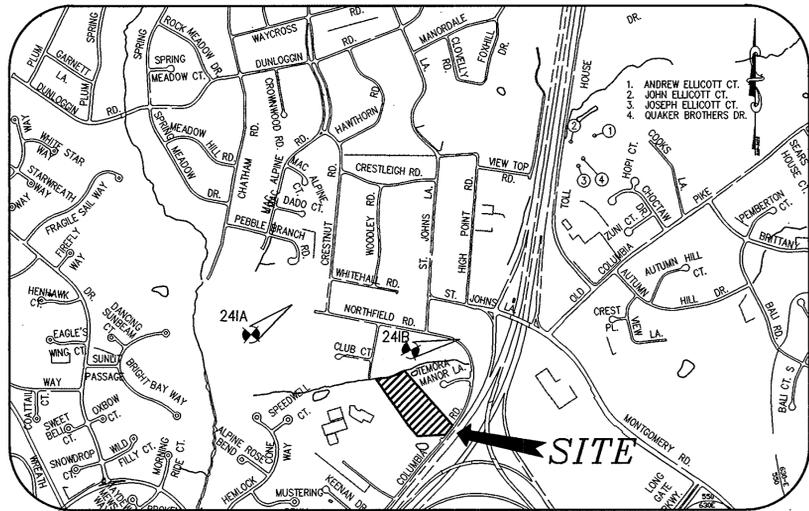


GENERAL NOTES

- THIS SUBDIVISION IS GRANDFATHERED TO THE SECOND AMENDMENT OF THE FOURTH EDITION OF THE THE SUBDIVISION REGULATIONS AND SUBJECT TO THE 10/18/93 ZONING REGULATIONS. THE SITE DEVELOPMENT PLAN FOR THESE LOTS WILL BE SUBJECT TO THE REGULATIONS IN EFFECT AT THE TIME OF THEIR SUBMISSION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTIONS DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS PRIOR TO ANY EXCAVATION WORK:

MISS UTILITY	1-800-257-7777
C&P TELEPHONE COMPANY	(410) 725-9976
HOWARD COUNTY BUREAU OF UTILITIES	(410) 313-4900
AT&T CABLE LOCATION DIVISION	(410) 393-3533
BALTIMORE GAS & ELECTRIC	(410) 685-0123
STATE HIGHWAY ADMINISTRATION	(410) 531-5533
HOWARD COUNTY DEPT. OF PUBLIC WORKS/ CONSTRUCTION INSPECTION DIVISION	(410) 313-1880
- PROJECT BACKGROUND:
 LOCATION: FIRST ELECTION DISTRICT - TAX MAP 24, GRID 23 - PARCEL 301
 DEED REFERENCE: 6579/312
 ZONING: R-20
 TOTAL TRACT AREA: 7.28 ACRES ±
 NUMBER OF PROPOSED LOTS: 17 (13 BUILDABLE & 4 OPEN SPACE)
 ACREAGE OF PROPOSED BUILDABLE LOTS: 4.31 ACRES ±
 OPEN SPACE REQUIRED: 2.18 ACRES ± (30% OF NET AREA)
 OPEN SPACE PROVIDED: 2.29 ACRES ±
 AREA OF PROPOSED PUBLIC RIGHT-OF-WAY: 0.72 ACRES ±
 RECREATIONAL OPEN SPACE REQUIRED (13 UNITS X 200 SQ. FT.): 2,600 SQ. FT. (0.06 ACRES)
 RECREATIONAL OPEN SPACE PROVIDED: 7,904 SQ. FT. (0.18 ACRES)
 PROPOSED ROAD DEDICATION: 0.00 ACRES ±
 AREA OF STEEP SLOPES: >25% = 3543 SQ.FT.; 15%-25% = 3475 SQ.FT.
 AREA OF 100 YEAR FLOODPLAIN: N/A
 DPZ REFERENCE #: SP-99-06, WF-01-32
- TWO FOOT CONTOUR TOPOGRAPHY AND EXISTING CONDITIONS BASED ON FIELD RUN TOPOGRAPHIC SURVEY BY O'CONNELL & LAWRENCE, INC. ON OR ABOUT APRIL, 1997. BOUNDARY SHOWN HEREON BASED ON FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT MARCH 2003 BY MILDENBERG, BOENDER & ASSOCIATES, INC.
- COORDINATES BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 241A & 241B.
 STA. No. 241A N 579,167.025 ELEV. 357.830
 E 1,360,260.255
 STA. No. 241B N 578,753.503 ELEV. 391.237
 E 1,362,302.965
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR BUFFERS AND FOREST CONSERVATION EASEMENT AREAS.
- THIS SUBDIVISION IS SUBJECT TO SECTION 18.122B OF THE HOWARD COUNTY CODE.
- PUBLIC WATER AND SEWAGE ALLOCATION HAS BEEN GRANTED UNDER THE TERMS AND PROVISIONS, THEREOF EFFECTIVE ON WHICH DATE DEVELOPER AGREEMENT # _____ WAS FILED AND ACCEPTED.
- ALL EXISTING STRUCTURES ARE TO BE REMOVED UNLESS OTHERWISE NOTED.
- STORMWATER MANAGEMENT CONTROL WILL BE PROVIDED IN ACCORDANCE WITH THE 2000 MARYLAND DESIGN MANUAL. A STORMWATER MANAGEMENT POND WITH WILL BE LOCATED IN OPEN SPACE 15. SWM WILL BE F-1 SURFACE SAND FILTER FOR WQV AND Rev AND EXTENDED DETENTION FOR Cpw. SWM WILL BE PRIVATELY OWNED AND MAINTAINED.
- GEOTECHNICAL REPORT PREPARED BY PROFESSIONAL CONSULTING CORPORATION IN APRIL 1999.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A GALVANIZED STEEL PERFORATED SQUARE POST (1 1/2" GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL PERFORATED SQUARE TUBE SLEEVE (12 GAUGE)-3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES ON SITE PRIOR TO COMMENCING CONSTRUCTION.
- FOREST CONSERVATION EASEMENT(S) HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.200 OF HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OR CONSERVATION EASEMENT ARE ALLOWED.
- THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION HAVE BEEN MET BY ON-SITE RETENTION OF 0.99 ACRES, REFORESTATION OF 0.14 ACRES, AND PAYMENT OF A FEE-IN-LIEU OF 0.86 ACRES (37,461.6 SQ. FT.) OF REFORESTATION IN THE AMOUNT OF \$16,730.80. FINANCIAL SURETY FOR THE 0.99 ACRES (43,124.4 SQ. FT.) OF RETENTION IS \$24,980 AND 0.14 ACRES (6,098.4 SQ. FT.) OF REFORESTATION IN THE AMOUNT OF \$3,049.20 HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$11,674.08.
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- OPEN SPACE LOT 14 SHALL BE CONVEYED TO HOWARD COUNTY, MARYLAND. OPEN SPACE LOTS 15, 16, & 17 WILL BE CONVEYED TO HOMEOWNERS ASSOCIATION.
- ALL EXISTING STRUCTURES TO BE REMOVED UNLESS OTHERWISE NOTED.
- ALL STORM DRAIN PIPES TO BE HDPE PIPE UNLESS OTHERWISE NOTED.
- NO HISTORIC STRUCTURES OR BURIAL GROUNDS EXIST ON-SITE PER THE HOWARD COUNTY HISTORIC SITES LIST DATED DECEMBER 1994 AND THE HOWARD COUNTY CEMETERIES AND GRAVESITES INVENTORY, RESOLUTION # 47-1994. TO THE BEST OF THE KNOWLEDGE OF THE CURRENT OWNER, NO GRAVES EXIST ON-SITE.
- NO WETLANDS, STREAMS, OR FLOODPLAIN EXIST ON-SITE PER FIELD INVESTIGATION. THERE ARE STREAM BUFFERS ON SITE. THERE ARE SOME STEEP SLOPES ON SITE.
- NOISE STUDY APPROVED UNDER SP-99-06.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - WIDTH - 12 FEET (14 FEET SERVING MORE THAN ONE RESIDENT).
 - SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.
 - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45-FOOT RADII.
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 - STRUCTURE CLEARANCES - MINIMUM 12 FEET
 - MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- THE STREET LIGHT LOCATIONS AND TYPES OF LIGHTS SHOWN ON SHEET 2 ARE AS FOLLOWS:
 - 150-WATT HPS VAPOR "PREMIER" POST TOP FIXTURE MOUNTED ON A 14' BLACK FIBERGLASS POLE, LABRADOR LANE, STATION 0+43.18, 33.42' RT
 - 100-WATT HPS VAPOR "PREMIER" POST TOP FIXTURE MOUNTED ON A 14' BLACK FIBERGLASS POLE AT LABRADOR LANE STATION 3+42, 13' LT. AND 7+22, 13' RT.
 STREETLIGHTS WILL BE REQUIRED IN THIS DEVELOPMENT IN ACCORDANCE WITH THE DESIGN MANUAL. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SELECTED SHALL BE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)." THE JUNE 1993 POLICY INCLUDES GUIDELINES FOR LATERAL AND LONGITUDINAL PLACEMENT. A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREETLIGHT AND ANY TREE.
- IF MATERIAL IS WITHIN 8% OF OPTIMUM MOISTURE, WORKING THE MATERIAL UNTIL REQUIRED COMPACTION IS ACHIEVED IS CONTRACTOR'S RESPONSIBILITY.
- SIDEWALKS SHALL MEET CURRENT ADA REQUIREMENTS. HANDICAP RAMPS AT THE ENTRANCE SHALL BE PROVIDED IN ACCORDANCE WITH HO. CO. STD. DTL. R-4-01.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING (29 SHADE TREES, 11 EVERGREENS) HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$10,350.00.
- 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 THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
- THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES, AND WALLS. 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.
- A WAIVER PETITION WP-01-32, WAS APPROVED ON OCTOBER 19, 2000, REQUESTING TO WAIVE SECTION 16.145(b) TO REACTIVATE A VOIDED PLAN. THE APPROVAL WAS SUBJECT TO THE FOLLOWING CONDITIONS:
 - THE OWNER/DEVELOPER SHALL SUBMIT REVISED PLANS TO THE DIVISION OF LAND DEVELOPMENT (2 COPIES), THE DEVELOPMENT ENGINEERING DIVISION (4 COPIES), AND THE SOIL CONSERVATION DISTRICT (1) COPY WITHIN 45 DAYS OF THE ACTION OF THE PLANNING DIRECTOR (BY 12/3/00).
 - WHEN THE OWNER/DEVELOPER SUBMITS THE REVISED PLANS AS INDICATED ABOVE, A REVIEW FEE OF \$580.00 (HALF OF THE ORIGINAL SUBMISSION FEE) SHALL BE PAID.
- A DESIGN MANUAL WAIVER, WAS APPROVED ON OCTOBER 19, 1999, REQUESTING TO WAIVE VOLUME III, SECTION 2.5.2.14, REGARDING SIGHT DISTANCE FOR THE SUBJECT PROPERTY TO ALLOW STOPPING SIGHT DISTANCE TO BE USED. THE APPROVAL IS SUBJECT TO OBTAINING EXECUTED EASEMENTS FOR THE OFF-SITE GRADING AND SIGHT DISTANCE PRIOR TO THE APPROVAL OF THE ROAD CONSTRUCTION PLANS BY THIS DIVISION.
- A DESIGN MANUAL WAIVER, WAS APPROVED ON DECEMBER 15, 2004, REQUESTING A WAIVER TO DESIGN MANUAL VOLUME I, CURRENT DESIGN STANDARDS FOR STORMWATER MANAGEMENT. THE APPROVAL WAS BASED PRINCIPALLY ON THE FACT THAT EVEN THOUGH THE DEVELOPMENT WAS GRANDFATHERED TO BE ABLE TO USE THE PREVIOUS DESIGN STANDARDS, THE DEVELOPMENT WOULD BE BETTER SERVED BY UTILIZING CURRENT DESIGN STANDARDS.
- A NOISE BARRIER IS BEING CONSTRUCTED ON COLUMBIA ROAD BY STATE HIGHWAY ADMINISTRATION UNDER CONTRACT NO. HO 662851. THIS WILL FULFILL THE NOISE MITIGATION REQUIREMENTS FOR THE SITE.

