

PARKSIDE ESTATES

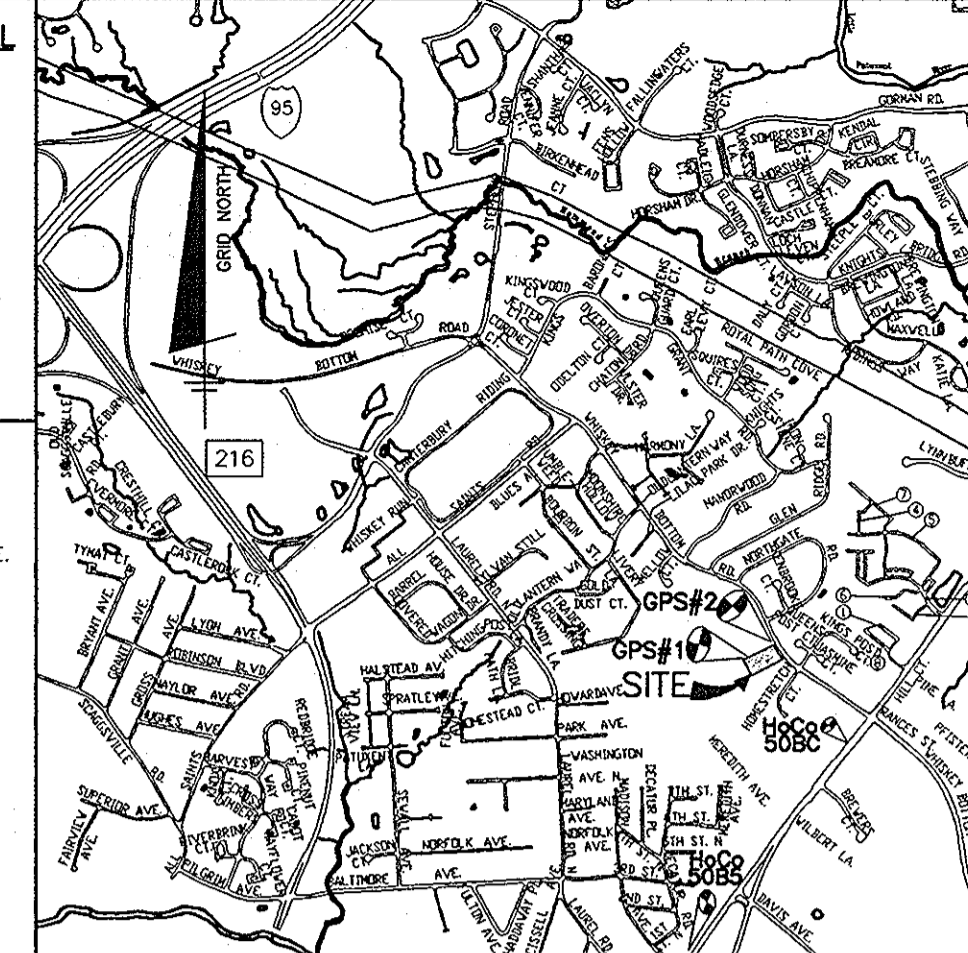
LOTS 2 THRU 6 AND OPEN SPACE LOTS 1 & 7

FINAL CONSTRUCTION PLANS

LEGEND	
EXISTING CONTOURS	400
PROPOSED CONTOURS	478
SOIL DELINEATION	MCS
EXISTING FOREST LINE	EKB2
PROPOSED WOODS LINE	
PROPERTY BOUNDARY	
EXISTING TREES	
EXISTING TREES TO BE REMOVED	
EXISTING HOUSES	
PROPOSED HOUSES	
PROPOSED PAVEMENT	
FACILITY DRAINAGE AREA	
LIMIT OF DISTURBANCE	
30' PUBLIC WATER, SEWER & UTILITY EASEMENT	
24' PRIVATE ACCESS & DRAINAGE EASEMENT FOR THE BENEFIT OF LOTS 2-7	
10' PUBLIC TREE MAINTENANCE EASEMENT	
15' PRIVATE DRAINAGE EASEMENT	

DOC STORMWATER MANAGEMENT CHART	
LOT NUMBER	MICRO-BIORETENTION M-6 (NUMBER)
LOT 2	1
LOT 3	1
LOT 4	1
LOT 5	1
LOT 6	1

BENCHMARKS NAD'83 HORIZONTAL	
GPS#1 REBAR AND CAP SET NORTH SIDE TO THE REAR OF SUBJECT PROPERTY WITHIN PROPERTY BOUNDARY. N 528709.91 E 1359118.00' ELEVATION: 262.22'	
GPS#2 REBAR AND CAP SET NORTH SIDE TO THE FRONT OF SUBJECT PROPERTY OUTSIDE OF PROPERTY BOUNDARY. N 528570.97 E 1358878.47' ELEVATION: 262.29'	



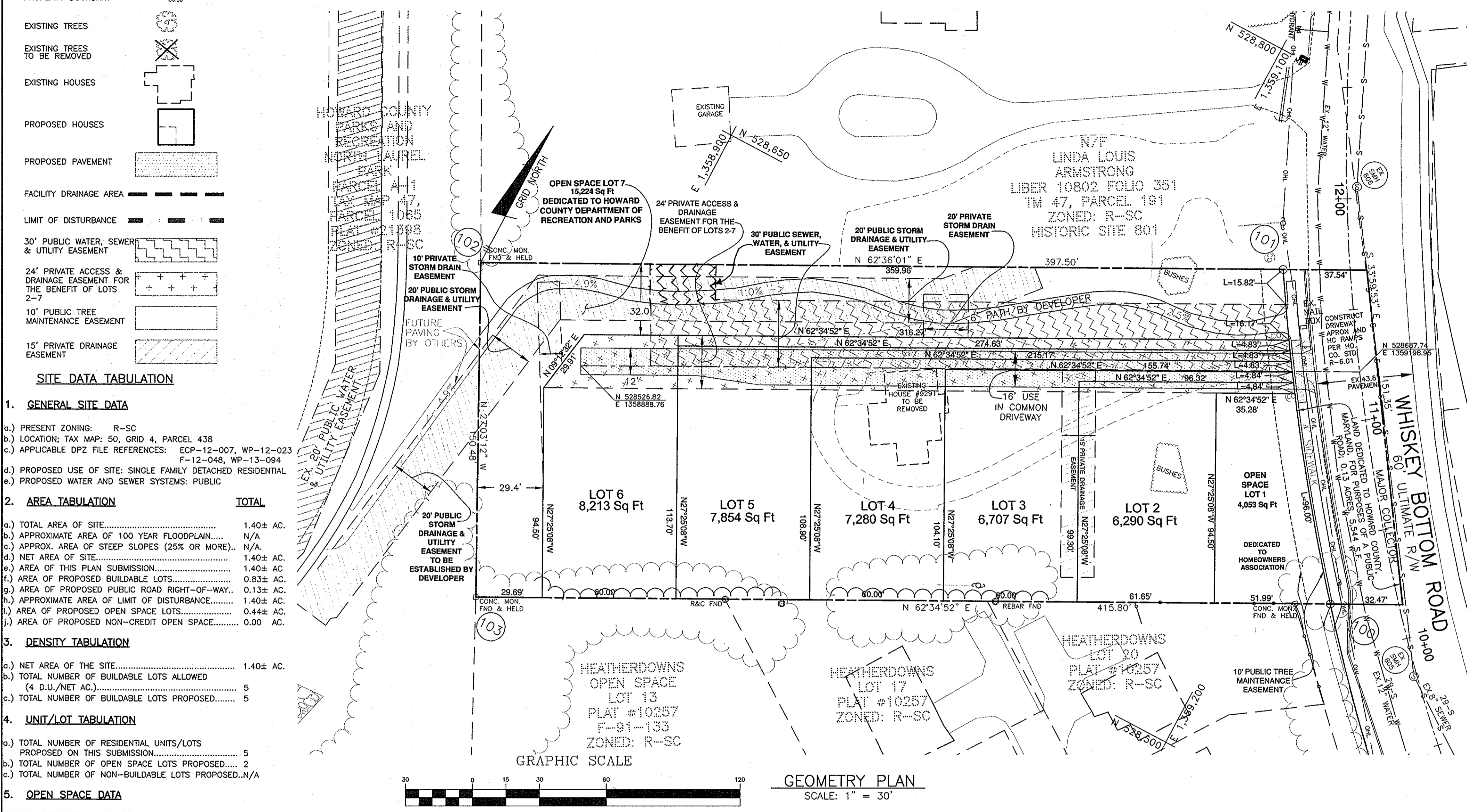
GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- SUBJECT PROPERTY ZONED R-SC PER THE 2-2-04 COMPREHENSIVE ZONING PLAN AND THE COMP LITE ZONING AMENDMENTS EFFECTIVE 7-28-06.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING /CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY WES UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK IS DONE.
- IF APPLICABLE, TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL NO 45-2003, EFFECTIVE 10-02-03 AND THE ZONING REGULATIONS AMENDED BY COUNCIL BILL 75-2003. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION, OR BUILDING/GRADING PERMIT.
- PROJECT BOUNDARY AND TOPOGRAPHY WITHIN THE SUBDIVISION AREA ARE BASED ON FIELD RUN BOUNDARY SURVEY AND TOPO PERFORMED BY BENCHMARK ENGINEERING INC. DATED JULY, 2011.
- EXISTING OFFSITE TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY GIS.
- THE COORDINATES SHOWN HEREON ARE BASED UPON GLOBAL POSITIONING SYSTEM COORDINATES WHICH ARE BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. GPS#1 AND GPS#2 AS DEFINED ON THIS SHEET WERE USED FOR THIS PROJECT.
- PREVIOUS DPZ SUBMISSIONS: EOP-12-007 APPROVED SEPTEMBER 14, 2011, WP-12-023 (VOIDED), F-12-048 (VOIDED)-WITHDRAWN MARCH 5, 2012, WP-13-094.
- NO WETLANDS, STREAMS, FLOODPLAINS, FOREST, FOREST CONSERVATION EASEMENTS, STEEP SLOPES OR ENVIRONMENTAL BUFFERS ARE LOCATED WITHIN THIS SITE. A CERTIFICATION LETTER TO THIS EFFECT DATED AUGUST 15, 2011 BY ECO-SCIENCE PROFESSIONALS, INC. HAS BEEN PROVIDED.
- PERIMETER LANDSCAPING SHALL BE PROVIDED AS SHOWN ON THE LANDSCAPE PLAN OF THE FINAL CONSTRUCTION DRAWINGS FOR THIS FINAL PLAN IN ACCORDANCE WITH SECTION 16.124 OF THE LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF \$10,350 FOR 20 SHADE TREES, 29 EVERGREEN TREES SHALL BE PROVIDED WITHIN THE DEVELOPER'S AGREEMENT UNDER THIS FINAL PLAN.
- A SIMPLIFIED FOREST STAND DELINEATION WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC., AUGUST 2011.
- TO THE BEST OF OUR KNOWLEDGE THERE ARE NO CEMETERIES LOCATED ON THIS SITE.
- A NOISE STUDY IS NOT REQUIRED FOR THIS DEVELOPMENT.
- WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE.
- PUBLIC WATER AND SEWERAGE ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.
- THE FOREST CONSERVATION ACT OBLIGATION FOR THIS PROJECT WILL BE MET BY PAYMENT OF FEE-IN-LIEU IN THE AMOUNT OF \$6,861 FOR AN OBLIGATION OF 0.21 ACRES. (9148 S.F. X \$0.75 = \$6,861)
- STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH THE 2000 MDE DESIGN MANUAL AND HOWARD COUNTY REQUIREMENTS. TREATMENT IS PROVIDED USING ENVIRONMENTAL SITE DESIGN METHODS, INCLUDING MICRO-BIORETENTION FACILITIES AND NON-ROOFTOP DISCONNECT.
- EXISTING UTILITIES ARE BASED ON FIELD LOCATIONS AND RECORD DRAWINGS.
- NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.
- WP-12-023 WAS SUBMITTED TO REQUEST CREDIT FOR OPEN SPACE AREA WHICH DOES NOT MEET THE 35' MINIMUM WIDTH, AND WAS VOIDED WITH F-12-048.
- WATER AND SEWER SERVICE SHALL BE PERMITTED TO BE CONSTRUCTED OR PLACED WITHIN THE PUBLIC WATER, SEWER AND UTILITY EASEMENTS THAT WILL IMPROVE OR HINDER ACCESS TO THE PUBLIC WATER AND SEWER MAINS. IMPROVEMENTS SUCH AS AIR CONDITONING UNITS, DECKS, FENCING, FOUNDATION PLANTINGS AND TREES SHALL NOT BE PLACED WITHIN THE EASEMENTS.
- A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-2430 FOR DETAILS AND COST ESTIMATE.
- APPROVAL OF A SITE DEVELOPMENT PLAN IS REQUIRED FOR THE DEVELOPMENT OF ALL RESIDENTIAL LOTS WITHIN THIS SUBDIVISION PRIOR TO ISSUANCE OF ANY GRADING OR BUILDING PERMITS FOR NEW HOUSE CONSTRUCTION IN ACCORDANCE WITH SECTION 16.155 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- LAND DEDICATED TO HOWARD COUNTY, MARYLAND FOR PURPOSES OF A PUBLIC ROAD (0.13 ACRES, 5,544 SQUARE FEET).
- THE EXISTING DWELLING ON LOT 4 WAS CONSTRUCTED CIRCA 1952, AND SHALL BE REMOVED PRIOR TO REGRADATION OF THE PLAT.
- ALL TRASH AND RECYCLABLES COLLECTION WILL BE AT WHISKEY BOTTOM ROAD, WITHIN 5' OF THE PUBLIC RIGHT OF WAY.
- 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' (16' SERVING MORE THAN ONE RESIDENCE)
 - SURFACE - 7" OF COMPACT CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN.)
 - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM 45' TURNING RADII.
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (425 LOADING).
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY.
 - STRUCTURE CLEARANCES - MINIMUM 12 FEET.
 - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- WP-13-094 WAS APPROVED JANUARY 16, 2013, WAIVING SECTION 16.121(c)(3) TO ALLOW CREDIT FOR OPEN SPACE LAND LESS THAN 35' IN WIDTH, AND SECTION 16.144(b) AND 16.145 TO WAIVE THE REQUIREMENT OF SKETCH OR PRELIMINARY EQUIVALENT SKETCH PLANS. THE APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
 - THE FINAL PLAN MUST BE SUBMITTED TO DPZ ON OR BEFORE MAY 16, 2013.
 - SECTION 16.121(c)(3)(ii) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS CONTAINS SEVERAL ITEMS THAT ARE NOT PERMITTED TO BE CREDITED TOWARD THE REQUIRED OPEN SPACE OBLIGATION. THIS WAIVER APPROVAL IS TO ALLOW OPEN SPACE CREDIT FOR NARROW STRIPS LESS THAN 35 FEET WIDE FOR OPEN SPACE LOT 7 ONLY. NOT OTHER REQUESTS ARE BEING ENDORSED BY THIS WAIVER APPROVAL.
 - THE PROPOSED OPEN SPACE LOT SHALL ACCOMMODATE A PATHWAY THAT MEETS THE DEPARTMENT OF RECREATION AND PARKS STANDARDS, WHILE INCORPORATING A SITE DESIGN THAT PROVIDES ADEQUATE STORMWATER MANAGEMENT AND LANDSCAPING PER THE COUNTY CODE AND LANDSCAPE MANUAL.
 - THE PROPOSAL MUST BE IN COMPLIANCE WITH THE DEPARTMENT OF RECREATION AND PARKS COMMENTS DATED SEPTEMBER 21, 2011. THE APPLICANT SHALL CONTINUE TO COOPERATE WITH THE DEPARTMENT OF RECREATION AND PARKS TO ENSURE THE PATHWAY COMES INTO FRUITION AND THE OPEN SPACE WITH THE PATHWAY DEDICATED TO THE COUNTY.
- ON-LOT STORMWATER FACILITIES ARE SUBJECT TO DECLARATIONS OF COVENANTS, WHICH SHALL BE RECORDED IN THE HOWARD COUNTY LAND RECORDS AT THE TIME OF PLAT RECORDATION. ALL ASSOCIATED DECLARATIONS OF COVENANTS SHALL BE AMENDED, AS NEEDED, BASED ON ANY FUTURE DESIGN.
- THIS PROJECT WAS PRESENTED TO THE HISTORIC DISTRICT COMMISSION ON MARCH 7, 2013. A TYPE C LANDSCAPE SCREENING ALONG THE HOWARD COUNTY, MARYLAND, AND MAINTAINED BY THE DEPARTMENT OF RECREATION AND PARKS. OPEN SPACE LOT 7 SHALL BE DEDICATED TO NORTH PROPERTY.
- A RIGHT OF ENTRY AGREEMENT MUST BE OBTAINED FROM HOWARD COUNTY REAL ESTATE SERVICES PRIOR TO PERFORMING CONSTRUCTION ACTIVITIES WITHIN THE EXISTING PARKLAND.
- THE DEPARTMENT OF RECREATION AND PARKS (410-627-3762) MUST APPROVE STAKEOUT LOCATIONS OF PARKLAND PATH AND PLANTINGS IN THE FIELD BEFORE CONSTRUCTION AND INSTALLATION. DPR SHALL BE NOTIFIED 7 DAYS PRIOR TO THE INSTALLATION OF THE PLANTS WITHIN OPEN SPACE LOT 7 WITH THE DATE AND TIME OF PLANTING.

