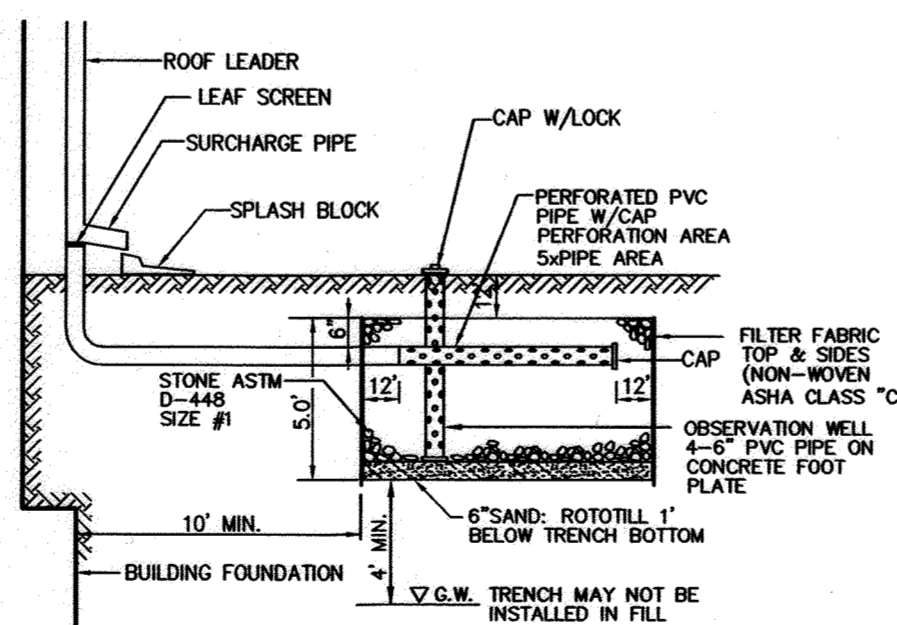


TYPICAL MICRO-BIORETENTION PROFILE

TYP. SECTION MICRO-BIORETENTION (M-6)

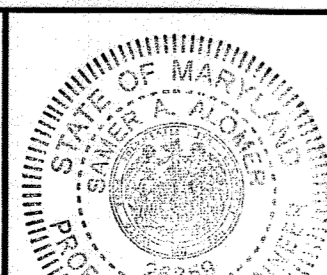


DRYWELL TYP. DETAIL

DEVELOPER/OWNER
 THE COLUMBIA BUILDERS GROUP, LLC
 B. JAMES GREENFIELD
 6420 AUTUMN SKY WAY
 COLUMBIA, MD 21044
 443-324-4732

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Samer A. Alomer
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 12/14/20
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 11/15/20



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. 26859, EXP DATE 08/08/21

SAMER A. ALOMER, P.E. DATE: 10/15/2020

SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR	MAP NO.
AwB	(D)	ALLOWAY SILT LOAM 2 TO 5 PERCENT SLOPES	0.43	23
FaaA	(D)	FALLSINGTON SANDY LOAM (HYDRIC SOIL) 0 TO 2 PERCENT SLOPES	0.02	23
SoB	(B)	SASSAFRAS LOAM 2 TO 5 PERCENT SLOPES	0.37	23
SrC	(B)	SASSAFRAS AND CROOK SOILS 5 TO 10 PERCENT SLOPES (HIGHLY ERODIBLE)	0.37	23
UcB	(D)	URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 0 TO 5 PERCENT SLOPES	0.37	23

SWM PRACTICES SCHEDULE

AREA	PROPOSED PRACTICES	REQUIRED ESDv	PROVIDED ESDv
LOT 1	M-6, MICRO-BIORETENTION (MB #1) M-5, DRYWELLS	604 C.F.	3,018 C.F.
LOT 2	M-6, MICRO-BIORETENTION (MB #2) M-5, DRYWELLS	604 C.F.	3,740 C.F.
LOT 3	M-6, MICRO-BIORETENTION (MB #3) M-5, DRYWELLS	1,065 C.F.	3,060 C.F.
LOT 4	M-6, MICRO-BIORETENTION (MB #4) M-5, DRYWELLS	661 C.F.	2,298 C.F.
LOT 5	M-6, MICRO-BIORETENTION (MB #5) M-5, DRYWELLS	581 C.F.	2,590 C.F.
TOTAL		3,515 C.F.	14,706 C.F.

