

SOILS DESCRIPTION

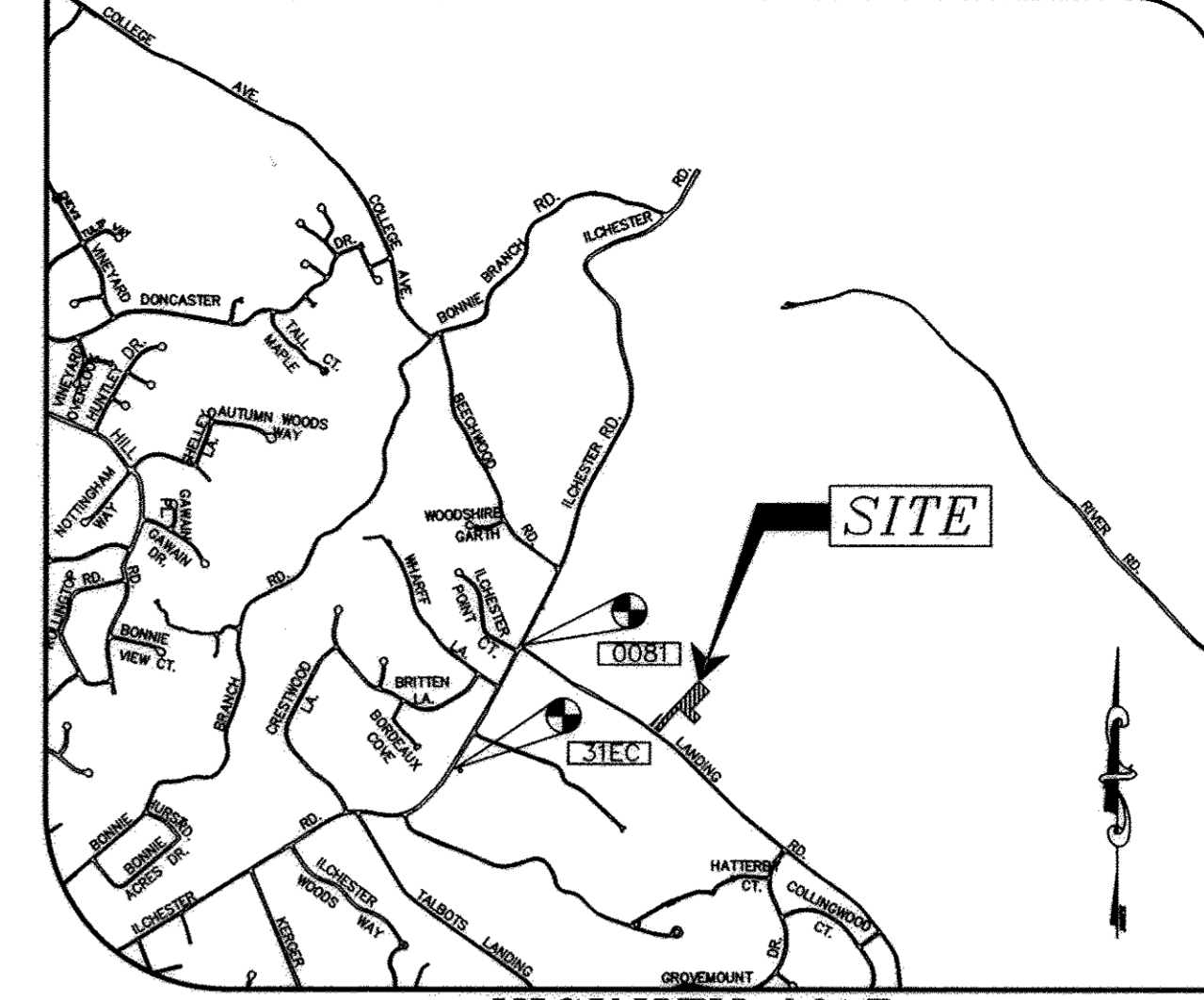
DESIGNATION	HYDROLOGICAL GROUP	DESCRIPTION	K FACTOR
LoB	B	LAGORE SILT LOAM, 3 TO 8 PERCENT SLOPES	.28
LoC	B	LAGORE SILT LOAM, 8 TO 15 PERCENT SLOPES	.28
WoA	D	WATCHUNG SILT LOAM, 0 TO 3 PERCENT SLOPES	.24

