

GENERAL NOTES

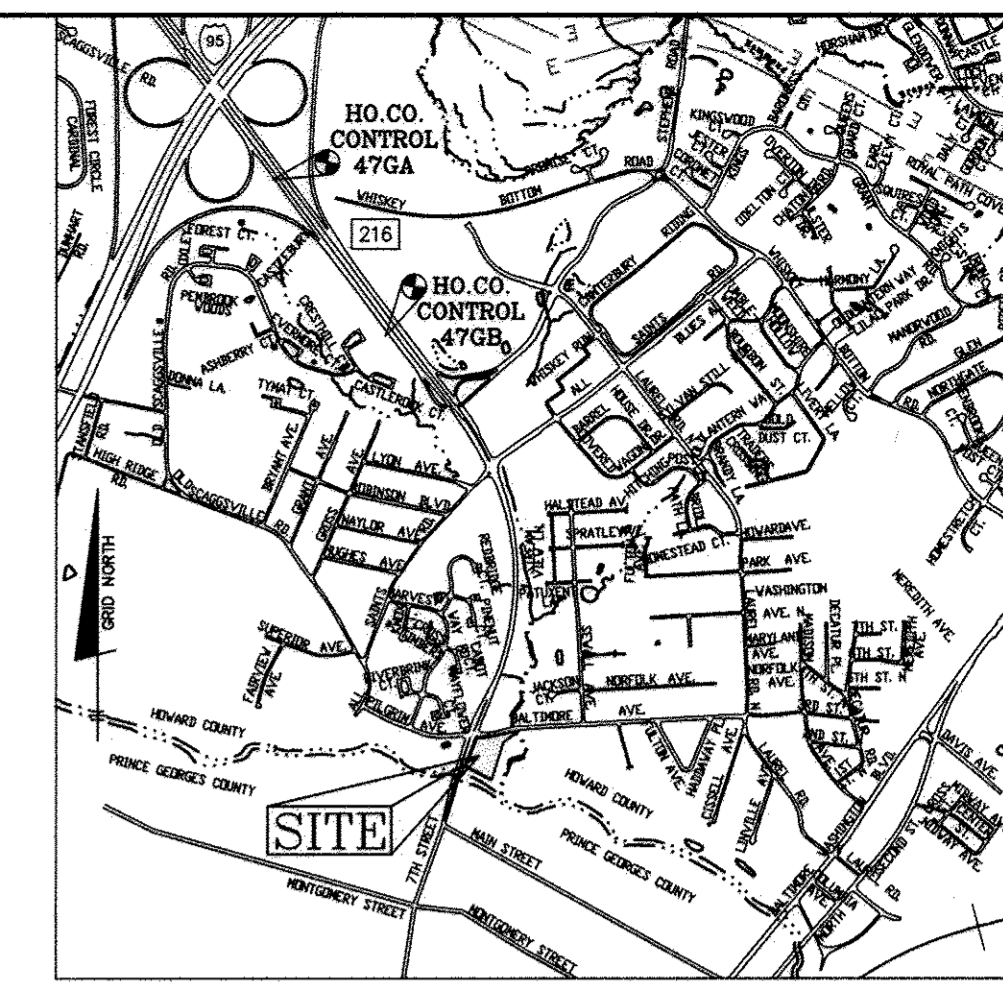
- 1. SUBJECT PROPERTY ZONED R-SC PER THE 10-6-13 COMPREHENSIVE ZONING PLAN.
2. THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
3. TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PREPARED BY BENCHMARK ENGINEERING, INC. DATED DECEMBER 2012 AND HOWARD COUNTY 2008 GIS AND ARE 2' INTERVALS.
4. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 47GA AND 47GB WERE USED FOR THIS PROJECT.
5. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE STREAMS, OR THEIR REQUIRED BUFFERS AND FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS.
6. THERE ARE ON-SITE STEEP SLOPES GREATER THAN 25%.
7. FOREST STAND DELINEATION WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. MARCH JULY 2013.
8. THERE IS NO FLOODPLAIN, STREAMS, WETLANDS OR THEIR BUFFERS LOCATED ON-SITE LOCATED IN THE LIMIT OF DISTURBANCE.
9. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO CEMETERIES LOCATED ON THIS SITE.
10. THIS SITE IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
11. THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED. THE TOTAL FOREST CONSERVATION OBLIGATIONS HAVE BEEN MET BY THE ON-SITE RETENTION OF 1.26 ACRES UNDER F-14-080.

RESIDENTIAL SITE DEVELOPMENT PLAN
PATUXENT OVERLOOK
LOTS 1-9 AND OPEN SPACE LOTS 10 - 12
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SHEET INDEX table with columns NO. and DESCRIPTION. Rows include COVER SHEET, LAYOUT PLAN AND DIMENSION PLAN, GRADING, SEDIMENT & EROSION CONTROL AND SOILS PLAN, SEDIMENT AND EROSION CONTROL DETAILS, and STORMWATER MANAGEMENT DRAINAGE AREA MAP, NOTES AND DETAILS.

BENCH MARKS table with columns NO., HO. CO. #, NAD '83, ELEV., and DESCRIPTION. Includes markers for MD RTE 216 AT I 95 BRIDGE and MD RTE 216 NORTH OF ALL SAINTS ROAD.

COORDINATE CHART table with columns NO., NORTH, and EAST. Lists coordinates for 13 points across the site.



- 12. PREVIOUS DPZ FILES: ECP-13-065, WP-14-021, F-14-080
13. WATER CONNECTION FOR THIS PROPERTY WILL BE FROM PUBLIC WATER MAIN CONTRACT NUMBER 24-4850-D.
14. SEWER CONNECTION FOR THIS PROPERTY WILL BE FROM PUBLIC SEWER MAIN CONTRACT 24-4850-D.
15. DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:

- a) WIDTH - 12' (16' SERVING MORE THAN ONE RESIDENCE).
b) SURFACE - 6" OF COMPACT CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN.)
c) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM 45' TURNING RADIUS.
d) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (425 LADING).
e) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY.
f) STRUCTURE CLEARANCES - MINIMUM 12 FEET.
g) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.

- 16. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED, MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
17. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF \$3,600.00 FOR THE 9 STREET TREES AND 3 TULIP POPLAR TREES HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT UNDER F-14-080.
18. A PRE-SUBMISSION COMMUNITY MEETING FOR THIS PROJECT WAS HELD AT 6:00PM ON JANUARY 8, 2013 AT THE NORTH LAUREL COMMUNITY CENTER.
19. 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.
20. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
21. EXISTING UTILITIES SHOWN ARE BASED ON A FIELD SURVEY AND HOWARD COUNTY GIS.