ESD NARRATIVE

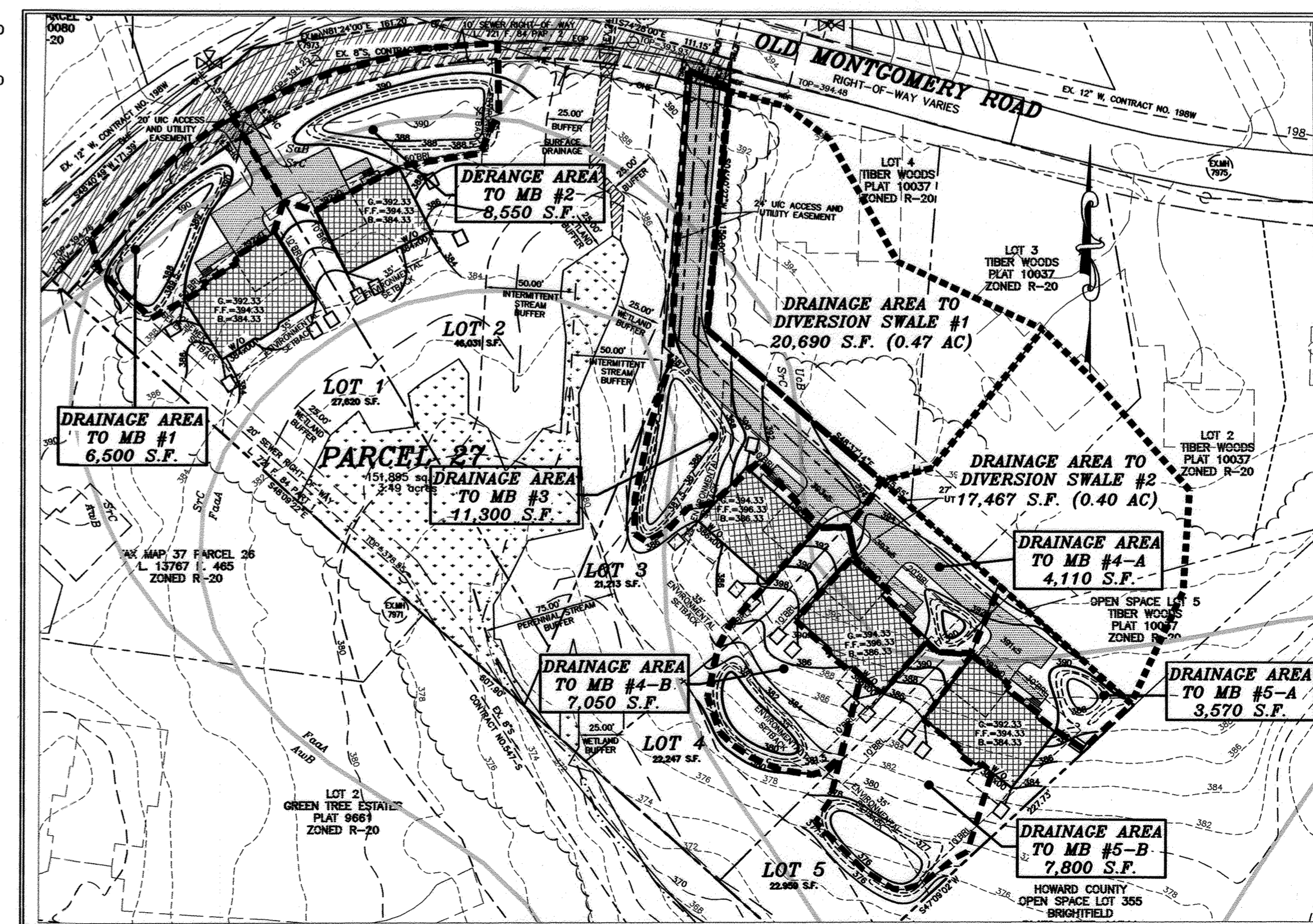
- THE PROPERTY CONTAINS A PERENNIAL STREAM (USE I) WHICH IS PROTECTED BY A 75' STREAM BUFFER, INTERMITTENT STREAM WHICH IS PROTECTED BY A 50' STREAM BUFFER AND SURFACE DRAINAGE WHICH IS PROTECTED BY A 25' BUFFER. THE SITE CONTAINS AREAS OF WETLANDS, PROTECTED BY 25' WETLAND BUFFER. PROPOSED STRUCTURES WILL BE CONSTRUCTED WITHIN 35' FROM ANY ENVIRONMENTALLY SENSITIVE AREA BUFFERS. FOREST EXISTS ON SITE. THERE ARE NO SPECIMEN TREES ON SITE.
- IMPROVEMENTS AND DEVELOPED AREA WILL MAINTAIN THE EXISTING DRAINAGE PATTERNS AS CLOSELY AS POSSIBLE. NO IMPACT IS PROPOSED THAT WOULD ALTER ANY NATURAL FLOW PATTERNS. PROPOSED SDF ARE CLUSTERED TO MINIMIZE PROPOSED DRIVEWAYS AND NEW IMPERVIOUS AREAS.
- 16' WIDE DRIVEWAY WILL BE USED OR SERVE AS USE-IN-COMMON ACCESS FOR ALL PROPOSED LOTS. MICRO-BIORETENTION FACILITIES (M-6) AND DRY WELLS (M-5) WILL PROVIDE STORMWATER QUALITY TREATMENT FOR THE NEW DEVELOPMENT.
- THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES WILL BE IN ACCORDANCE WITH THE CURRENT MDE STANDARDS AND SPECIFICATIONS UTILIZING SUPER SILT FENCES. NO SEDIMENT TRAPS OR BASINS ARE REQUIRED.
- TABLE 5.2, SUMMARY OF SITE DEVELOPMENT STRATEGIES WAS UTILIZED TO THE EXTENT ALLOWABLE BY THE CURRENT HOWARD COUNTY ZONING AND LAND DEVELOPMENT REGULATIONS BY UTILIZING SHARED DRIVEWAY AND MINIMIZING LAND DISTURBANCE.
- THIS PROJECT WAS DESIGNED TO MINIMIZE THE IMPERVIOUS AREAS, ESD MEASURES WERE UTILIZED IN THE FOLLOWING ORDER OF PREFERENCE: (M-6) AND (M-5).

