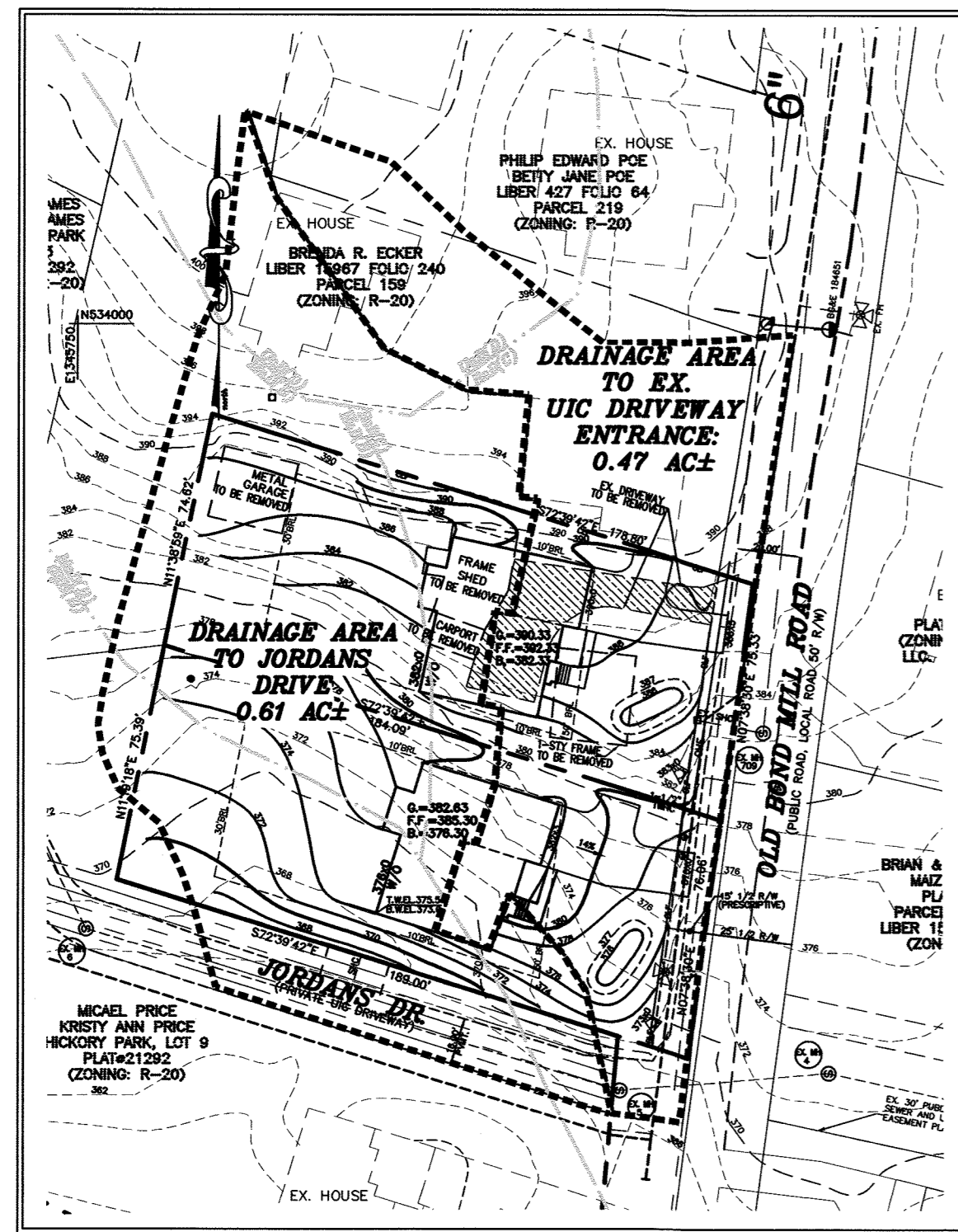
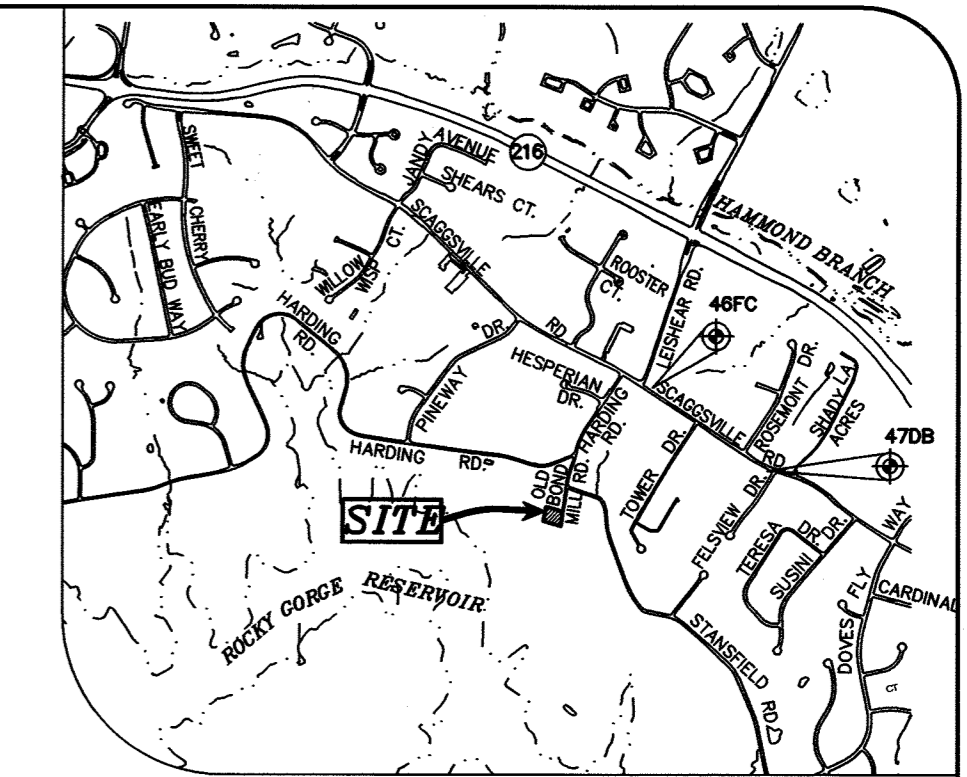