ROAD CONSTRUCTION PLANS FOREST CREEK LOTS 1 THRU 13 AND OPEN SPACE LOTS 14 THRU 17 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1"=1000'

SHEET INDEX	
COVER SHEET	1
ROAD PLAN AND PROFILES	2
FILLET PROFILES	3
COLUMBIA ROAD IMPROVEMENTS	4
FINAL GRADING AND EROSION & SEDIMENT CONTROL PLAN	5
EROSION & SEDIMENT CONTROL NOTES & DETAILS	6
STORM DRAIN PROFILES	7
DRAINAGE AREA MAP	8
TEMPORARY STORMWATER MANAGEMENT DETAILS	9
PERMANENT STORMWATER MANAGEMENT DETAILS	10
STORMWATER MANAGEMENT SPECIFICATIONS AND BORING LOGS	11
LANDSCAPE PLAN	12
FOREST CONSERVATION PLAN	13



AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

DATE: 10/15/12
P.E. NO.: 17942

SIGNATURE: *Chad Edmondson*

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

SIGNATURE OF ENGINEER: *Chad Edmondson* DATE: 10-2-5
 PRINTED NAME OF ENGINEER: CHAD EDMONDSON

BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING 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. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERFORMING SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER: *Robert Dorsey, Jr.* DATE: 10-10-05
 PRINTED NAME OF DEVELOPER: ROBERT DORSEY, JR.

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

USDA - NATURAL RESOURCES CONSERVATION SERVICE
 SIGNATURE: *Jim Angles* DATE: 10/27/05

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT
 SIGNATURE: *Robert Dorsey, Jr.* DATE: 10/27/05

APPROVED: DEPARTMENT OF PUBLIC WORKS
 SIGNATURE: *William J. Mahoney* DATE: 10-21-05

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 SIGNATURE: *Grady Hancock* DATE: 11/3/05
 CHIEF, DIVISION OF LAND DEVELOPMENT, C&H

APPROVED: DEPARTMENT OF PUBLIC WORKS
 SIGNATURE: *Chad Edmondson* DATE: 10/15/12
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE: OCT 2005
 PROJECT: 2002-087
 ILLUSTRATION: HSP
 SCALE: 1"=50'

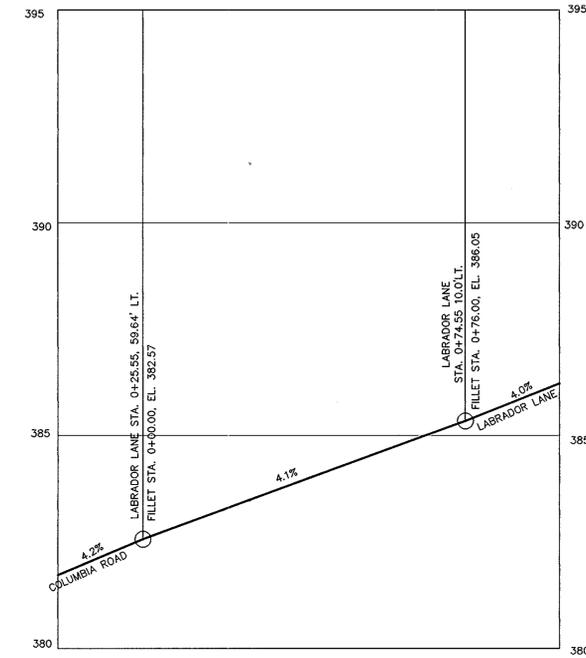
DATE: 10/15/12
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 REVISIONS

FOREST CREEK
 LOTS 1 THRU 13 & OPEN SPACE LOTS 14 THRU 17
 TAX MAP 24 GRID 23 PARCEL 301
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 COVER SHEET

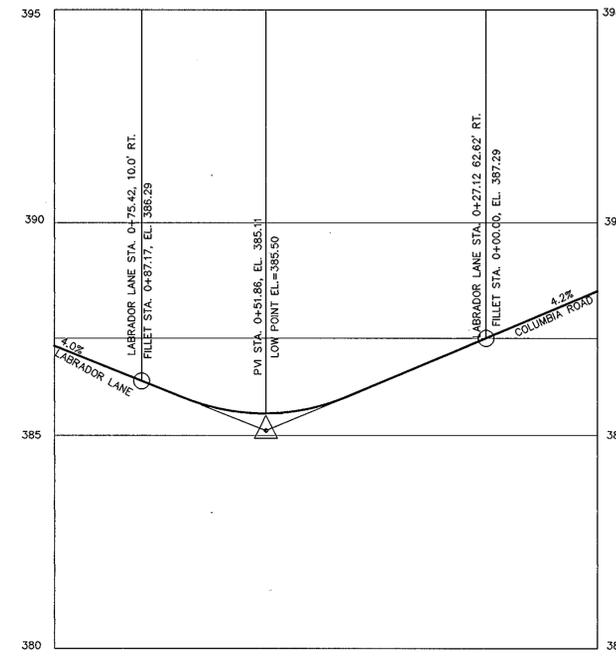
MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hill Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 987-0286 Fax: (301) 621-5521 Wash. (410) 987-0288 Fax.

1 OF 13
 F-05-42

02-097.DWG.FINAL_V02097-GRADING.DWG



**COLUMBIA ROAD LEFT TURN
TO LABRADOR LANE**
SCALE: HOR. 1" = 20', VER 1" = 2'



**COLUMBIA ROAD RIGHT TURN
TO LABRADOR LANE**
SCALE: HOR. 1" = 20', VER 1" = 2'

OWNER AND DEVELOPER
FOREST HILLS, LLC
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
410-465-5739

APPROVED: DEPARTMENT OF PUBLIC WORKS <i>William Z. ...</i> CHIEF BUREAU OF HIGHWAYS	10-31-15 DATE
APPROVED: DEPARTMENT OF PLANNING AND ZONING <i>Cindy ...</i> CHIEF, DIVISION OF LAND DEVELOPMENT	11/3/15 DATE
<i>...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	11/2/15 DATE

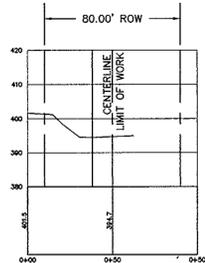


**MILDENBERG,
BOENDER & ASSOC., INC.**
Engineers Planners Surveyors
5072 Dorsey Hill Drive, Suite 202, Ellicott City, Maryland 21042
(410) 987-0286 Buft. (301) 621-5521 Wash. (410) 997-0288 Fax.

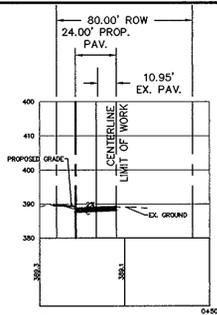
FOREST CREEK
LOTS 1 THRU 13 & OPEN SPACE LOTS 14-16
TAX MAP 24 GRID 23 PARCEL 301
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FILLET PROFILES

no.	1	NO AS-BUILT INFO THIS SHEET	10/15/12	date
revisions				

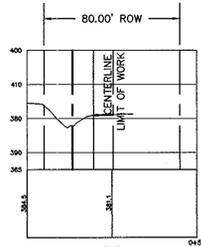
project	2002-087	date	OCT2005
illustration	HSP	engineering	HSP
scale	HSP	approval	HSP
AS SHOWN CE			



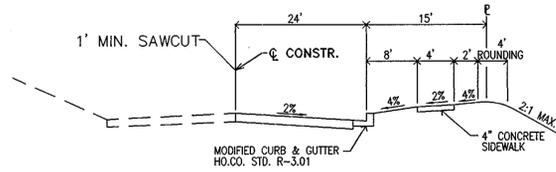
STA. 0+00



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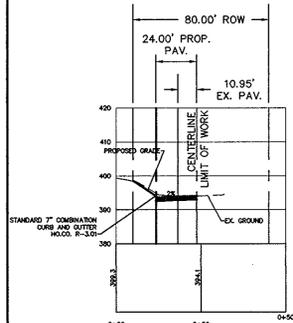


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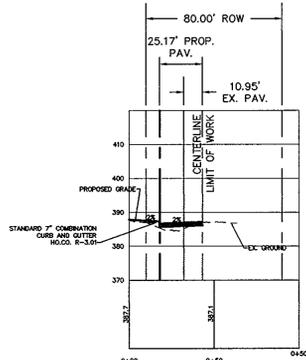


TYPICAL SECTION FOR EXISTING COLUMBIA ROAD IMPROVEMENT, R/W=80'

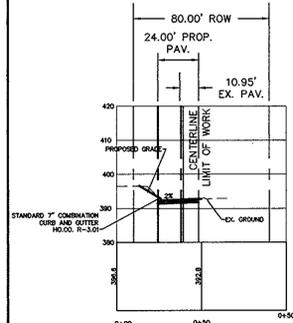
N.T.S.
STA. 0+00 TO STA. 1+80
CLASSIFICATION = Minor Arterial
DESIGN SPEED = 40 mph



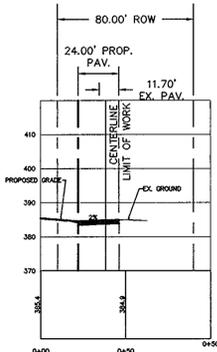
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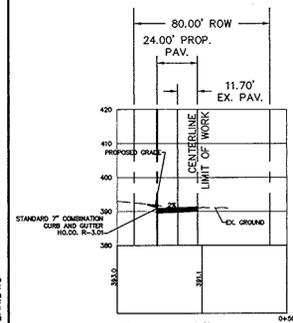
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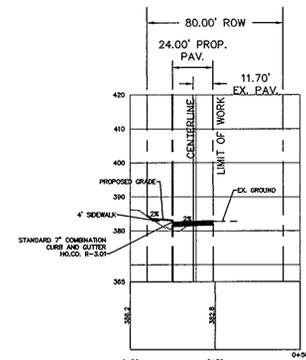
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STA. 3+00