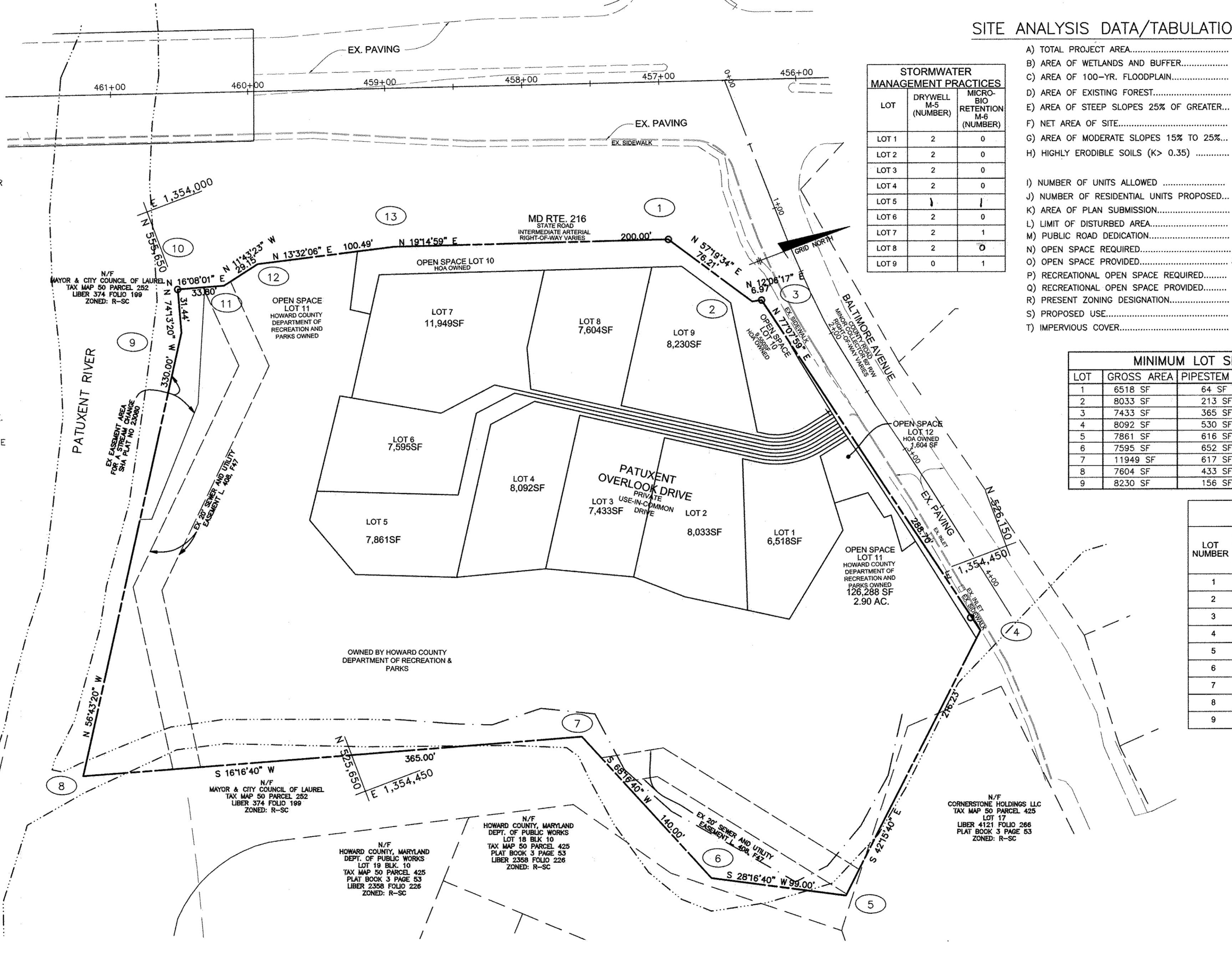
- 22. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
23. SHC ELEVATIONS SHOWN ARE LOCATED AT THE PUBLIC EASEMENT LINE.
24. A 6' HIGH NOISE BARRIER IS LOCATED WITHIN HOA OWNED OPEN SPACE LOT 10 FOR THE PURPOSES OF NOISE MITIGATION AS APPROVED UNDER F-14-080. THE NOISE BARRIER IS TO BE OWNED AND MAINTAINED BY THE HOA.
25. THIS PLAN IS SUBJECT TO A DESIGN MANUAL WAIVER APPROVED OCTOBER 31, 2013 TO ALLOW LOTS ACCESSING FROM A USE-IN-COMMON EASEMENT SUBJECT TO THE FOLLOWING:
1. THE DRIVEWAY MUST BE BUILT 18' WIDE (ASPHALT TO ASPHALT) WITH P-2 PAVING WITH CONCRETE FLUSH CURB ON BOTH SIDES AND A TURNAROUND AREA AT THE END. THIS DRIVEWAY MUST BE WITHIN A 40' ACCESS EASEMENT.
2. THE DRIVEWAY TURNING RADIUS AND TURNAROUND AREA MUST BE APPROVED BY THE DEPARTMENT OF FIRE AND RESCUE.
3. COMPLIANCE OF ANY APPROVAL CONDITIONS FOR WP-14-021.
26. THIS PLAN IS SUBJECT TO WAIVER PETITION WP-14-021 APPROVED OCTOBER 31, 2013 TO THE FOLLOWING SECTIONS OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS:

SECTION 16.120(C)(2)(IV) OF THE AMENDED FIFTH EDITION - SHARED USE AND MAINTENANCE OF A SINGLE USE-IN-COMMON DRIVEWAY WILL BE REQUIRED ONLY IF THE TOTAL DEVELOPMENT POTENTIAL OF THE SUBDIVISION UNDER CURRENT ZONING WILL NOT EXCEED 6 UNITS (IN CONJUNCTION WITH SECTION 2.6B, VOLUME III (ROADS AND BRIDGES) OF THE DESIGN MANUAL). THE APPLICANT IS SEEKING TO UTILIZE A SHARED DRIVEWAY FOR MORE THAN SIX USERS.

SECTION 16.1205(A) (7) OF THE AMENDED FIFTH EDITION - ON-SITE FOREST RETENTION; SPECIMEN TREES ARE CONSIDERED PRIORITY FOR ON-SITE RETENTION AND PROTECTION IN THE COUNTY. THE APPLICANT PROPOSES TO REMOVE THREE (3) SPECIMEN TREES (TREES HAVING A 30" DIAMETER AT BREAST HEIGHT).

SECTION 16.14 AND SECTION 16.1450F OF THE AMENDED FIFTH EDITION - REQUIRES THE SUBMISSION OF A SKETCH PLAN AND/OR PRELIMINARY EQUIVALENT SKETCH PLAN. THE APPLICANT IS PROPOSING 9 SINGLE - FAMILY DETACHED IN-FEE SIMPLE LOTS WHICH IS, BY DEFINITION, A MAJOR SUBDIVISION.

- APPROVAL IS SUBJECT TO THE FOLLOWING EIGHT (8) CONDITIONS:
1) SUBJECT TO SUBMISSION OF A FINAL SUBDIVISION PLAN FOR PROCESSING.
2) REPLACEMENT MITIGATION FOR THE 3 SPECIMEN TREES TO BE REMOVED AT A 1 TO 1 RATIO REPLACEMENT WITH LARGER 3 1/2" CALIPER NATIVE SPECIES TO BE PLANTED WITHIN OR NEAR THE PROPOSED FOREST CONSERVATION EASEMENT AREA.
3) ALL OF THE PLANNED RESIDENTIAL LOTS SHALL FRONT ON AND OBTAIN ACCESS FROM THE PROPOSED PRIVATE SHARED DRIVEWAY WITHIN THE PROJECT AREA. THE DEVELOPER SHALL BE RESPONSIBLE FOR ESTABLISHING SAFE VEHICULAR ACCESS TO ALL RESIDENTIAL LOTS ONTO BALTIMORE AVENUE.
4) A USE-IN-COMMON DRIVEWAY MAINTENANCE AGREEMENT MUST BE PREPARED AND RECORDED WITH THE PLAT. ALL FUTURE LOT OWNERS WILL BE SUBJECT TO THE REQUIREMENTS AND OBLIGATIONS OF THIS AGREEMENT. A NOTE MUST BE ADDED TO THE PLAT AND SITE DEVELOPMENT PLAN REGARDING THIS USE-IN-COMMON AGREEMENT, INCLUDING THE RECORDED LIBER AND FOLIO REFERENCE ONCE IT HAS BEEN RECORDED WITHIN THE LAND RECORDS OFFICE.
5) THE PROPOSED PRIVATE DRIVEWAY MUST BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED DESIGN MANUAL REQUIREMENTS ISSUED BY THE DEVELOPMENT ENGINEERING DIVISION. FURTHERMORE, THIS DRIVEWAY MUST BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH ANY ADDITIONAL REQUIREMENTS AND PLAN REVIEW COMMENTS PROVIDED BY THE DEVELOPMENT ENGINEERING DIVISION, THE DEPARTMENT OF FIRE AND RESCUE SERVICES AND THE DEPARTMENT OF PUBLIC WORKS AS PART OF THE FINAL PLAN PROCESS.
6) A COMPLETE TITLE REPORT MUST BE SUBMITTED TO THE OFFICE OF DPW, REAL ESTATE SERVICES FOR THE PREPARATION OF PUBLIC EASEMENT DOCUMENTS WITH THE FINAL PLAN PROCESSING.
7) A COMPLETE DEED HISTORY THAT PROVIDES A CHRONOLOGICAL DESCRIPTION OF HOW TAX PARCEL 257 WAS CREATED TO BE SUBMITTED WITH THE FINAL PLAN.
8) ON THE FINAL PLAT AND THE SITE DEVELOPMENT PLAN, PROVIDE A BRIEF DESCRIPTION OF THIS WAIVER PETITION, WP-14-021, AND THE REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICATION.
27. THE MODERATE INCOME HOUSING UNIT REQUIREMENTS PER COUNCIL BILL 35-2015 FOR THIS SUBDIVISION WILL BE FULFILLED BY PAYMENT OF FEE-IN-LIEU OF CONSTRUCTION IN THE AMOUNT OF \$2.04 PER SQUARE FOOT OF EACH NEW HOUSE PROPOSED BY THIS SUBDIVISION PLEASE NOTE THAT ALL LOTS/RESIDENTIAL UNITS IN THIS SUBDIVISION ARE SUBJECT TO THE MIHU FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICATION.
28. FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY AND NOT THE PIPESTEM LOT DRIVEWAY.
29. THE 65dba NOISE LINE ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPT OF HOUSING AND URBAN DEVELOPMENT.



STORMWATER MANAGEMENT PRACTICES table with columns LOT, DRYWELL M-5 (NUMBER), and MICRO-BIO RETENTION M-6 (NUMBER). Lists practices for lots 1 through 9.