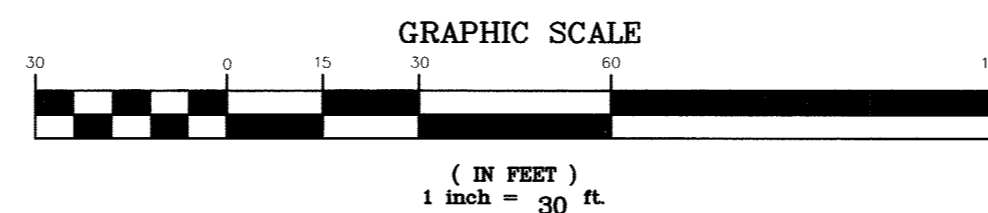
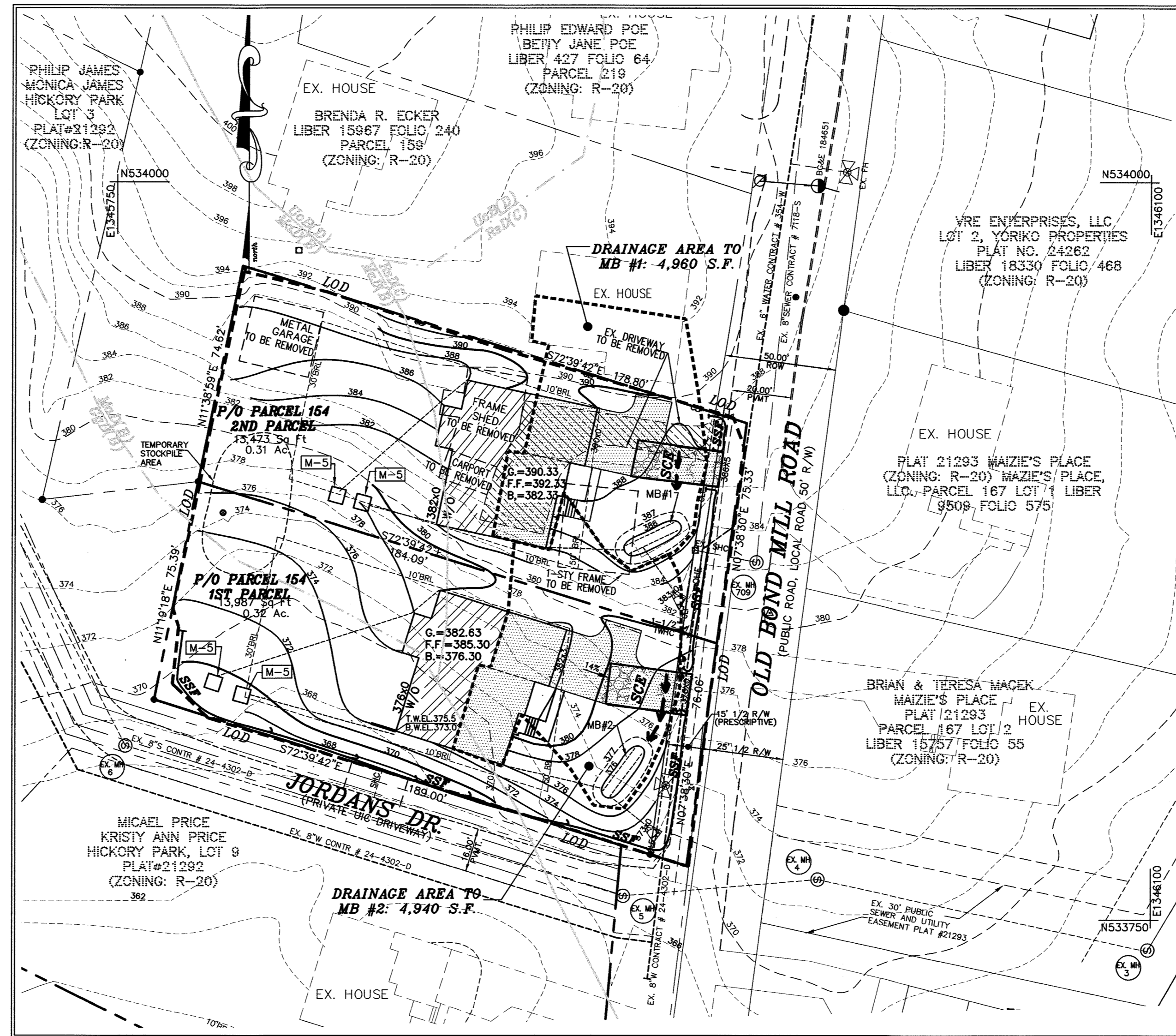
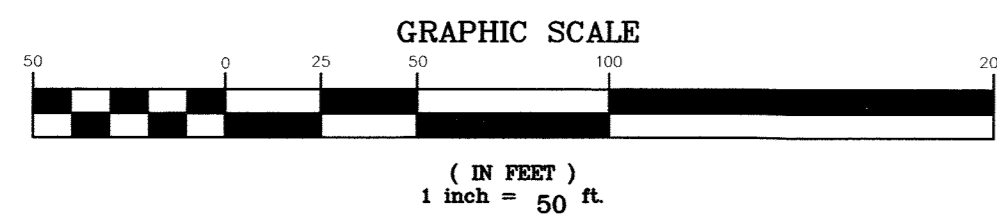