TRAVERSE POINT CHART (NAD '83)			
No.	NORTH	EAST	
1	528,709.906	1,359,118.020	
2	528,570.974	1,358,978.467	
3	528,510.040	1,358,978.048	
4	528,531.754	1,359,175.720	

BOUNDARY COORDINATE CHART (NAD '83)			
No.	NORTH	EAST	
100	528,588.839	1,359,236.917	
101	528,712.478	1,359,147.078	
102	528,546.836	1,358,827.487	
103	528,412.810	1,358,895.958	
104	528,729.751	1,359,180.371	
105	528,604.282	1,359,264.968	

MINIMUM LOT SIZE CHART			
LOT NO.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
2	6,290	168	6,122
3	6,707	461	6,246
4	7,280	746	6,534
5	7,854	1,032	6,822
6	8,213	1,317	6,896



SITE DATA TABULATION	
1. GENERAL SITE DATA	
a.) PRESENT ZONING:	R-SC
b.) LOCATION; TAX MAP:	50, GRID 4, PARCEL 438
c.) APPLICABLE DPZ FILE REFERENCES:	EOP-12-007, WP-12-023, F-12-048, WP-13-094
d.) PROPOSED USE OF SITE:	SINGLE FAMILY DETACHED RESIDENTIAL
e.) PROPOSED WATER AND SEWER SYSTEMS:	PUBLIC
2. AREA TABULATION	
a.) TOTAL AREA OF SITE:	1.40± AC.
b.) APPROXIMATE AREA OF 100 YEAR FLOODPLAIN:	N/A
c.) APPROX. AREA OF STEEP SLOPES (25% OR MORE):	N/A
d.) NET AREA OF SITE:	1.40± AC.
e.) AREA OF THIS PLAN SUBMISSION:	1.40± AC.
f.) AREA OF PROPOSED BUILDABLE LOTS:	0.83± AC.
g.) AREA OF PROPOSED PUBLIC ROAD RIGHT-OF-WAY:	0.13± AC.
h.) APPROXIMATE AREA OF LIMIT OF DISTURBANCE:	1.01± AC.
i.) AREA OF PROPOSED OPEN SPACE LOTS:	0.44± AC.
j.) AREA OF PROPOSED NON-CREDIT OPEN SPACE:	0.00 AC.
3. DENSITY TABULATION	
a.) NET AREA OF THE SITE:	1.40± AC.
b.) TOTAL NUMBER OF BUILDABLE LOTS ALLOWED:	5
c.) (4 D.U./NET AC.):	5
d.) TOTAL NUMBER OF BUILDABLE LOTS PROPOSED:	5
4. UNIT/LOT TABULATION	
a.) TOTAL NUMBER OF RESIDENTIAL UNITS/LOTS PROPOSED ON THIS SUBMISSION:	5
b.) TOTAL NUMBER OF OPEN SPACE LOTS PROPOSED:	2
c.) TOTAL NUMBER OF NON-BUILDABLE LOTS PROPOSED:	N/A
5. OPEN SPACE DATA	
MINIMUM RESIDENTIAL LOT SIZE:	6,000 S.F.
OPEN SPACE REQUIRED (25% OF 1.40 AC.):	0.35 AC.±
AREA OF PROPOSED OPEN SPACE LOTS:	0.44 AC.±
AREA OF PROPOSED NON-CREDITED O.S. LOTS:	*SEE NOTE #31
AREA OF CREDITED OPEN SPACE PROVIDED:	0.44 AC.±

ENGINEER'S CERTIFICATE
I HEREBY CERTIFY THAT THIS PLAN FOR SOIL EROSION AND EROSION 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.
Michael J. ... 9-23-13
ENGINEER