SITE ANALYSIS DATA:

- AREA OF THE SITE: 3.49 AC ±
- AREA OF ROAD DEDICATION: 11,826 S.F. (0.27 AC ±)
- AREA OF WETLANDS AND ITS BUFFERS: 37,384 S.F. (0.86 AC ±)
- AREA OF FLOODPLAIN: 0
- AREA OF EXISTING FOREST: 138,280 S.F. (3.17 AC±)
- AREA OF STREAM BUFFER: 46,350 S.F. (1.06 AC ±)
- AREA OF STEEP SLOPES 15% OR GREATER: 0
- AREA OF STEEP SLOPES 25% OR GREATER: 0
- TOTAL ENVIRONMENTAL SENSITIVE AREA: 54,773 S.F. (1.26 AC±)
- NET BUILDABLE AREA: 97,122 S.F. (2.23 AC±)
- LIMIT OF DISTURBANCE AREA: 80,210 S.F. (1.84 AC ±)
- GREEN OPEN AREA (PERVIOUS): 110,992 S.F. (2.55 AC±)
- PROPOSED IMPERVIOUS AREA: 29,077 S.F. (0.67 AC±)
- AREA OF HIGHLY ERODIBLE SOILS: 118,340 S.F. (2.72 AC±)

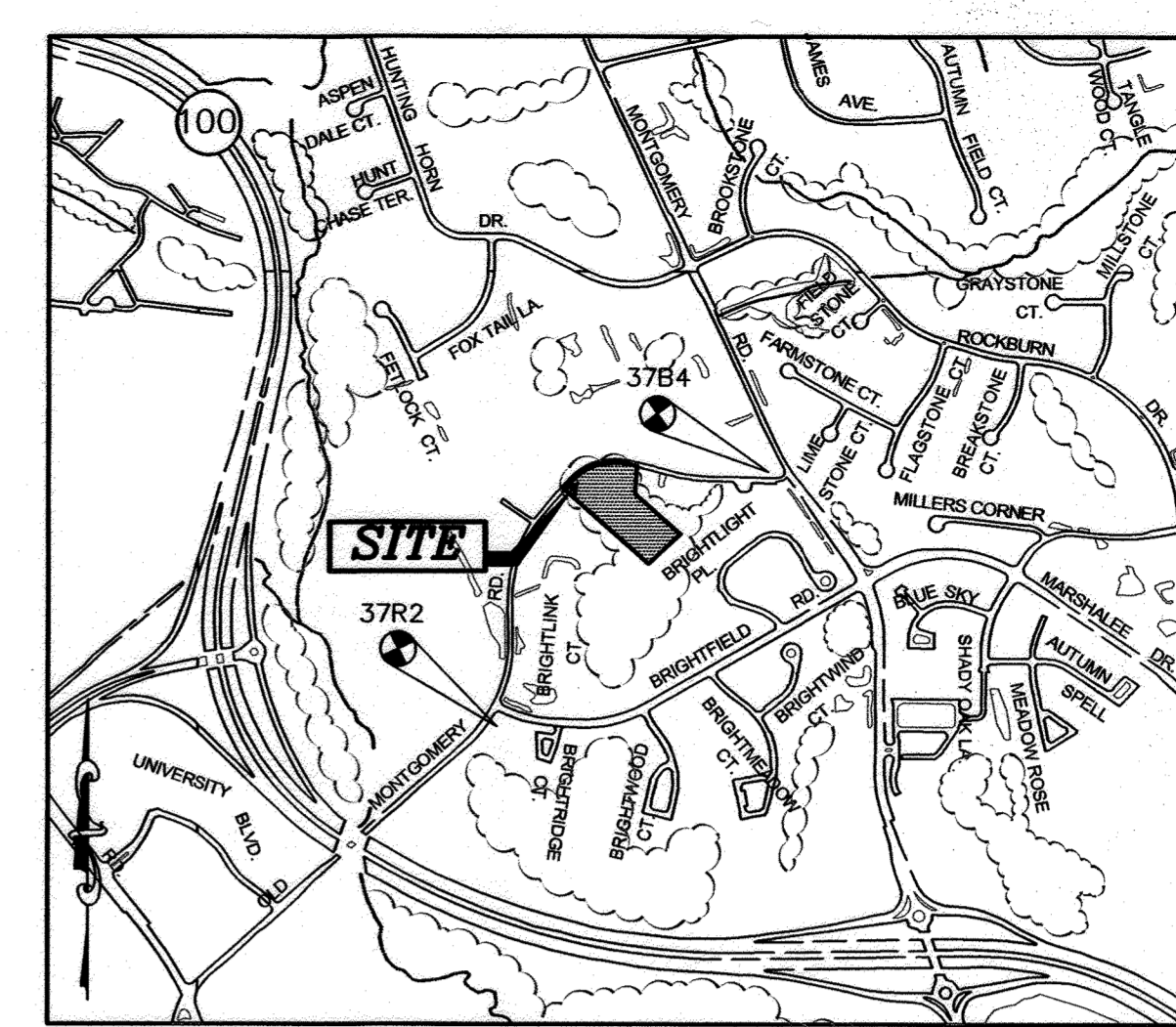
LEGEND

- WETLAND AREA
- PROPOSED IMPERVIOUS AREA TREATED BY MICRO-BIORETENTION (M-6)
- PROPOSED IMPERVIOUS AREA TREATED BY DRYWELLS (M-5)
- ROAD DEDICATION
- SURFACE DRAINAGE
- SSF SUPER SILT FENCE
- DF CLEAN WATER DIVERSION FENCE
- LOD LIMIT OF DISTURBANCE
- EXISTING TREELINE
- OHE OVERHEAD POWER LINE
- MICRO-BIORETENTION
- DRYWELL
- STREAM BANK BUFFER
- WETLAND BUFFER
- DRAINAGE AREA



DRAINAGE AREA MAP

SCALE: 1"=60'



VICINITY MAP
 SCALE: 1"=1,000'

NOTES:

- SITE ANALYSIS DATA:
 ADDRESS: 8021 OLD MONTGOMERY ROAD ELKRDG, MD 21075
 LOCATION: TAX MAP - 37 PARCEL 27 GRID: 2
 ELECTION DISTRICT: 1ST
 ZONING: R-20
 TOTAL AREA: 3.49 AC
 PROPOSED USE FOR SITE: RESIDENTIAL
 TYPE OF PROPOSED UNIT: SFD
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 37B2 & 37R2
 STA. No. 37B4 EL. 401.357 N 563,928.557 E 1,373,109.173
 STA. No. 37R2 EL. 399.701 N 562,611.417 E 1,371,551.550