SITE ANALYSIS DATA/TABULATION (F-14-080)

- A) TOTAL PROJECT AREA..... 4.9 AC.
B) AREA OF WETLANDS AND BUFFER..... N/A
C) AREA OF 100-YR. FLOODPLAIN..... 1.4 AC.
D) AREA OF EXISTING FOREST..... 2.9 AC.
E) AREA OF STEEP SLOPES 25% OF GREATER... 1.2 AC. (OUTSIDE FLOODPLAIN)
F) NET AREA OF SITE..... 2.3 AC.
G) AREA OF MODERATE SLOPES 15% TO 25%... 1.3 AC.
H) HIGHLY ERODIBLE SOILS (> 0.35) ..... 2.0 AC. (0.2 AC. OUTSIDE STEEP SLOPES AND FLOODPLAIN)
I) NUMBER OF UNITS ALLOWED ..... 9 (2.3 AC.\*4)
J) NUMBER OF RESIDENTIAL UNITS PROPOSED... 9
K) AREA OF PLAN SUBMISSION..... 4.9 AC.
L) LIMIT OF DISTURBED AREA..... 2.04 AC.
M) PUBLIC ROAD DEDICATION..... 0.02 AC.
N) OPEN SPACE PROVIDED..... 1.2 AC. OR 25% (3.2 AC OR 65% (LOTS 10 & 11, LOT 12 IS UNCREDITED))
O) RECREATIONAL OPEN SPACE REQUIRED..... NA
P) RECREATIONAL OPEN SPACE PROVIDED..... NA
Q) PRESENT ZONING DESIGNATION..... R-SC
S) PROPOSED USE..... SINGLE FAMILY DWELLINGS
T) IMPERVIOUS COVER..... 0.66 AC.

MINIMUM LOT SIZE CHART table with columns LOT, GROSS AREA, PIPESTEM AREA, and MINIMUM LOT SIZE. Lists requirements for lots 1 through 9.

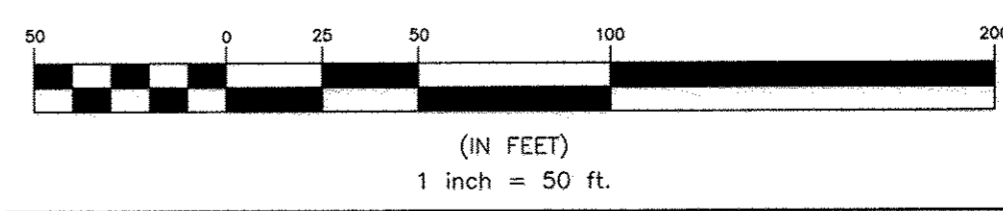
ADDRESS CHART table with columns LOT NUMBER and ADDRESS. Lists addresses for lots 1 through 9 along Patuxent Overlook Drive.

VICINITY MAP SCALE: 1"=2000'

LEGEND

- EXISTING CONTOURS (452, 450)
EXISTING TREELINE
PROPOSED TREELINE
EXISTING STREAM
EXISTING STREAM BUFFER
APPROXIMATE 100 YEAR FLOODPLAIN LIMITS
PROPOSED STRUCTURE
SLOPES 25% OR GREATER
SLOPES 15% TO 24.9%
SOIL DELINEATION
SOILS DELINEATION (GnA)
100 YEAR FLOODPLAIN
EROSION CONTROL MATTING
FOREST CONSERVATION EASEMENT (CREDITED) PLAT 23226
FOREST CONSERVATION EASEMENT (NON-CREDITED) PLAT 23226
PROP. MICRO-BIORETENTION FACILITY
PROP. BIO-SWALE
EX. PUBLIC SEWER, WATER & UTILITY EASEMENT PLAT 23226
EX. PRIVATE USE-IN-COMMON ACCESS EASEMENT PLAT 23226
SUPER SILT FENCE F-14-080
STABILIZED CONSTRUCTION ENTRANCE F-14-080

PLEASE NOTE THAT ALL LOTS/RESIDENTIAL UNITS IN THIS SUBDIVISION ARE SUBJECT TO THE MIHU FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.



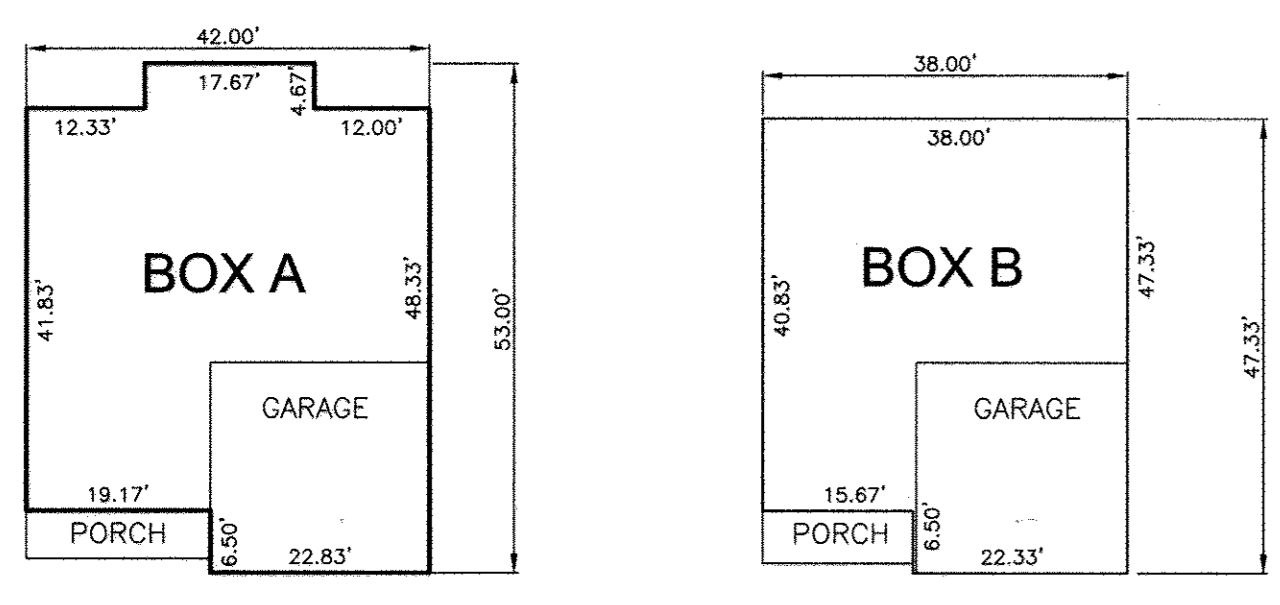
PERMIT INFORMATION CHART table with columns SUBDIVISION NAME, SECTION/AREA, LOT/PARCEL#, PLAT No., GRID No., ZONE, TAX MAP, ELECTION DISTRICT, and CENSUS TRACT. Lists details for Patuxent Overlook.

APPROVED: DEPARTMENT OF PLANNING AND ZONING. Includes signatures and dates for Kent Seale and Chris E. Jones.

- 30. TRAFFIC CONTROL DEVICES:
A. THE R1-1 (STOP) SIGN AND THE STREET NAME SIGN (SNS) ASSEMBLY FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETE.
B. THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-313-2430) PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES.
C. ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
D. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POSTED (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
31. A PRIVATE ROAD NAME SIGN (SNS) ASSEMBLY THAT NEEDS TO BE INSTALLED AT THE INTERSECTION OF THE PRIVATE ROAD WITH A PUBLIC ROAD 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 ESTIMATES.

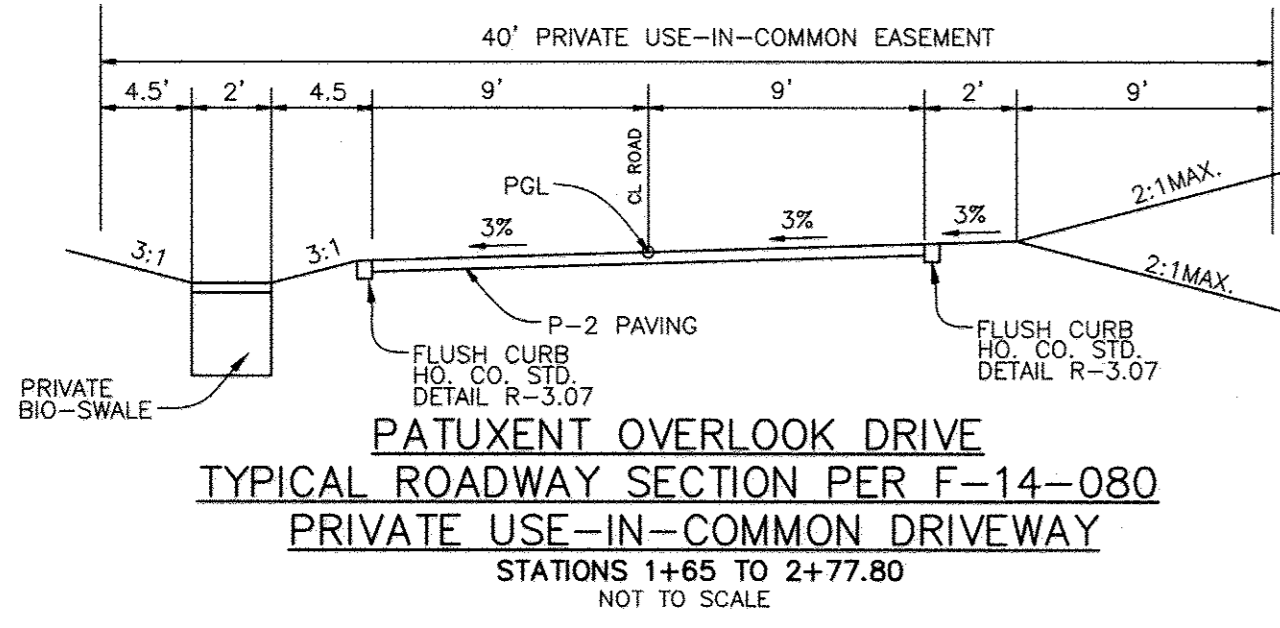
BENCHMARK ENGINEERING, INC. logo and contact information. Includes professional certification for CE Malagon.