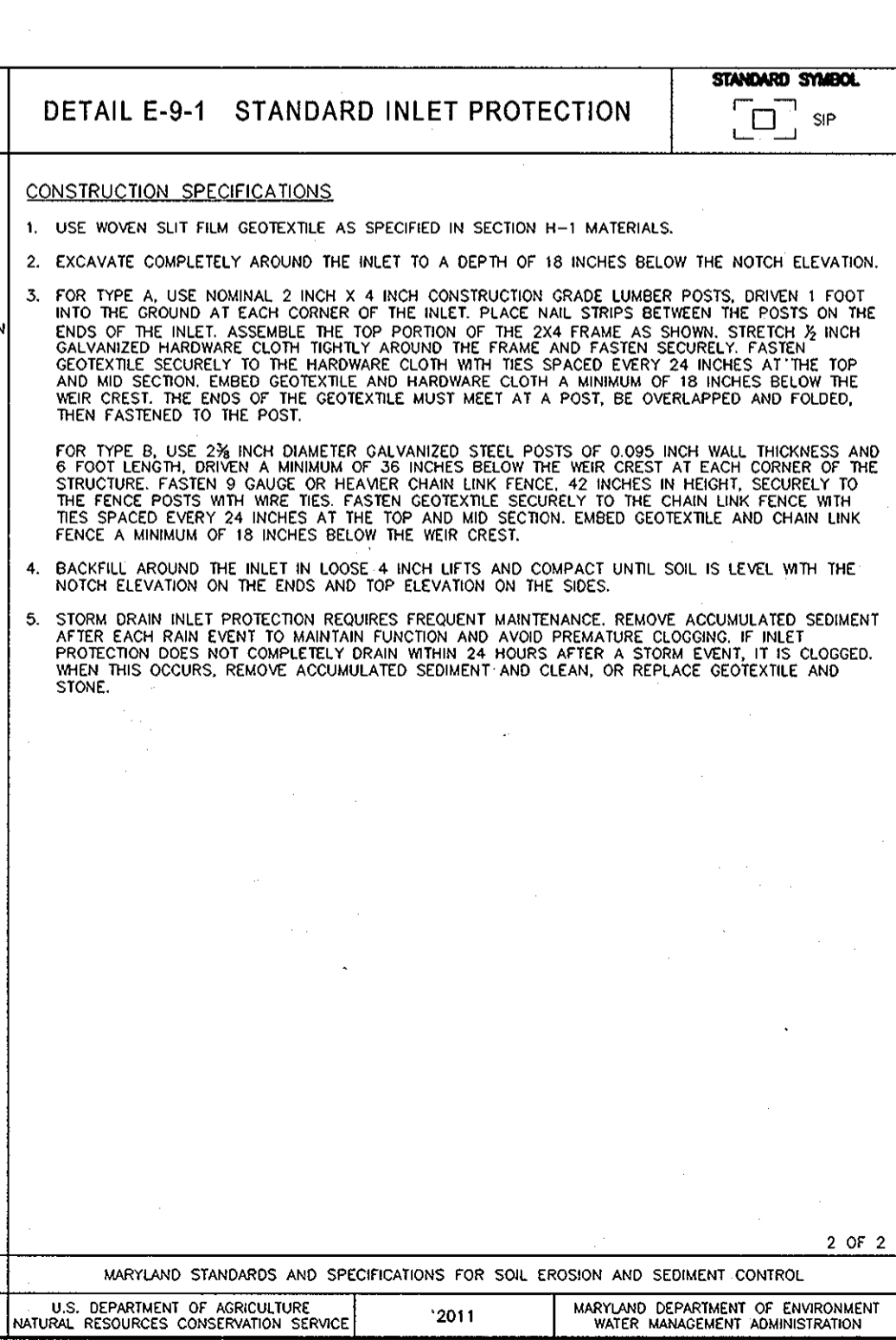
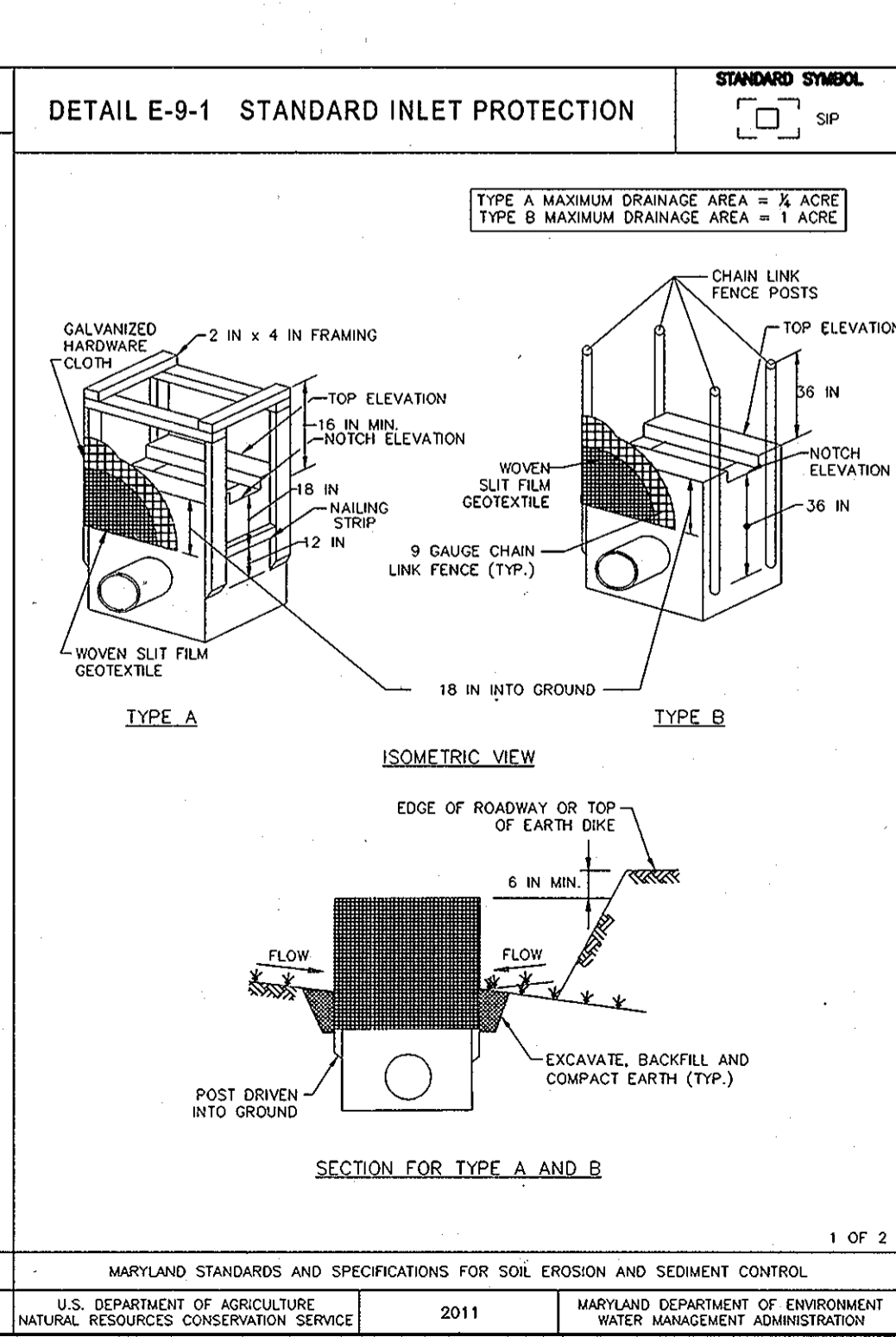
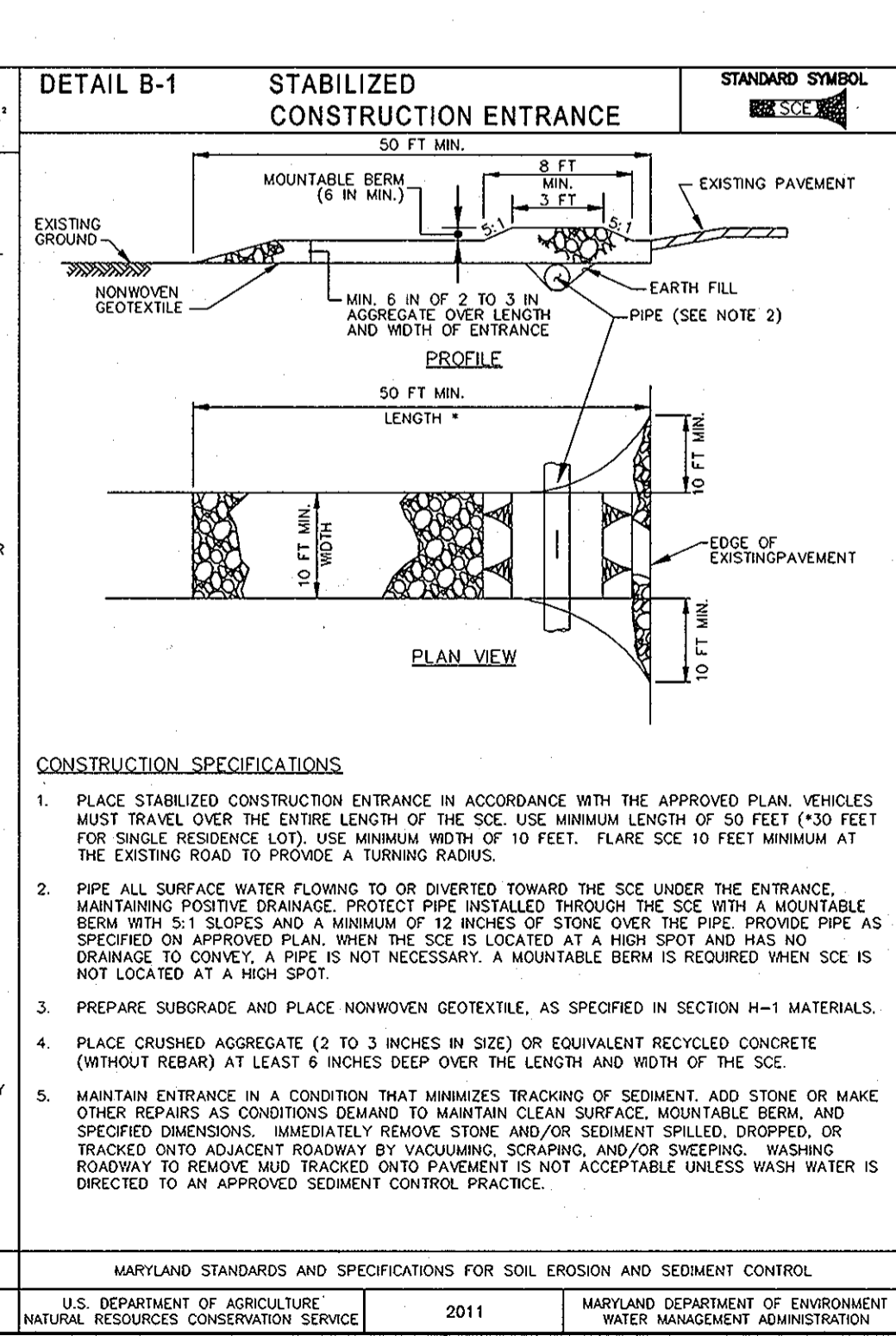
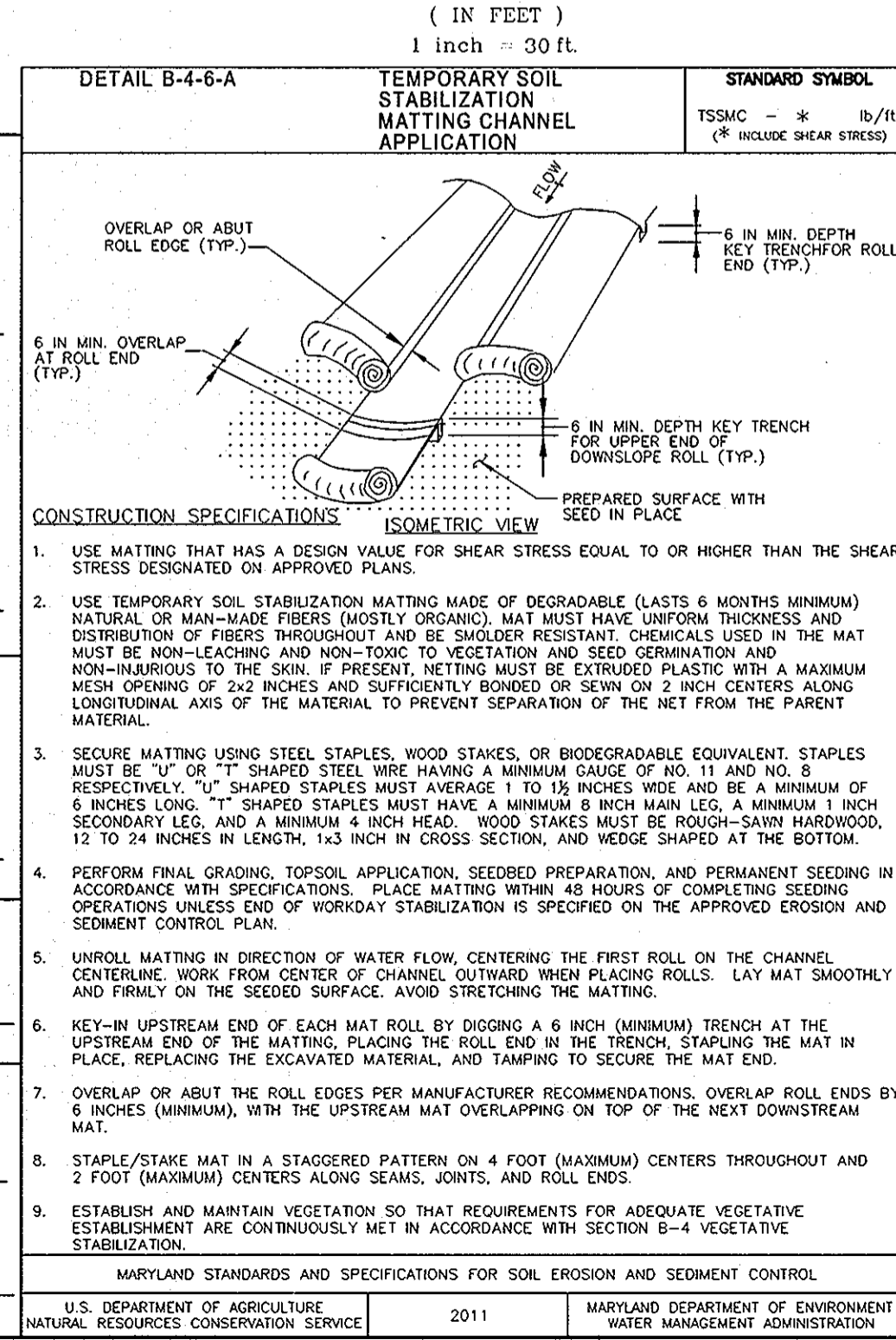
DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT FOR SOIL EROSION AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SOIL EROSION AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
R. D. By ... 9/24/13
DEVELOPER

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Robertson 9/26/13
HOWARD SCD

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Michelle ... 10-24-13
CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Victor ... 11-13-13
CHIEF, DIVISION OF LAND DEVELOPMENT

