOILS LEGEND

MAP SYMBOL	SOIL TYPE	MAPPING UNIT
MIA	B	MANOR LOAM - 0 TO 3 PERCENT SLOPES
MIB2	B	MANOR LOAM - 3 TO 8 PERCENT SLOPES - MODERATELY ERODED
MC2	B	MANOR LOAM - 8 TO 15 PERCENT SLOPES - MODERATELY ERODED
MIC3	B	MANOR LOAM - 8 TO 15 PERCENT SLOPES - SEVERELY ERODED

TAKEN FROM USDA SOIL SURVEY OF HOWARD COUNTY (ISSUED JULY, 1968) SOILS MAP No.10



STONE OUTLET SEDIMENT TRAP ST-II
 EX. DRAINAGE AREA=0.76ac.
 PROP. DRAINAGE AREA=1.30ac.
 TOTAL STORAGE REQUIRED=4880c.f.
 WET STORAGE PROVIDED=4880c.f.
 BOTTOM STORAGE ELEVATION=448.64
 CREST ELEVATION=446.25
 TOP ELEVATION=449.84
 BOTTOM DIMENSIONS=±113'x±4'
 WEIR LENGTH = 5'

NOTE: CONTRACTOR TO TEST PT. AREA OF EXISTING UTILITIES, DETERMINE EXISTING LOCATION AND ELEVATION PRIOR TO SITE GRADING ACTIVITIES

CONTRACTOR TO AVOID DISTURBING EX. PLUMBING EQUIPMENT AND TRENCH DURING CONSTRUCTION. ALL TO BE RETURNED TO ORIGINAL CONDITION AFTER CONSTRUCTION IS COMPLETED

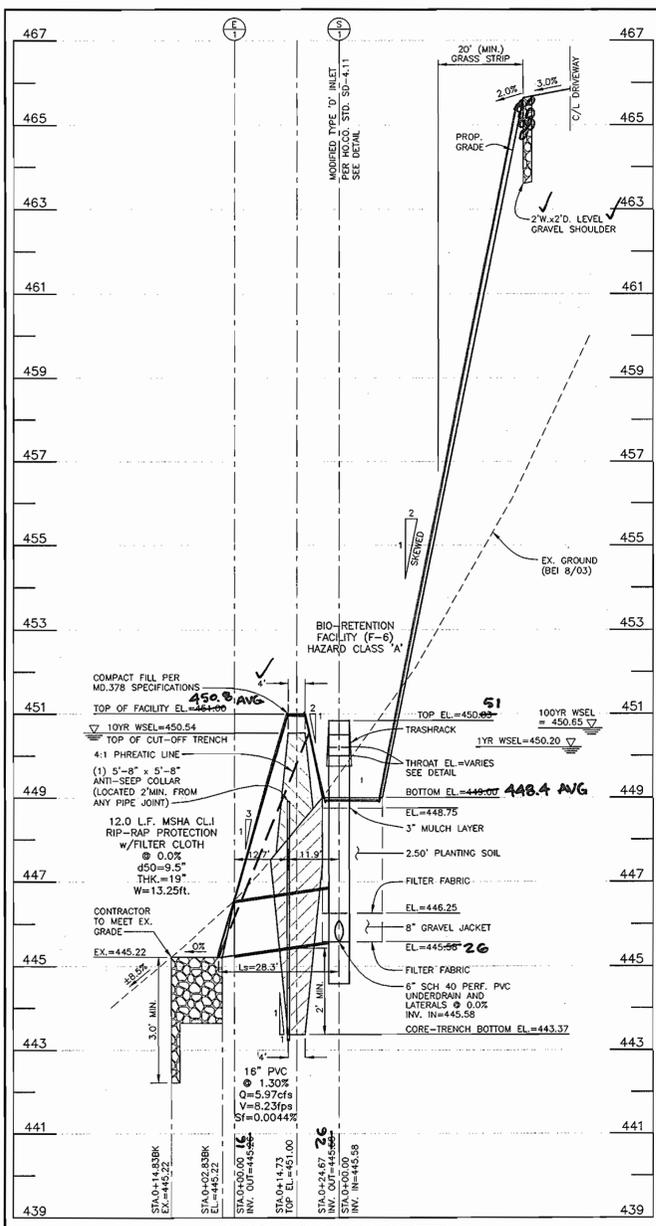
NOTE: CONTRACTOR TO TEST PT. AREA OF EXISTING UTILITIES, DETERMINE EXISTING LOCATION AND ELEVATION PRIOR TO SITE GRADING ACTIVITIES