OWNER: DEVELOPMENT PARTNERS, LLC
DEVELOPER: DEVELOPMENT PARTNERS, LLC
PATUXENT OVERLOOK
LOTS 1-9 AND OPEN SPACE LOTS 10 - 12
RESIDENTIAL SITE DEVELOPMENT PLAN COVER SHEET
DATE: MAY 2017
SCALE: AS SHOWN SHEET 1 OF 5

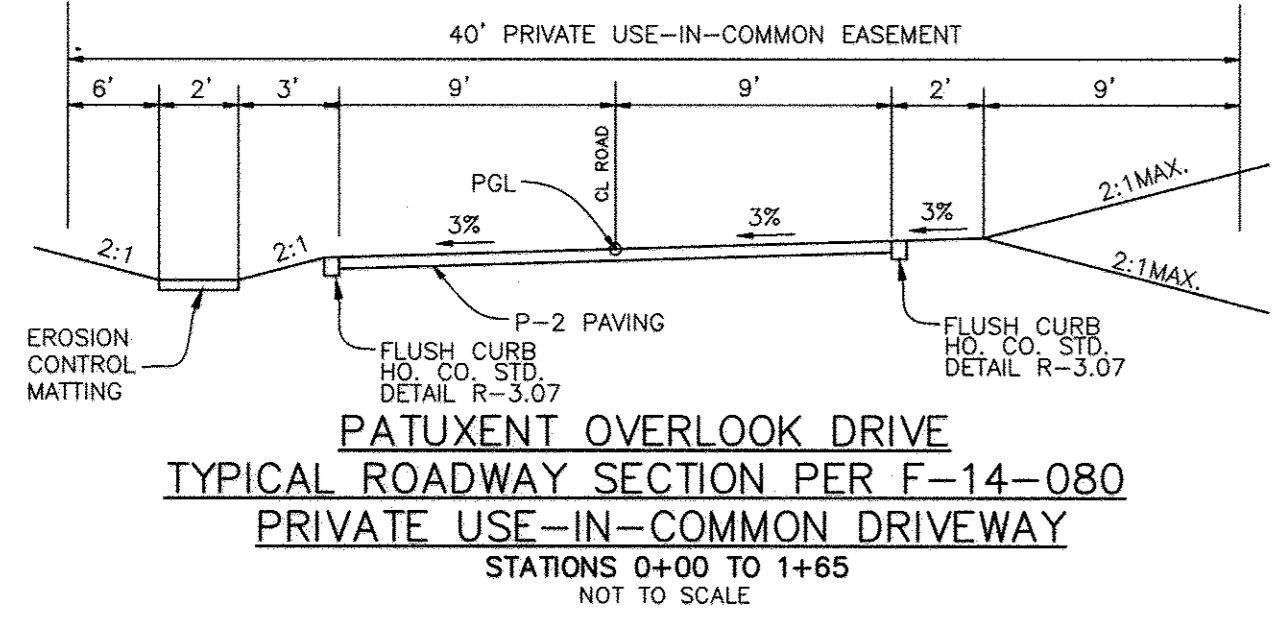


CLAREMONT ALL OPTIONS  
 CHARTLEY ALL OPTIONS  
 PARKER ALL OPTIONS  
 ABERDEEN ALL OPTIONS

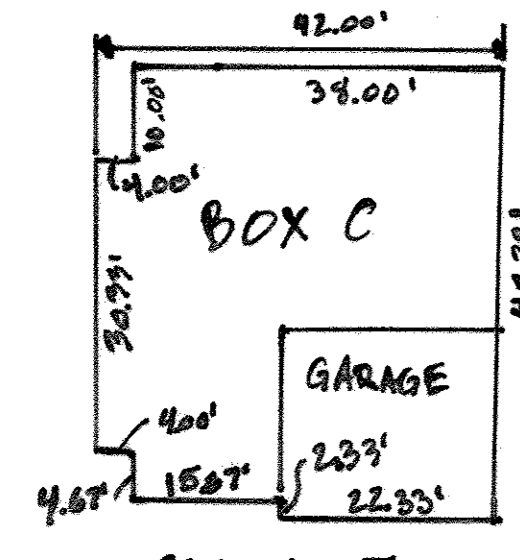
GENERIC BOX DETAIL  
 SCALE: 1"=20'



PATUXENT OVERLOOK DRIVE  
 TYPICAL ROADWAY SECTION PER F-14-080  
 PRIVATE USE-IN-COMMON DRIVEWAY  
 STATIONS 1+65 TO 2+77.80  
 NOT TO SCALE