STA. 1+50

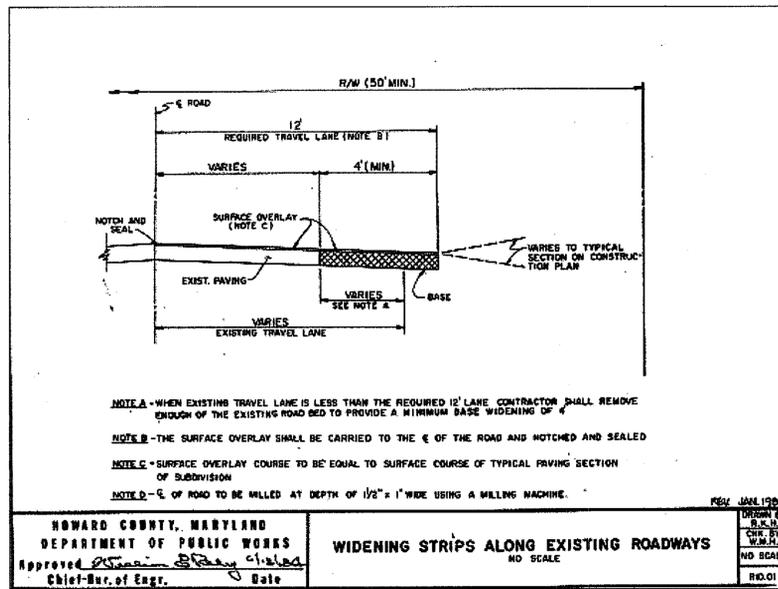


STA. 3+50

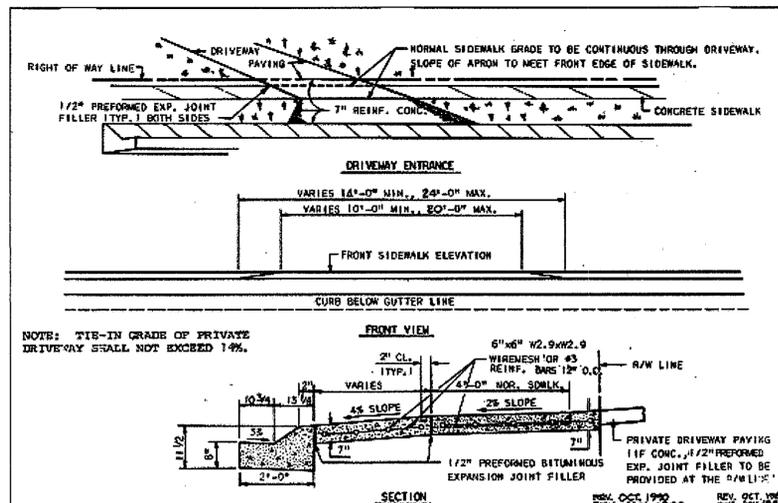
ROAD IMPROVEMENT SECTIONS

SCALE H. 1"=50'
V. 1"=25'

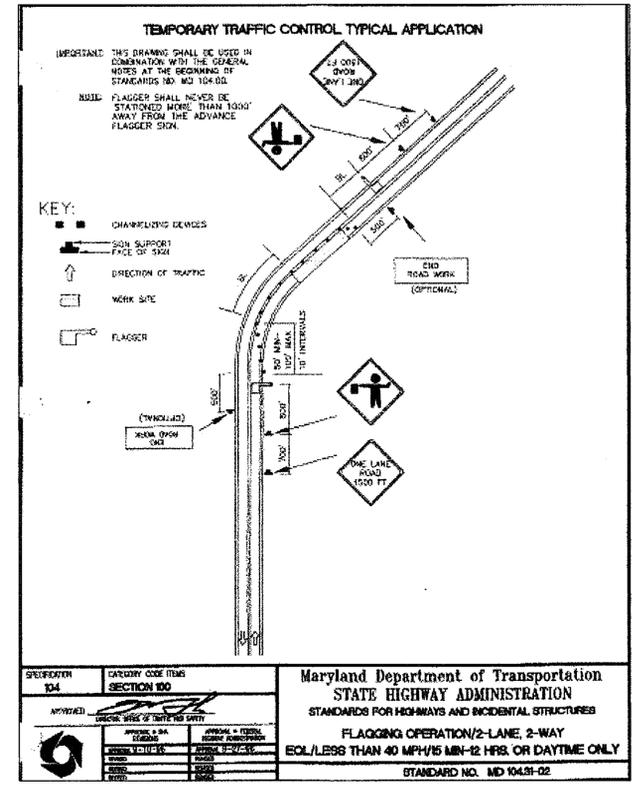
REFER TO HO.CO. R-10.01 FOR FURTHER DETAILS



HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved: *[Signature]* Chief-Dir. of Engr.
NO SCALE
REV. JAN. 1997
DRAWN BY: R.K.M.
CHK. BY: W.M.H.
NO. 01

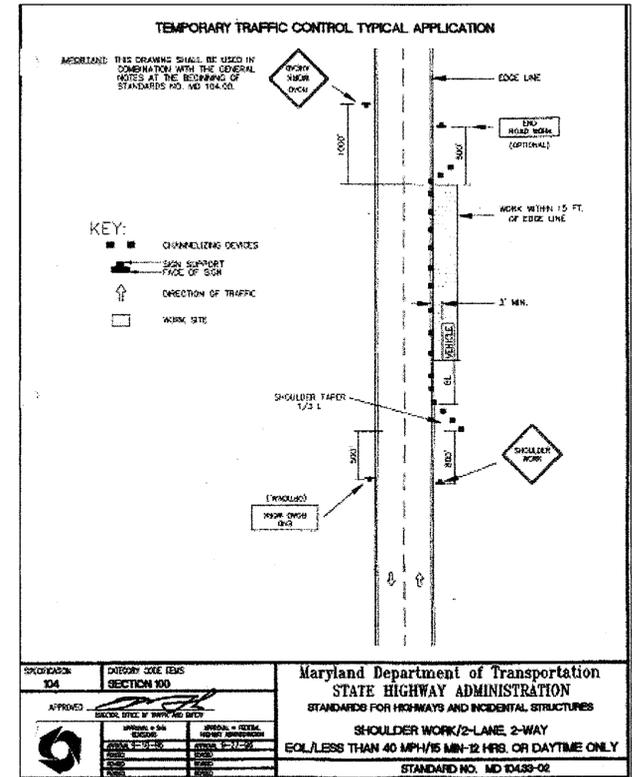


HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved: *[Signature]* Chief-Dir. of Engr.
NO SCALE
REV. OCT. 1999
REV. JAN. 1999
REV. OCT. 1998
REV. JAN. 1999
DRAWN BY: W.P. BALLARD
CHK. BY: J.L.R.
NO SCALE
R-6.03



Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
FLAGGING OPERATION/2-LANE, 2-WAY
EQ/L/LESS THAN 40 MPH/15 MIN-12 HRS. OR DAYTIME ONLY
STANDARD NO. MD 10431-02

THIS DETAIL TO BE USED AT ENTRANCE CONSTRUCTION STAGE



Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
SHOULDER WORK/2-LANE, 2-WAY
EQ/L/LESS THAN 40 MPH/15 MIN-12 HRS. OR DAYTIME ONLY
STANDARD NO. MD 10432-02

THIS DETAIL TO BE USED AT ALL OTHER STAGES OF CONSTRUCTION



10/15/12

project	2002-087	date	OCT 2005
illustration	HSP	engineering	HSP
scale	1"=50'	approval	CE

no.	1	description	NO AS-BUILT INFO THIS SHEET	date	10/15/12
revisions					

FOREST CREEK
LOTS 1 THRU 13 & OPEN SPACE LOT 14
TAX MAP 24 GRID 23 PARCEL 301
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
COLUMBIA ROAD IMPROVEMENTS

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0286 Fax: (301) 821-5521 Wash. (410) 997-0288 Fax

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:

- 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 DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 50-0-0 UREA 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 15 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. PER ACRE 1.4 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. 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 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 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, 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 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 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 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

- 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).
- 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 PERMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERMETER 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 PERMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1981 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.
- 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:	7.28	ACRES
AREA DISTURBED:	5.65	ACRES
AREA TO BE ROOFED OR PAVED:	1.00	ACRES
AREA TO BE VEGETATIVELY STABILIZED:	4.56	ACRES
TOTAL CUT:	25,000	CU. YDS.
TOTAL FILL:	25,000	CU. YDS.
TOTAL WASTE/BORROW AREA LOCATION:	N/A	

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 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 EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- 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.

STANDARD 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 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. 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 1/2" IN DIAMETER.
 - TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONSON GRASS, 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 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 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 DESCRIBED 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 PHYTO-TOXIC MATERIALS.
 - 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 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 DIVERSIONS, 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" 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 GRADING AND SEEDBED PREPARATION.

- 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 CONFORM TO THE FOLLOWING REQUIREMENTS:
 - 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 UNDER COMAR 26.04.06.
 - COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHOROUS, 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.

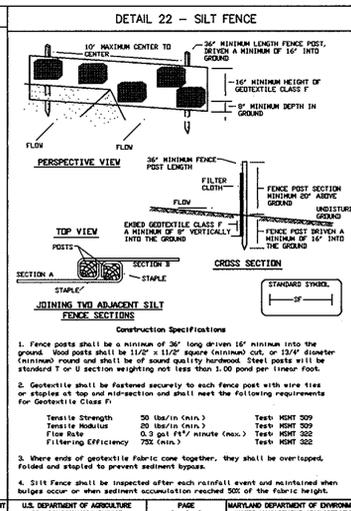
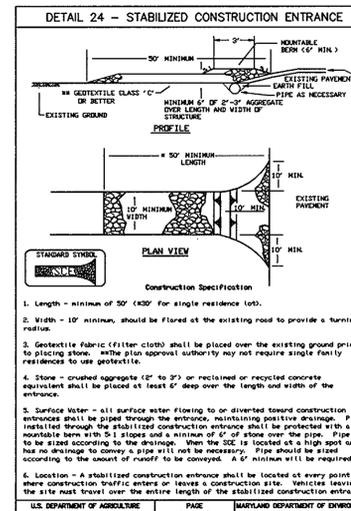
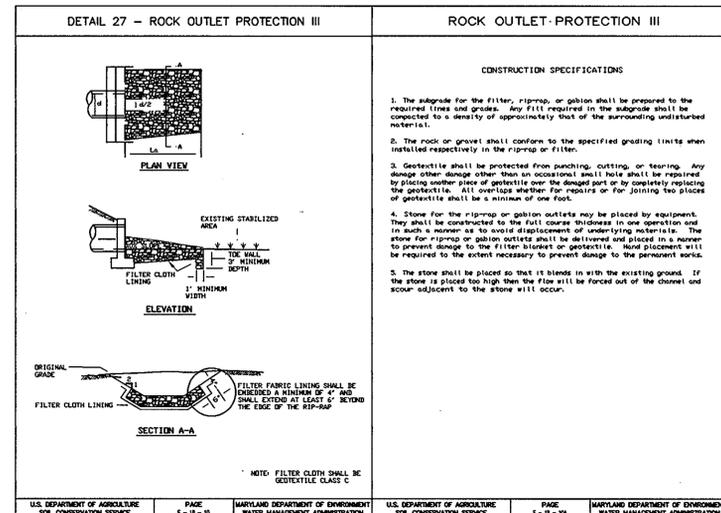
REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING, MD-VI, PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTE, REVISED 1973.

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT (1 DAY)
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (1 DAY)
- CONSTRUCT SILT FENCES AND EARTH DIKES (2 DAYS)
- CONSTRUCT SEDIMENT BASIN TO TEMPORARY GRADES SHOWN (3 DAYS)
 - CONSTRUCT TSWM STRUCTURE
 - CONSTRUCT 20' EMERGENCY SPILWAY TO EL. 332.6
 - CONSTRUCT SEDIMENT BASIN AND BARRIERS AS SHOWN.
- CONSTRUCT SITE TO GRADES INDICATED.
- WHEN ALL CONTRIBUTING DRAINAGE AREAS TO SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED, FLUSH STORM DRAIN SYSTEM AND WITH PERMISSION OF SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS.
- CONVERT SEDIMENT BASIN TO PERMANENT STORM WATER MANAGEMENT FACILITY. (2 DAYS, 5 DAY CLEAR WATER FORECAST PRIOR TO CONVERSION)
 - REMOVE ACCUMULATED SEDIMENTS
 - REMOVE TEMPORARY DEWATERING STANDPIPE AND CONSTRUCT SAND FILTER AND 6" PVC PER PLAN
 - STABILIZE DISTURBED AREAS.

A PUMP AROUND SHOULD BE USED TO DIVERT WATER FROM STORMDRAIN AROUND THE POND TO THE STREAM IN THE EVENT THAT THE 5 DAY CLEAR WATER FORECAST IS DISTURBED BY RAINFALL.