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 PERMANENT SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.	
<i>Sidney Venable III</i>	10/18/06
OWNER'S AGENT: REV. SIDNEY J. VENABLE, III	DATE:
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 SOIL CONSERVATION DISTRICT.	
<i>Donald A. Mason</i>	10/18/06
ENGINEER: DONALD A. MASON, MD P.E. No.21443	DATE:
THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.	
<i>John M. ...</i>	10/30/06
HOWARD SOIL CONSERVATION DISTRICT	DATE:
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.	
<i>Jim ...</i>	10/30/06
USDA-NATURAL RESOURCES CONSERVATION SERVICE	DATE:
APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>...</i>	11/01/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE:
<i>...</i>	11/3/06
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE:
<i>...</i>	11/6/06
DIRECTOR	DATE:

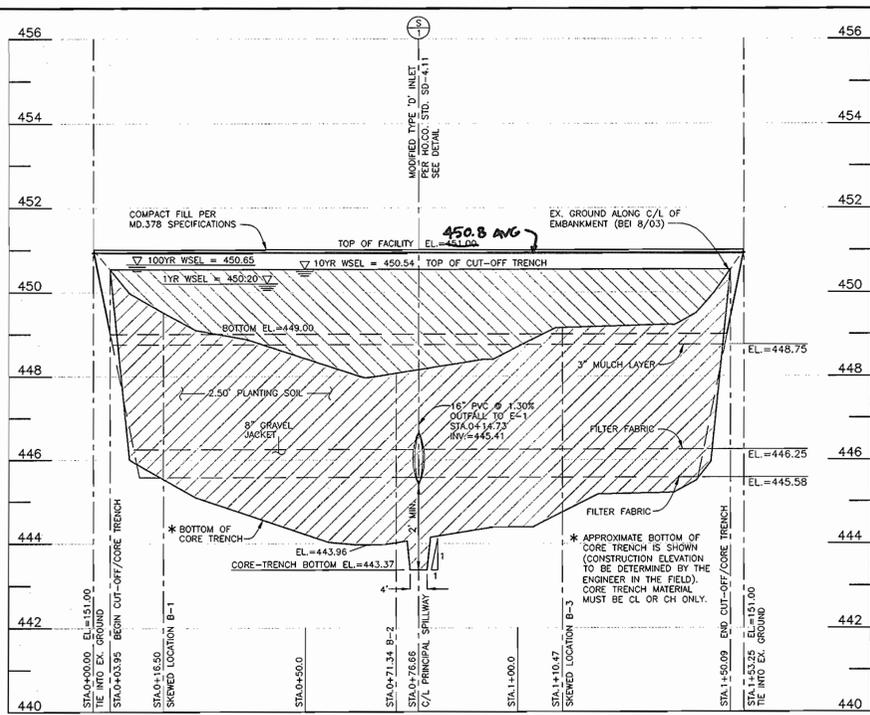
PLAN
SCALE: 1"=20'

THIS PLAN IS FOR SEDIMENT AND EROSION CONTROL PURPOSES ONLY

NO. DATE REVISION	
BENCHMARK ENGINEERING, INC.	
8480 BALTIMORE NATIONAL PIKE & SUITE 418 ELLICOTT CITY, MARYLAND 21043 PHONE: 410-465-6105 FAX: 410-465-6644 www.bei-civilengineering.com	
OWNER:	PROJECT: MT. HEBRON PRESBYTERIAN CHURCH
LOCATION:	TAX MAP 17 - GRID 10 PARCEL: 400 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE:	SEDIMENT & EROSION CONTROL PLAN, NOTES AND DETAILS
DATE:	JUNE 13, 2005 PROJECT NO. 1655
SCALE:	AS SHOWN DRAWING 3 OF 6
Design: MCR	Draft: MAN/MCR Check: DAM