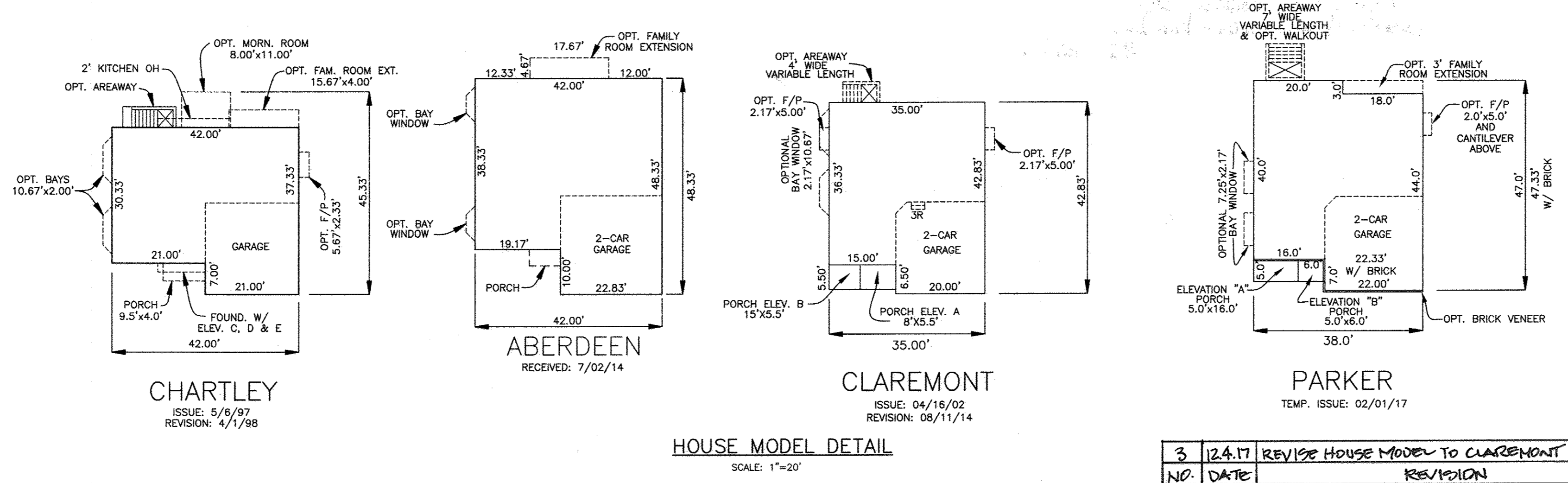
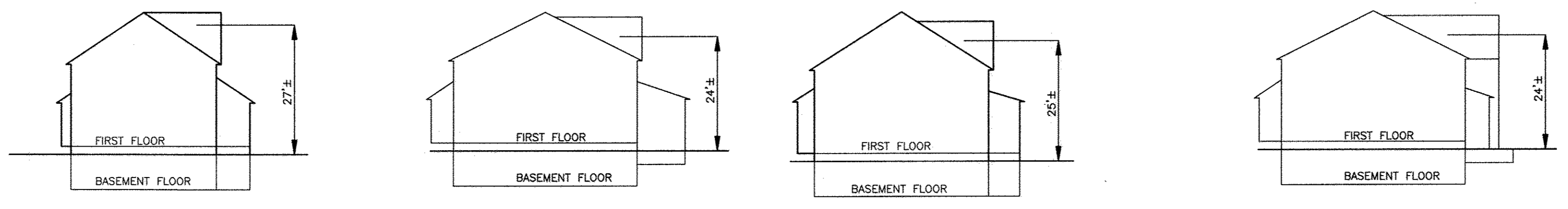
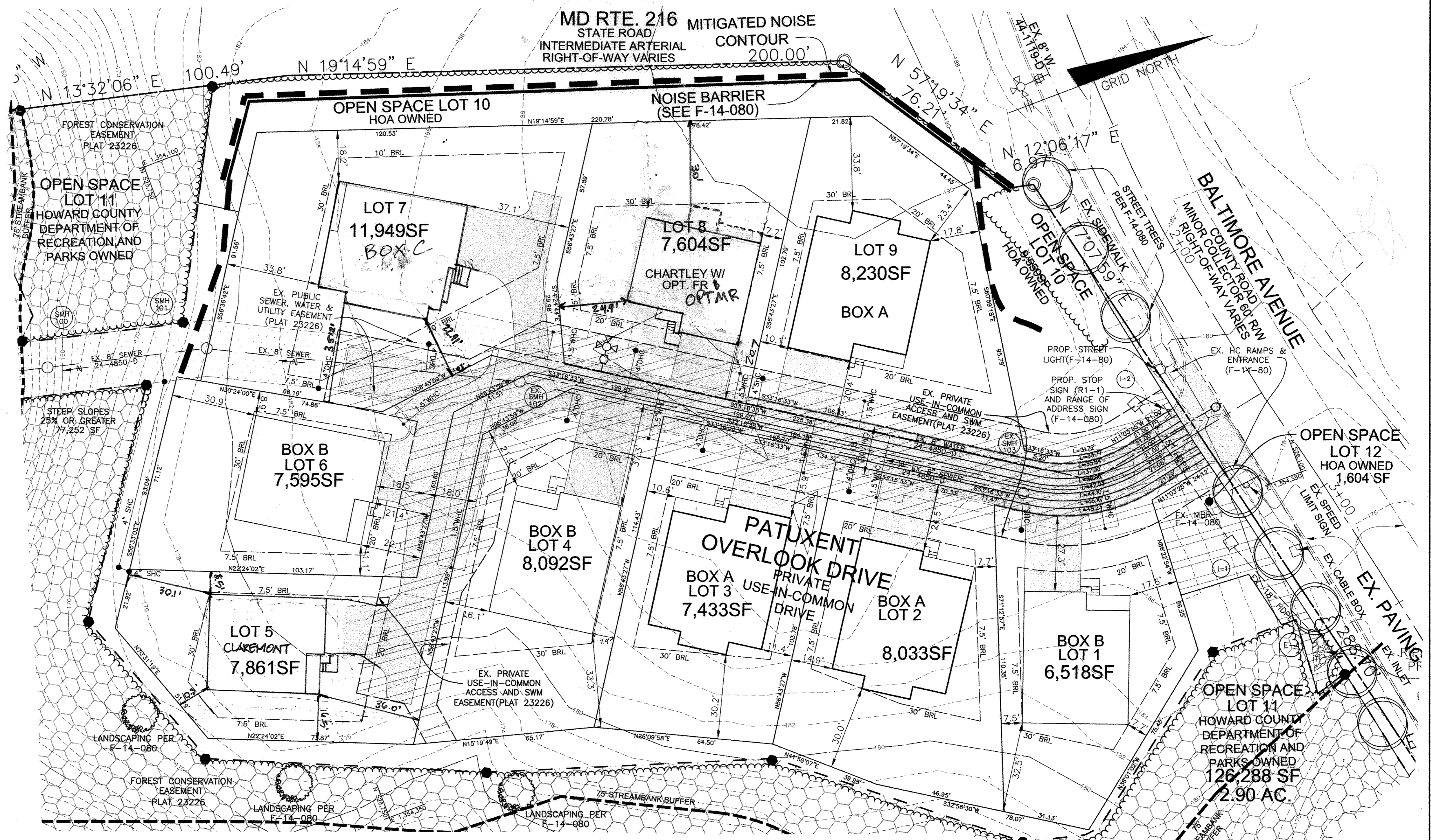


PATUXENT OVERLOOK DRIVE  
 TYPICAL ROADWAY SECTION PER F-14-080  
 PRIVATE USE-IN-COMMON DRIVEWAY  
 STATIONS 0+00 TO 1+65  
 NOT TO SCALE



CLAREMONT ALL OPTIONS  
 CHARTLEY ALL OPTIONS  
 PARKER ALL OPTIONS  
 ABERDEEN ALL OPTIONS  
 1"=20'

NOTE: LOTS 7 & 8 ARE SUBJECT TO A DESIGN MANUAL  
 WAIVER TO SECTION 5.4.B.5 OF VOLUME II,  
 APPROVED AUGUST 3, 2017.



APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Kent Steinhilber 6-13-17  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
 Chad Clark 6-2-17  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
 N. J. ... 6-14-17  
 DIRECTOR DATE

1 6/16/17 ADD MORNING ROOM TO LOTS 3 ADD BOX C TO LOT 7	
NO.	DATE
REVISION	
OWNER: DEVELOPMENT PARTNERS, LLC 11807 WOLLINGFORD COURT CLARKSVILLE, MD 21029 301-490-0398	
DEVELOPER: DEVELOPMENT PARTNERS, LLC 11807 WOLLINGFORD COURT CLARKSVILLE, MD 21029 301-490-0398	
PATUXENT OVERLOOK LOTS 1-9 AND OPEN SPACE LOTS 10-12 TAX MAP 50, GRID 02, PARCELS 257 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND RESIDENTIAL SITE DEVELOPMENT PLAN LAYOUT AND DIMENSION PLAN	
DATE: MAY 2017	BEI PROJECT NO. 1583
SCALE: 1"=20'	SHEET 2 OF 5

3	12.4.17	REVISE HOUSE MODEL TO CLAREMONT LOT 5
NO.	DATE	REVISION

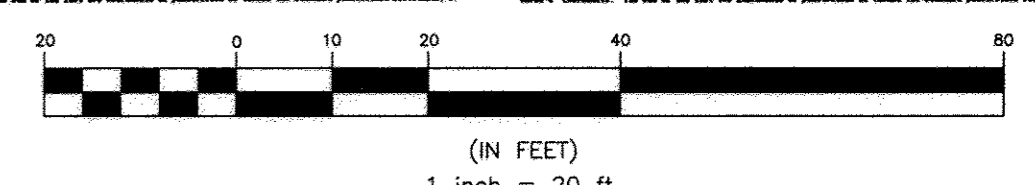
DRIVEWAY CULVERT SCHEDULE					
LOT	SIZE	TYPE	PIPE	IN	OUT
1	12"	HDPE	24LF@6.2%	184.3	182.8
2	12"	HDPE	24LF@3.3%	187.5	186.7
3	12"	HDPE	24LF@1.0%	188.0	187.7
4	12"	HDPE	24LF@2.0%	186.2	185.8

SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND - MAP 28						
SORT	SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME	K-VALUE
MkF			B	B	MANOR-BRINKLOW COMPLEX 25 TO 65 PERCENT SLOPES, VERY ROCKY	0.24/0.20
UcB			D	B/C	URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 0 TO 5 PERCENT SLOPES	0.37

**LEGEND**

- EXISTING CONTOURS 452  
450
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING STREAM
- EXISTING STREAM BUFFER
- APPROXIMATE 100 YEAR FLOODPLAIN LIMITS
- PROPOSED STRUCTURE
- SLOPES 25% OR GREATER
- SLOPES 15% TO 24.9%
- SOIL DELINEATION
- SOILS DELINEATION
- 100 YEAR FLOODPLAIN
- EROSION CONTROL MATTING
- FOREST CONSERVATION EASEMENT (CREDITED) PLAT 23226
- FOREST CONSERVATION EASEMENT (NON-CREDITED) PLAT 23226
- PROP. MICRO-BIORETENTION FACILITY
- PROP. BIO-SWALE
- EX. PUBLIC SEWER, WATER & UTILITY EASEMENT PLAT 23226
- EX. PRIVATE USE-IN-COMMON ACCESS EASEMENT PLAT 23226
- SUPER SILT FENCE F-14-080
- STABILIZED CONSTRUCTION ENTRANCE F-14-080
- FOREST CONSERVATION SIGN F-14-080

BORING LOG		GEOLAB, INC. BORING LOG		GEOLAB, INC. BORING LOG		GEOLAB, INC. BORING LOG		GEOLAB, INC. BORING LOG		GEOLAB, INC. BORING LOG	
NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
1	8/16/17	2	10/25/17								



**ENGINEER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT THIS PLAN FOR SEDIMENT 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.  
**C. Malaga** 5-9-17  
 ENGINEER DATE

**DEVELOPER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.  
**J. M. B.** 5-9-17  
 DEVELOPER DATE

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.  
**Howard SCD** 5/24/17  
 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
**Kentel Walsh** 6-13-17  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