FOR THE PUMP AROUND, INSTALL SAND BAGS INSIDE OF MHI TO COVER 18" OUTLET PIPE. PLACE INTAKE HOSE IN MHI. PUMP SHOULD DISCHARGE ONTO A STABLE VELOCITY DISSIPATOR MADE OF RIP RAP OR SANDBAGS. CONVERT BASIN TO POND WITH FOREBAY. REMOVE SANDBAGS WHEN BASIN IS COMPLETELY CONVERTED.

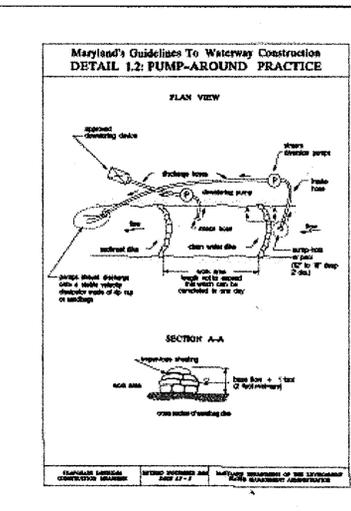
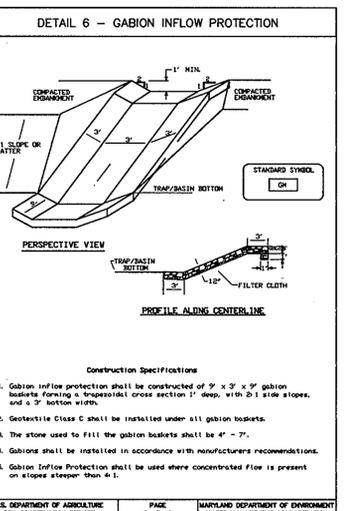
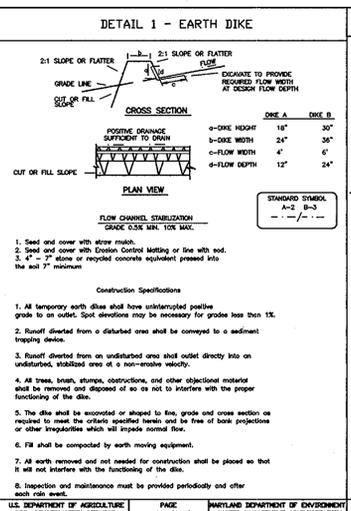


SILT FENCE

Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	100 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils USDA general classification system, silt Class 4 maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.



EROSION AND SEDIMENT CONTROL NOTES

- 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.
- ALL EXCAVATED MATERIALS SHALL BE STOCKPILED ON THE UPGRADE SIDE OF THE MAIN TRENCH.
- EXCAVATION AND BACKFILL SHALL BE LIMITED TO THAT WHICH CAN BE STABILIZED WITHIN ONE WORKING DAY.
- IMMEDIATELY FOLLOWING BACKFILL OF THE SEWER TRENCH, ALL DISTURBED AREAS ARE TO BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES SHOWN ON THIS SHEET.
- THROUGHOUT THE PROJECT, THE CONTRACTOR SHALL REGULARLY INSPECT ALL SEDIMENT CONTROL DEVICES AND PROVIDE ALL NECESSARY MAINTENANCE TO INSURE THAT ALL DEVICES ARE IN OPERATIVE CONDITION.
- ALL SEDIMENT CONTROL FACILITIES SHALL REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.



BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING 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. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PREPARE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN AND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERMITS, SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: Robert Dorsey, Jr. DATE: 10-10-05
 Signature: Chad Edmondson DATE: 10/27/05

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Signature: Jim M... DATE: 10/27/05
 Signature: ... DATE: 10/27/05

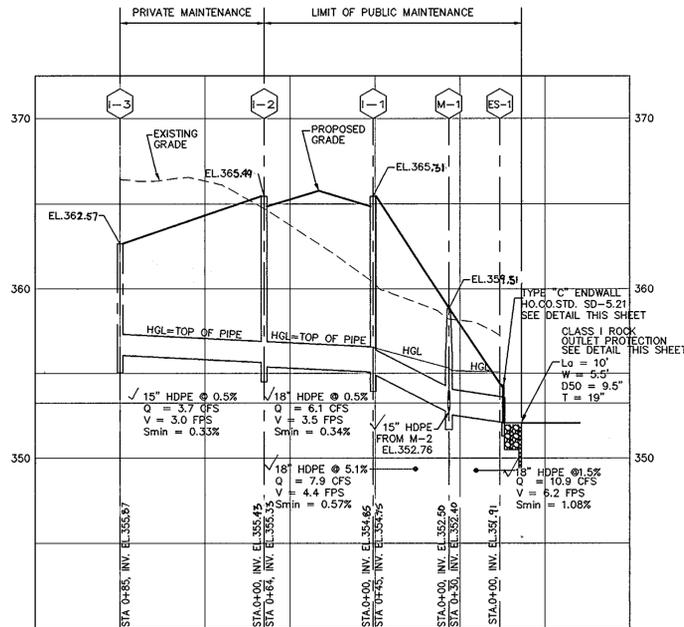
APPROVED: DEPARTMENT OF PUBLIC WORKS
 Signature: ... DATE: 10-31-05

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Signature: ... DATE: 11/2/05

Signature: ... DATE: 11/2/05

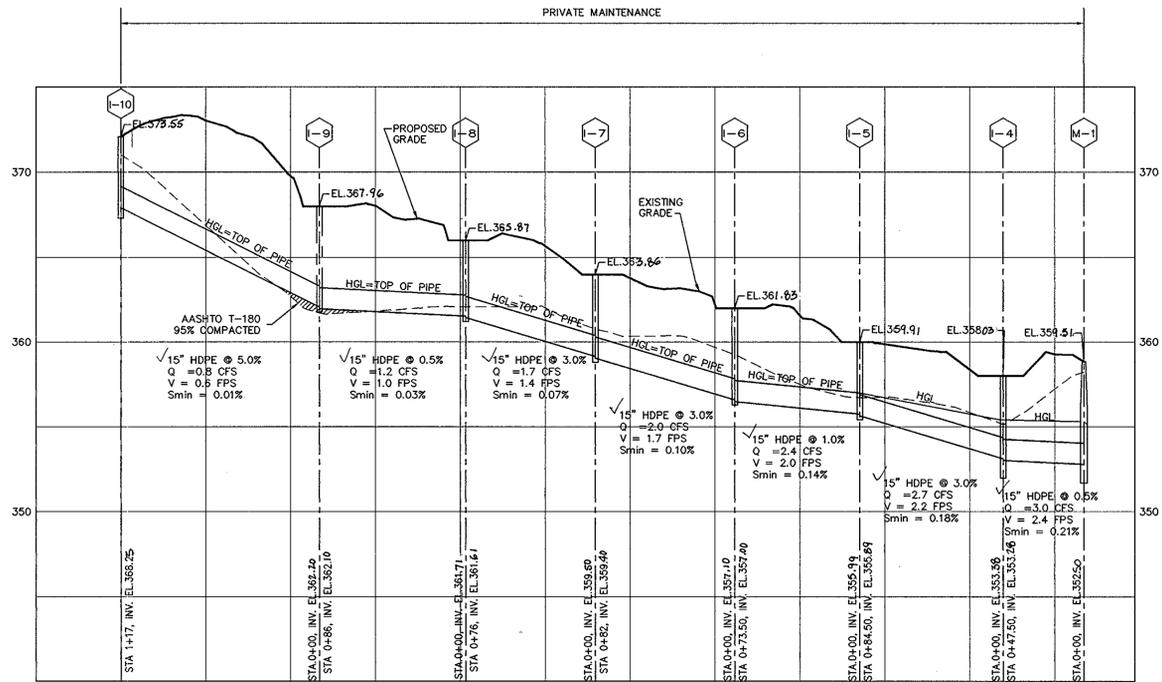
FOREST CREEK
 LOTS 1 THRU 13 & OPEN SPACE LOTS 14-17
 TAX MAP 24 GRID 23 PARCEL 301
 HOWARD COUNTY, MARYLAND
 SECOND ELECTION DISTRICT
 EROSION & SEDIMENT CONTROL NOTES & DETAILS

6 OF 13
 F-05-42



STORM DRAIN PROFILE FROM I-3 TO ES-1

HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



STORM DRAIN PROFILE FROM I-10 TO MH-1

HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'

STRUCTURE SCHEDULE

NO.	LOCATION*	TOP***	INV. IN	INV. OUT	COMMENTS
ES-1	PUBLIC N578140.5231 E1361537.9580	---	351.91	---	18" END WALL (HO.CO. STD SD 5.21)
I-1	PUBLIC LABRADOR LANE, STA. 7+42.37' 30.00' LT.	365.51	354.85	354.75	INLET TYPE A-10 (HO. CO. STD SD 4.41)
I-2	PUBLIC LABRADOR LANE, STA. 7+42.37' 30.00' RT.	365.49	355.45	355.35	INLET TYPE A-10 (HO. CO. STD SD 4.41)
I-3	PRIVATE LABRADOR LANE, STA. 7.32.33' 116.31' RT.	362.97	---	355.67	YARD INLET (HO. CO. STD SD-4.14) - SUMP
I-4	PRIVATE LABRADOR LANE, STA. 7+40.27' 109.90' LT.	358.03	353.88	353.88	YARD INLET (HO. CO. STD SD-4.14) - SUMP
I-5	PRIVATE LABRADOR LANE, STA. 6+56.50' 120.04' LT.	359.91	355.99	355.69	YARD INLET (HO. CO. STD SD-4.14) - SUMP
I-6	PRIVATE LABRADOR LANE, STA. 5+82.90' 122.02' LT.	361.65	357.10	357.00	YARD INLET (HO. CO. STD SD-4.14) - SUMP
I-7	PRIVATE LABRADOR LANE, STA. 5+01.59' 132.68' LT.	365.86	359.60	359.40	YARD INLET (HO. CO. STD SD-4.14) - SUMP
I-8	PRIVATE LABRADOR LANE, STA. 4+25.22' 134.59' LT.	366.87	361.71	361.61	YARD INLET (HO. CO. STD SD-4.14) - SUMP
I-9	PRIVATE LABRADOR LANE, STA. 3+42.59' 135.63' LT.	367.96	362.20	362.10	YARD INLET (HO. CO. STD SD-4.14) - SUMP
I-10	PRIVATE LABRADOR LANE, STA. 2+69.59' 146.61' LT.	373.65	368.25	---	YARD INLET (HO. CO. STD SD-4.14) - SUMP
MH-1	PUBLIC N578118.1497 E1361558.0719	359.51	352.50	352.40	MH (HO. CO. STD G 5.01)

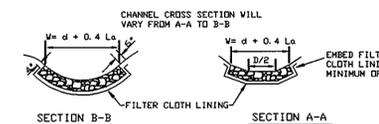
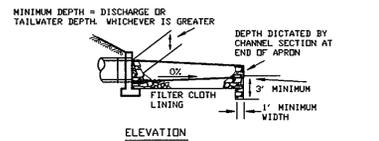
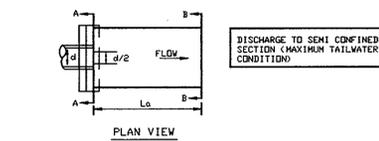
* STATIONS GIVEN TO CENTERLINE FACE OF INLET AT TOP OF CURB FOR INLETS LOCATED WITHIN THE ROAD RIGHT-OF-WAY. STATIONS FOR YARD INLETS TO CL OF INLET. LOCATION OF MANHOLES IS TO CL OF MANHOLE COVER. END SECTION GIVEN TO THE CENTERLINE OF PIPE AT THE CONNECTION OF THE STORM DRAIN PIPE TO THE END SECTION.