PROFILE THROUGH CENTER BIO-RETENTION FACILITY (F-6)
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'



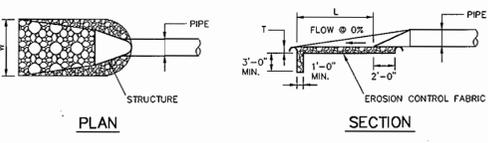
PROFILE ALONG C/L OF EMBANKMENT BIO-RETENTION FACILITY (F-6)
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

MATERIAL	SPECIFICATION	SIZE	NOTES:
PLANTINGS (if required)	SEE APPENDIX A; TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2.5' TO 4.0' DEEP)	SAND: 35-60% SILT: 30-35% CLAY: 10-25%	N/A	USDA SOIL TYPES: LOAMY SAND, SANDY LOAM OR LOAM
MULCH	SHREDDED HARDWOOD	N/A	AGED 6 MONTHS, MINIMUM
PEA GRAVEL DIAPHRAGM AND CURTAIN DRAIN	PEA GRAVEL: ASTM D-448 ORNAMENTAL STONE: WASHED COBBLES	PEA GRAVEL: NO. 6 STONE: 2" TO 5"	FOR USE AS NECESSARY BENEATH UNDERDRAINS ONLY
GEOTEXTILE (CLASS "C")	APPROPRIATE OPENING SIZE: (ASTM D-4751) GRAB TENSILE STRENGTH: (ASTM D-4832) PUNCTURE RESISTANCE: (ASTM D-4833)	N/A	
UNDERDRAIN GRAVEL	AASHTO M-43	0.375" TO 0.750"	
UNDERDRAIN PIPING	F758 TYPE PS28 OR AASHTO M-278	4" TO 6" RIGID SCH 40 PVC OR SDR35	3/8" PERFORATED 6" O.C. 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES, NOT NECESSARY UNDERNEATH PIPES
POURED-IN-PLACE CONC. (IF REQUIRED)	MSHA MIX NO. 3; f'c=3500psi @ 28 DAYS, NORMAL WEIGHT, AIR ENTRAINMENT, REINFORCING TO MEET ASTM 615-60	N/A	ON-SITE TESTING OF POURED-IN-PLACE CONC. REQUIRED: 28 DAY STRENGTH TEST AND SLUMP TEST; ALL CONC. DESIGN (CAST IN-PLACE OR PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND - DESIGN TO INCLUDE MEETING ACT CODE 350.R/89; VERTICAL LOADING (H-10 OR H-20) ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING
SAND (1.0' DEEP)	AASHTO M-6 OR ASTM C-33	0.02" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE ARE NOT ACCEPTABLE. NO CALCIUM CARBONATE OR BOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND

OPERATION & MAINTENANCE SCHEDULE FOR BIO-RETENTION AREAS

- 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 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.

Condition @ Study point	Q1-year (cfs)	Q10-year (cfs)	Q100-year (cfs)
existing	0.13	2.87	6.33
developed	0.17	5.97	10.29