Paul ... 10-31-13
CHIEF, DEVELOPMENT ENGINEERING DIVISION



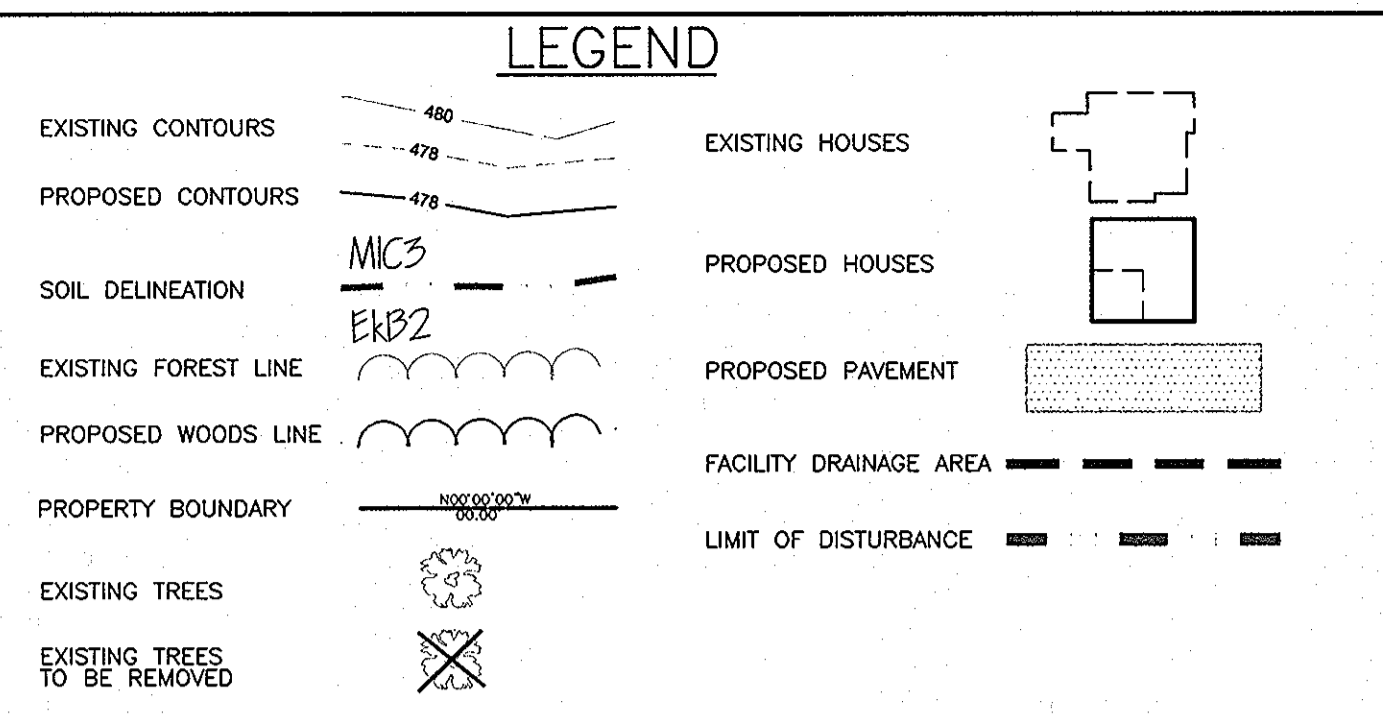
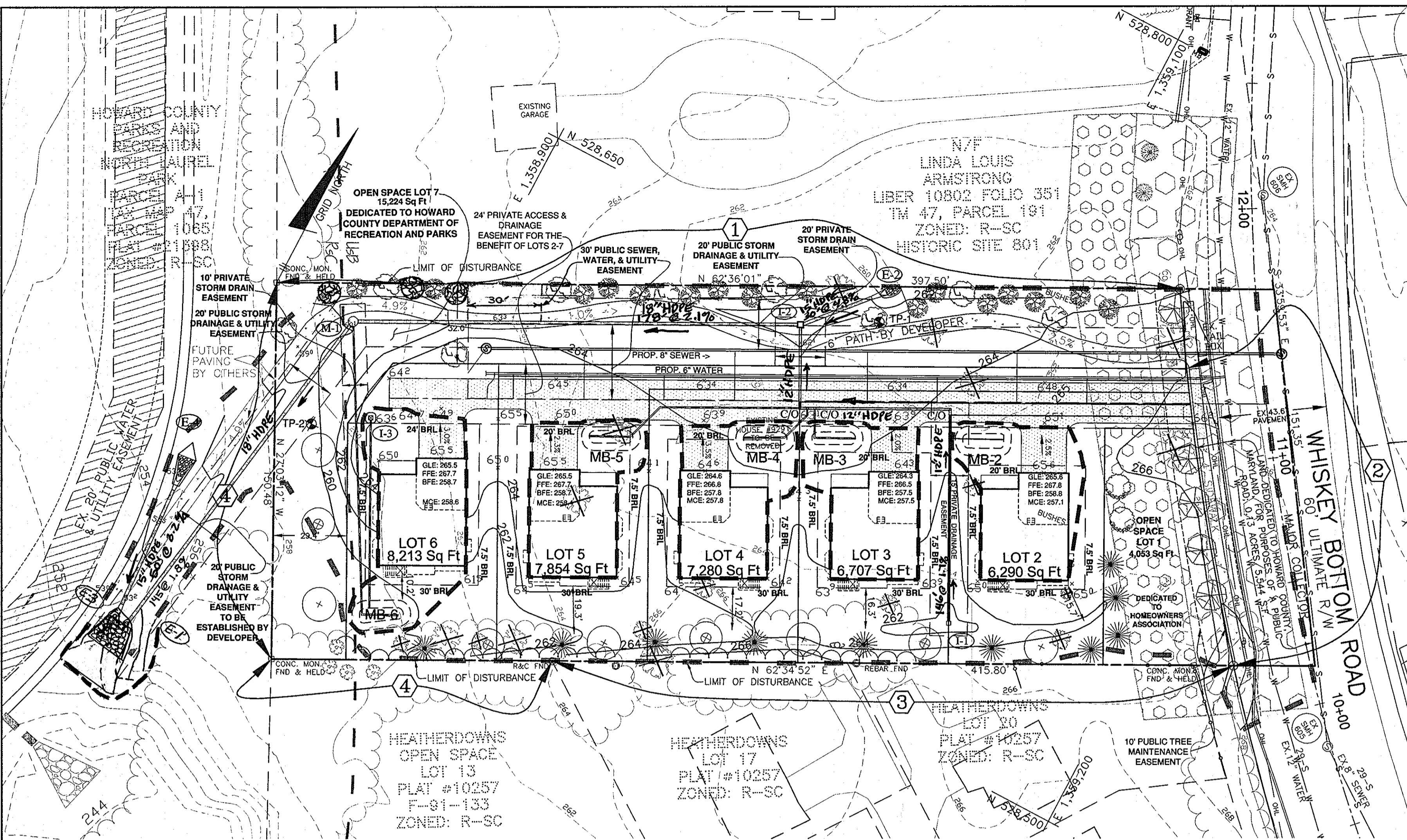
SHEET INDEX	
NO.	DESCRIPTION
1	GEOMETRY PLAN AND SEDIMENT CONTROL DETAILS
2	STORMWATER MANAGEMENT, MAINTENANCE OF TRAFFIC, LANDSCAPE PLAN AND DETAILS
3	STORM DRAIN DRAINAGE AREA MAP AND PROFILES AND WHISKEY BOTTOM ROAD CROSS SECTIONS
4	SEDIMENT CONTROL PLAN, NOTES AND DETAILS

BENCHMARK ENGINEERING, INC.
ENGINEERS & LAND SURVEYORS & PLANNERS
6480 BALTIMORE NATIONAL Pkve & Suite 315A ELKLOFT CITY, MARYLAND 21043
(P) 410-465-8103 (F) 410-465-6644
75 THOMAS JOHNSON DRIVE SUITE A FREDERICK, MARYLAND 21702
301-710-5688
WWW.BE-CIVILENGINEERING.COM

Professional Certification: I am a duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 28736, Expiration Date: 12/31/2015.

PARKSIDE ESTATES
LOTS 2-6 & OPEN SPACE LOTS 1 & 7
TAX MAP: 50 GRID: 4 PARCEL: 438
ZONED: R-SC
ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

GEOMETRY PLAN AND SEDIMENT CONTROL DETAILS
DATE: JANUARY 2013
BEI PROJECT NO. 2384-C
DESIGN: AAM DRAWN: AAM SCALE: AS SHOWN SHEET 1 OF 4



Practices and Sizing Pe: 1.20 inches

Driveway - for overcompensation	Treated by Micro-Bioretenion
Total Drainage Area: 5104 s.f.	
Impervious Area: 5104 s.f.	
Rv = 0.950	
ESDV = 161.6 c.f.	
75% Req'd Storage: 121	

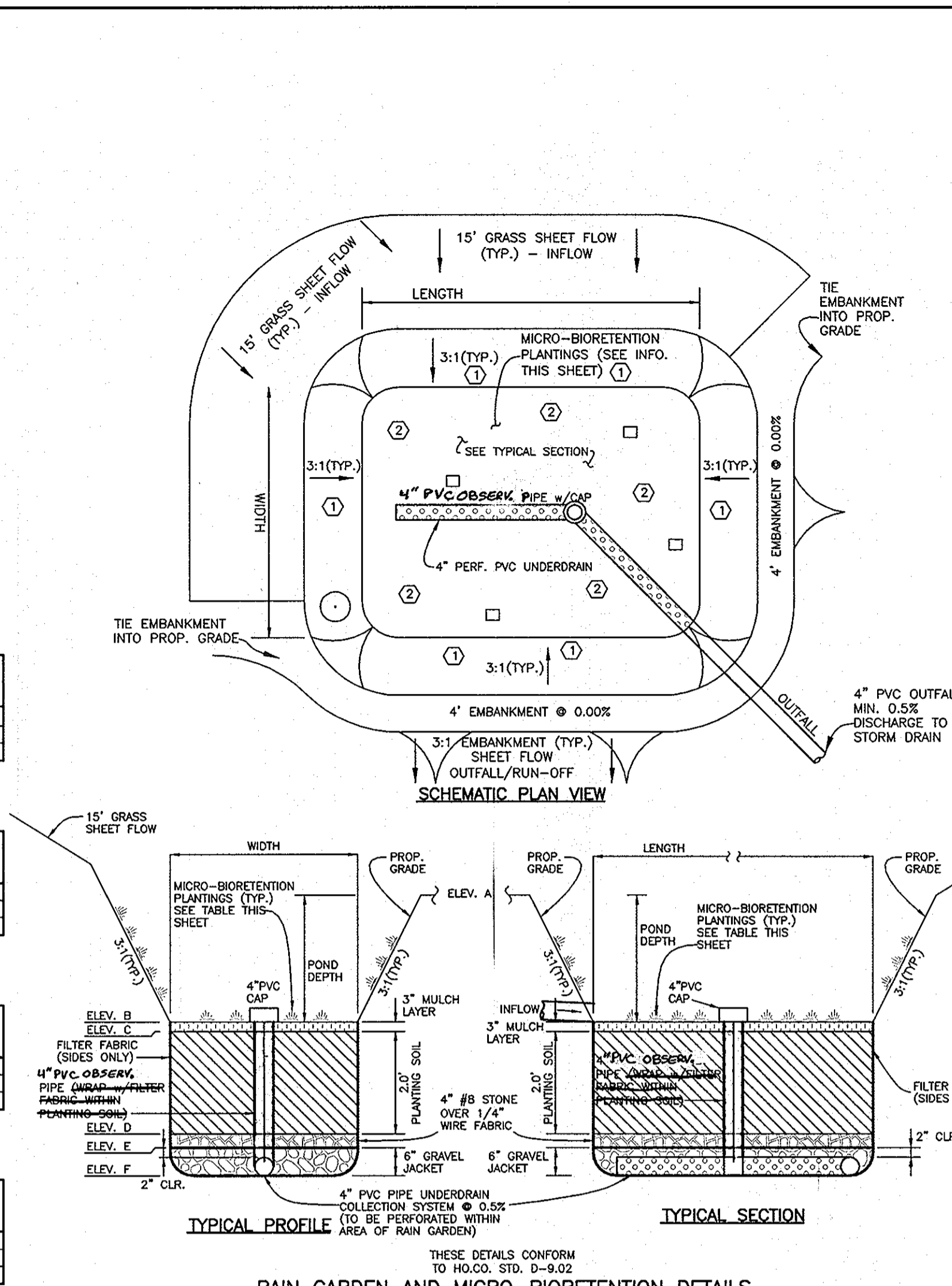
Drainage Area MB-2	Treated by Micro-Bioretenion
Total Drainage Area: 2580 s.f.	
Impervious Area: 1813 s.f.	
Rv = 0.682	
ESDV = 176.1 c.f.	
75% Req'd Storage: 132	
Plus 1/5 of driveway storage: 156	

Drainage Area MB-3	Treated by Micro-Bioretenion
Total Drainage Area: 2441 s.f.	
Impervious Area: 1902 s.f.	
Rv = 0.714	
ESDV = 174.4 c.f.	
75% Req'd Storage: 131	
Plus 1/5 of driveway storage: 155	

Drainage Area MB-4	Treated by Micro-Bioretenion
Total Drainage Area: 2480 s.f.	
Impervious Area: 1909 s.f.	
Rv = 0.706	
ESDV = 175.2 c.f.	
75% Req'd Storage: 131	
Plus 1/5 of driveway storage: 156	

Drainage Area MB-5	Treated by Micro-Bioretenion
Total Drainage Area: 2377 s.f.	
Impervious Area: 1828 s.f.	
Rv = 0.742	
ESDV = 176.4 c.f.	
75% Req'd Storage: 132	
Plus 1/5 of driveway storage: 157	

Drainage Area MB-6	Treated by Micro-Bioretenion
Total Drainage Area: 3066 s.f.	
Impervious Area: 1858 s.f.	
Rv = 0.616	
ESDV = 182.6 c.f.	
75% Req'd Storage: 137	
Plus 1/5 of driveway storage: 161	



SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO:	HISTORIC PROPERTY	ROAD	EXISTING HOMES	PERIMETER	TOTALS
LANDSCAPE TYPE		1 C	2 B	3 B	4 A	
LINEAR FEET OF PERIMETER		360'	120'	272'	262'	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)		NO	NO	NO	NO	
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)		NO	NO	NO	NO	
NUMBER OF PLANTS REQUIRED						
SHADE TREES	9	2	5	4	20	
EVERGREEN TREES	18	3	7	-	28	
OTHER TREES (2-1 SUBSTITUTED)	-	-	-	-	-	
SHRUBS	-	-	-	-	-	
NUMBER OF PLANTS PROVIDED						
SHADE TREES	9	2	5	4	20	
EVERGREEN TREES	19	3	6	1*	29	
OTHER TREES (2-1 SUBSTITUTED)	-	-	-	-	-	
SHRUBS (10-1 SUBSTITUTED)	-	-	-	-	-	

PERIMETER LANDSCAPE PLANTING LIST

SYMBOL	QUANTITY	NAME	REMARKS
●	5	PLANTANUS ACERFOJA 'BLOODGOOD' (Bloodgood London Plane)	2 1/2" MIN. CAL. FULL HEAD
⊙	4	QUERCUS COCCINEA SCARLET OAK	2 1/2" MIN. CAL. FULL HEAD
⊙	10	CEDRUS DEODARA CEDAR CEDAR	6"-8" H.L. UNSHEARED
⊙	2	PRUNUS SERRULATA KWANZAN KWANZAN CHERRY	1 1/2" MIN. CAL. FULL HEAD
⊙	19	ILLEX 'NELLIE R. STEVENS' NELLIE STEVENS HOLLY	5"-6" H.L.
⊙	9	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE	2 1/2" MIN. CAL. FULL HEAD



