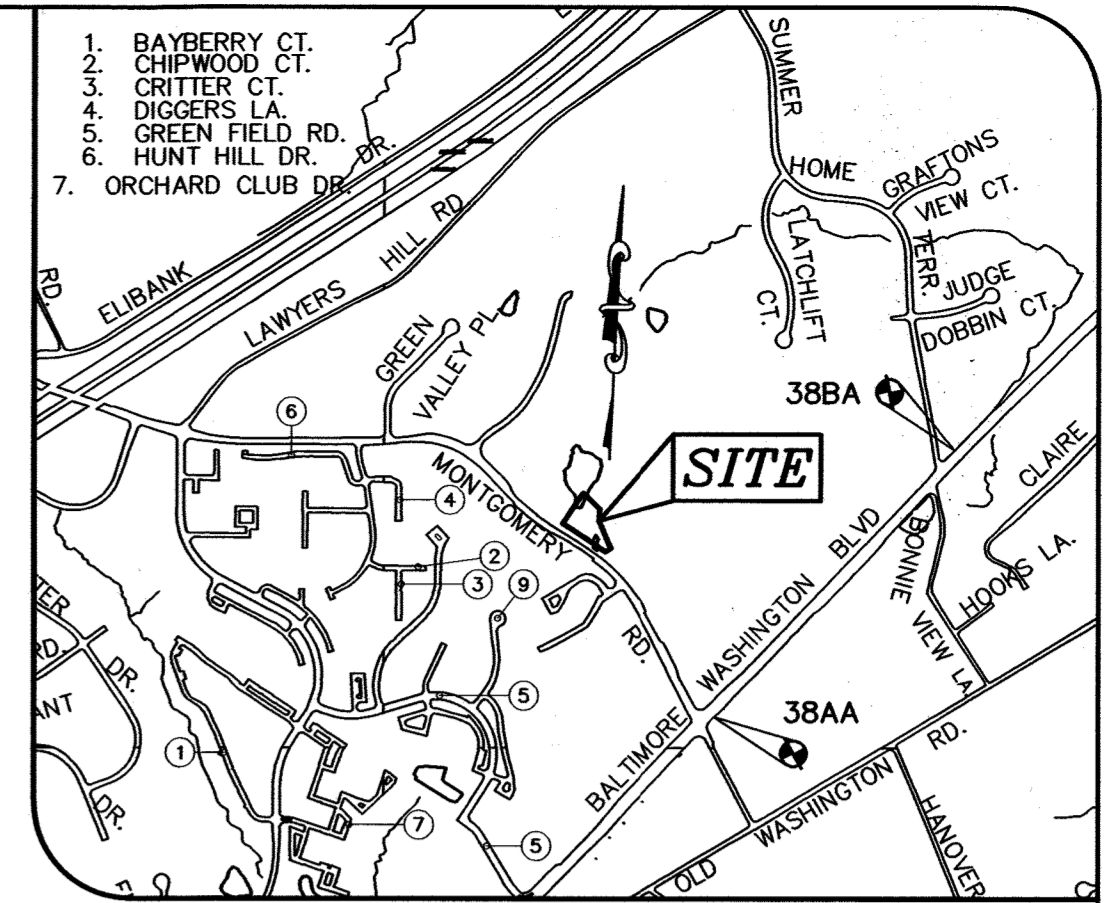


**SOIL DESCRIPTION:**

SYMBOL	RATING	NAME	K FACTOR	MAP NO.	COMMENTS
R <sub>s</sub> C	(C)	RUSSETT FINE SANDY LOAM 5 TO 10% SLOPES	0.43	19	
R <sub>s</sub> D	(C)	RUSSETT FINE SANDY LOAM 10 TO 15% SLOPES	0.43	19	ERODABLE (SLOPES>5%)
U <sub>c</sub> B	(C)	URBAN LAND - CHILLUMBELVILLE COMPLEX 0 TO 5% SLOPES	N/A		

**SPECIMEN TREE TABLE:**

KEY	SPECIES	SIZE (IN, DBH)	CRZ (FEET RADIUS)	COMMENTS	STATUS
ST-1	BLACK OAK	30	45	FAIR CONDITION, LIMB DIE-BACK	TO REMAIN
ST-2	BLACK OAK	35	52.5	FAIR CONDITION, LIMB DIE-BACK	TO REMAIN
ST-3	TULIP POPLAR	32	48	FAIR CONDITION, THIN LOPSIDED HABIT	TO BE REMOVED
ST-4	BLACK OAK	30.5	45.75	GOOD CONDITION	TO REMAIN
ST-5	BLACK OAK	35.5	53.25	FAIR CONDITION, THIN CANOPY	TO BE REMOVED