CONNECTION FOR PVC TO HDPE END-SECTION
NOT TO SCALE

STRUCTURE	d50	LENGTH(L)	WIDTH(W)	THICK.(T)	SHA CLASS
E-1	9.5"	12' @ 0%	13.25'	19"	I

OUTLET PROTECTION DETAIL
NOT TO SCALE

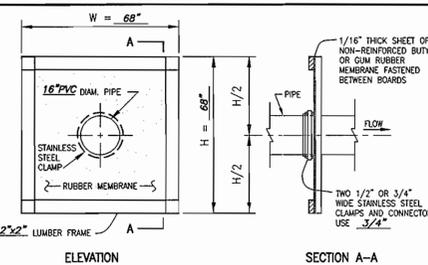
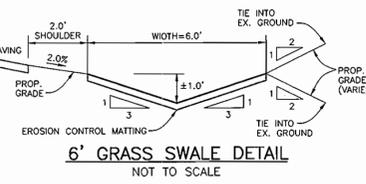
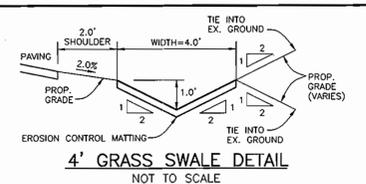
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Howard County
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
Chris Hantz
 CHIEF, DIVISION OF LAND DEVELOPMENT
Mark M. Layle
 DIRECTOR
 DATE: 10/10/06
 DATE: 11/3/06
 DATE: 1/16/06

NO.	TYPE	LOCATION	INVERT IN	INVERT IN	INVERT OUT	TOP ELEV.	HO. CO. STD.	REMARKS	FRONT TO BACK INSIDE DIM. OF INLET
S-1	OUTFALL STRUCTURE	N 597,064.0872 E 1,360,150.3977	445.58 (6" PVC)	445.58 (6" PVC)	445.58	450.83	-	SEE DETAIL	2'-6"
E-1	15" HDPE END	N 597,086.3778 E 1,360,160.9770	-	-	445.26	446.51	-	SEE MANUFACTURERS SPECS	-

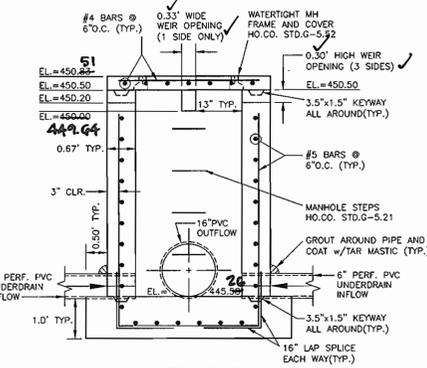
BORING NO.	DEPTH OF TEST	MEASURED RATE (IN./HR.)
B-1	6'	0.375
B-2	-	-
B-3	6'	0.6875

LEGEND

- SOILS CLASSIFICATION: Abc1
- SOILS DELINEATION: [Symbol]
- EXISTING CONTOURS: [Symbol]
- PROPOSED CONTOURS: [Symbol]
- EXISTING STRUCTURE: [Symbol]
- DRAINAGE AREA: [Symbol]
- DRAINAGE DIVIDE: [Symbol]
- TO STUDY PATH: [Symbol]
- LIMIT OF DISTURBANCE: [Symbol]
- STABILIZED CONSTRUCTION ENTRANCE: [Symbol]
- SILT DIVERSION FENCE: SDF
- SUPER SILT FENCE: SSF
- EROSION CONTROL MATTING: [Symbol]

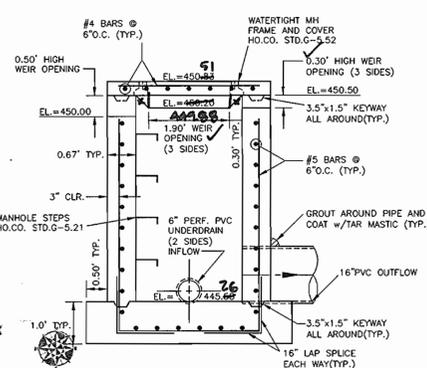


RUBBER MEMBRANE ANTISEEP COLLAR FOR 1" TO 16" DIAM. SMOOTH WALL PIPE
SCALE: N7S
 NRCS
 Natural Resources Conservation Service
 United States Department of Agriculture