**SOILS TABLE**

SYMBOL	RATING	NAME	K FACTOR	MAP NO.	COMMENTS
GgB	(B)	GLENELG LOAM, 3-8% SLOPES	0.20	23	HIGHLY ERODIBLE
MsD	(B)	MANOR LOAM, 8-15% SLOPES	0.28	23	HIGHLY ERODIBLE
Rsd	(C)	RUSSETT FINE SANDY LOAM, 10-15% SLOPES	0.24	23	HIGHLY ERODIBLE



**DRAINAGE AREA MAP**



**VICINITY MAP**  
ADC MAP: 39, E-5  
SCALE: 1"=2000'

**NOTES:**

- SITE ANALYSIS DATA:  
ADDRESS: 10678 OLD BOND MILL ROAD, LAUREL MD, 20723  
LOCATION: TAX MAP : 46 PARCEL: 154 (1ST & 2ND PARCELS) GRID 18, LIBER 18276 FOLIO 354  
ELECTION DISTRICT : SIXTH  
ZONING: R-20  
TOTAL AREA: 0.63 AC±  
TOTAL NUMBER OF UNITS : 2  
TYPE OF PROPOSED UNIT : SFD  
PROPOSED USE FOR SITE : RESIDENTIAL
- COORDINATES BASED ON NAD '83 (HORIZONTAL) AND NAD '88 (VERTICAL) MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 46FC & 47DB  
STA. No. 46FC N 535,145.935 E 1,346,954.793 ELEV. 403.75  
STA. No. 47DB N 534,316.891 E 1,348,131.226 ELEV. 398.56
- PROJECT BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT SEPTEMBER, 2018 BY MILDENBERG, BOENDER & ASSOC., INC.
- EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PERFORMED ON OR ABOUT SEPTEMBER, 2018 BY MILDENBERG, BOENDER & ASSOC., INC.
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED UNDER CONTRACT # 354-W (WATER) AND # 7118-S (SEWER).
- NO CEMETERIES EXIST ON SITE.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
- NO FORESTED AREAS, WETLANDS, FLOODPLAIN, STREAMS AND ITS BUFFERS EXIST ON SITE.
- NO AREA OF STEEP SLOPES 15% OR GREATER EXIST ON SITE.
- THERE ARE NO SPECIMEN TREES THAT EXIST ON SITE.
- 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.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (COUNCIL BILL 45-2003). DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION OR BUILDING/GRADING PERMIT.

**ESD NARRATIVE**

- WETLANDS AND ITS BUFFERS, STREAMS AND ITS BUFFERS, OR STEEP SLOPES DO NOT EXIST ON SITE. NO FORESTED AREAS OR SPECIMEN TREES EXISTS 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 OR SERVE EACH PARCEL. RAIN GARDENS (M-7) 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 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 PLANNED THE PROJECT TO MINIMIZE IMPERVIOUS AREAS, WE UTILIZED ESD MEASURES IN THE FOLLOWING ORDER OF PREFERENCE:  
MICRO-SCALE PRACTICES: (M-7) AND (M-5)

**SITE ANALYSIS DATA:**

- AREA OF THE SITE = 0.63± AC (GROSS)
- LIMIT OF DISTURBANCE = 26,681 S.F. (0.61 AC±)
- AREA OF ROAD DEDICATION = 0
- AREA OF WETLANDS AND ITS BUFFERS = 0
- AREA OF 100 YEAR FLOODPLAIN = 0
- AREA OF STREAM BUFFER = 0
- 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 = 0
- AREA OF HIGHLY ERODIBLE SOILS = 27,460 S.F. (0.63 AC±)
- PROPOSED GREEN OPEN SPACE = 21,393 S.F. (0.49 AC±)
- PROPOSED IMPERVIOUS AREA = 6,050 S.F. (0.138 AC±)
- TWO (2) NEW SINGLE FAMILY DETACHED RESIDENTIAL UNITS ARE PROPOSED.

**EXISTING RCN:**

SITE AREA: 0.63 AC  
GROUP 'B' SOIL:  
OPEN SPACE: 0.29 AC; CN: 61  
GROUP 'C' SOIL:  
OPEN SPACE: 0.27 AC; CN: 74  
IMPERVIOUS: 0.07 AC; CN: 98  
 $(0.29)(61) + (0.27)(74) + (0.07)(98) / 0.63 = 68.7$   
RCN = 69

**PROPOSED RCN:**

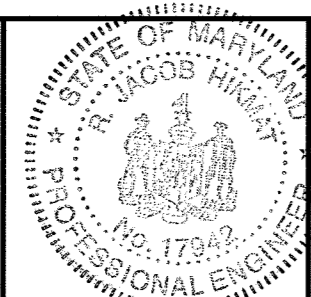
SITE AREA: 0.63 AC  
GROUP 'B' SOIL:  
OPEN SPACE: 0.30 AC; CN: 61  
GROUP 'C' SOIL:  
OPEN SPACE: 0.19 AC; CN: 74  
WOODS IN GOOD CONDITION: 0.14 AC; CN: 70  
 $(0.30)(61) + (0.19)(74) + (0.14)(70) / 0.63 = 66.7$   
RCN = 67