LEGEND

- WETLAND AREA
- FLOODPLAIN AREA
- PROPOSED DRIVEWAY AREA TREATED BY MICROBIORETENTION (M-6)
- AREA TREATED BY DRYWELLS (M-5)
- SSF SUPER SILT FENCE
- LOD LIMIT OF DISTURBANCE
- EXISTING TREELINE
- PROPOSED TREELINE
- MICRO-BIORETENTION
- DRYWELL
- STABILIZED CONSTRUCTION ENTRANCE

SITE ANALYSIS DATA:

- AREA OF THE SITE = 2.01+ AC (GROSS)
- AREA OF THE SITE = 1.87+ AC (NET)
- LIMIT OF DISTURBANCE = 1.37 AC±
- AREA OF ROAD DEDICATION = 0
- AREA OF WETLANDS AND ITS BUFFERS = 5,547 S.F. (0.13 AC±)
- AREA OF PROPOSED FLOODPLAIN = 1,665 S.F. (0.11 AC±)
- AREA OF STREAM BUFFER = 9,105 S.F. (0.21 AC±)
- AREA OF STEEP SLOPES (25% OR GREATER AT VERTICAL DISTANCE OF 10 FEET OR MORE) = 0
- AREA OF 15%-24.99% SLOPES = 0
- AREA OF SLOPES 20% OR GREATER = 0
- AREA OF FOREST = 0
- TOTAL ENVIRONMENTAL SENSITIVE AREA = 9,170 S.F. (0.21 AC±)
- AREA OF HIGHLY ERODIBLE SOILS = 0
- PROPOSED GREEN OPEN SPACE = 70,020 S.F. (1.61 AC±)
- THREE (3) SINGLE FAMILY DETACHED RESIDENTIAL UNITS ARE PROPOSED.



VICINITY MAP
SCALE: 1" = 2000'
ADC MAP 11, GRID B2

NOTES:

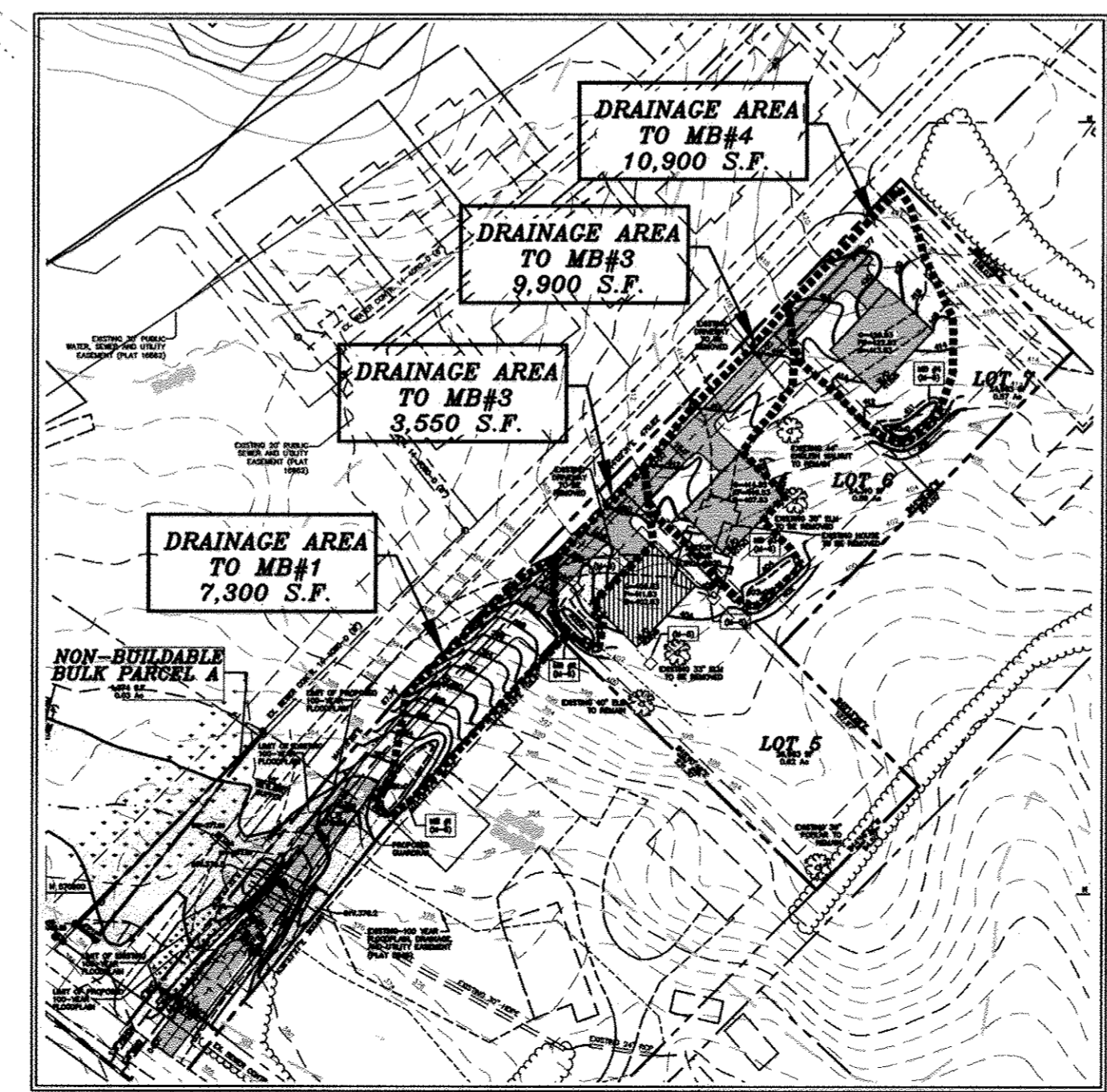
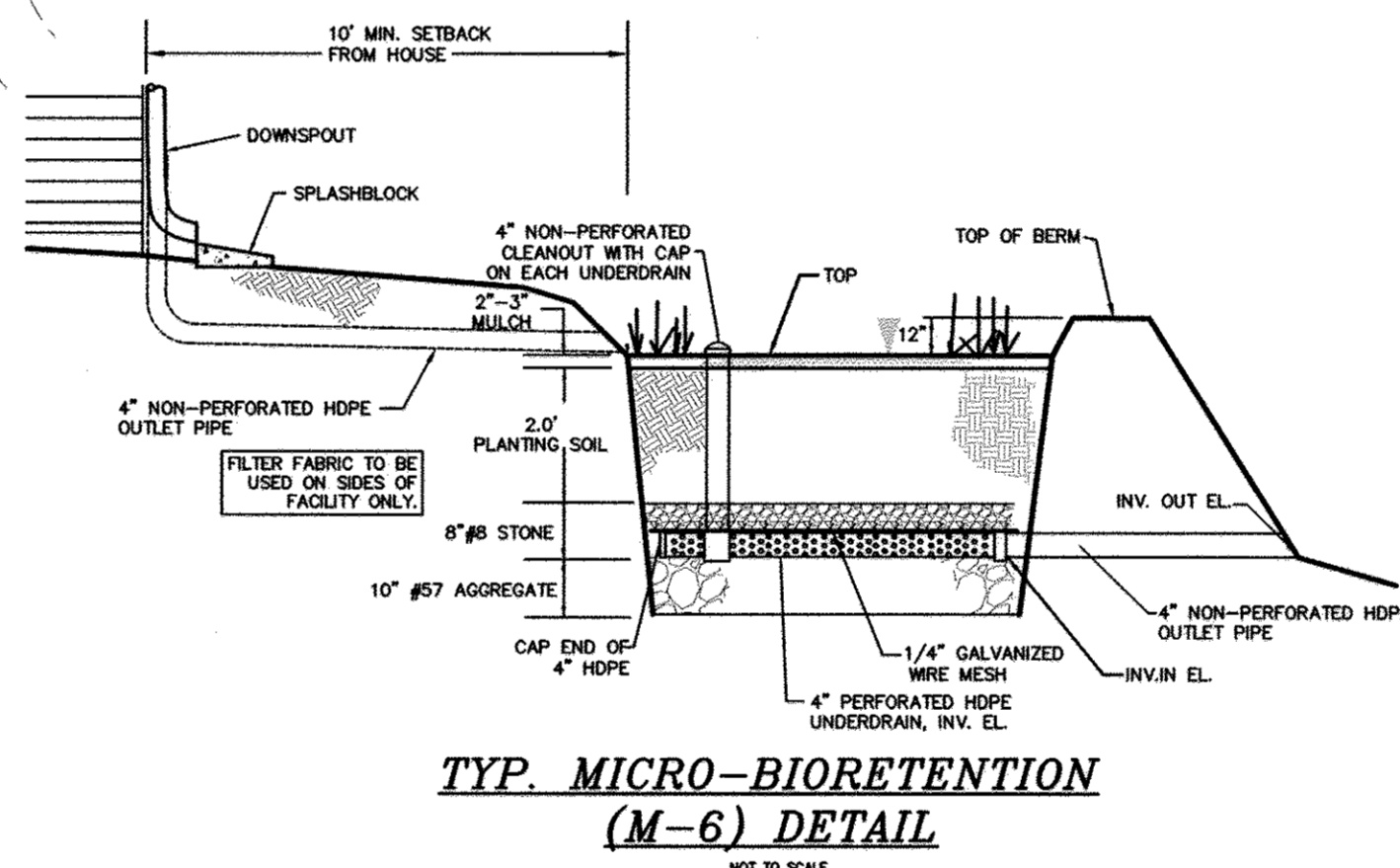
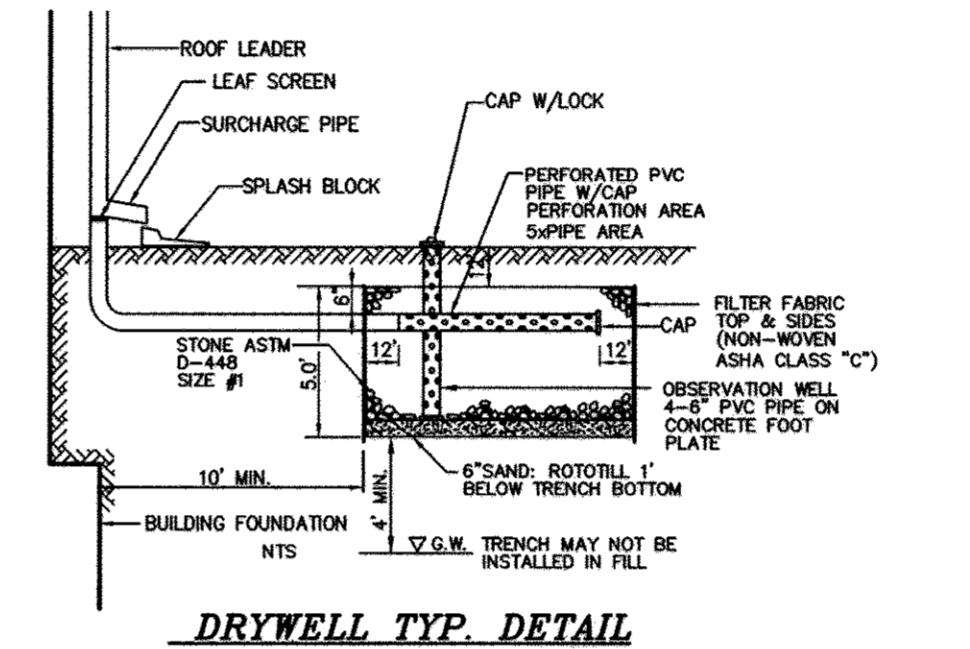
- SITE ANALYSIS DATA:
LOCATION: TAX MAP: 31 PARCEL: 758 GRID 11 LOT 3
ELECTION DISTRICT: FIRST
ZONING: R-ED
PROPOSED USE FOR SITE: RESIDENTIAL.
TOTAL NUMBER OF UNITS: 3
TYPE OF PROPOSED UNIT: SFD
DEED REFERENCE: 17117/00053
PREVIOUS DPZ FILE NUMBERS: WP 79-56, WP-84-80, F-84-162, ECP 13-004, PLAT #4351
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 0081 & 31EC
STA. No. 0081 EL. 477.89 N 572335.3648 E 1377504.0126
STA. No. 31EC EL. 477.73 N 570387.0462 E 1376436.6974
- PROJECT BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT MARCH, 2012 BY MILDBERG, BOENDER AND ASSOC., INC.
- TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PERFORMED ON OR ABOUT MARCH, 2012 BY MILDBERG, BOENDER AND ASSOC., INC.
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT PUBLIC WATER AND SEWER WILL BE UTILIZED UNDER CONTRACT #14-4295-D (WATER) AND #14-4080-D (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 OCTOBER, 2012, VERIFIED IN JANUARY 2018.
- A TOTAL OF FIVE (5) SPECIMEN TREES EXIST ON-SITE. TWO TREES ARE PROPOSED TO BE REMOVED AND THREE TREES ARE PROPOSED TO REMAIN. AN ALTERNATIVE COMPLIANCE TO SECTION 16.1205(a)(7) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WILL BE APPLIED FOR TO ALLOW FOR THE REMOVAL OF THE TWO SPECIMEN TREES.
- 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.