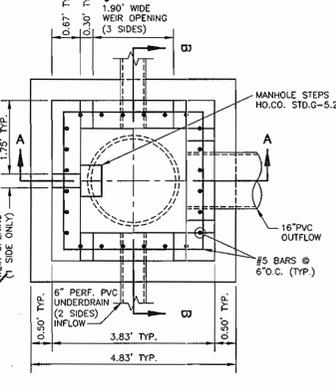


SECTION B-B

RUN	SIZE	LENGTH	TYPE & CLASS
S-1 TO E-1	16"	24.67'	PVC

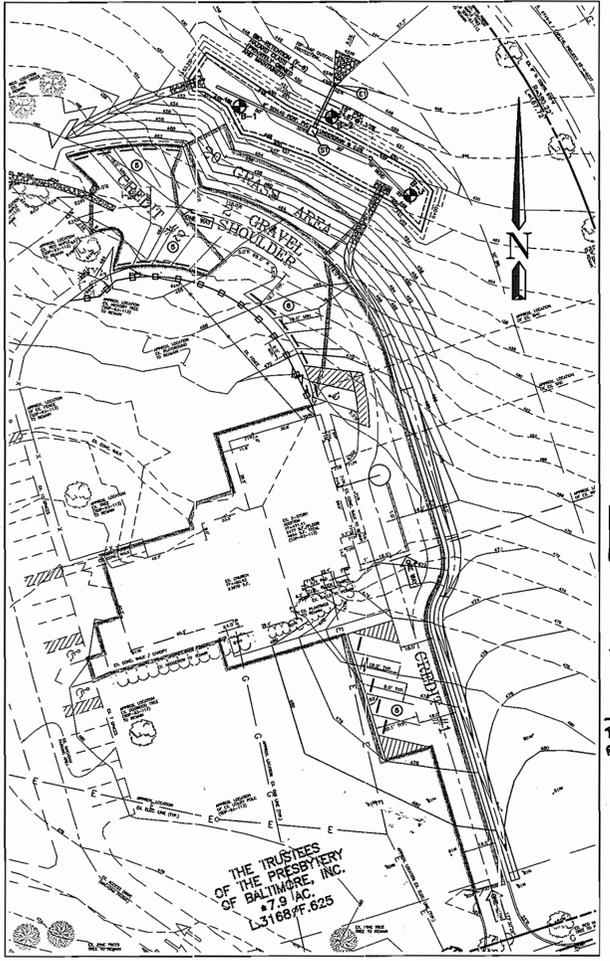


SECTION A-A



PLAN - BELOW SLAB

CONTROL/OUTLET STRUCTURE
SCALE: 1"=2'



STORMWATER MANAGEMENT CREDIT PLAN BIO-RETENTION FACILITY (F-6)
SCALE: 1" = 40'

STORMWATER MANAGEMENT POND AS-BUILT
 Brian Dietz 117-08
 BRIAN R. DIETZ DATE
 PROP. L.S.# 21080



NOTE: ALL STORMWATER MANAGEMENT BMP'S SHOWN ON THESE PLANS ARE TO BE PRIVATELY OWNED AND MAINTAINED
 NOTE: ALL STORM DRAINS SHOWN ON THESE PLANS ARE TO BE PRIVATELY OWNED AND MAINTAINED
 NOTE: ALL STORM DRAINS LABELED AS HDPE SHALL HAVE A SMOOTH-BORE INTERIOR FINISH

NO.	DATE	REVISION

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
 www.bei-civilengineering.com

OWNER: THE TRUSTEES OF THE PRESBYTERY OF BALTIMORE, INC.
 2330 MT. HEBRON DRIVE
 ELLICOTT CITY, MARYLAND 21042
 PHONE: 410-465-3993

