

GENERAL NOTES

1. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
2. THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A TOPOGRAPHIC SURVEY PREPARED BY JOHN C. MELLEMA, SR., INC., DATED FEB. 2017.
3. THE PROJECT BOUNDARY IS BASED ON BOUNDARY PROVIDED BY JOHN C. MELLEMA, SR., INC., DATED FEB. 2017.
4. THE COORDINATES AND ELEVATIONS SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY CONTROL STATION 31E4 AND BENCHMARKS 31E2 & 31E4 WERE USED FOR THIS PROJECT.
5. THE SUBJECT PROPERTY IS ZONED R-20 IN ACCORDANCE WITH THE ZONING REGULATIONS EFFECTIVE ON OCT. 06, 2013, AND IS SUBJECT TO SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE OCT. 07, 2007 PER COUNCIL BILL 47-2007 & 48-2007. DEVELOPMENT OR CONSTRUCTION ON THIS PROPERTY MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION OR BUILDING/GRADING PERMIT APPLICATIONS.
6. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S) OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS.
7. THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
8. WATER FOR THIS PROJECT IS PUBLIC CONTRACT #208-W.
9. SEWER FOR THIS PROJECT IS TO BE PUBLIC, CONTRACT #10-1214.
10. EXISTING UTILITIES LOCATED FROM AS-BUILT DRAWINGS. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE.
11. THERE ARE NO "FLOODPLAIN" AREAS LOCATED WITHIN THE DEVELOPMENT AREA AS PER FEMA DFIRM MAPS APPROVED BY FEMA AND EFFECTIVE FOR COUNTY DEVELOPMENT RESTRICTIONS AS OF MAY 6, 2013.
12. THERE ARE 0 S.F. (0.00 AC.) $\geq 25\%$ STEEP SLOPES, AND 0 S.F. (0.00 AC.) 15% - 24.99% STEEP SLOPES OVER 20,000 SF CONTIGUOUS LOCATED WITHIN THE DEVELOPMENT AREA.
13. THE PROJECT SITE WAS EVALUATED FOR THE PRESENCE OF ENVIRONMENTAL FEATURES AND A LETTER HAS BEEN PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. C/O MR. JOHN CANOLES, JULY 19, 2017. MR. CANOLES NOTED AREAS OF FOREST AND LAWN BUT NO SPECIMEN TREES OR ANY OTHER REGULATED ENVIRONMENTAL FEATURES WERE FOUND WITHIN THE LIMITS OF THE DEVELOPMENT AREA FOR THIS PROJECT.
14. FOREST CONSERVATION WILL NOT BE REQUIRED FOR THIS PROJECT, BECAUSE THE PROPERTY IS LESS THAN 40,000 SF.
15. THERE ARE 0 S.F. (0.00 AC.) AREA OF WETLANDS PRESENT WITHIN THE DEVELOPMENT AREA PER ECO-SCIENCE PROFESSIONALS, INC. C/O MR. JOHN CANOLES, JULY 19, 2017.
16. OPEN SPACE IS NOT REQUIRED FOR A SINGLE, UNSUBDIVIDED LOT.
17. GEOTECHNICAL INVESTIGATIONS SHALL BE COMPLETED AS PART OF THE SITE DEVELOPMENT PLAN SUBMISSION.
18. A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
19. ILCHESTER ROAD IS CLASSIFIED AS A MINOR COLLECTOR. CRESTWOOD DRIVE AND TALBOTS LANDING ARE BOTH CLASSIFIED AS LOCAL ROADS. SITE ACCESS SHALL BE VIA A PRIVATE DRIVEWAY.
20. TO THE BEST OF THE OWNER'S KNOWLEDGE, THERE ARE NO BURIAL GROUNDS, CEMETERIES, OR HISTORIC STRUCTURES LOCATED WITHIN THE DEVELOPMENT AREA.
21. THERE ARE NO EXISTING DWELLINGS OR STRUCTURES WITHIN THE DEVELOPMENT AREA.
22. THE PROPOSED BUILDINGS SHALL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM.
23. STORMWATER MANAGEMENT FOR THE PROJECT IS PROVIDED BY THE USE OF NON-STRUCTURAL AND MICRO-SCALE PRACTICES IN ACCORDANCE WITH ENVIRONMENTAL SITE DESIGN CRITERIA. MICRO-SCALE PRACTICES INCLUDE DRY WELLS (M-5), AND A MICROBIORETENTION FACILITY (M-6). THESE FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED.
24. APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (ECP) DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SITE DEVELOPMENT PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY ZONING SHALL OCCUR AT THE SITE DEVELOPMENT PLAN STAGE. 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.
25. APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (ECP) BY THE HOWARD SOIL CONSERVATION DISTRICT DOES NOT GRANT APPROVAL OF THE PROPOSED SEDIMENT CONTROL SCHEME.
26. THERE ARE HIGHLY ERODIBLE SOILS ON THIS SITE.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY TEMPORARY CONSTRUCTION EASEMENTS THAT MAY BE REQUIRED.