**VICINITY MAP**  
SCALE: 1"=100'  
ADC MAP: 17 (G-7)

**GENERAL NOTES:**

- THE SUBJECT PROPERTY IS ZONED R-ED PER THE 10/06/2013 COMPREHENSIVE ZONING PLAN.
- PROPERTY IS BEING DEVELOPED AS R-20.
- PARCEL BACKGROUND:**  
ADDRESS : MONTGOMERY ROAD, ELKRIDGE MD 21075  
TAX MAP 38; GRID: 02 PARCEL 26  
ELECTION DISTRICT : FIRST  
DEED REFERENCE: 9927 / 492  
AREA : 47,802 S.F. OR 1.0974 ACRES ±  
TOTAL NUMBER OF UNITS : 1  
TYPE OF PROPOSED UNIT : SFD  
PROPOSED USE FOR SITE : RESIDENTIAL.
- PROJECT BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT FEB., 2021 BY MILDBERG, BOENDER & ASSOC.
- TOPOGRAPHY SHOWN HERE IS GIS AND HAS BEEN FIELD VERIFIED BY MILDBERG, BOENDER & ASSOC. INC. IN FEBRUARY, 2021 TO ACCURATELY REPRESENT THE RELATIVE CHANGES ON THE SUBJECT PROPERTY.
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 38AA & 38BA  
STA. No. 38AA: N 561,158.815; E 1,389,726.426; EL. 220.036 (NAVD88)  
STA. No. 38BA: N 562,553.314; E 1,390,967.956; EL. 166.174 (NAVD88)
- SOILS LOCATION AND CLASSIFICATION BASED ON HOWARD COUNTY GIS SOIL SURVEY
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE ANY APPROVAL OF SUBSEQUENT SUBDIVISION OR SITE DEVELOPMENT PLANS. FURTHER COMMENTS WILL BE GENERATED UPON REVIEW OF THE APPLICABLE DEVELOPMENT PLANS IN ACCORDANCE WITH THE SUBDIVISION AND ZONING REGULATIONS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- NO CEMETERIES OR HISTORIC STRUCTURES EXIST ON SITE.
- PROJECT IS CONDITIONALLY EXEMPT FROM THE REQUIREMENTS OF SECTION SEC. 16.124 OF HOWARD COUNTY CODE FOR FOREST CONSERVATION WITH THE FILING OF DECLARATION OF INTENT FOR CLEARING LESS THAN 20,000 S.F. OF FOREST.
- WETLAND DELINEATION PERFORMED BY ECO-SCIENCE, INC. IN APRIL, 2021.
- FOREST STAND DELINEATION PERFORMED BY MILDBERG, BOENDER & ASSOC., INC. IN MAY, 2021.