PROJECT: **MT. HEBRON PRESBYTERIAN CHURCH**

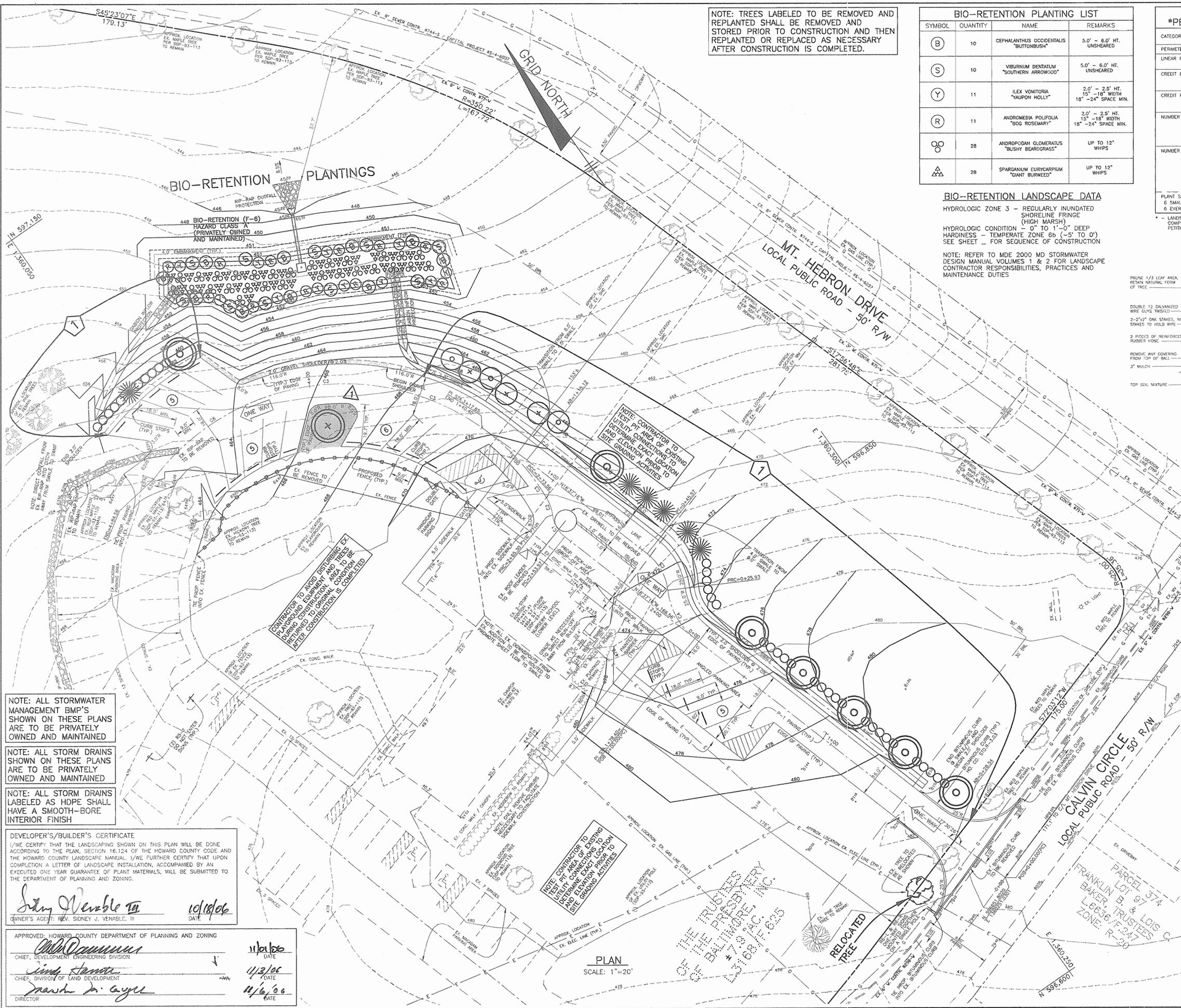
LOCATION: TAX MAP 17 - GRID 10
 PARCEL 400
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **STORMWATER MANAGEMENT PLAN, PROFILES AND DETAILS**

DATE: JUNE 13, 2005 PROJECT NO. 1655
 OCTOBER 20, 2006

SCALE: AS SHOWN DRAWING 5 OF 6

Design: MCR Draft: MAN/MCR Check: DAM



NOTE: TREES LABELED TO BE REMOVED AND REPLANTED SHALL BE REMOVED AND STORED PRIOR TO CONSTRUCTION AND THEN REPLANTED OR REPLACED AS NECESSARY AFTER CONSTRUCTION IS COMPLETED.