SITE DATA

TAX MAP 31, BLOCK 16, PARCEL 829
 1ST ELECTION DISTRICT
 PRESENT ZONING: R-20 RESIDENTIAL
 TOTAL AREA OF PROPERTY: 0.39 AC.
 DPZ REFERENCES:
 DEED/PLAT REFERENCES: L.04635 / F.00146
 AREA MANAGED BY ESDV ("DEVELOPMENT AREA"): 19,427 S.F./0.45 AC.
 USE OF PROPOSED STRUCTURES (THIS PLAN): SINGLE FAMILY RESIDENTIAL
 *TOTAL BUILDING COVERAGE WITHIN THE DEVELOPMENT AREA: 2,247 SF (0.05 AC. OR 11.57%)
 *PAVED AREA WITHIN THE DEVELOPMENT AREA: 3,174 SF (0.07 AC. OR 16.34%)
 LIMIT OF DISTURBED AREA (THIS PLAN): 13,973 SF / 0.32 AC.
 *WETLANDS ON SITE: 0.00 AC.
 *WETLAND BUFFERS ON SITE: 0.00 AC.
 *STREAMS AND THEIR BUFFERS ON SITE: 0.00 AC.
 *AREA OF 100 YEAR FLOODPLAIN: 0.00 AC.
 *AREA OF EXISTING FOREST ON SITE: 0.24 AC.
 *AREA OF STEEP SLOPES (15% OR GREATER): 0.07 AC.
 *AREA OF ERODIBLE SOILS: 0.07 AC.
 *IMPERVIOUS AREA : 5,421 S.F. (0.12 AC. OR 27.90%)
 *GREEN/OPEN AREA : 14,006 S.F. (0.32 AC. OR 72.1%)
 NOTE *WITHIN LIMITS OF DEVELOPMENT AREA ONLY
 DEVELOPMENT AREA INCLUDES OFFSITE AREAS WHICH REQUIRE AN EASEMENT

ENVIRONMENTAL SITE DESIGN NARRATIVE

IN ACCORDANCE WITH CHECKLIST ITEM III.K.