**LEGEND**

- PROPOSED DRIVEWAY OR ROOFTOP AREA TREATED BY MICROBIORETENTION (M-6)
- AREA TREATED BY DRYWELLS (M-5)
- EXISTING PAVED DRIVEWAY TO BE REMOVED
- SSF - SUPER SILT FENCE
- LOD - LIMIT OF DISTURBANCE
- A-2 - TEMPORARY DIVERSION SWALE
- MB #2 (M-6) - MICRO-BIORETENTION
- (M-5) - DRYWELL
- SCB - STABILIZED CONSTRUCTION ENTRANCE

**OWNER/DEVELOPER**  
VRE ENTERPRISES LLC  
10620 VISTA ROAD  
COLUMBIA, MARYLAND 21044  
(410) 997-0296

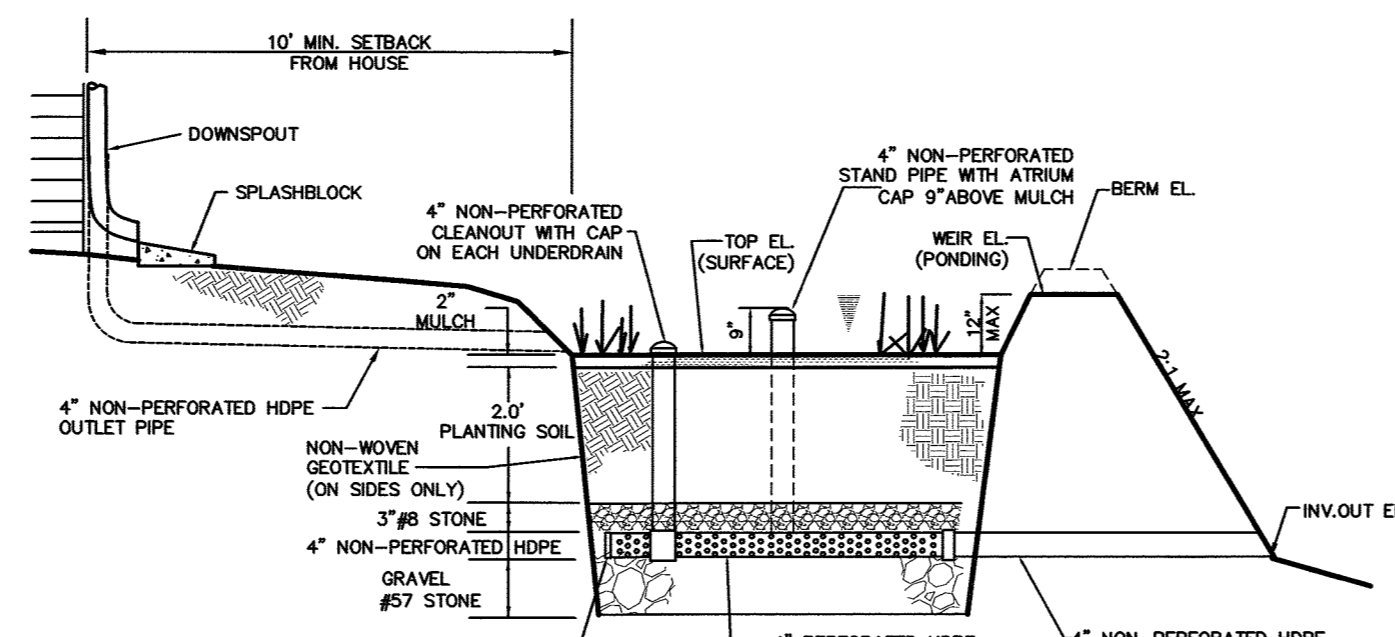
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
DATE: 5-9-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 5-7-19  
CHIEF, DIVISION OF LAND DEVELOPMENT