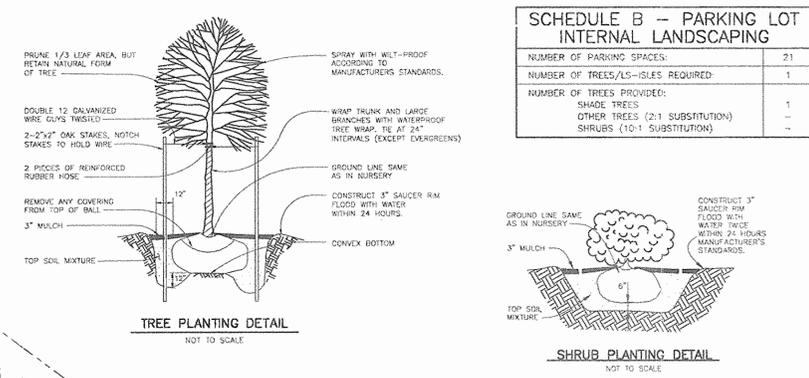
BIO-RETENTION PLANTING LIST			
SYMBOL	QUANTITY	NAME	REMARKS
(B)	10	CEPHALANTHUS OCCIDENTALIS "BUTTBUSH"	5.0' - 6.0' HT. UNSHEARED
(S)	10	VIBURNUM DENTATUM "SOUTHERN ARROWWOOD"	5.0' - 6.0' HT. UNSHEARED
(Y)	11	ILEX VOMITORIA "YALPORN HOLLY"	2.0' - 2.5' HT. 15" - 18" WIDTH 18" - 24" SPACE MIN.
(R)	11	ANDROMEDA POLIFOLIA "BOG ROSEMARY"	2.0' - 2.5' HT. 15" - 18" WIDTH 18" - 24" SPACE MIN.
(O)	28	ANDROPOGON GLOMERATUS "BUSHY BEARDGRASS"	UP TO 12" WHIPS
(A)	28	SPARGANIUM EURYCARPUM "GIANT BURWEED"	UP TO 12" WHIPS

SCHEDULE A *PERIMETER LANDSCAPE EDGE	
CATEGORY	*YES
ADJACENT TO ROADWAY	NO
ADJACENT TO PERMETER PROPERTIES	NO
PERIMETER NO. / LANDSCAPE TYPE	1 / E
LINEAR FEET OF ROADWAY (FRONTAGE/PERIMETER)	TOTAL 351.5'
CREDIT FOR EXISTING VEGETATION: NO OR YES (w/LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO
CREDIT FOR WALL, FENCE OR BERM: NO OR YES (w/LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO
NUMBER OF PLANTS REQUIRED: SHADE TREES (10:1 SUBSTITUTION) EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION) SHRUBS	10 -- -- 96
NUMBER OF PLANTS PROVIDED: SHADE TREES (10:1 SUBSTITUTION) EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	7 6 6 36
PLANT SUBSTITUTION DESCRIPTION: 6 SMALL DECIDUOUS TREES FOR 3 SHADE TREES (2:1) 6 EVERGREEN TREES FOR 60 SHRUBS (10:1)	

*PERIMETER PLANTING LIST			
SYMBOL	QUANTITY	NAME	REMARKS
(O)	7	ACER SACCHARUM "SUGAR MAPLE"	2.5" - 3.0" MIN. CAL. B & B FULL HEAD
(+)	3	MAGNOLIA STELLATA "STAR MAGNOLIA"	8.0' - 10.0' HT.
(O)	3	CORNUS FLORIDA "WHITE FLOWERING DOGWOOD"	6.0' - 8.0' HT.
(O)	36	PHOTINIA X FRASERI "FRASERS PHOTINIA"	3.0' - 3.5' HT.
(*)	6	PRINUS NIGRA "NORWAY SPRUCE"	6.0' - 8.0' MIN. HT. UNSHEARED

INTERNAL PARKING PLANTING LIST			
SYMBOL	QUANTITY	NAME	REMARKS
(+)	1	ACER RUBRA "RED MAPLE"	2.5" - 3.0" MIN. CAL. B & B FULL HEAD