**ESD NARRATIVE**

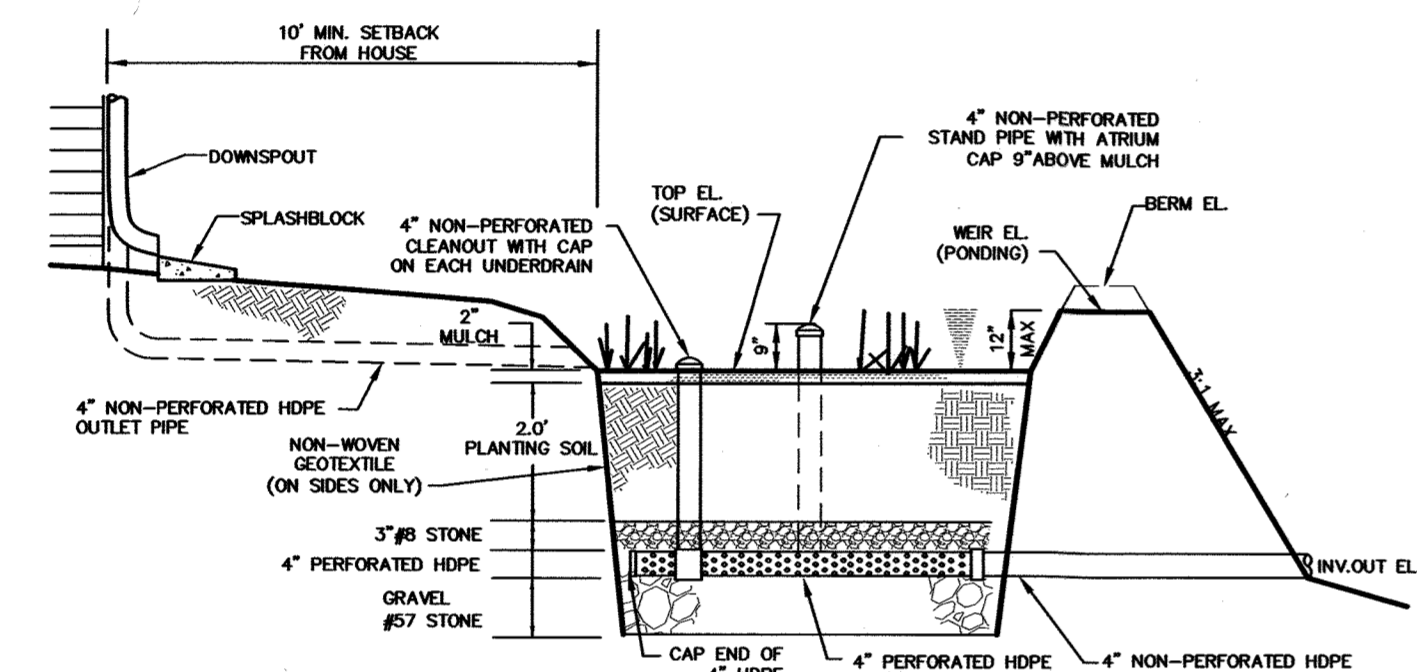
- THE PROPERTY CONTAINS ENVIRONMENTAL FEATURES. THERE IS A POND IN THE NORTHWEST PORTION OF THE SITE THAT CONTINUES OFF-SITE TO THE NORTH. THERE IS ALSO A DEPRESSED SUMP AREA ON THE EAST SIDE OF THE SITE THAT HAS PONDING WATER WITH WETLANDS. PROPOSED STRUCTURE WILL BE CONSTRUCTED OUTSIDE OF THE ENVIRONMENTALLY SENSITIVE AREA BUFFERS. FOREST EXIST ON SITE. THERE ARE 5 SPECIMEN TREES ON SITE.
- 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.
- 12' WIDE DRIVEWAY WILL BE USED TO PROVIDE ACCESS TO THE HOUSE. MICRO-BIORETENTION FACILITY (M-6) WILL PROVIDE STORMWATER QUALITY TREATMENT FOR THE HOUSE AND PART OF THE DRIVEWAY. THE REMAINING PART OF THE PROPOSED DRIVEWAY WILL BE TREATED BY NON-ROOFTOP DISCONNECTION (N-2).
- 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.
- THIS PROJECT WAS DESIGNED TO MINIMIZE THE IMPERVIOUS AREAS, ESD MEASURES WERE UTILIZED IN THE FOLLOWING ORDER OF PREFERENCE:  
(M-6) MICRO-BIORETENTION  
(N-2) NON-ROOFTOP DISCONNECTION