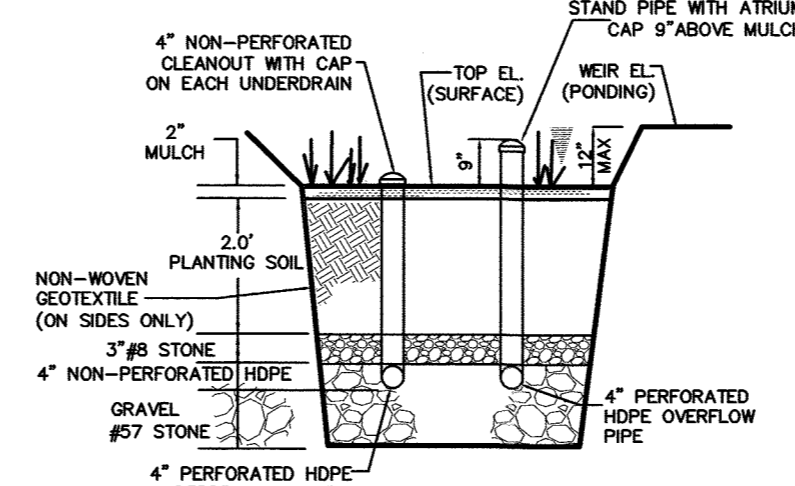
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP. DATE 9/03/18.  
R. JACOB HIKMAT, P.E. DATE: 5/11/19

**SWM PRACTICES SCHEDULE**

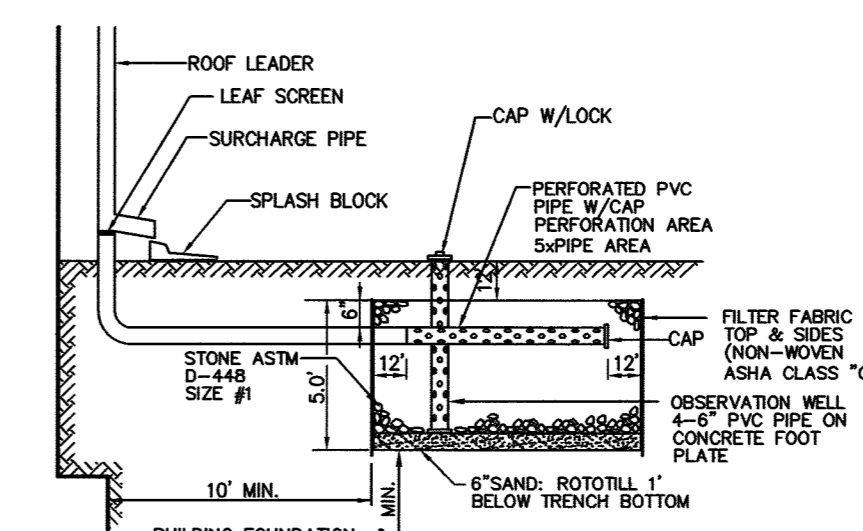
AREA	PROPOSED PRACTICES	REQUIRED ESDv	PROVIDED ESDv
P/O PARCEL 154 1ST PARCEL	M-5, DRYWELLS (2 EACH)	93 C.F.	100 C.F.
P/O PARCEL 154 2ND PARCEL	M-6, MICRO BIORETENTION (MB #2)	185 C.F.	239 C.F.
P/O PARCEL 154 1ST PARCEL	M-5, DRYWELLS (2 EACH)	93 C.F.	100 C.F.
P/O PARCEL 154 2ND PARCEL	M-6, MICRO BIORETENTION (MB #1)	185 C.F.	239 C.F.



**TYPICAL MICRO-BIORETENTION PROFILE**  
NOTE - THE ENTIRE DRAINAGE AREA MUST BE FULLY STABILIZED BEFORE RUNOFF CAN BE DIRECTED TO THE FACILITY.



**TYP. SECTION MICRO-BIORETENTION (M-6)**



**DRYWELL TYP. DETAIL**

date: MAY 2019  
project: 18-013  
illustration: MAM  
scale: 1"=30'  
approval: RH

description: SIMPSON PROPERTY  
revisions: [None]

SIMPSON PROPERTY  
10678 OLD BOND MILL ROAD, LAUREL MD, 20723  
TAX MAP: 46  
BLOCK: 18  
PARCEL: 154 (1ST & 2ND PARCELS)  
SIXTH ELECTION DISTRICT  
HOWARD COUNTY, MD  
ENVIRONMENTAL CONCEPT PLAN

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