** ELEVATIONS MEASURED TO CENTER OF ALL INLETS.

PIPE SCHEDULE

QUANTITY	PIPE SIZE
652	15" HDPE (PRIVATE)
139	18" HDPE (PUBLIC)

DETAIL 25 - ROCK OUTLET PROTECTION I

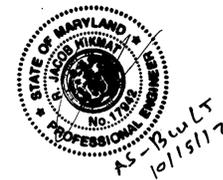
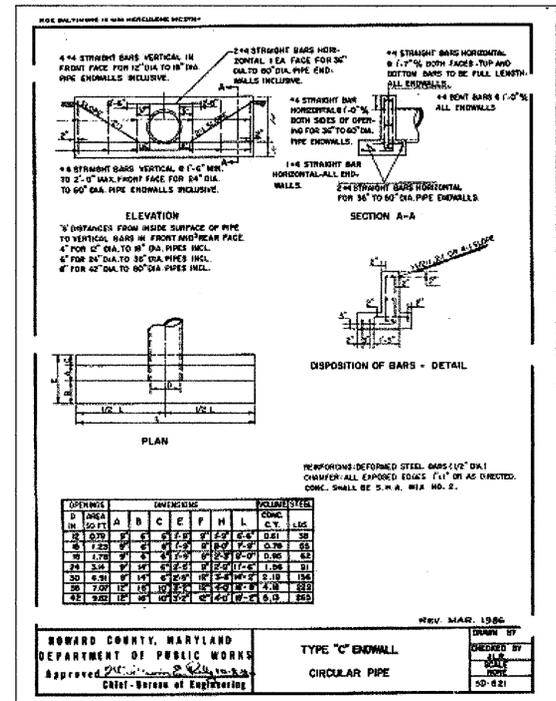


NOTE: FILTER CLOTH SHALL BE GEOTEXTILE CLASS C

ROCK OUTLET PROTECTION

Construction Specifications

- The subgrade for the filter, rip-rap, or gabion shall be prepared to the required lines and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.
- The rock or gravel shall conform to the specified grading limits when installed respectively in the rip-rap or filter.
- Geotextile shall be protected from punching, cutting, or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of geotextile over the damaged part or by completely replacing the geotextile. All overlaps whether for repairs or for joining two pieces of geotextile shall be a minimum of one foot.
- Stone for the rip-rap or gabion outlets may be placed by equipment. They shall be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for rip-rap or gabion outlets shall be delivered and placed in a manner that will ensure that it is reasonably homogeneous with the smaller stones and spalls filling the voids between the larger stones. Rip-rap shall be placed in a manner to prevent damage to the filter blanket or geotextile. Hand placement will be required to the extent necessary to prevent damage to the permanent works.
- The stone shall be placed so that it blends in with the existing ground. If the stone is placed too high then the flow will be forced out of the channel and scour adjacent to the stone will occur.



I HEREBY CERTIFY THAT THE PLAN SHOWN ON THIS PLAN WAS PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MARYLAND.

OWNER AND DEVELOPER
FOREST HILLS, LLC
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
410-465-3739

APPROVED: DEPARTMENT OF PUBLIC WORKS
CHIEF BUREAU OF HIGHWAYS
William J. ... 10-31-05
DATE

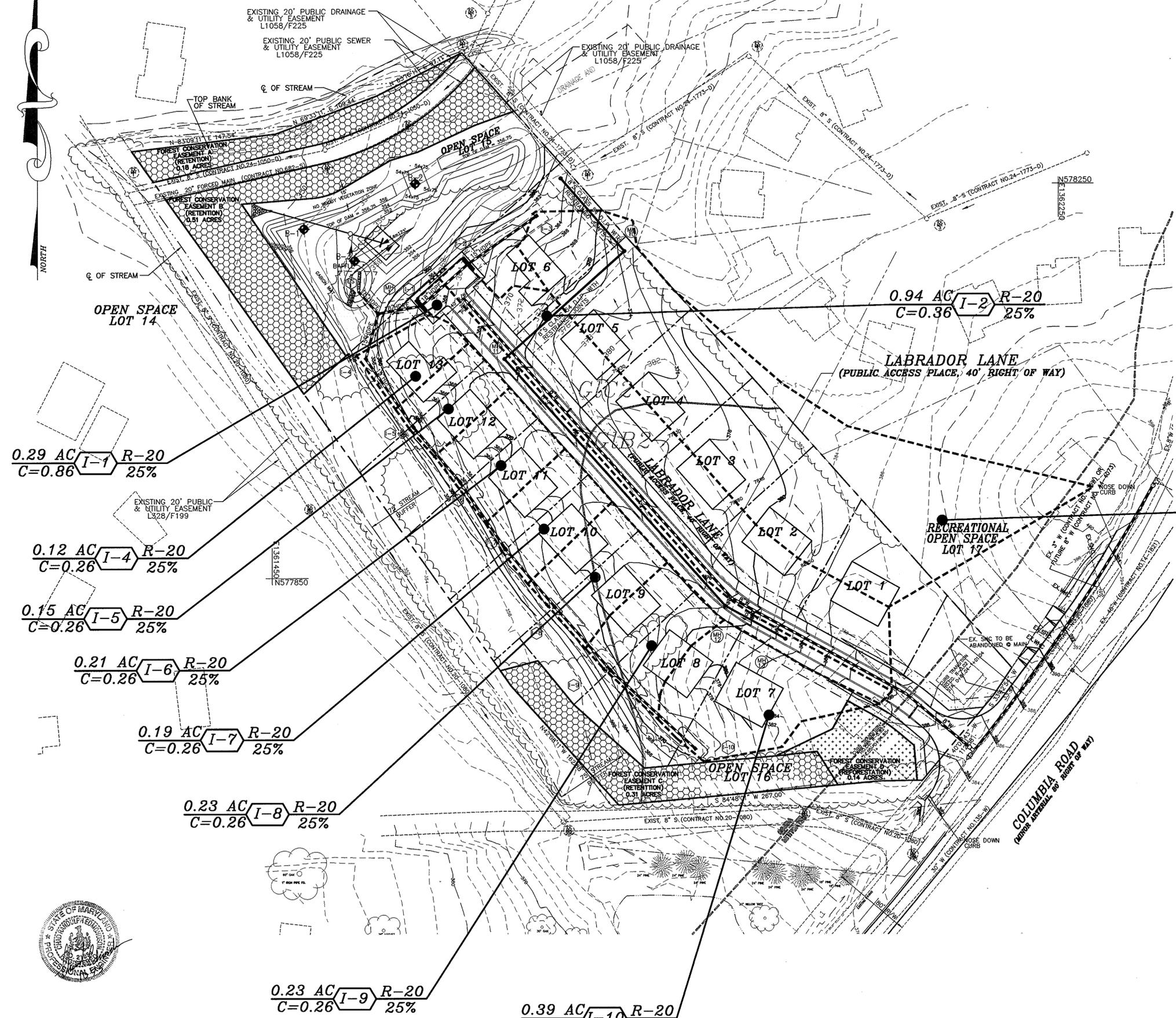
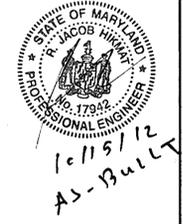
APPROVED: DEPARTMENT OF PLANNING AND ZONING
... 11/2/05
DATE

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0286 Fax (301) 621-5621 Wash. (410) 997-0286 Fax

FOREST CREEK
LOTS 1 THRU 13 & OPEN SPACE LOTS 14-17
TAX MAP 24 GRID 23 PARCEL 301
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
STORM DRAIN PROFILES

Project: 2002-097
Illustration: HSP
Date: OCT 2005
Scale: 1" = 50'
Approval: HSP

02-097.DWG.FINAL.02097-SDDA.DWG



SOILS DESCRIPTION

SYMBOL DESCRIPTION
 GIB2 GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED - TYPE B
 GIC2 GLENELG LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED - TYPE B

OWNER AND DEVELOPER
 FOREST HILLS, LLC
 10717-B BIRMINGHAM WAY
 WOODSTOCK, MARYLAND 21163
 410-465-5739

APPROVED: DEPARTMENT OF PUBLIC WORKS
 [Signature] 10-31-15
 CHIEF, BUREAU OF HIGHWAYS MS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 11/2/15
 CHIEF, DIVISION OF LAND DEVELOPMENT CCM DATE

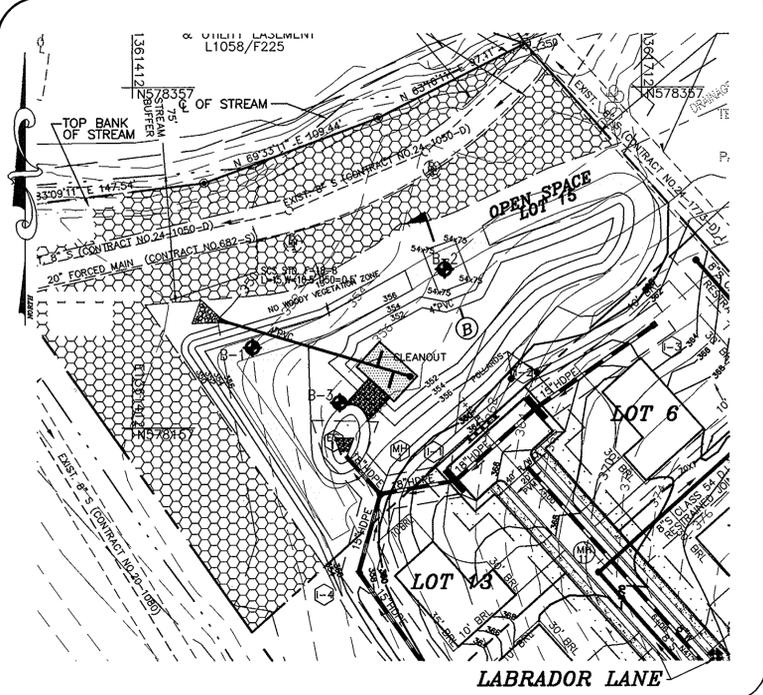
[Signature] 11/2/15
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

project	2002-097	date	OCT 2005
illustration	HSP	engineering	HSP
scale	1"=50'	approval	CE

no.	1	description	AS-BUILT INFO TH-15 SHEET	date	10/15/12
revisions					

FOREST CREEK
 LOTS 1 THRU 13 & OPEN SPACE LOTS 14-17
 TAX MAP 24 GRID 23 PARCEL 301
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DRAINAGE AREA MAP

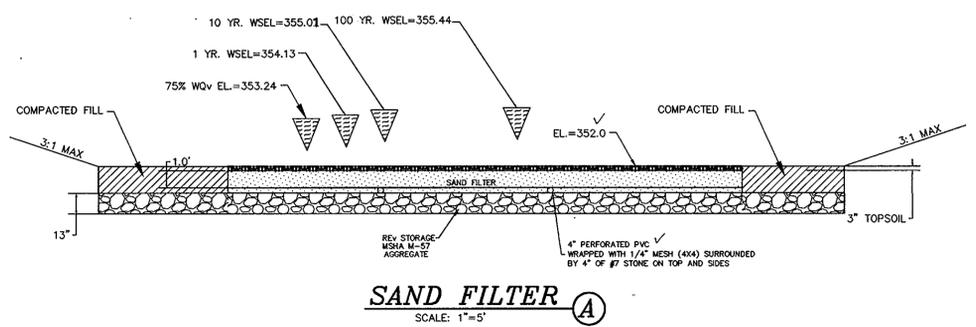
MILDENBERG, BOENDER & ASSOC., INC.
 Planners Surveyors
 Engineers
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0286 Fax. (301) 621-5521 Wash. (410) 997-0286 Fax.