**Chad Clark** 6-2-17  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**N. J. J.** 6-14-17  
 DIRECTOR DATE

**NOTE: LOTS 7 & 8 ARE SUBJECT TO A DESIGN MANUAL WAIVER TO SECTION SA.8.5 OF VOLUME II, APPROVED AUGUST 8, 2017.**

**NOTE: MASS GRADING FOR THIS SITE IS THE PROPOSED GRADES AS SHOWN ON THIS PLAN.**

**\* Sediment Controls installed under F-14-080 are to be used and maintained for Controls on this S.D.P.**

BORING LOG		GEOLAB, INC. BORING LOG		GEOLAB, INC. BORING LOG		GEOLAB, INC. BORING LOG		GEOLAB, INC. BORING LOG		GEOLAB, INC. BORING LOG	
NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
1	8/16/17	2	10/25/17								

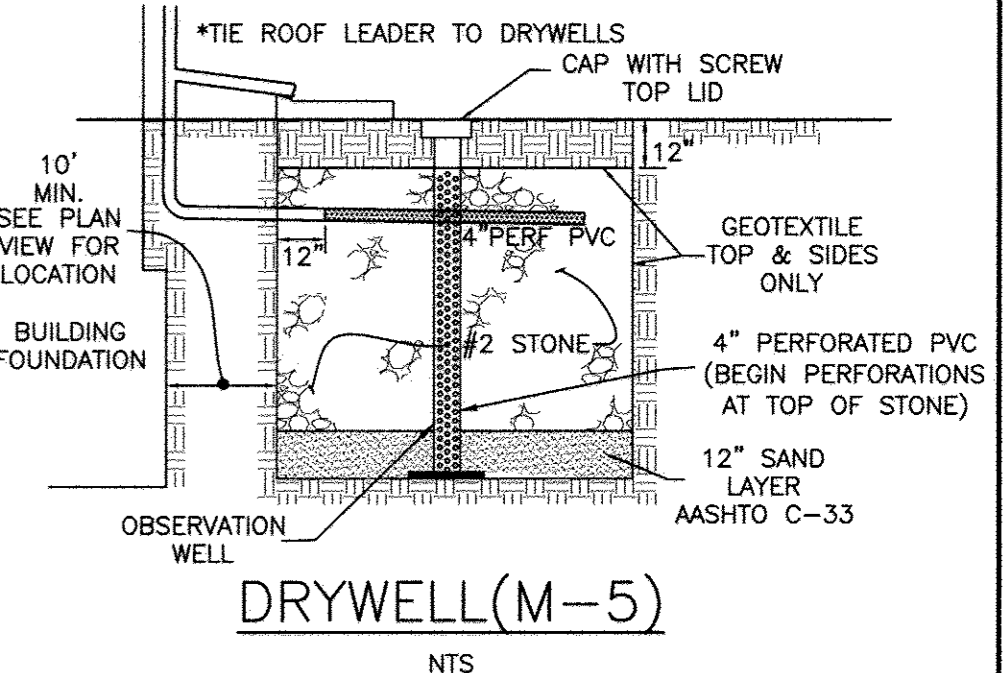
<b>BENCHMARK ENGINEERING, INC.</b> 8480 BALTIMORE NATIONAL PIKE & SUITE 315 A ELLICOTT CITY, MARYLAND 21043 (P) 410-465-4100 (F) 410-465-6844 WWW.BE-CIVILENGINEERING.COM		
OWNER: DEVELOPMENT PARTNERS, LLC 11807 WOLLINGFORD COURT CLARKSVILLE, MD 21029 301-490-0388	PATUXENT OVERLOOK LOTS 1-9 AND OPEN SPACE LOTS 10-12 TAX MAP 50, GRID 02, PARCELS 257 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND RESIDENTIAL SITE DEVELOPMENT PLAN GRADING, SEDIMENT & EROSION CONTROL AND SOILS PLAN DATE: MAY 2017 BEI PROJECT NO. 1583 SCALE: 1"=20' SHEET 3 OF 5	





### MATERIALS & SPECIFICATIONS FOR MICRO-BIORETENTION

MATERIAL	SPECIFICATION	SIZE	NOTES:
PLANTINGS	SEE APPENDIX A: TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2.0' TO 4.0' DEEP)	LOAMY SAND 60-65% COMPOST 35-40% OR SANDY LOAM 30% COARSE SAND 30% & COMPOST 40%	N/A	USDA SOIL TYPES: LOAMY SAND OR SANDY LOAM; CLAY CONTENT <5%
ORGANIC CONTENT	MIN 10% BY DRY WEIGHT ASTM D 2974	N/A	AGED 6 MONTHS, MINIMUM, NO PINE OR WOOD CHIPS
MULCH	SHREDDED HARDWOOD	N/A	PE TYPE 1 NONWOVEN
GEOTEXTILE (CLASS "C")	N/A	1/4" WIRE MESH	1/4" WIRE MESH
UNDERDRAIN GRAVEL	AASHTO M-43	NO. 57 OR NO. 8 0.375" TO 0.750"	
UNDERDRAIN PIPING	F758, TYPE PS28 OR AASHTO M-278	4" TO 6" RIGID SCH 40 PVC SDR35 OR HDPE	3/8" PERFORATED PVC 4 HOLES PER ROW, MINIMUM 2" OF GRAVEL OVER PIPES, NOT NECESSARY UNDERNEATH PIPES.
IMPERVIOUS LINER	ASTM-D-4833 (THICKNESS) ASTM-D-4112 (TENSILE STRENGTH 1,100 LB., ELONGATION 200%) ASTM-D-624 (TEAR RESISTANCE - 150 LB./IN) ASTM-D-471 (WATER ADSORPTION: +8 TO -2% MASS) ASTM-D-4833 (PUNCTURE STRENGTH 125LB) ASTM-D-4832 (TENSILE STRENGTH 300 LB)		LINER TO BE ULTRAVIOLET RESISTANT; A GEOTEXTILE FABRIC SHOULD BE USED TO PROTECT THE LINER FROM PUNCTURE.
GEOTEXTILE (BELOW IMPERV. LINER)			



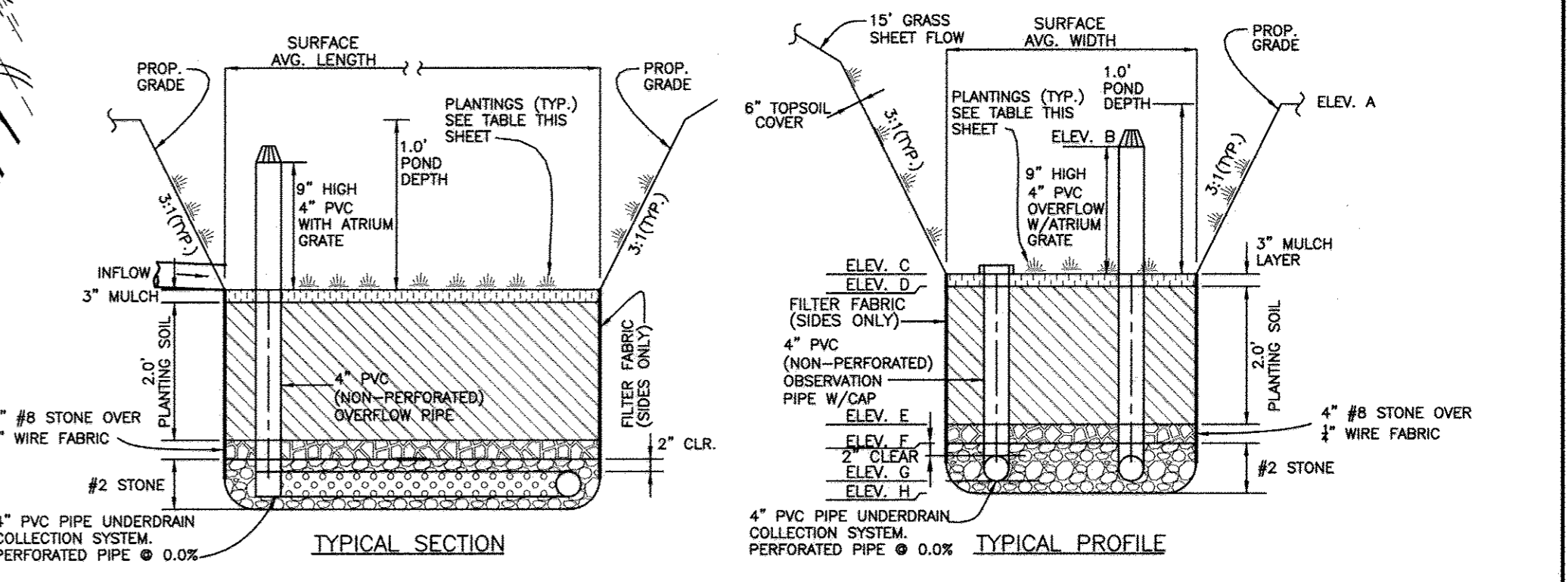
- #### BIORETENTION PLANTING DATA
- PLANTINGS WITHIN THE PONDING AREA OF THE MICRO-BIORETENTION FACILITY ARE TO BE OF A MEDIUM TO HIGH WATER TOLERANCE.
  - PLANTINGS ALONG THE PERIMETER (BERM) AREA OF THE MICRO-BIORETENTION FACILITY ARE TO BE OF A LOW TO MEDIUM WATER TOLERANCE.
  - AVOID PLANTINGS WITH EXCESSIVE ROOT MASS IN POND AREA OF THE MICRO-BIORETENTION FACILITY.