ESD NARRATIVE

- DISTURBANCE TO THE ON-SITE NATURAL FEATURES (STREAMS, STREAM BUFFERS, WETLANDS, AND WETLAND BUFFERS) WAS KEPT TO A MINIMUM FOR THE DESIGN OF THE SITE. THE ONLY PROPOSED DISTURBANCE TO ENVIRONMENTALLY SENSITIVE AREAS IS TO CONSTRUCT THE PROPOSED USE-IN-COMMON DRIVEWAY, WHICH IS THE ONLY WAY FOR THE PROPOSED LOTS TO HAVE ACCESS TO LANDING ROADS. THE PROPOSED MICRO-BIORETENTION FACILITIES WILL PROVIDE STORMWATER QUALITY TREATMENT FOR THE NEW DEVELOPMENT, WHICH WILL BE AN IMPROVEMENT OVER EXISTING CONDITIONS.
- THE 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.
- NON-STRUCTURAL PRACTICES ARE NOT PERMITTED ON THE IN-FILL DEVELOPMENTS. MICRO-BIORETENTION FACILITIES WILL PROVIDE STORMWATER QUALITY TREATMENT FOR THE NEW DEVELOPMENT.
- THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES WILL BE IN ACCORDANCE WITH THE LATEST 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 EARTH DISTURBANCE.
- IN DESIGNING THIS PROJECT, AND AFTER WE PLAN THE PROJECT TO MINIMIZE IMPERVIOUS AREAS, WE UTILIZED ESD MEASURES IN THE FOLLOWING ORDER OF PREFERENCE:
A. MICRO-BIORETENTION (M-6)
B. DRYWELL (M-5)

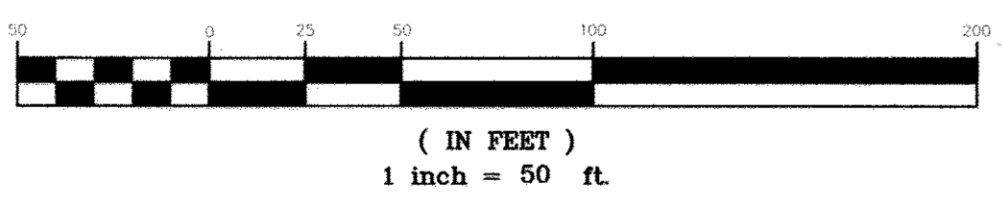
SWM PRACTICES SCHEDULE

AREA	PROPOSED PRACTICES	REQUIRED ESDv	PROVIDED ESDv
LOT 5	M-6, MICRO-BIORETENTION (MB #2)	188 C.F.	252 C.F.
	M-5, DRYWELLS (3 EACH)	209 C.F.	224 C.F.
LOT 6	M-6, MICRO-BIORETENTION (MB #3)	438 C.F.	516 C.F.
LOT 7	M-6, MICRO-BIORETENTION (MB #4)	336 C.F.	439 C.F.
PIPESTEM AREA	M-6, MICRO-BIORETENTION (MB #1)	597 S.F.	655 C.F.
TOTAL		1,766 C.F.	2,086 C.F.