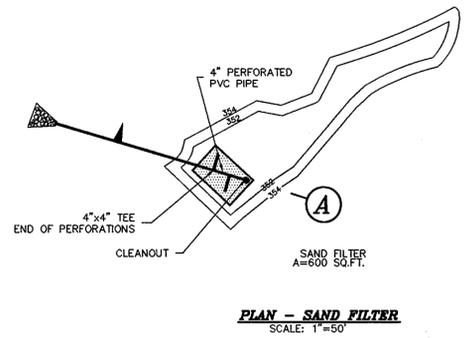
SWM POND PLAN
SCALE: 1"=50'

SWM POND DATA:

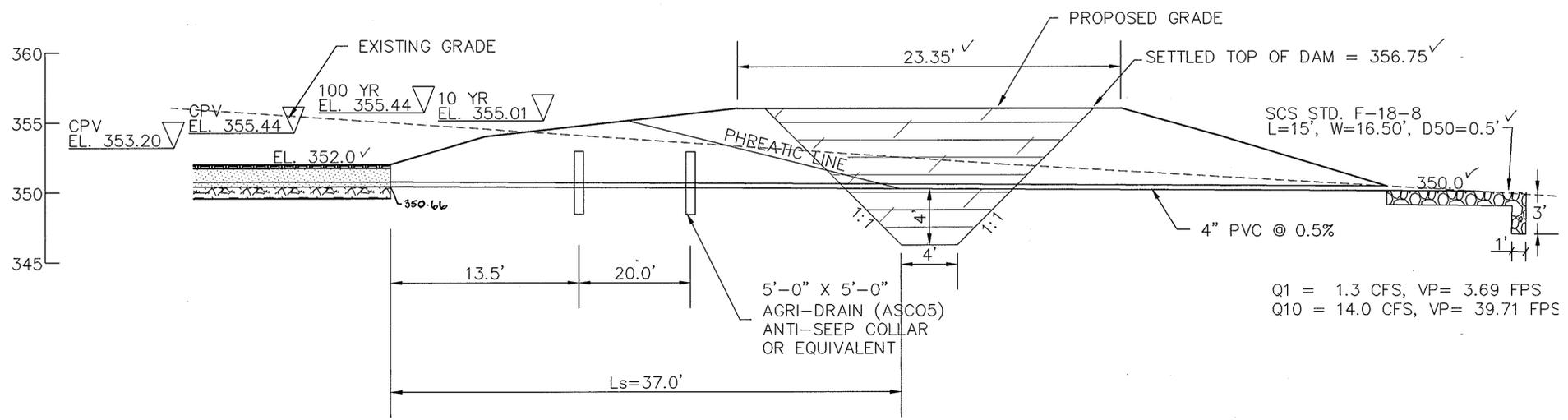
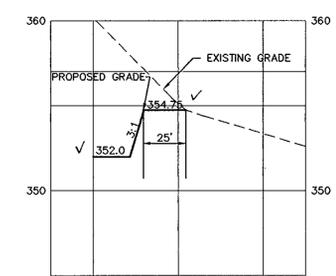
NON MD-378 POND	= 5.5 AC
DRAINAGE AREA:	= 75 (ULTIMATE DEVELOPMENT OF WATERSHED)
PROPOSED RCN:	= 0.19 HRS.
SAND FILTER AREA (Wqv):	= 600 SQ. FT.
10 YR. WSEL:	= 355.01
Wqv REQUIRED:	= 6,856 Cu. Ft.
Wqv PROVIDED:	= 7,014 Cu. Ft.
Wav EL.:	= 353.20
Rev REQUIRED:	= 1,789 Cu. Ft.
Rev PROVIDED:	= 1,789 Cu. Ft.
1 YR. Q (OUT OF SWMF):	= CONTAINED IN POND
10 YR. Q (OUT OF SWMF):	= 9.5 CFS @ EL. = 355.01
OWNERSHIP:	PRIVATE
MAINTENANCE:	PRIVATE
HAZARD CLASSIFICATION:	"A"



SAND FILTER A
SCALE: 1"=5'

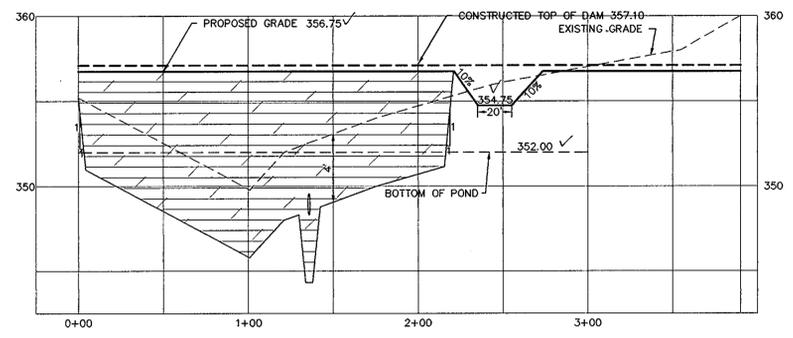


PLAN - SAND FILTER
SCALE: 1"=50'

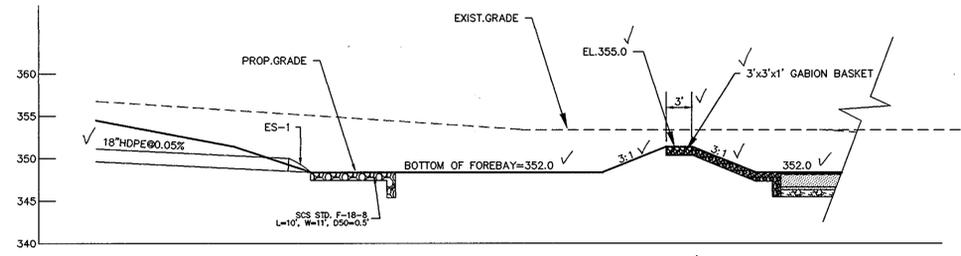


NOTE: WHEN REPLACING 15" CMP WITH 4" PVC, BACKFILL WITH CORE TRENCH MATERIAL.

PRINCIPLE SPILLWAY
SCALE: 1"=5'



DAM PROFILE
SCALE: HOR. 1"=50'
VER. 1"=5'



FOREBAY DETAIL
SCALE: 1"=10'

OWNER AND DEVELOPER
FOREST HILLS, LLC
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
410-465-3739

AS-BUILT CERTIFICATION
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE AS-BUILT PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.
SIGNATURE: [Signature] P.E. No.: 17942
DATE: 10/15/12

BY THE DEVELOPER:
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING 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. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERMITS TO BE OBTAINED BY THE HOWARD SOIL CONSERVATION DISTRICT.
SIGNATURE OF DEVELOPER: [Signature] DATE: 10-10-05
ROBERT DORSEY, JR.
PRINTED NAME OF DEVELOPER

BY THE ENGINEER:
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
SIGNATURE OF ENGINEER: [Signature] DATE: 10/27/05
CHAD EDMONDSON
PRINTED NAME OF ENGINEER

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
USDA - NATURAL RESOURCE CONSERVATION SERVICE DATE: 10/27/05
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
HOWARD SOIL CONSERVATION DISTRICT DATE: 10/27/05
APPROVED: DEPARTMENT OF PUBLIC WORKS

CHIEF BUREAU OF HIGHWAYS DATE: 10-31-05
APPROVED: DEPARTMENT OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 11/2/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 11/2/05



I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE AS-BUILT PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

project	date	illustration	scale	approval
2002-087	OCT 2005	HSP	1"=50'	CE

no.	date	description	revisions
1	10-15-12	IN Fc	10-15-12

FOREST CREEK
LOTS 1 THRU 13 & OPEN SPACE LOTS 14-16
TAX MAP 24 GRID 23 PARCEL 301
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
PERMANENT STORMWATER MANAGEMENT DETAILS

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hill Drive, Suite 202, Ellicott City, Maryland 21042
(410) 987-0286 Fax: (301) 621-5521 Wash. (410) 987-0288 Fax.

Project	2005-087	date	OCT 2005
Illustration	HSP/SID	engineering	approval
Scale	1"=50'		

No.	1	description	No. A-5-Built In/PA This Sheet
date	10/15/02	revisions	

FOREST CREEK
 LOTS 1 THRU 13 & OPEN SPACE LOTS 14-16
 TAX MAP 24 GRID 23 PARCEL 301
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 LANDSCAPE PLAN

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 987-0286 Fax: (301) 821-5521

NOTE: THIS DRAWING IS TO BE USED FOR LANDSCAPE PLAN PURPOSES ONLY.

NOTES:
 1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
 2. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING (28 SHADE TREES, 13 EVERGREENS) HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$10,350.00.

STREET TREE CALCULATIONS

COLUMBIA ROAD - 58 LF/40' = 2
 ROAD A - 1588 LF/40' = 39
TOTAL TREES REQUIRED = 41 LARGE STREET TREES
TOTAL TREES PROVIDED = 41 LARGE STREET TREES

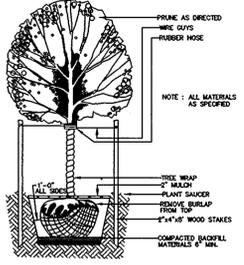


STREET TREE PLANTING SCHEDULE

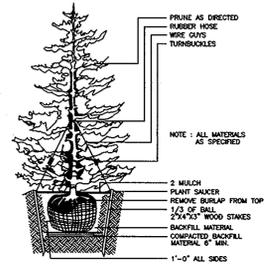
QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
41	○	ACER SACCHARUM 'GREEN MOUNTAIN'	GREEN MOUNTAIN SUGAR MAPLE	2 1/2" CAL.
TOTAL			41 PUBLIC STREET TREES	

PERIMETER LANDSCAPE PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
23	○	ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.
6	○	ACER SACCHARUM 'GREEN MOUNTAIN'	GREEN MOUNTAIN SUGAR MAPLE	2 1/2" - 3" CAL.
11	○	PINUS STROBUS	WHITE PINE	6' - 8' HT.
TOTAL			40 TREES (29 SHADE TREES, 11 EVERGREENS)	



TYPICAL DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



TYPICAL EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE

LEGEND

- FOREST CONSERVATION EASEMENT (RETENTION)
- FOREST CONSERVATION EASEMENT (AFFORESTATION)