FOREST CONSERVATION WORKSHEET Version 1.0

Project: 9291 Whiskey Bottom Road Date: August 9, 2011

NET TRACT AREA	Acres
A. Total tract area	1.4
B. Area within 100 Year Floodplain	0.00
C. Area of site included in overhead transmission line	0
D. Net Tract Area	1.4

LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)

Category	Percentage	0.15	0.21
E. Afforestation Threshold	(percentage)	0.15	0.21
F. Conservation Threshold	(percentage)	0.20	0.28

EXISTING FOREST COVER:

Category	Value
G. Existing forest cover (including floodplain)	0
H. Area of forest above afforestation threshold	0
I. Area of forest above conservation threshold	0

BREAK EVEN POINT:

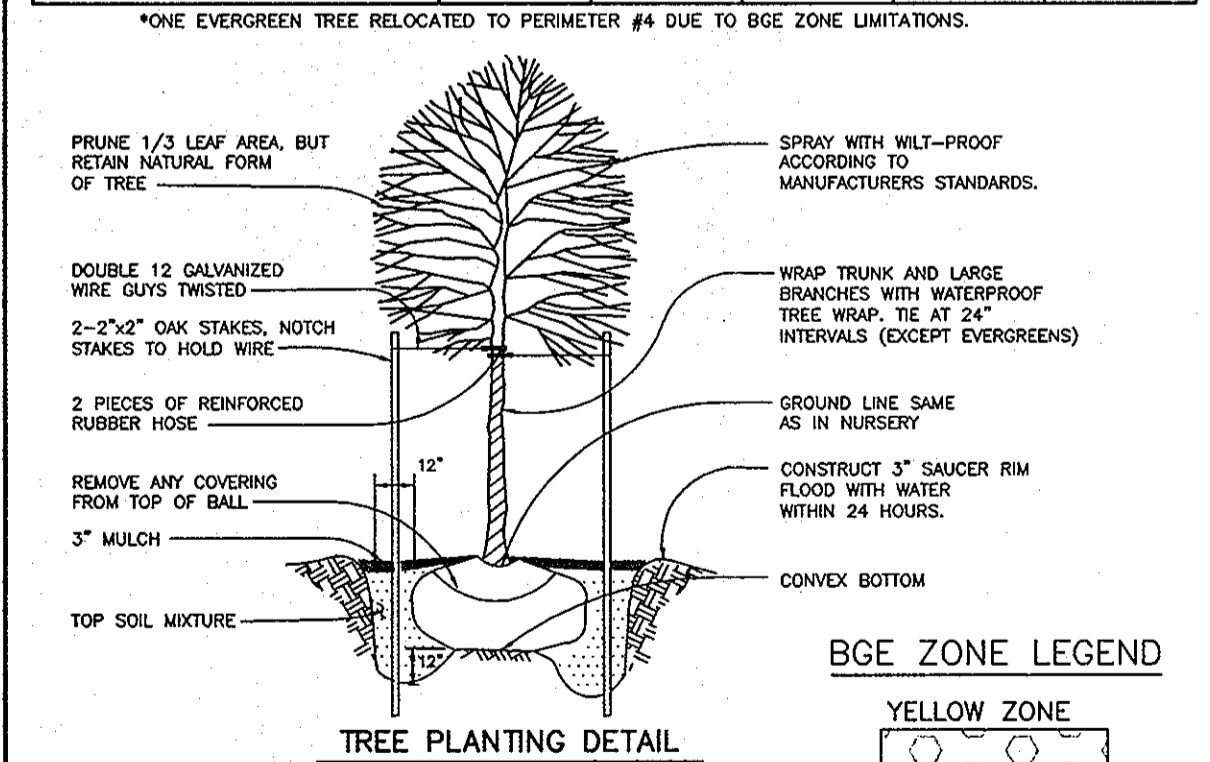
Category	Value
J. Forest retention above threshold with no mitigation	--
K. Clearing permitted without mitigation	Break-Even Point

PROPOSED FOREST CLEARING:

Category	Value
L. Total area of forest to be Cleared or Retained Outside FCE	0.0
M. Total area of forest to be Retained in FCE	0.0

PLANTING REQUIREMENTS:

Category	Value
N. Reforestation for clearing above Conservation Threshold	0
P. Reforestation for clearing below Conservation Threshold	0
Q. Credit for retention above conservation threshold	0
R. Total reforestation required	0
S. Total afforestation required	0.21
T. Total reforestation and afforestation required	0.21



STREET TREE CALCULATIONS WHISKEY BOTTOM ROAD

STREET TREES REQUIRED FOR 152 LF OF RIGHT-OF-WAY = 5 TREES REQUIRED
5 TREES PROVIDED

STREET TREE PLANTING LIST

SYMBOL	QUANTITY	NAME	REMARKS
⊙	5	ACER GRiseum 'PAPERBARK MAPLE'	2.5"-3.0" MIN. CAL. FULL HEAD

DEVELOPER'S/BUILDER'S CERTIFICATION

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF NOTICE, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME: *KOB* DATE: *9/24/13*

- LANDSCAPING NOTES**
- PERIMETER LANDSCAPING SHALL BE PROVIDED BY THE PLANTINGS AS SHOWN ON THESE PLANS.
 - TREES MUST BE A MINIMUM OF FOUR (4) FEET FROM ANY STORM DRAIN AND 10 FEET FROM A DRIVEWAY APRON.
 - AT THE TIME OF INSTALLATION, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATIONS.
 - IN THE EDGE GREEN ZONE, ONLY TREES WITH A MATURE HEIGHT OF LESS THAN 25 FEET SHALL BE ALLOWED.
 - IN THE BGE YELLOW ZONE, ONLY TREES WITH A MATURE HEIGHT OF LESS THAN 40 FEET SHALL BE ALLOWED.
 - THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, 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.
 - NO CLEARING OF EXISTING VEGETATION IS PERMITTED WITHIN THE LANDSCAPE EDGE FOR WHICH CREDIT IS BEING TAKEN; HOWEVER, LANDSCAPE MAINTENANCE IS AUTHORIZED.
 - SHOULD ANY TREE DESIGNATED FOR PRESERVATION, FOR WHICH CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE LANDSCAPE MANUAL.
 - PERIMETER LANDSCAPING SHALL BE PROVIDED AS SHOWN ON THE LANDSCAPE PLAN OF THE FINAL CONSTRUCTION DRAWINGS FOR THIS FINAL PLAN IN ACCORDANCE WITH SECTION 16.124 OF THE LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF \$10,350 FOR 20 SHADE TREES AND 29 EVERGREEN TREES SHALL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT.
 - THE DEPARTMENT OF RECREATION AND PARKS (410-627-9762) MUST APPROVE STAKEOUT LOCATIONS OF PARKLAND PATH AND PLANTINGS IN THE FIELD BEFORE CONSTRUCTION AND INSTALLATION. DPR SHALL BE NOTIFIED 7 DAYS PRIOR TO THE INSTALLATION OF THE PLANTS WITHIN OPEN SPACE LOT 7 WITH THE DATE AND TIME OF PLANTING.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

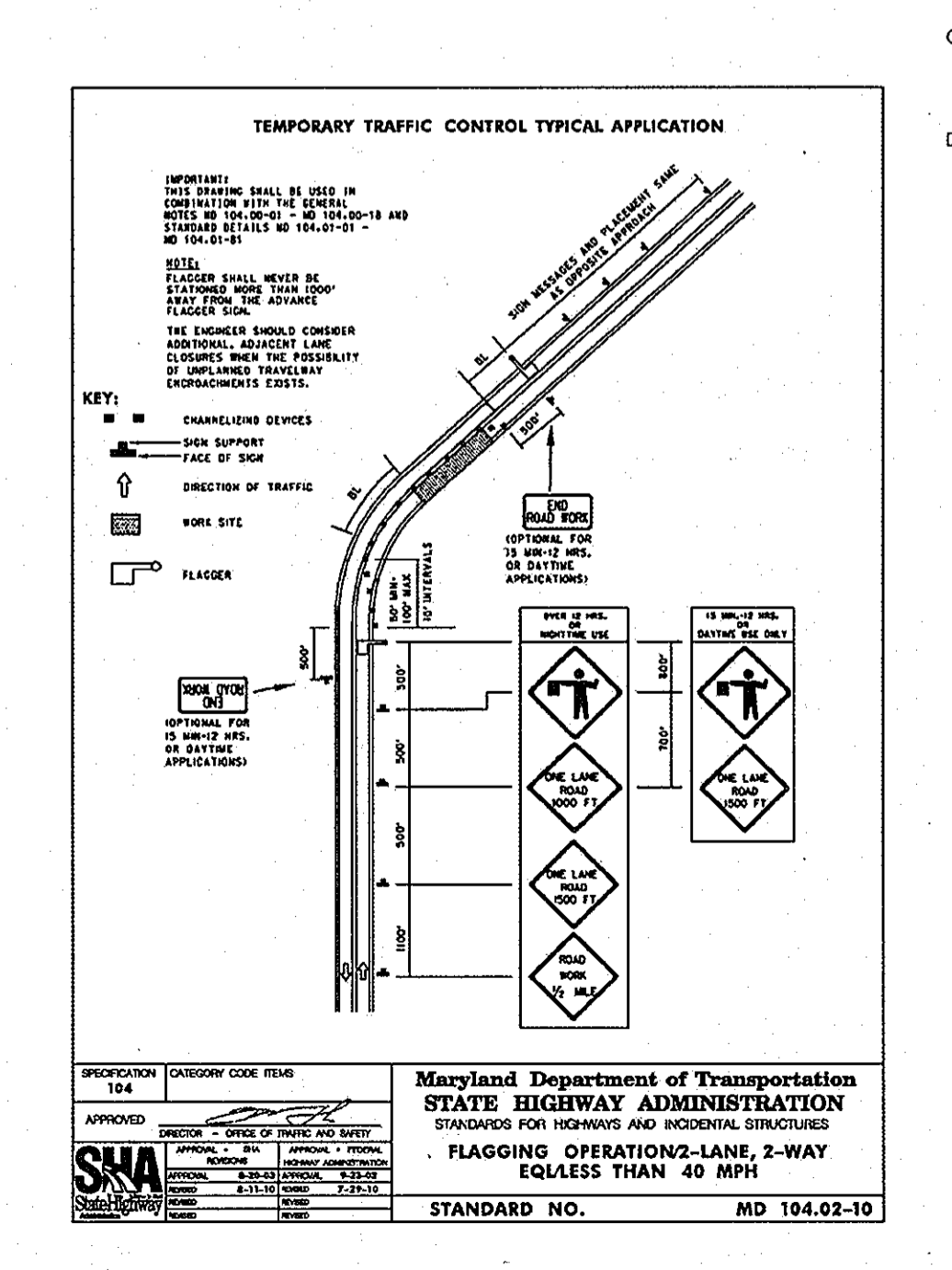
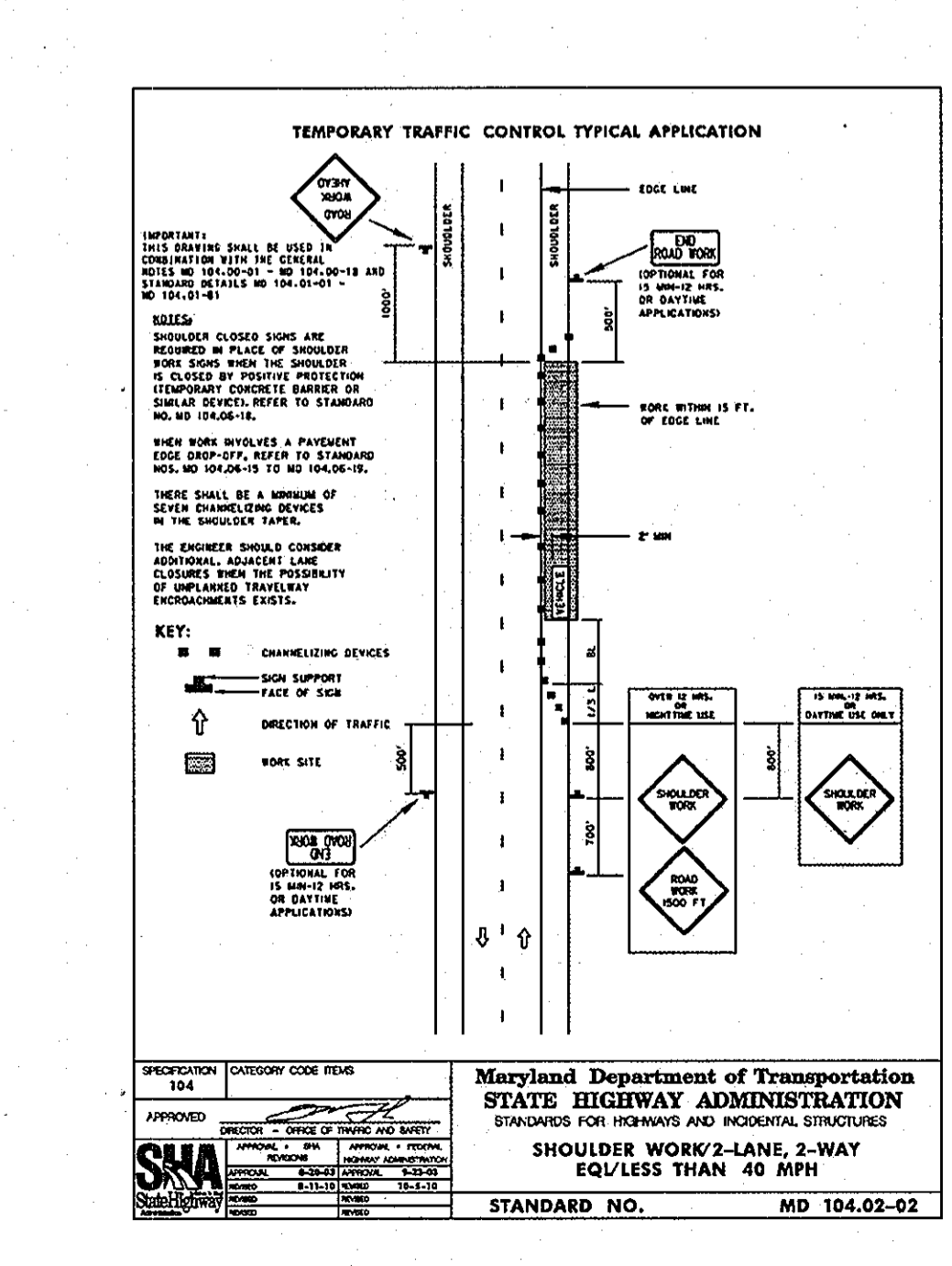
W. R. ... 10-24-13
CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