**SITE ANALYSIS DATA:**

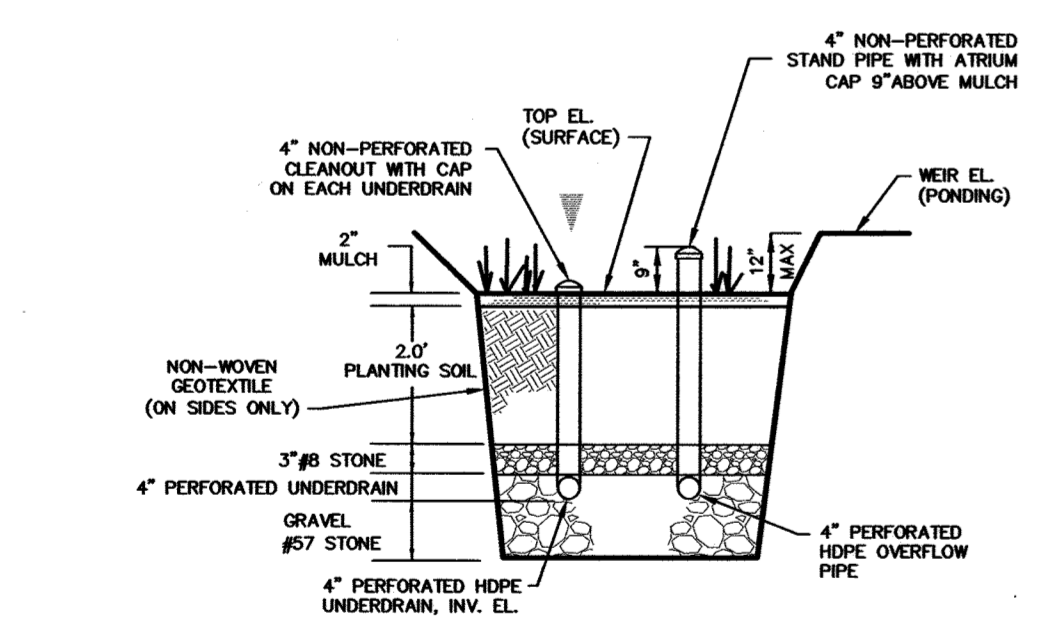
- AREA OF THE SITE = 1.1 AC (47,208 S.F.)
- AREA OF WETLANDS AND ITS BUFFERS = 19,598 S.F. (0.45 AC)
- AREA OF FLOODPLAIN = 0
- AREA OF EXISTING FOREST = 34,416 S.F. (0.79 AC)
- AREA OF STREAM BUFFER = 0
- AREA OF STEEP SLOPES 15% OR GREATER = 0
- AREA OF STEEP SLOPES 25% OR GREATER = 0
- NET BUILDABLE AREA = 0.65 AC
- LIMIT OF DISTURBANCE AREA = 14,900 S.F. (0.34 AC)
- GREEN OPEN AREA (PERVIOUS) = 44,382 S.F. (1.02 AC)
- PROPOSED IMPERVIOUS AREA = 3,420 S.F. (0.08 AC)