DEVELOPER'S/OWNER'S CERTIFICATE

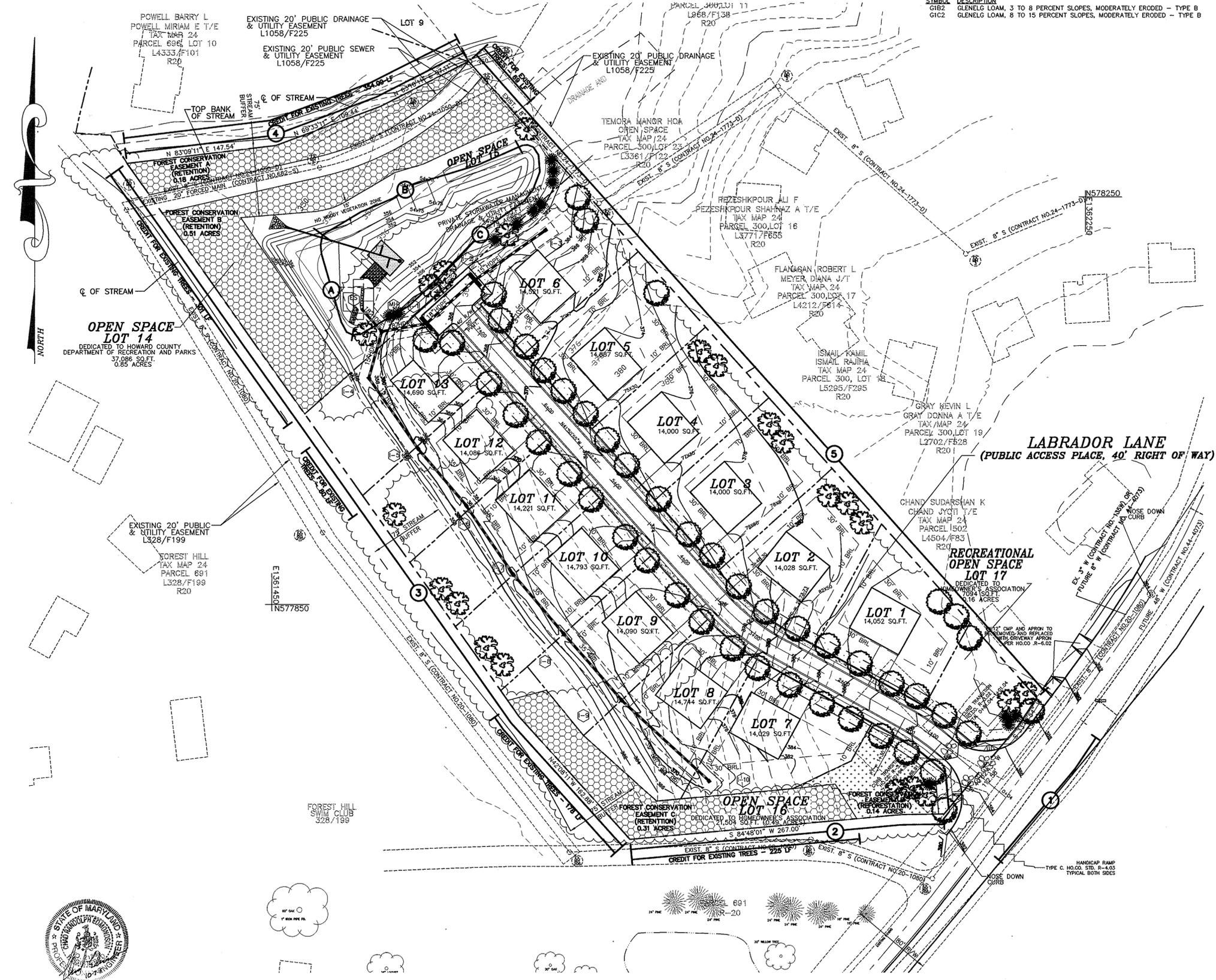
I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE IN ACCORDANCE WITH THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE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

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Land Development, Date: 10/15/05
 Chief, Development Engineering Division, Date: 10/15/05

OWNER AND DEVELOPER
 FOREST HILLS, LLC
 10717-B BIRMINGHAM WAY
 WOODSTOCK, MARYLAND 21163
 410-465-5739

SOILS DESCRIPTION

SYMBOL	DESCRIPTION
G1B2	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED - TYPE B
G1C2	GLENELG LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED - TYPE B



SCHEDULE D: STORMWATER MANAGEMENT AREA LANDSCAPING

LINEAR FEET OF PERIMETER	106 LF (PERIMETER A)	213 LF (PERIMETER B)	290 LF (PERIMETER C)	609 LF (TOTAL)
CREDIT FOR EXISTING VEGETATION (NO. YES AND LINEAR FEET)	YES, 106 LF OF EXISTING TREES	YES, 213 LF OF EXISTING TREES	NO	YES, 334 LF OF EXISTING TREES
CREDIT FOR OTHER LANDSCAPING (NO. YES AND LF)	N/A	N/A	N/A	N/A
NUMBER OF TREES REQUIRED	0 SHADE TREES 0 EVERGREEN TREES	0 SHADE TREES 0 EVERGREEN TREES	6 SHADE TREES 7 EVERGREEN TREES	6 SHADE TREES 7 EVERGREEN TREES
NUMBER OF TREES PROVIDED	0 SHADE TREES 0 EVERGREEN TREES	0 SHADE TREES 0 EVERGREEN TREES	5 SHADE TREES 9 EVERGREEN TREES	5 SHADE TREES 9 EVERGREEN TREES
SUBSTITUTION TREES (SMALL DECIDUOUS TREES)	0 SMALL TREES	0 SMALL TREES	0 SMALL TREES	0 SMALL TREES

SCHEDULE A: PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES					TOTAL
	B (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)	
LINEAR FEET OF PERIMETER	146.03 LF	310.03 LF	928.26 LF	354.09 LF	837.44 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	YES, 225 LF OF EXISTING TREES	YES, 559 LF OF EXISTING TREES	YES, 354.09 LF OF EXISTING TREES	YES, 69 LF OF EXISTING TREES	
NUMBER OF PLANTS REQUIRED	3 SHADE TREES 4 EVERGREEN TREES	2 SHADE TREES 0 EVERGREEN TREES	5 SHADE TREES 0 EVERGREEN TREES	0 SHADE TREES 0 EVERGREEN TREES	13 SHADE TREES 4 EVERGREEN TREES	23 SHADE TREES 4 EVERGREEN TREES
NUMBER OF PLANTS PROVIDED	3 SHADE TREES 4 EVERGREEN TREES	2 SHADE TREES 0 EVERGREEN TREES	5 SHADE TREES 0 EVERGREEN TREES	0 SHADE TREES 0 EVERGREEN TREES	13 SHADE TREES 4 EVERGREEN TREES	23 SHADE TREES 4 EVERGREEN TREES
SUBSTITUTION TREES (SMALL DECIDUOUS TREES)	0 SMALL TREES	0 SMALL TREES				

02-097.DWG/FINAL/02097-LANDSCAPE.DWG



NOTE: THIS DRAWING IS TO BE USED FOR FOREST CONSERVATION PLAN PURPOSES ONLY.

NOTES:
 1. THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION HAVE BEEN MET BY ON-SITE RETENTION OF 0.99 ACRES. REFORESTATION AND PAYMENT OF A FEE-IN-LIEU OF 0.86 ACRES (37,441.6 SQ. FT.) OF FORESTATION IN THE AMOUNT OF \$18,730.80. FINANCIAL SURETY FOR THE 0.99 ACRES (43,124.4 SQ. FT.) OF RETENTION IN THE AMOUNT OF \$8,624.88 AND 0.14 ACRES (6,098.4 SQ. FT.) OF FORESTATION IN THE AMOUNT OF \$3,049.20 HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$11,674.08.

GENERAL NOTES

- ALL FOREST RETENTION AREAS SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED BLAZE ORANGE PLASTIC FENCING AND SIGNAGE AS INDICATED ON THE PLANS. THE DEVICES SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING ACTIVITIES.
- THE FOREST PROTECTION DEVICES SHALL BE MAINTAINED SUCH THAT THE CRITICAL ROOT ZONES OF ALL TREES WITHIN THE RETENTION AREA NOT OTHERWISE PROTECTED WILL BE WITHIN FOREST PROTECTION DEVICES. ALL PROTECTION DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION, INCLUDING SILT FENCE BEING USED AS PROTECTIVE FENCING. ALL DEVICES SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS CEASED IN THE IMMEDIATE VICINITY.
- ATTACHMENT OF SIGNS, OR ANY OTHER OBJECTS TO TREES IS PROHIBITED. NO EQUIPMENT, MACHINERY, VEHICLES, MATERIALS OR EXCESSIVE PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THESE PROTECTED AREAS. THE GENERAL CONTRACTOR SHALL TAKE THE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE AND DRAINING OF MATERIALS THAT MAY BE HARMFUL TO TREES.
- THE GENERAL CONTRACTOR SHALL PREVENT PARKING OF CONSTRUCTION VEHICLES AND EQUIPMENT, AND THE STORING OF BUILDING SUPPLIES OR STOCKPILING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS. AREA SHALL BE PROHIBITED.
- THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION EASEMENTS. ROOT PRUNING SHALL BE USED AT THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AND ADJACENT TO ALL PRESERVATION AREAS, AS NECESSARY.

PRE-CONSTRUCTION MEETING

- AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, AND AFTER THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, BUT BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER, AND HOWARD COUNTY INSPECTORS SHALL ATTEND. THE PURPOSE OF THIS MEETING WILL BE:
- TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIMEN TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, TREE ROOT SYSTEMS, AREAS AND EQUIPMENT STAGING AREAS;
 - INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES;
 - MAKE ALL NECESSARY ADJUSTMENTS TO PROTECTION DEVICES;
 - ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.

CONSTRUCTION MONITORING

- THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTATION, ROOT INJURY, TRUNK WOUNDS, LIMB INJURY, OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS. ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
- THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