- #### OPERATION AND MAINTENANCE SCHEDULE FOR BIORETENTION(M-6) AND SWALES(M-8)
- 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 WASHOUT, 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 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 ONE PER MONTH AND AFTER EACH HEAVY STORM.

- #### OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DRY WELLS (M-5)
- THE MONITORING WELLS AND STRUCTURES SHALL BE INSPECTED ON A QUARTERLY BASIS AND AFTER EVERY LARGE STORM EVENT.
  - WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS SHALL BE RECORDED OVER A PERIOD OF SEVERAL DAYS TO INSURE TRENCH DRAINAGE.
  - A LOG BOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
  - WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN THE 72 HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
  - THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
  - ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

#### DRYWELL SIZING CHART

Lot No.	Drywell No.	Length (ft)	Width (ft)	Stone Depth (ft)	Grade (ft)	Top of Stone (ft)	Bottom of Stone (ft)
1	DW-1	8.00	7.00	5.00	179.4	178.4	173.4
1	DW-2	8.00	7.00	5.00	178.6	177.6	172.6
2	DW-3	8.00	8.00	5.00	180.5	179.5	174.5
2	DW-4	8.00	8.00	5.00	181.0	180.0	175.0
3	DW-5	8.00	8.00	5.00	181.2	180.2	175.2
3	DW-6	8.00	8.00	5.00	181.2	180.2	175.2
4	DW-7	8.00	8.00	5.00	181.0	180.0	175.0
4	DW-8	7.00	7.00	5.00	179.0	178.0	173.0
6	DW-9	12.00	11.00	2.00	176.4	175.4	170.4
6	DW-10	12.00	11.00	2.00	178.0	177.0	172.0
7	DW-11	10.00	16.00	2.00	178.9	177.9	172.9
7	DW-12	10.00	16.00	2.00	181.8	180.8	175.8
8	DW-13	11.00	16.00	2.50	188.0	187.0	184.5
8	DW-14	10.00	16.00	2.50	188.0	187.0	184.5
8	DW-15	8.00	8.00	4.00	178.0	175.0	171.0



TYPICAL MICRO-BIORETENTION FACILITY DETAIL(M-6)

The following table summarizes our field infiltration rates:

Boring	Depth of pipe (feet)	Field Infiltration Rate (inches/hour)
SWM-1	4.5	1.4
SWM-2	4.9	7.3
SWM-3	2.7	3.6
SWM-4	4.0	3.1
SWM-5	2.8	4.6
SWM-6	4.3	1.7
SWM-7	4.0	0.2
SWM-8	4.1	4.0

BASED ON AN ANALYSIS PREPARED BY GEO-LABS, INC. DATE NOVEMBER 2016. SEE BORING LOGS ON SHEET 3.

(M-6) MICRO-BIORETENTION DESIGN TABLES

	MBR-1	MBR-2	MBR-3	MBR-4	MBR-5
ELEV. A	177.10	186.20	188.50	188.30	177.70
ELEV. B	176.85	185.95	188.25	188.05	177.45
ELEV. C	176.10	185.20	187.50	187.30	176.70
ELEV. D	175.85	184.95	187.25	187.05	176.45
ELEV. E	173.85	182.95	185.25	185.05	174.45
ELEV. F	173.52	182.62	184.92	184.72	174.12
ELEV. G	173.02	182.12	184.42	184.22	173.62
ELEV. H	172.38	181.48	183.92	183.70	173.08

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 22380, Expiration Date: 6.30.17.

**BENCHMARK ENGINEERING, INC.**  
 8480 BALTIMORE NATIONAL PIKE SUITE 315 & ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 (F) 410-465-6844  
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OWNER: DEVELOPMENT PARTNERS, LLC  
 11807 WOLLINGFORD COURT CLARKSVILLE, MD 21029 301-490-0389