DRAINAGE AREA MAP TO MICRO-BIORETENTIONS
SCALE: 1"=100'

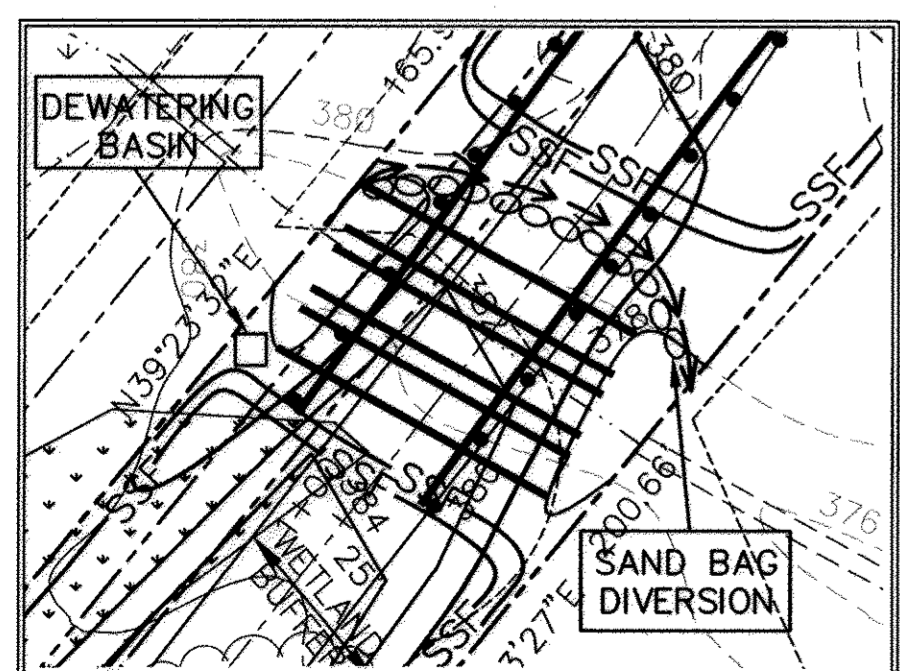
GRAPHIC SCALE



SPECIMEN TREE DATA CHART

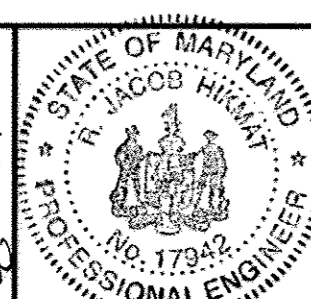
KEY	SPECIES, SIZE (dbh)	CONDITION	COMMENTS
A	ENGLISH WALNUT (44")	GOOD, NON-NATIVE	TO REMAIN
B	SIBERIAN ELM (35")	GOOD, NON-NATIVE	TO BE REMOVED
C	SIBERIAN ELM (33")	GOOD, NON-NATIVE	TO BE REMOVED
D	SIBERIAN ELM (40")	FAIR, SOME DIEBACK NOTED, NON-NATIVE	TO REMAIN
E	TULIP POPLAR (36")	GOOD	TO REMAIN

USE MDE WATERWAY CONSTRUCTION GUIDELINES MCWC 4.3 FOR CULVERT INSTALLATION



STREAM CROSSING DIVERSION DETAIL
SCALE: 1"=50'

APPROVED: DEPARTMENT OF PLANNING AND ZONING
6/18/18
6/13/18



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. 17942, EXP. DATE 9/03/18.
5/23/18
R. JAGOB HIKMAT, P.E. DATE

OWNER/DEVELOPER

LRP, LLC
7350-B GRACE DRIVE
COLUMBIA, MD 21044
(410)997-0296

Project	date	approval
17-001	MAY 2018	MMM
illustration		MMM
scale	1"=50'	RBH

description	date
revisions	

BAUGHAN PROPERTY
LOTS 5 THRU 7 AND NON-BUILDABLE BULK PARCEL "A"
TAX MAP 31, GRID 11, PARCEL 758
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
ENVIRONMENTAL CONCEPT PLAN (ECP)

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