PLANTING SPECIFICATIONS AND NOTES

- SITE PREPARATION AND SOILS**
- PROTECTION FENCING IS TO BE INSTALLED AS A FIRST ORDER OF BUSINESS. SEE PLAN FOR LOCATION.
 - DISTURBANCE OF SOILS SHOULD BE LIMITED TO THE PLANTING FIELD FOR EACH PLANT. AS SHOWN ON THE DETAIL VIEW, A PLANTING FIELD OF 10' X 10' SHALL BE MAINTAINED. THE ROOT BALL OR CONTAINER IS RECOMMENDED.
 - SOIL MIX FOR ALL PLANTS EXCEPT ERICACEOUS MATERIAL SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLUDGE.
 - SOIL MIX FOR ERICACEOUS MATERIAL SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME PEAT MOSS.
 - ALL MIXING IN 3 AND 4 SHALL BE LIMITED TO CONTAINER GROWN OR BALL AND BURLAP STOCK ONLY AND CONFINED TO THE PLANTING FIELD AND IMMEDIATE ADJACENT SOIL SURFACE AREA AND SHALL BE DONE TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.
- PLANT STORAGE AND INSPECTION**
- FOR CONTAINER GROWN NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN 2 WEEKS AFTER DELIVERY TO THE SITE.
 - FOR BALL AND BURLAP NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN 30 DAYS AFTER DELIVERY TO THE SITE.
 - PLANTING STOCK SHOULD BE INSPECTED PRIOR TO PLANTING. PLANTS NOT CONFORMING TO STANDARD NURSERYMAN SPECIFICATIONS FOR SIZE, FORM, VIGOR, ROOTS, TRUNK WOUNDS, INSECTS AND DISEASE SHOULD BE REPLACED.
 - UNITS PLANTED, ALL PLANT STOCK SHALL BE KEPT IN A SHADED, COOL, AND MOISTENED ENVIRONMENT.
- PLANT INSTALLATION**
- THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE STOCKPILED SOILS SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING FIELD. AFTER PLANT INSTALLATION, BACK SOILS EVENLY OVER THE PLANTING FIELD AND COVER WITH AT LEAST 4 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILLED AROUND TREES.
 - PLANTING FIELD DIAMETERS SHOULD BE REDUCED OR PLANTING FIELD MOVED IF IT APPEARS THAT EXCESSIVE EXISTING ROOT DAMAGE MAY OCCUR DURING DIGGING OPERATION NEAR EXISTING FOREST.
 - CARE SHALL BE TAKEN WHEN DIGGING PLANTING FIELDS NOT TO CHOP THROUGH LARGER EXISTING ROOTS. IF LARGER EXISTING ROOTS ARE ENCOUNTERED GREATER THAN 1/2 INCH ARE ENCOUNTERED PLEASE TRY TO DIG AROUND THEM AS MUCH AS POSSIBLE TO MINIMIZE IMPACT TO EXISTING TREES. THEY WERE HERE FIRST.
 - CONTAINER GROWN STOCK SHOULD BE REMOVED FROM THE CONTAINER AND ROOTS GENTLY LOOSENED FROM THE SOIL. IF THE ROOTS ENIRCLE THE SOIL BALL, SUBSTITUTION IS STRONGLY RECOMMENDED. U-SHAPED OR KINKED ROOT SYSTEMS SHOULD ALSO BE NOTED. ROOTS NOT BE TRIMMED ON SITE, DUE TO THE INCREASED CHANCES OF SOIL BORNE DISEASES.
 - FOR BALL AND BURLAP STOCK, PLACE TREE IN PREPARED PLANTING FIELD AND REMOVE AND/OR STRIKE FROM ROOT BALL. THEN FEEL BACK BURLAP TO BASE OF ROOT BALL AND COVER ENTIRE ROOT BALL WITH TOPSOIL MIXTURE INDICATED ABOVE AND WATER GENEROUSLY.
 - FOR TREES PLANTED IN THE AFFORESTATION AREA, CONTRACTOR SHALL EVENLY DISPERSE SPECIES IN GROUPS OF TWO (2) TO FIVE (5), PER SPECIES OVER THE ENTIRE DESIGNATED AREA. TO BE PLANTED MAINTAINING AN AVERAGE RANDOM SPACING OF INDIVIDUAL TREES AT PROPER SPACING INDICATED ON PLANT LIST.
 - AVOID PLANTING IN A STRAIGHT GRID PATTERN. TREES SHALL BE PLANTED ON AN AVERAGE SPACING AS INDICATED ON PLANT LISTS TO OBTAIN A MORE NATURAL APPEARANCE.
 - NEWLY PLANTED TREES MAY NEED WATERING AS MUCH AS ONCE A WEEK FOR THE ENTIRE GROWING SEASON, DUE TO THE VERY DEEP, WELL DRAINED NATURE OF THE NATIVE SOILS FOUND ON THIS SITE COMBINED WITH THE LOOSENESS OF THE BACKFILLED AREA WITHIN THE PLANTING FIELD. THE NEXT TWO YEARS MAY REQUIRE WATERING ONLY 1-2 TIMES DURING SUMMER AND DRY MONTHS. AFTER THAT PERIOD, TREES SHOULD ONLY NEED WATER IN SEVERE DROUGHTS. DAILY WATERING PLAN SHOULD COMPENSATE FOR RECENT RAINFALL PATTERNS.
- FERTILIZING**
- DO NOT FERTILIZE NEWLY PLANTED TREES WITHIN THE FIRST GROWING SEASON AFTER PLANTING. DOING SO MAY CAUSE A SPURT OF CANOPY GROWTH WHICH THE ROOTS CANNOT SUPPORT AND ADD ADDITIONAL SHOCK TO THE ALREADY DISTURBED PLANT.
 - NOTHING SHOULD BE ADDED TO THE SOIL WITHOUT TESTING IT FIRST TO DETERMINE ITS NEEDS.
 - IF AND WHEN IT IS TIME TO FERTILIZE, ORGANIC FERTILIZERS ARE PREFERRED TO SYNTHETIC FERTILIZERS. BONE MEAL OR SEAWEED BASED PRODUCTS ARE AVAILABLE COMMERCIALY AND ARE RECOMMENDED. THEY HAVE THE ABILITY TO SUPPLY NUTRIENTS TO THE PLANT AS NEEDED WHILE MINIMIZING THE RISK OF EXCESS NUTRIENTS ENTERING THE FOREST SYSTEM AND WATER SUPPLY.
- MAINTENANCE SCHEDULE**
- ANNUAL MAINTENANCE DURING THE GROWING SEASON, FOR A THREE YEAR PERIOD.
 - ASSESS TREE MORTALITY OF PLANTING STOCK, REMOVE AND REPLACE ANY DEAD OR DISEASED PLANTINGS.
 - VOLUNTEER SEEDING OF NATIVE, LOCAL AND ENDEMIC VEGETATION IS TO BE EXPECTED. DO NOT DISCOURAGE THIS EFFORT UNLESS IT IS NEGATIVELY AFFECTING THE PLANTED STOCK.
 - REMOVE THROUGH MANUAL MEANS (GRUBBING, PULLING, CUTTING) AGGRESSIVE, NOXIOUS, INVASIVE SPECIES AND ALL HERBACEOUS VEGETATION WITHIN A 3-FOOT RADIUS SURROUNDING THE PLANTED WOODY NURSERY STOCK.
 - REMOVE AND DISPOSE OF MAN-MADE TRASH, INCLUDING ITEMS CONTAINED WITHIN ENTIRE PLANTING AREA. DO NOT REMOVE DOWN AND DEAD MATERIAL, NATURALLY OCCURRING OR ACCUMULATING, UNLESS IT IS SMOTHERING PLANTING STOCK.
 - A 75 PERCENT SURVIVAL OF PLANTED STOCK MUST BE ACHIEVED AT THE END OF THE 24 MONTH MANAGEMENT PERIOD. IF NOT, ADDITIONAL PLANTINGS MAY BE REQUIRED TO ACHIEVE THIS GOAL.

FOREST RETENTION AREA

MACHINERY, DUMPING OR STORAGE OF MATERIALS IS PROHIBITED

VIOLATORS ARE SUBJECT TO FINES AS IMPOSED BY THE CONSERVATION ACT OF 1991

FOREST CONSERVATION AREA

REFORESTATION PROJECT

TREES FOR YOUR FUTURE

SIGNAGE DETAILS

NOT TO SCALE

FOREST CONSERVATION DATA

FOREST CONSERVATION WORKSHEET

NET TRACT AREA:

A. TOTAL TRACT AREA	7.28
B. AREA WITHIN 100 YEAR FLOODPLAIN	0.00
C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION	0.00
D. NET TRACT AREA	7.28

LAND USE CATEGORY:

AFFORESTATION THRESHOLD	15% X D = 1.09
F. CONSERVATION THRESHOLD	20% X D = 1.46

EXISTING FOREST COVER:

G. EXISTING FOREST COVER (EXCLUDING FLOODPLAIN & UTILITY EASEMENT)	1.74*
H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD	0.65
I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD	0.28

BREAK EVEN POINT:

J. FOREST RETENTION ABOVE THE THRESHOLD WITH NO MITIGATION	1.51
K. CLEARING PERMITTED WITHOUT MITIGATION	0.23

PROPOSED FOREST CLEARING:

L. TOTAL AREA OF FOREST TO BE CLEARED	0.79
M. TOTAL AREA OF FOREST TO BE RETAINED	0.99

PLANTING REQUIREMENTS:

N. REFORESTATION FOR CLEARING ABOVE THE CONSERVATION THRESHOLD	0.07
O. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD	0.81
P. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD	0.00
R. TOTAL REFORESTATION REQUIRED	1.00
S. TOTAL AFFORESTATION REQUIRED	0.00
T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED	1.00

* EXISTING FOREST IN THE EXISTING UTILITY EASEMENT ON OPEN SPACE LOT 14 HAS BEEN EXCLUDED FROM THE AREA OF EXISTING FOREST.

FOREST CONSERVATION EASEMENTS

EASEMENT	ACREAGE
FCE A	0.18 ACRES (RETENTION)
FCE B	0.51 ACRES (RETENTION)
FCE C	0.31 ACRES (RETENTION)
FCE D	0.14 ACRES (REFORESTATION)

MD DNR QUALIFIED PROFESSIONAL

MASHID TRINGA
 10/17/05

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division
 DATE: 11/3/05



LEGEND

- FOREST CONSERVATION EASEMENT (RETENTION)
- FOREST CONSERVATION EASEMENT (AFFORESTATION)
- FOREST CONSERVATION SIGNAGE

OWNER AND DEVELOPER

10717-B BIRMINGHAM WAY
 WOODSTOCK, MARYLAND 21163
 410-465-5739

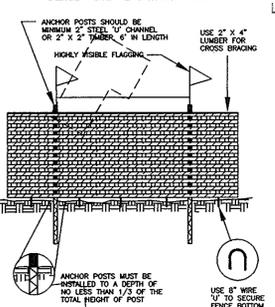
SOILS DESCRIPTION

SYMBOL DESCRIPTION
 G1B2 GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED - TYPE B
 G1C2 GLENELG LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED - TYPE B

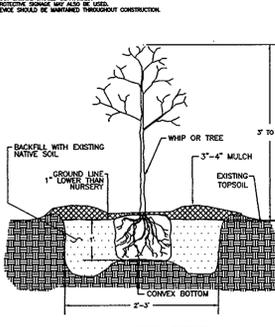
REFORESTATION PLANT LIST

ALTERNATIVE 1 QTY. SPECIES	SHADE TOL.	MOIST. REQ.	WET. STATUS	MIN.O.C.	SIZE & SPACING REMARKS	ALTERNATIVE 2 QTY. SPECIES	SHADE TOL.	MOIST. REQ.	WET. STATUS	MIN.O.C.	SIZE & SPACING REMARKS
12 Acer rubrum	VT	D-W	FACU	15'	CONT/B & B 1" CALIPER	21 Acer rubrum	VT	D-W	FAC	11'	SEEDLING/WHIP WITH TREE SHELTER
2 Cornus florida	VT	D-M	FACU	15'	CONT/B & B 1" CALIPER	6 Cornus florida	VT	D-M	FACU	11'	SEEDLING/WHIP WITH TREE SHELTER
10 Lindera benzoin	T	M	FACW-	15'	CONT/B & B 3'-5' HEIGHT	6 Lindera benzoin	T	M	FACW-	11'	SEEDLING/WHIP WITH TREE SHELTER
2 Liquidambar styraciflua	I	M-W	FAC	15'	CONT/B & B 1" CALIPER	3 Liquidambar styraciflua	I	M-W	FAC	11'	SEEDLING/WHIP WITH TREE SHELTER
8 Liriodendron tulipifera	MT	D-M	FAC	15'	CONT/B & B 1" CALIPER	10 Liriodendron tulipifera	MT	D-M	FAC	11'	SEEDLING/WHIP WITH TREE SHELTER
3 Prunus serotina	I	M	FACU	15'	CONT/B & B 3'-5' HEIGHT	8 Prunus serotina	I	M	FACU	11'	SEEDLING/WHIP WITH TREE SHELTER
TOTAL 37 TREES & SHRUBS (28 TREES REQUIRED)						TOTAL 58 WHIPS WITH TREE SHELTERS & SHRUBS (49 WHIPS WITH TREE SHELTERS REQUIRED)					

PROTECTIVE FENCE DETAIL



TREE PLANTING DETAIL



OPEN SPACE LOT 14

DEDICATED TO HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS
 37,098 SQ. FT.
 0.855 ACRES

REFORESTATION PLANT LIST

ALTERNATIVE 1 QTY. SPECIES	SHADE TOL.	MOIST. REQ.	WET. STATUS	MIN.O.C.	SIZE & SPACING REMARKS	ALTERNATIVE 2 QTY. SPECIES	SHADE TOL.	MOIST. REQ.	WET. STATUS	MIN.O.C.	SIZE & SPACING REMARKS
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date	OCT 2005	approval	CE
project	2005-097	illustration	HSP/SID
scale	1"=60'	revision	

date	10/15/02	description	
no.	1	NO AS-BUILT INFO THIS SHEET	

FOREST CREEK
 LOTS 1 THRU 13 & OPEN SPACE LOTS 14-17
 TAX MAP 24 GRID 23 PARCEL 301
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 FOREST CONSERVATION PLAN

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0296 Fax: (301) 521-5621
 13 of 13
 F-05-42