K. ... 11-13-13
CHIEF, DIVISION OF LAND DEVELOPMENT

Chad ... 10-31-13
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Eco-Science Professionals, Inc.
Consulting Ecologists
710, Box 890 Glen Arden, Maryland 21027
Telephone: (410) 453-3488 Fax: (410) 822-3488



MICRO-BIORETENION GEOMETRY (M-6)

LOT	LENGTH	WIDTH	DEPTH	A	B	C	D	E	F
MB-2	17.5'	4.5'	1.0'	263.8	262.8	260.5	260.2	259.7	
MB-3	17.5'	4.5'	1.0'	263.0	262.0	261.7	259.7	259.4	258.9
MB-4	17.5'	4.5'	1.0'	263.0	262.0	261.7	259.7	259.4	258.9
MB-5	17.5'	4.5'	1.0'	263.8	262.8	262.5	260.5	260.2	259.7
MB-6	17.5'	4.5'	1.0'	259.0	258.0	257.7	255.2	254.9	254.4

- OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENION (M-6)**
- THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A-4.1 AND 2.
 - THE OWNER SHALL PERFORM A PLANT INSPECTION IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
 - THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
 - THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

- MICRO-BIORETENION PLANTING SCHEDULE**
- IRIS VERSICOLOR - IRIS
 - RUBRICKIA SUBTENTOSA - SWEET CONFLOWER
 - LOBELIA CARDINALIS - CARDINAL FLOWER
 - ACER RUBRUM - RED MAPLE

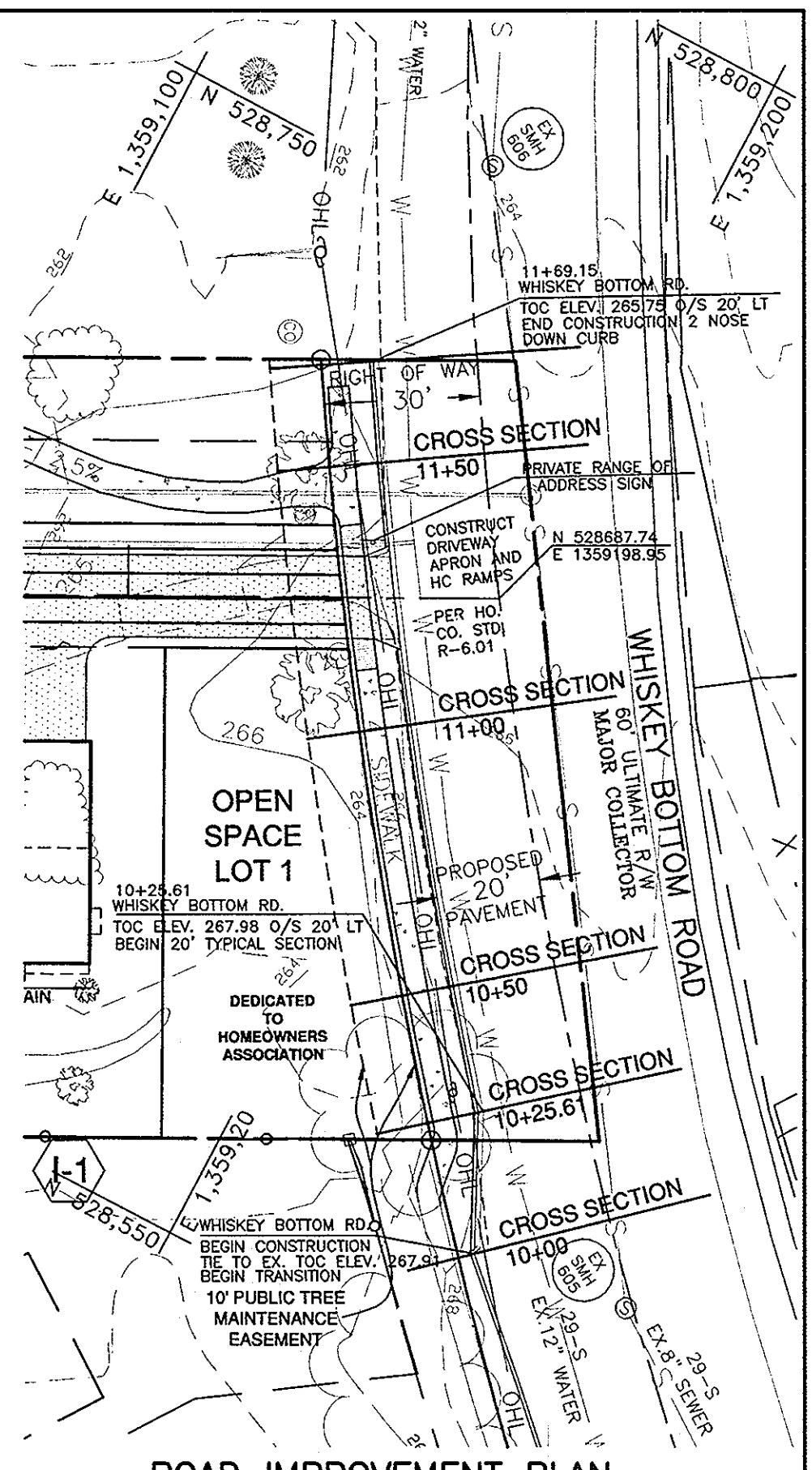
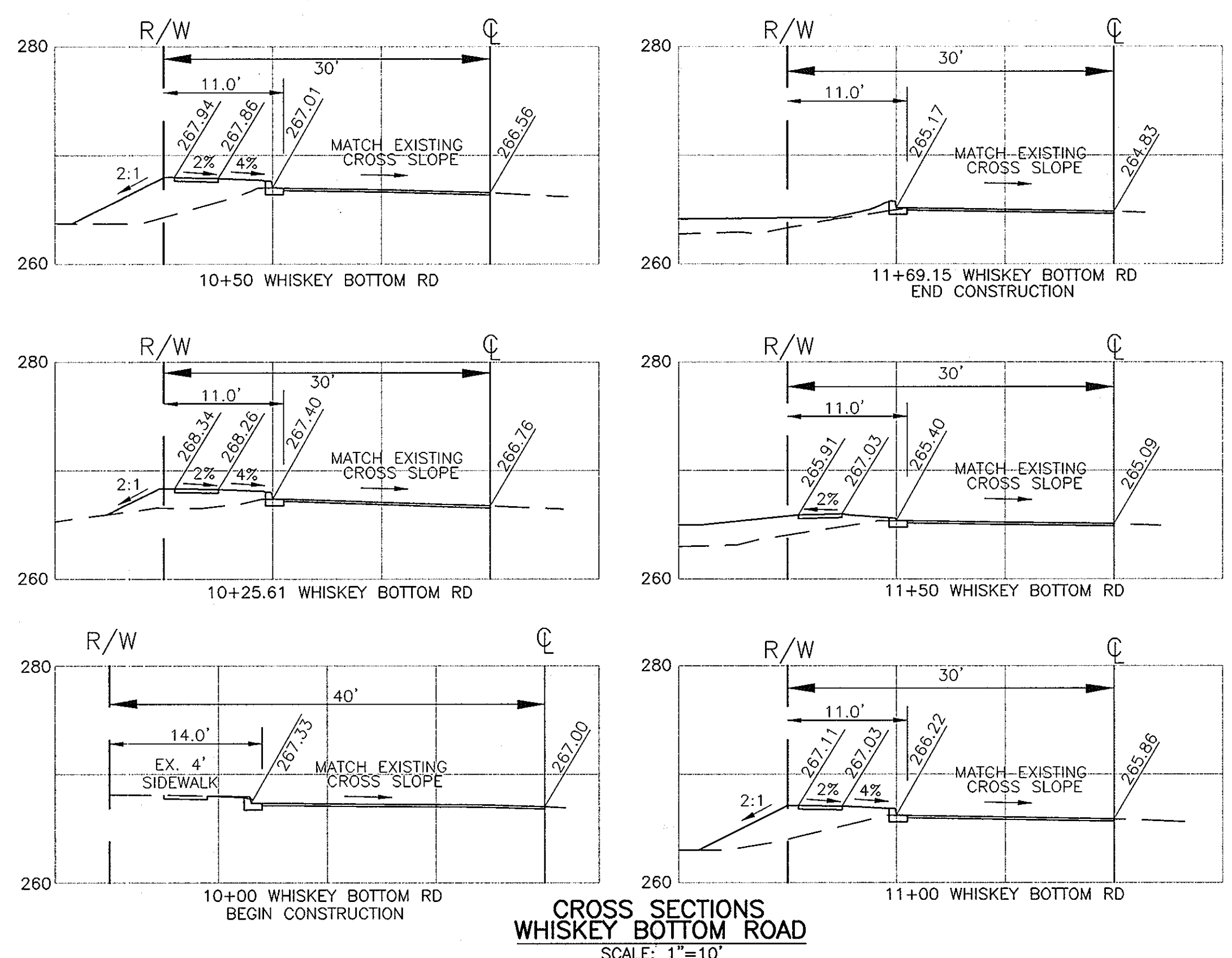
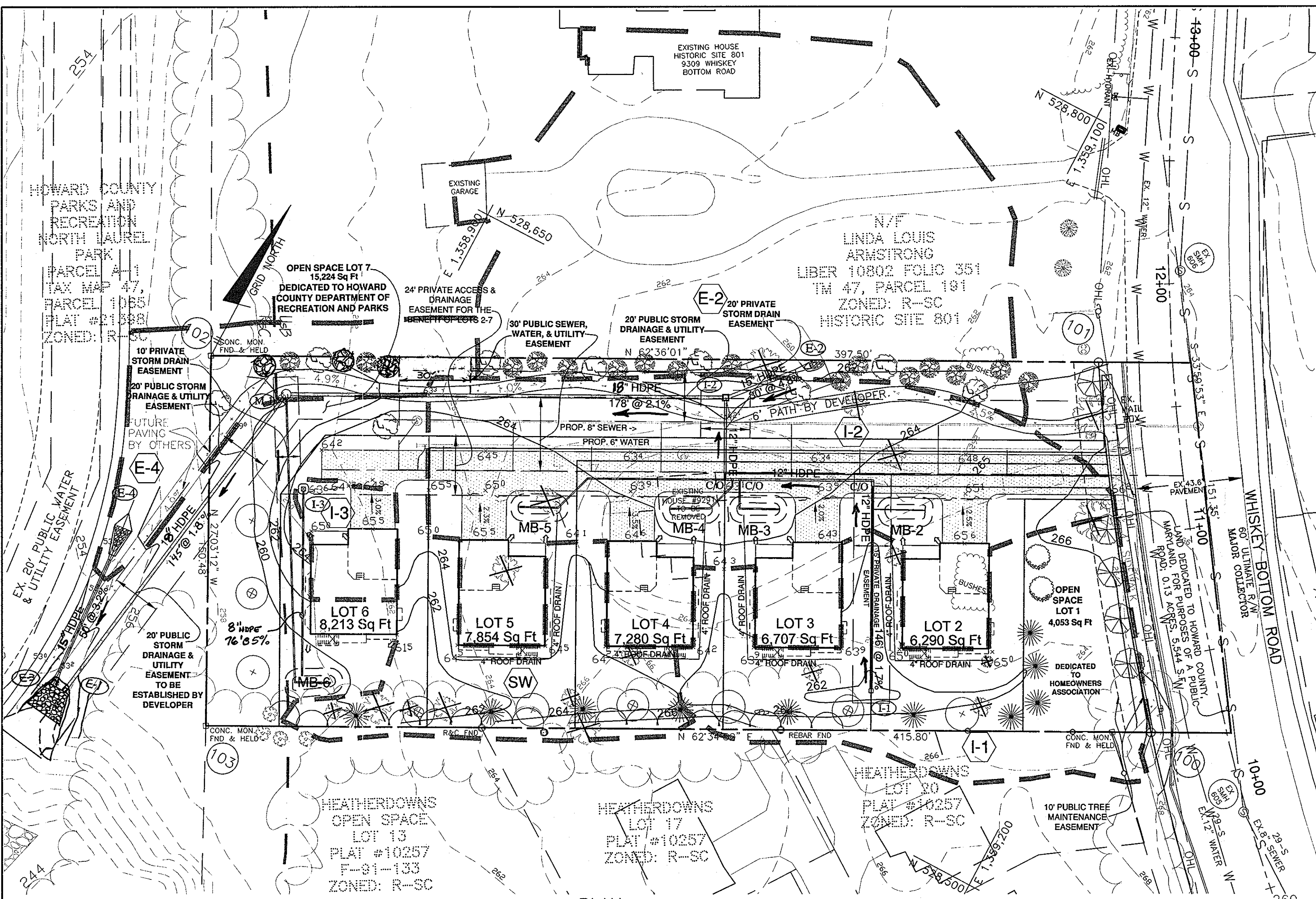
- PLANTING DATA**
- PLANTINGS WITHIN THE PONDING AREA OF THE RAIN GARDEN ARE TO BE OF A MEDIUM TO HIGH WATER TOLERANCE
 - PLANTINGS ALONG THE PERIMETER (BERM) AREA OF THE RAIN GARDEN ARE TO BE OF A LOW TO MEDIUM WATER TOLERANCE
 - AVOID PLANTINGS WITH EXCESSIVE ROOT MASS IN POND AREA OF THE RAIN GARDEN OVER 0.5" PIPE AND UNDERDRAIN.