- PROJECT BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT FEBRUARY, 2020 BY MILDENBERG, BOENDER & ASSOC., INC.
- TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PERFORMED ON OR ABOUT FEBRUARY, 2020 BY MILDENBERG, BOENDER & ASSOC., INC.
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED UNDER CONTRACT #198-W (WATER) AND #547-S (SEWER).
- NO CEMETERIES EXIST ON SITE.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
- FOREST STAND AND WETLAND DELINEATION PERFORMED BY ECO-SCIENCE, INC. IN APRIL, 2020.
- APPROVAL FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) IS REQUIRED PRIOR TO ANY DISTURBANCE, GRADING, OR FILLING IN THE STREAM, STREAM BUFFER, WETLAND, OR WETLAND BUFFER.
- HORIZONTAL GEOMETRY OF THE MICRO-BIORETENTION MAY BE MODIFIED WHILE MAINTAINING SURFACE AREA.
- FOREST CONSERVATION OBLIGATIONS WILL BE SATISFIED BY PAYMENT OF FEE-IN-LIEU.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PROCESS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY AFFECT THE OVERALL SITE DESIGN) AS THE PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- THIS SITE IS LOCATED IN THE DEEP RUN WATERSHED WHICH REQUIRE 10 AND 100 YEARS STORM MANAGEMENT WHICH IS PROVIDED VIA MICRO-BIORETENTION FACILITIES (M-6).

project	date	description	revision
20-005	OCT. 2020	illustration	1
		engineering	1
		approval	1

project	date	description	revision

FAIRMOUNT WOODS
 TAX MAP 37: GRID 2: PARCEL 27
 HOWARD COUNTY, MARYLAND
 1ST ELECTION DISTRICT
ENVIRONMENTAL CONCEPT PLAN (ECP)

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 7350-B Grace Drive, Columbia, Maryland 21044
 (410) 997-0296 Tel. (410) 997-0298 Fax.