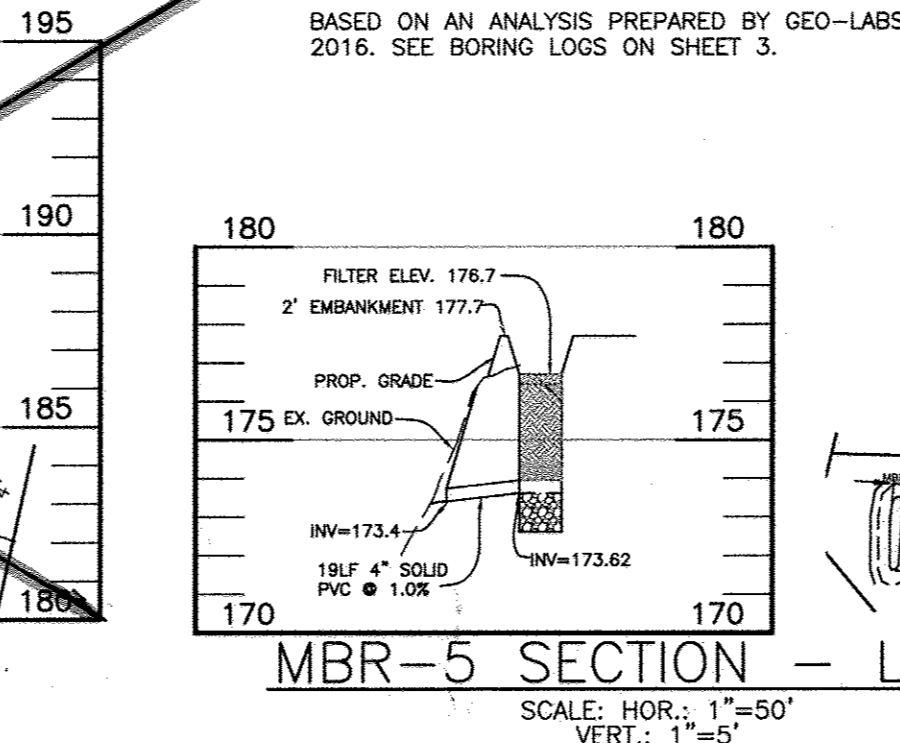
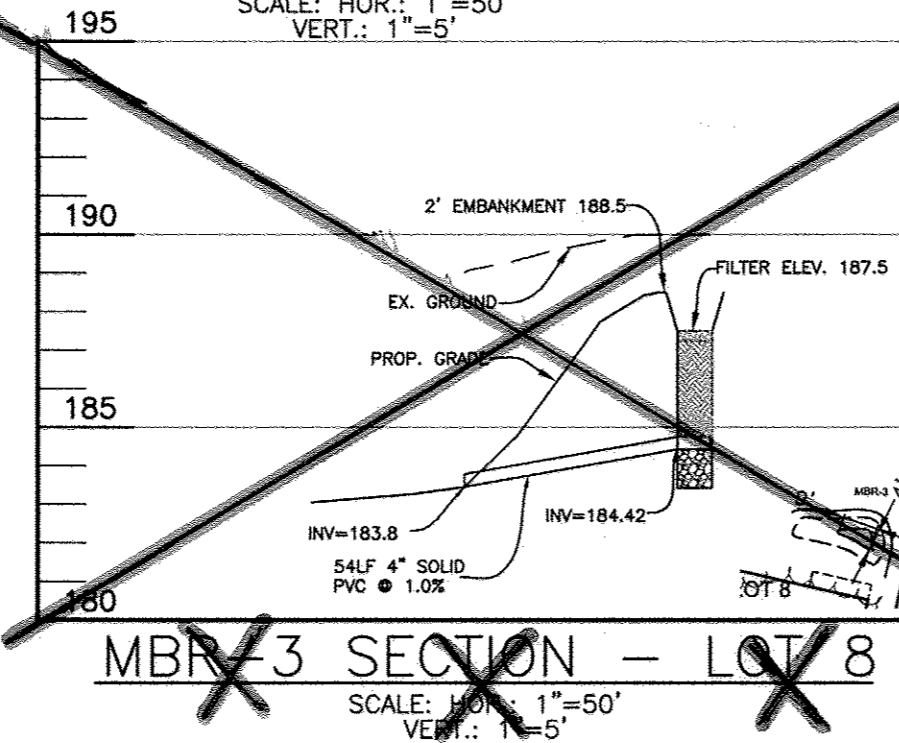
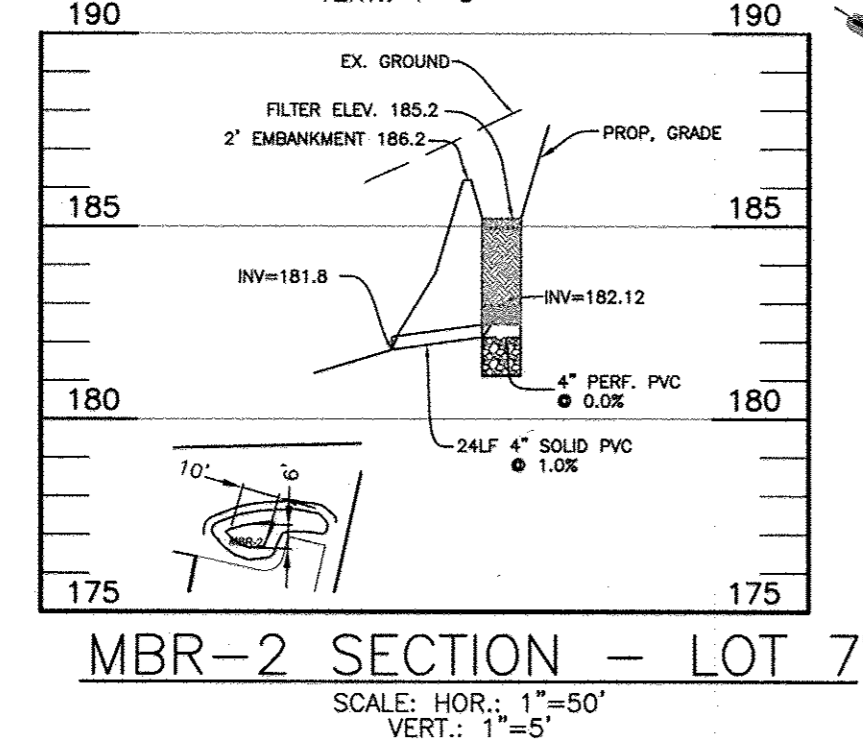
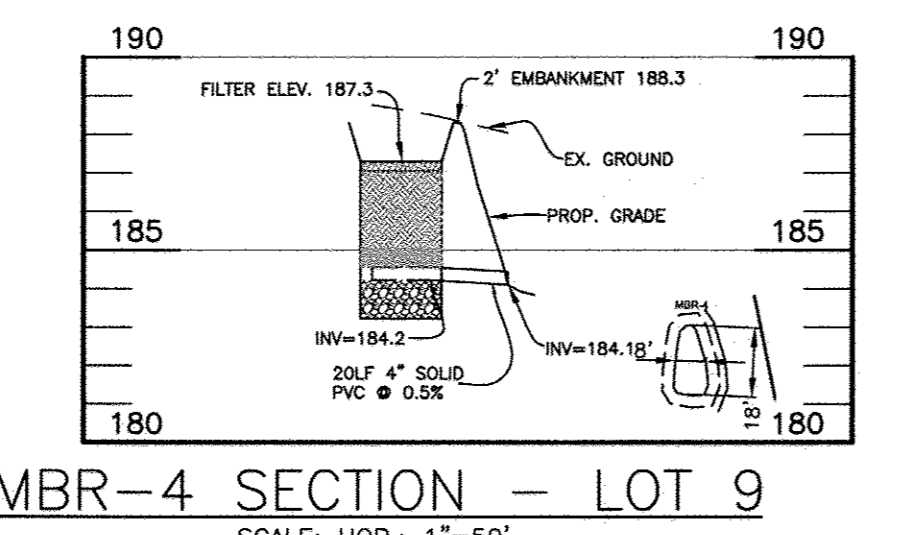
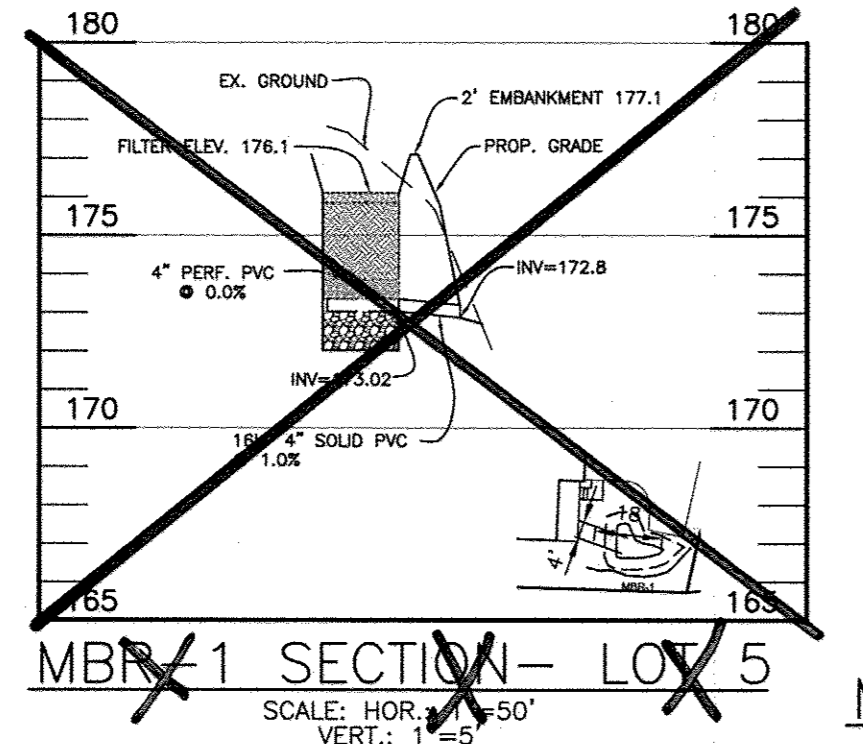
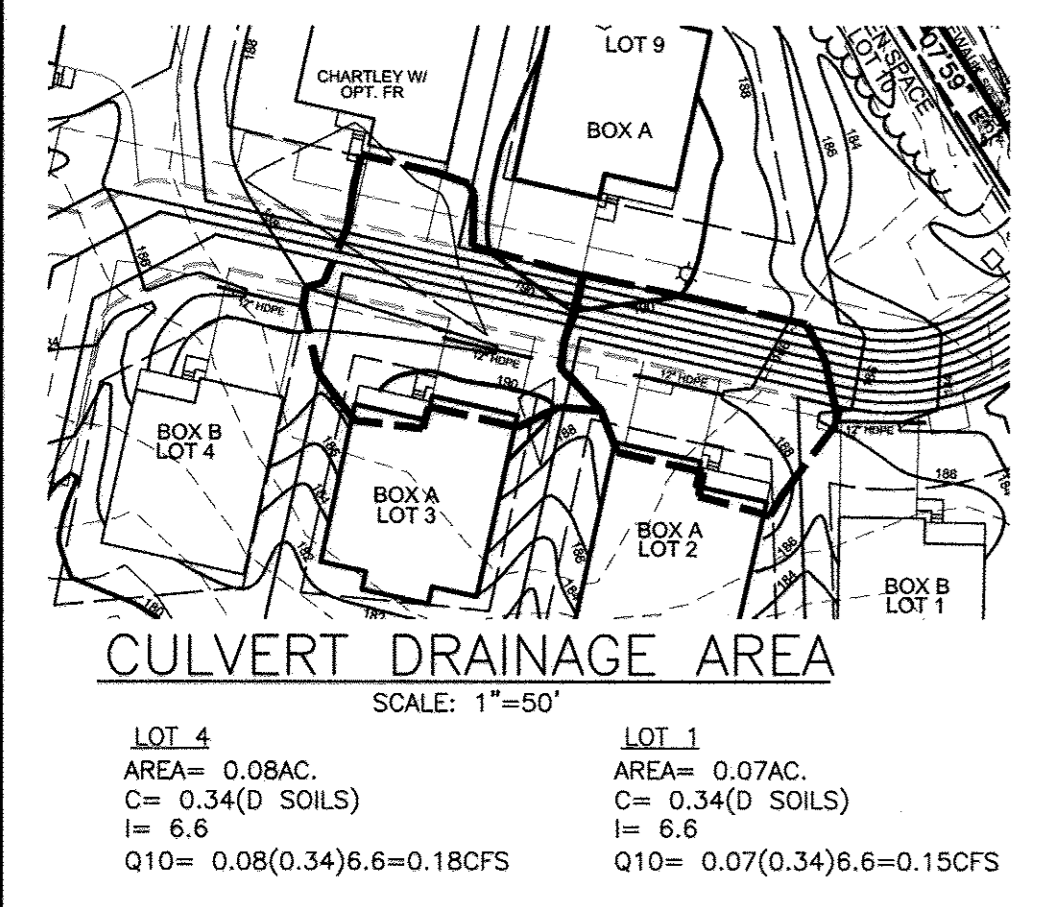
DEVELOPER: DEVELOPMENT PARTNERS, LLC  
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**PATUXENT OVERLOOK**  
 LOTS 1-9 AND OPEN SPACE LOTS 10-12

TAX MAP 50, GRID 02, PARCELS 257  
 6TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

**RESIDENTIAL SITE DEVELOPMENT PLAN**  
 STORMWATER MANAGEMENT DRAINAGE  
 AREA MAP, NOTES AND DETAILS

DATE: MAY 2017 BEI PROJECT NO. 1583  
 SCALE: 1"=20' SHEET 5 OF 5



APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Neil S. ...* 6-13-17  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*...* 6-2-17  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*...* 6-14-17  
 DIRECTOR DATE