BENCHMARK ENGINEERING, INC.
ENGINEERS & LAND SURVEYORS & PLANNERS
8480 BALTIMORE NATIONAL PIKE SUITE 315 A ELICOTT CITY, MARYLAND 21043
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75 THOMAS JOHNSON DRIVE SUITE E ABERDEEN, MARYLAND 21702
410-710-5688
WWW.BE-CADLENDIG.COM

PARKSIDE ESTATES
LOTS 2-6 & OPEN SPACE LOTS 1 & 7
TAX MAP: 50 GRID: 4 PARCEL: 438
ZONED: R-SC
ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

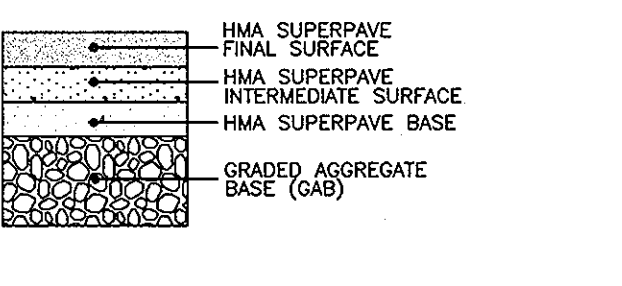
OWNER/DEVELOPER:
CONESTONE HOLDINGS LLC
9695 NORFOLK AVENUE
LAUREL, MARYLAND 20723
410-792-2565

DESIGN: AAM DRAWN: AAM
DATE: JANUARY 2013
SCALE: AS SHOWN
SHEET 2 OF 4



CROSS SECTIONS WHISKEY BOTTOM ROAD
SCALE: 1" = 10'

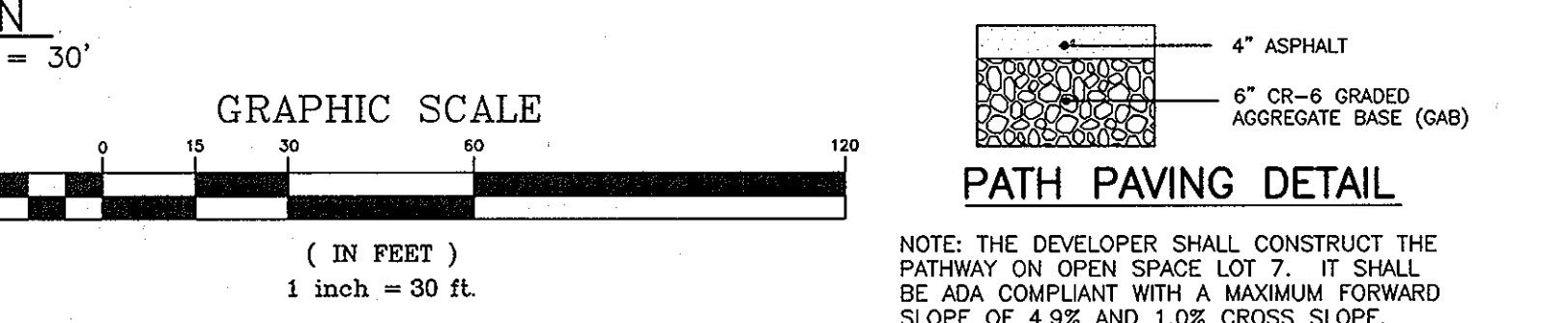
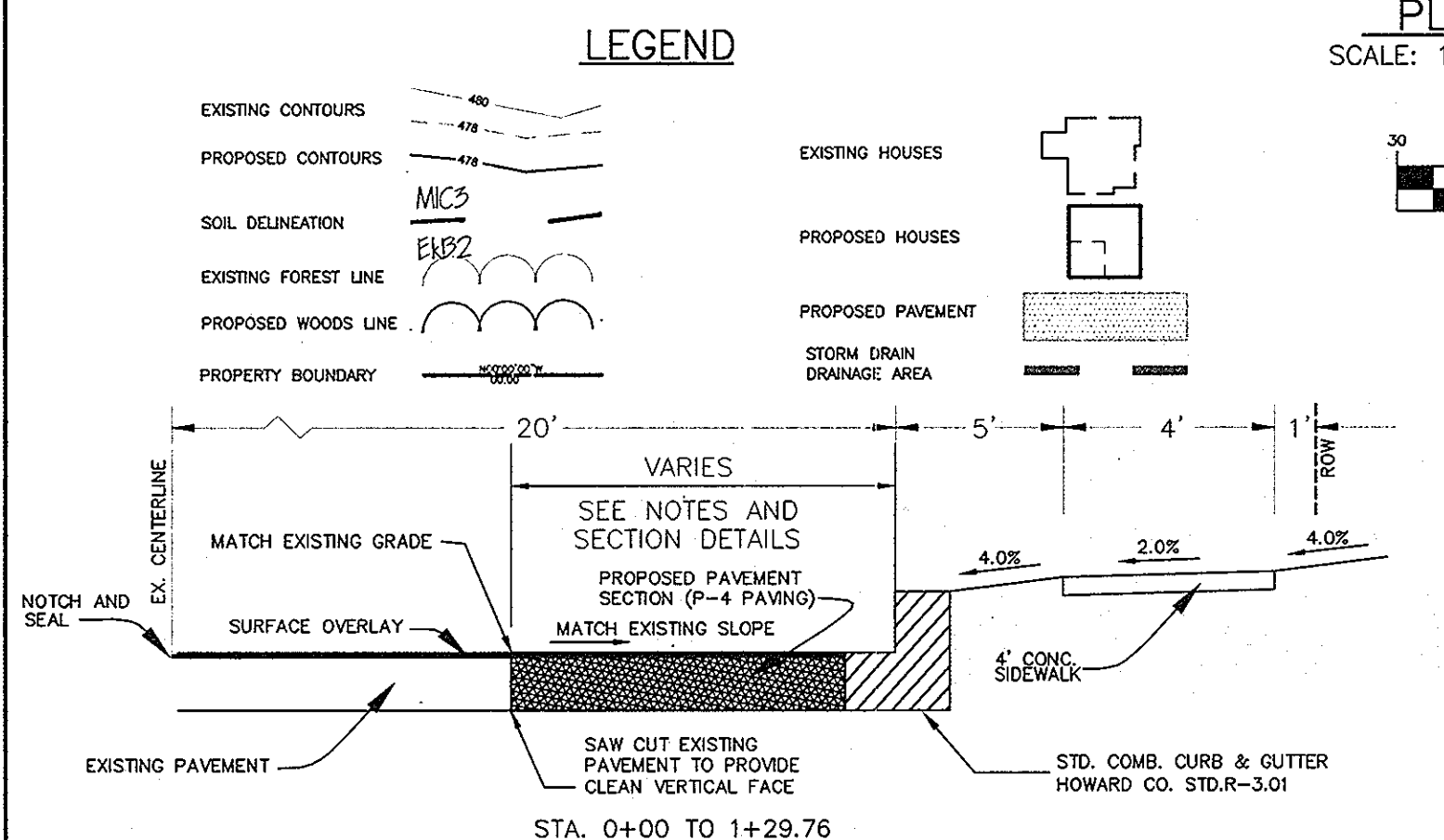
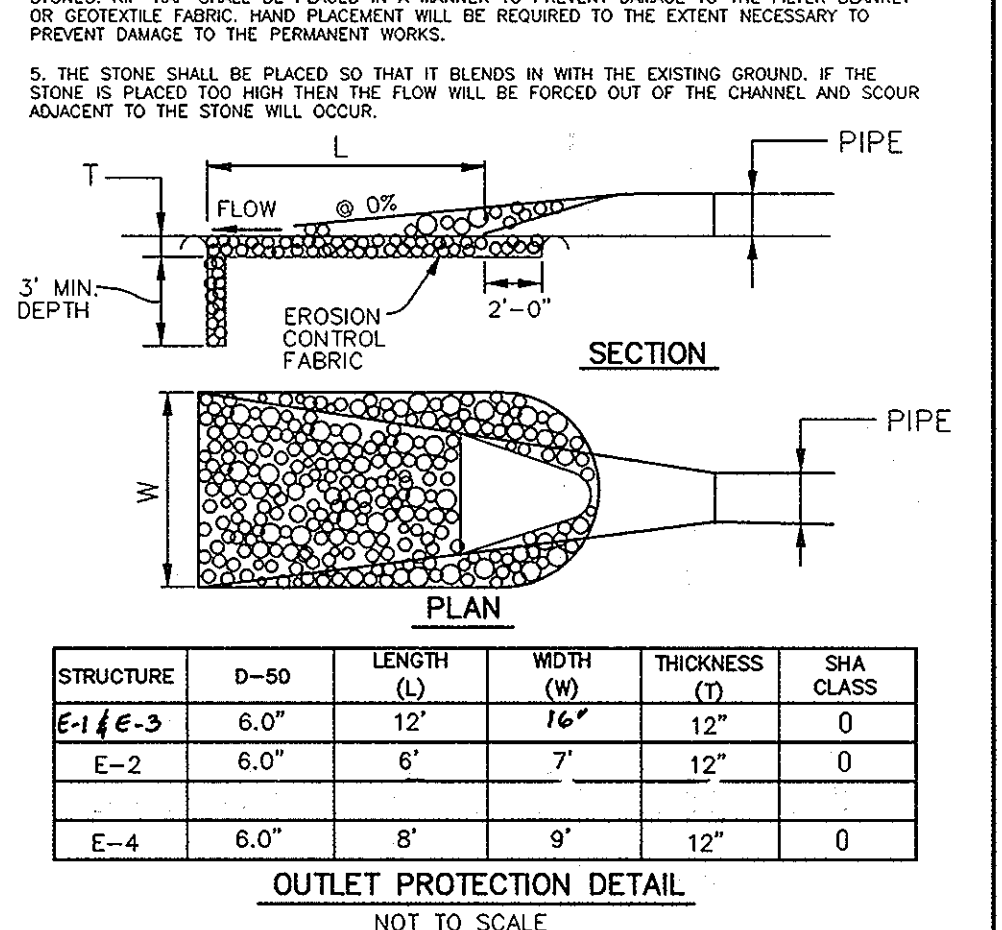
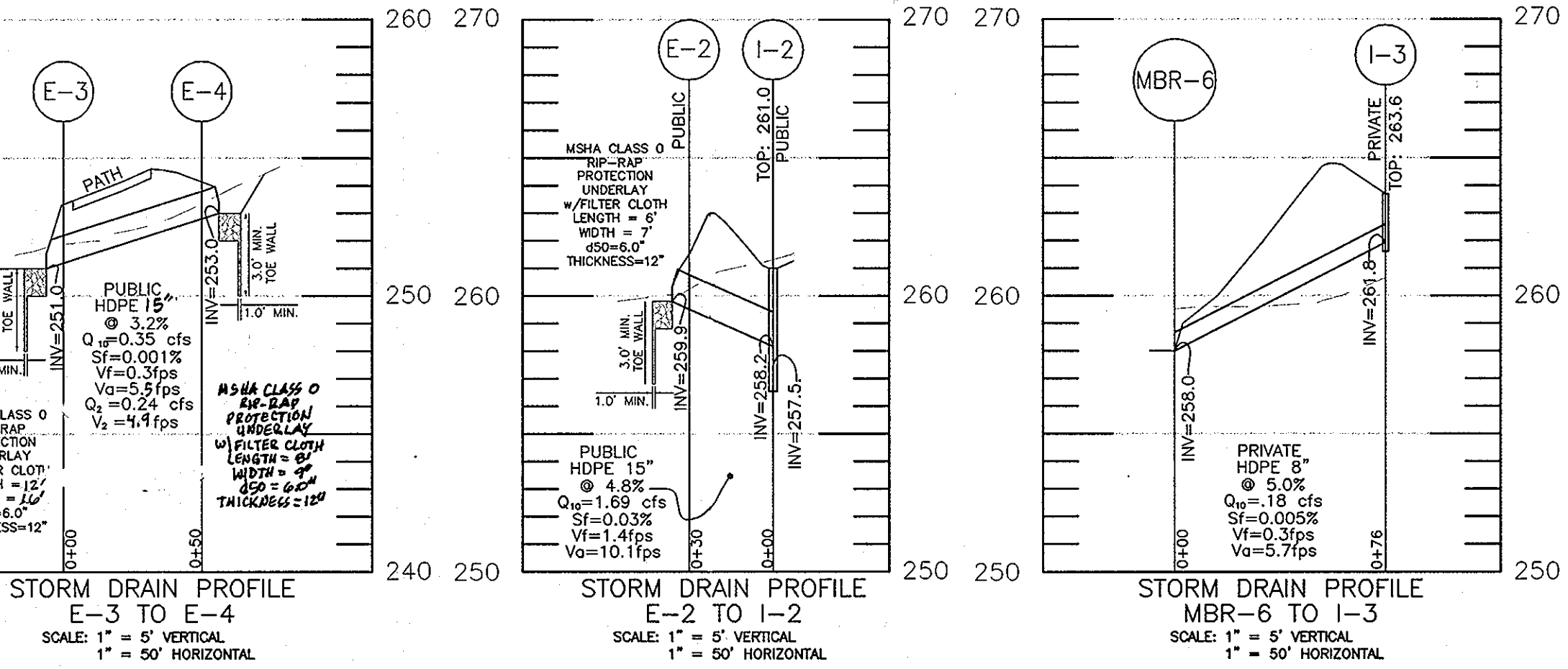
SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)	3 TO <5 TO <7		7	
			MIN HMA WITH GAB	HMA WITH CONSTANT GAB	MIN HMA WITH GAB	HMA WITH CONSTANT GAB
P-4	MINOR COLLECTORS, NON-RESIDENTIAL MAJOR COLLECTORS	HMA SUPERPAVE FINAL SURFACE	2.0	2.0	2.0	2.0
		HMA SUPERPAVE INTERMEDIATE SURFACE	2.0	2.0	2.0	2.0
		HMA SUPERPAVE BASE	2.0	2.0	2.0	2.0
		GRADED AGGREGATE BASE (GAB)	4.0	4.0	3.0	6.0
			13.0	7.0	4.0	6.0