**LEGEND**

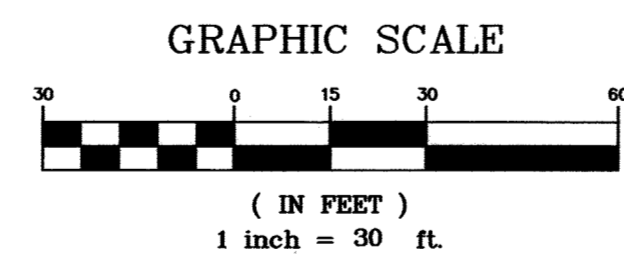
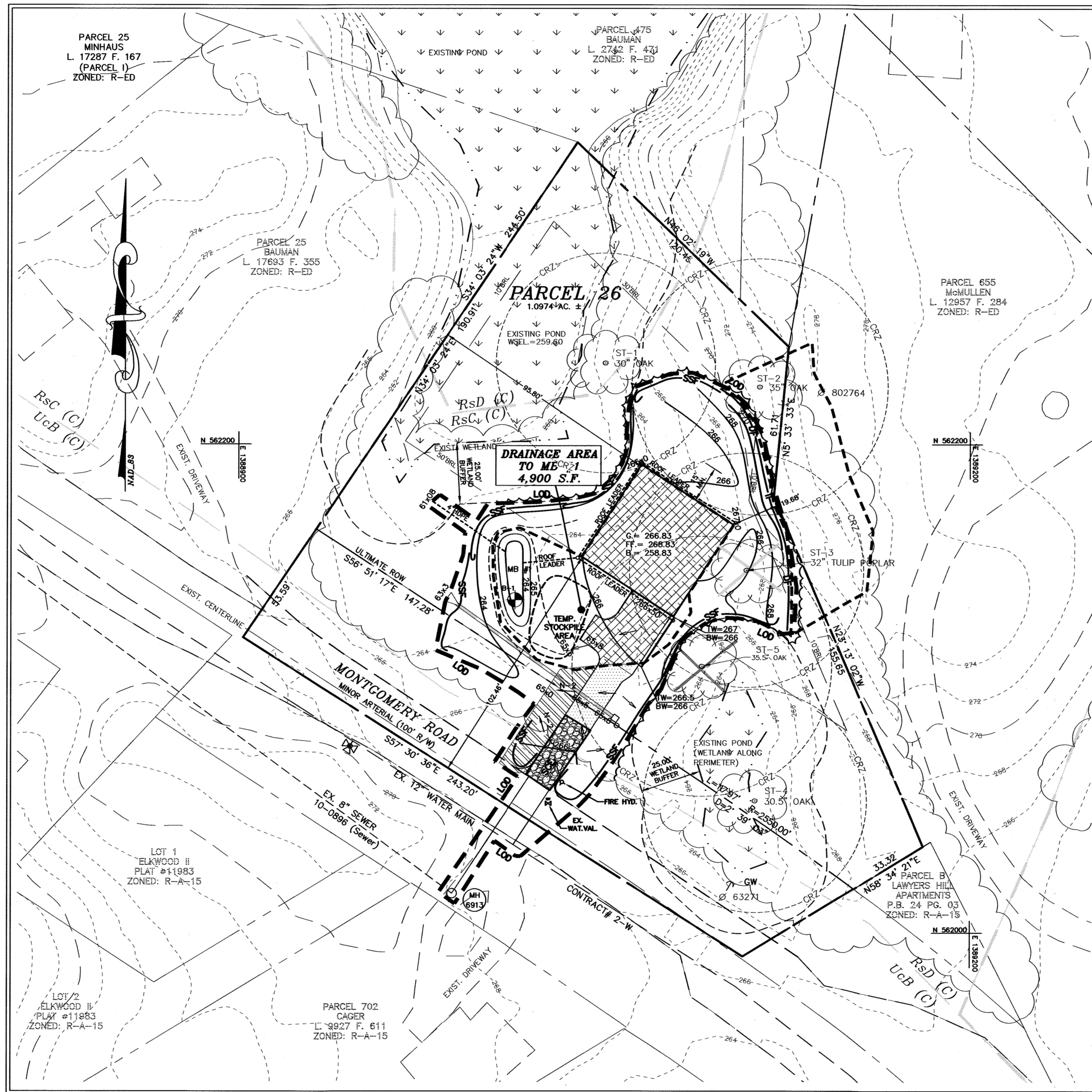
- DF - CLEAN WATER DIVERSION FENCE
- SF - SILT FENCE
- LOD - LIMIT OF DISTURBANCE
- DRAINAGE AREA
- IMPERVIOUS AREA TREATED BY MICRO-BIORETENTION (M-6)
- EX. TREE TO BE REMOVED
- SCB - STABILIZED CONSTRUCTION ENTRANCE



**TYPICAL MICRO-BIORETENTION PROFILE**  
NOT TO SCALE



**TYP. SECTION MICRO-BIORETENTION (M-6)**  
NOT TO SCALE



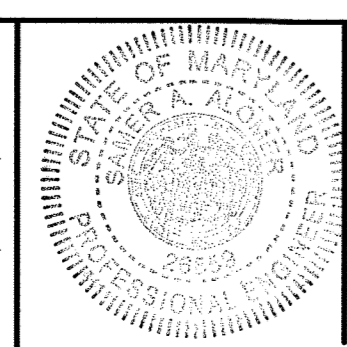
**SWM PRACTICES SCHEDULE**

AREA	PROPOSED PRACTICES	REQUIRED ESDv	PROVIDED ESDv	REQUIRED Pe	PROVIDED Pe
PARCEL 26	MICRI-BIORETENTION (M-6) NON-ROOFTOP DISCONNECTION (N-2)	371 C.F.	399 C.F.	1.2"	1.25"

**OWNER/DEVELOPER**

LAWRENCE C. CAGER  
PO BOX 1732  
BALTIMORE, MD, 21203  
202-258-6089

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 12.16.21  
DATE  
12/21/21  
DATE



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 08/08/23  
SAMER A. ALOMER P.E. 11-17-21 DATE

date	NOV. 2021	description	engineering	approval	SA
project	21-004	illustration	MMM	scale	1"=30'

date		description		revisions	
no.					

**CAGER PROPERTY**  
MONTGOMERY ROAD, ELKRIDGE MD 21075  
TAX MAP: 38 - PARCELS : 26 GRID 02  
FIRST ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
ENVIRONMENTAL CONCEPT PLAN (ECP)

**MILDBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
7350-B Crace Drive, Columbia, Maryland 21044  
(410) 997-0286 Tel. (410) 997-0288 Fax.