BIO-RETENTION LANDSCAPE DATA
 HYDROLOGIC ZONE 3 - REGULARLY INUNDATED SHORELINE FRINGE (HIGH MARSH)
 HYDROLOGIC CONDITION - 0" TO 1'-0" DEEP HARDINESS - TEMPERATE ZONE 6b (-5' TO 0') SEE SHEET - FOR SEQUENCE OF CONSTRUCTION
 NOTE: REFER TO MDE 2000 MD STORMWATER DESIGN MANUAL VOLUMES 1 & 2 FOR LANDSCAPE CONTRACTOR RESPONSIBILITIES, PRACTICES AND MAINTENANCE DUTIES



- LANDSCAPING NOTES**
- THE PROPOSED LANDSCAPING SHALL BE PROVIDED BY THE PLANTINGS AS SHOWN ON THESE PLANS.
 - THE DEVELOPER SHALL BE RESPONSIBLE FOR ALL INTERNAL PLANTINGS; THE PRESERVATION OF THE EXISTING PERIMETER VEGETATION; AND FOR THE PERIMETER PLANTINGS AS SHOWN ON THESE PLANS. BONDING FOR THE PROPOSED PLANTINGS IS THE OBLIGATION OF THE DEVELOPER AS PART OF THE DEVELOPERS AGREEMENT.
 - 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 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.
 - LANDSCAPING ALONG THE PROPOSED DRIVEWAY IS PROVIDED IN COMPLIANCE WITH THE PROVISIONS OF CONDITIONAL USE PETITION CASE #BA-04-19C
 - ALL LANDSCAPING PLANT TYPES SHOWN ON THESE PLANS ARE RECOMMENDATIONS AND MAY BE SUBSTITUTED WITH APPROVED EQUIVALENTS FROM THE HOWARD COUNTY LANDSCAPE MANUAL.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE TOTAL AMOUNT OF \$6,180.00 AT THE TIME OF SDP ORIGINAL SUBMITTAL INCLUDING:
 - \$2,400.00 FOR THE REQUIRED 8 SHADE TREES;
 - \$800.00 FOR THE REQUIRED 6 SMALL DECIDUOUS/ORNAMENTAL TREES;
 - \$900.00 FOR THE REQUIRED 6 EVERGREEN TREES;
 - \$1,080.00 FOR THE REQUIRED 36 SHRUBS

NOTE: ALL STORMWATER MANAGEMENT BMP'S SHOWN ON THESE PLANS ARE TO BE PRIVATELY OWNED AND MAINTAINED

NOTE: ALL STORM DRAINS SHOWN ON THESE PLANS ARE TO BE PRIVATELY OWNED AND MAINTAINED

NOTE: ALL STORM DRAINS LABELED AS HDPE SHALL HAVE A SMOOTH-BORE INTERIOR FINISH

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 LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Sidney Venable III
 OWNER'S AGENT: REV. SIDNEY J. VENABLE, III
 DATE: 10/18/06

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 11/16/06

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 11/2/06

DIRECTOR
 DATE: 11/6/06

NO.	DATE	REVISION

BENCHMARK
 ENGINEERS • LAND SURVEYORS • PLANNERS

ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 418
 ELLICOTT CITY, MARYLAND 21043
 PHONE: 410-465-6105 FAX: 410-465-6644
 www.bei-civilengineering.com

OWNER: THE TRUSTEES OF THE PRESBYTERY OF BALTIMORE, INC.
 5400 LOCH RAVEN DRIVE
 BALTIMORE, MARYLAND 21239
 PHONE: 410-433-2012

PROJECT: MT. HEBRON PRESBYTERIAN CHURCH
 LOCATION: TAX MAP 17 - GRID 10 PARCEL 400 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 TITLE: LANDSCAPE PLAN NOTES AND DETAILS
 DATE: JUNE 13, 2005 PROJECT NO. 1655
 OCTOBER 20, 2006 DRAWING 6 OF 6

Design: MCR Draft: MAN/MCR Check: DAM SCALE: AS SHOWN