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 CLASS C28 OR BETTER SHALL BE PROTECTED FROM PUNCHING, CUTTING, OR TEARING. ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLES SHALL BE REPAIRED BY PLACING ANOTHER PIECE OF GEOTEXTILE FABRIC OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE FABRIC. ALL DESIGNERS WHETHER FOR REPAIRS OR FOR JOINING TWO PIECES OF GEOTEXTILE FABRIC 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 THE 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 FABRIC. 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.

P-4 PAVING DETAIL

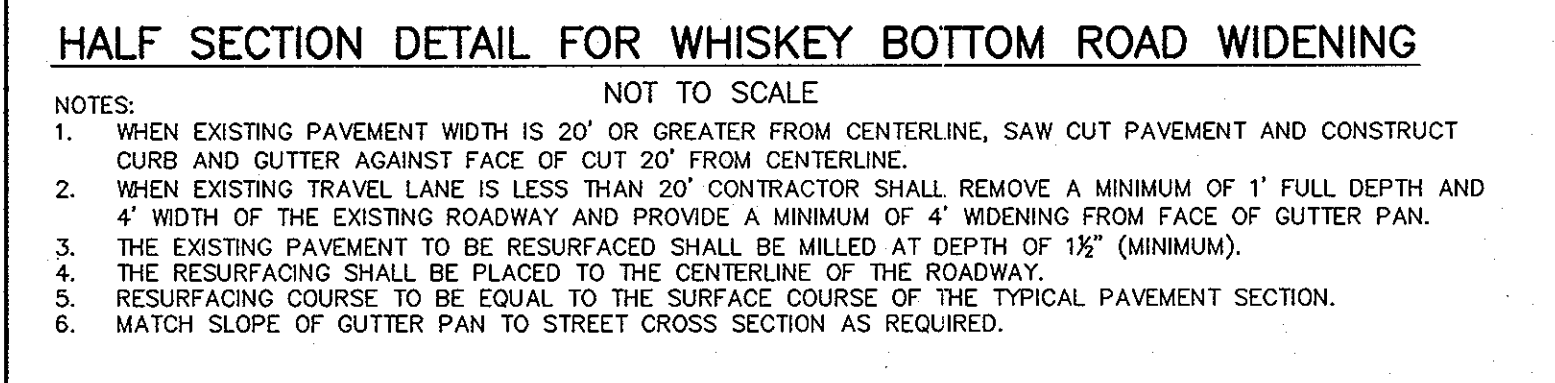


STORM DRAIN DRAINAGE AREA DATA

INLET NO.	ZONING	AREA (AC)	'C' FACTOR	% IMPERVIOUS
I-1	R-SC	0.30	0.36	0
I-2	R-SC	0.52	0.56	52
I-3	R-SC	0.04	0.68	71
E-2	R-SC	0.63	0.36	7
E-4	R-SC	0.15	0.36	15
SW	R-SC	0.16	0.36	0

PIPE SCHEDULE

SIZE	LENGTH	TYPE & CLASS	OWNER
8"	76 LF	HDPE	PRIVATE
12"	178 LF	HDPE	PRIVATE
15"	80 LF	HDPE	PUBLIC
18"	323 LF	HDPE	PUBLIC



SOILS LEGEND

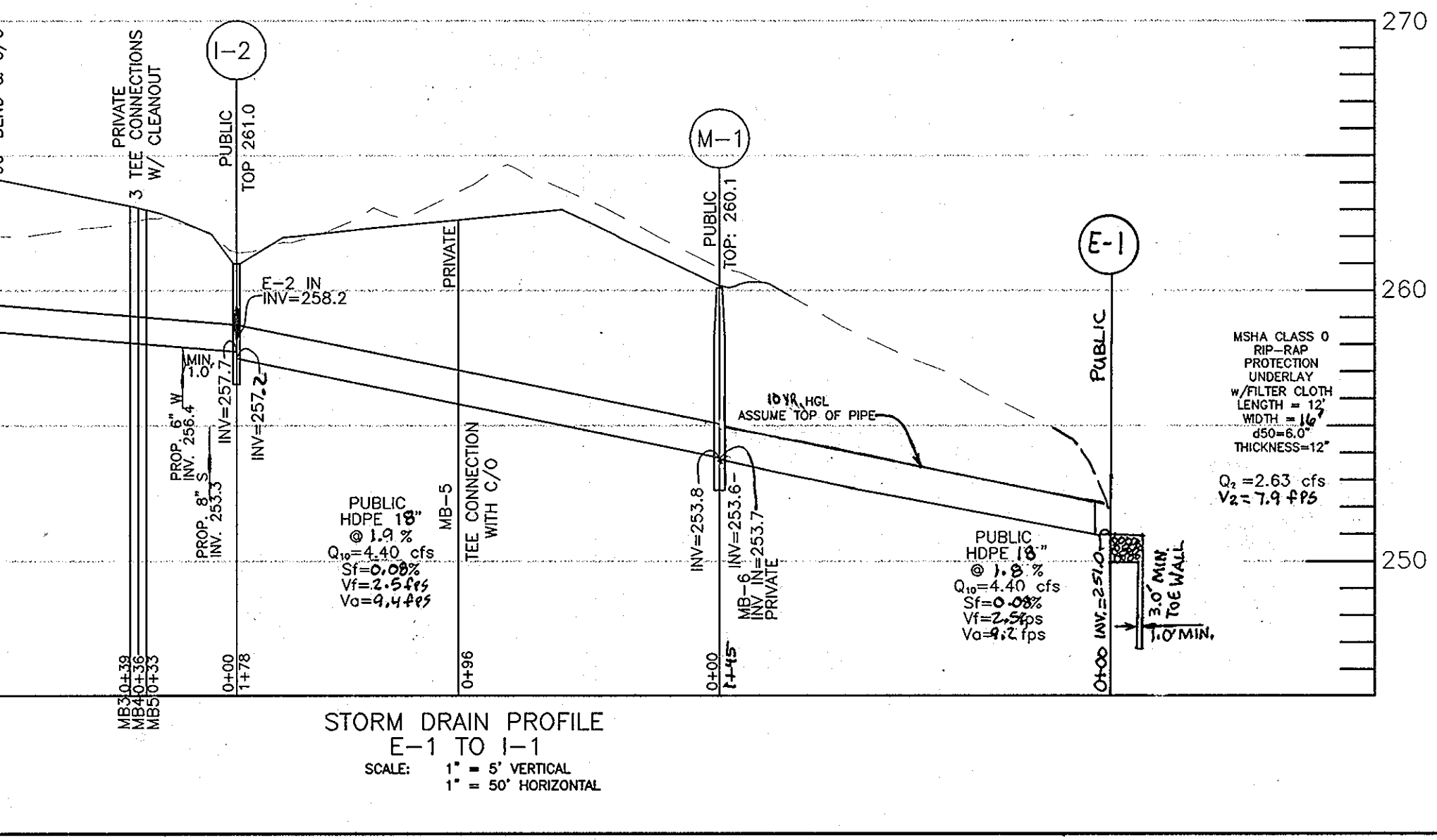
MAP SYMBOL	SOIL GROUP	SOIL TYPE
R/C	C	RUSSETT FINE SANDY LOAM, 5 TO 10 PERCENT SLOPES
U/B	D	URBAN LAND-SASSAFRAS-BELTSVILLE COMPLEX, 0 TO 5 PERCENT SLOPES

TAKEN FROM HOWARD COUNTY SOILS SURVEY, ISSUED MAY 2008, MAP NO. 28

STORM DRAIN STRUCTURE SCHEDULE

NO.	LOCATION	INV. IN	INV. OUT	TOP ELEV.	HO. CO. STD.	OWNER
I-1	N 528,551.35 E 1,359,127.86	-	259.2	261.0	CB-18"	PRIVATE
I-2	N 528,629.24 E 1,359,019.93	258.2	257.7	257.2	261.0	D-4.14
I-3	N 528,516.46 E 1,358,885.91	-	261.8	263.6	CB-12"	PRIVATE
M-1	N 528,547.24 E 1,358,861.74	253.7	253.8	253.6	G-5.12	PUBLIC
E-1	N 528,383.26 E 1,358,836.12	-	251.0	-	HDPE**	PUBLIC
E-2	N 528,656.65 E 1,359,044.07	-	259.9	-	HDPE**	PUBLIC
E-3	N 528,398.20 E 1,358,833.33	-	251.0	-	HDPE**	PUBLIC
E-4	N 528,460.40 E 1,358,829.39	-	253.0	-	HDPE**	PUBLIC

*HANCOR 18" SQUARE CATCH BASIN WITH RISER AND GRATE, OR APPROVED EQUAL. ADJUST INVERT OUT TO MATCH SELECTED STRUCTURES.
**HANCOR HI-Q FLARED END SECTION OR EQUAL.



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 10-24-13
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 11-13-13
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 10-31-13
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

- STRUCTURE LOCATION FOR MANHOLES IS AT THE CENTER OF THE MANHOLE.
- STRUCTURE LOCATION FOR INLETS IS AT THE CENTER TOP.
- STRUCTURE LOCATION FOR END SECTIONS IS AT THE MIDPOINT OF THE END OF END SECTION.

NO. DATE REVISION

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PARKSIDE ESTATES
 LOTS 2-6 & OPEN SPACE LOTS 1 & 7

TAX MAP: 50 GRID: 4 PARCEL: 438
 ZONED: R-SC
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

STORM DRAIN DRAINAGE AREA MAP AND PROFILES
 AND WHISKEY BOTTOM ROAD CROSS SECTIONS

DATE: JANUARY 2013 BEI PROJECT NO. 2384-C
 SEPTEMBER 2013

DESIGN: AAM DRAWN: AAM SCALE: AS SHOWN SHEET 3 OF 4