1. THE PROJECT SITE IS LOCATED IN THE R-20 ZONING DISTRICT, ON THE NORTH SIDE OF ILCHESTER ROAD, JUST EAST OF TALBOTS LANDING. THE CONTIGUOUS PARCEL AREA IS 0.39 AC AND THE ACCESS TO THIS LANDLOCKED PARCEL WILL BE PROVIDED THROUGH AN EASEMENT FOR INGRESS/EGRESS, UTILITIES AND GRADING, WHICH TRAVERSES THE ADJACENT PROPERTY. DUE TO THE OFFSITE DISTURBANCES, THE TOTAL DEVELOPMENT AREA FOR THE PROJECT IS 0.45 AC. AN ENVIRONMENTAL STUDY BY ECO-SCIENCE PROFESSIONALS, INC. DETERMINED THAT THERE ARE NO STREAMS, WETLANDS OR THEIR BUFFERS WITHIN THIS DEVELOPMENT AREA. THE TOPOGRAPHY DOES NOT RESULT IN ANY STEEP SLOPES OVER 15% WITHIN THIS DEVELOPMENT AREA. ACCORDING TO CURRENT DFIRM APPROVED BY FEMA AND HOWARD COUNTY, THERE IS NO 100YR FLOODPLAIN LOCATED WITHIN THE PROPERTY BOUNDARY. THE NATURAL RESOURCES WILL REMAIN UNDISTURBED, PROTECTED AND ENHANCED. THIS SITE DRAINS TO THE BONNIE BRANCH OF THE PATAPSCO RIVER.
2. THERE IS APPROXIMATELY 0.24 AC. OF EXISTING FOREST LOCATED ON THE SUBJECT PROPERTY. THE SUBJECT PROPERTY IS LESS THAN 40,000 S.F. AND THEREFORE THE FOREST CONSERVATION ACT REQUIREMENTS ARE NOT APPLICABLE. REVIEW OF THE SITE HAS FOUND THAT NO INDIVIDUAL SPECIMEN TREES, AS DEFINED BY THE LANDSCAPE MANUAL, ARE PRESENT ON THE SITE. EVERY EFFORT HAS BEEN MADE TO REDUCE THE NECESSARY DISTURBANCE AND CLEARING OF FOREST FOR THE CONSTRUCTION OF THE PROPOSED HOUSE, DRIVEWAY, STORMWATER MANAGEMENT FACILITIES AND ASSOCIATED GRADING.
3. THE SITE'S TOPOGRAPHY NATURALLY SLOPES FROM THE SOUTHEAST TO THE NORTHWEST TOWARD A CULVERT UNDER CRESTWOOD LANE, THEN TO THE BONNIE BRANCH OF THE PATAPSCO RIVER. THE SITE HAS BEEN DESIGNED TO MAINTAIN THESE NATURAL FLOW PATTERNS.
4. THE CONCEPTUAL REDUCTION IN IMPERVIOUS AREA THROUGH BETTER SITE DESIGN IS ACHIEVED THROUGH THE ENVIRONMENTAL SITE DESIGN (ESD) FOR THE PROJECT TO THE MAXIMUM EXTENT PRACTICABLE (MEP). THE ESD CONCEPT PROPOSES THE USE OF FOUR (4) DRY WELLS (M-5) AND ONE (1) MICRO-BIORETENTION (M-6). THE OVERFLOW FOR THE PROPOSED MICRO-BIORETENTION (M-6) WILL DISCHARGE BY A DOMED RISER AND OUTFALL PIPE TO THE BONNIE BRANCH OF THE PATAPSCO RIVER AND ULTIMATELY TO THE PATAPSCO RIVER ITSELF. THE SITE HAS BEEN GRADED SO THAT UNDISTURBED UPLAND AREAS ARE DIVERTED BY SWALE AROUND NEW IMPERVIOUS AREAS WHEREVER POSSIBLE.
5. SEDIMENT CONTROL FOR THIS SPECIFIC SITE PLAN WILL BE PROVIDED THROUGH THE USE OF PERIMETER CONTROLS (PRIMARILY SILT FENCE AND/OR SUPER SILT FENCE AND CLEAR WATER DIVERSION FENCE). SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH THE CURRENT REQUIREMENTS AND SHALL BE APPROVED BY THE HOWARD SOIL CONSERVATION DISTRICT.
6. AS STATED IN #3 ABOVE, STORMWATER MANAGEMENT FOR THE PROJECT SHALL BE MET THROUGH THE USE OF FOUR (4) DRY WELLS (M-5) AND ONE (1) MICRO-BIORETENTION (M-6). THESE FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED.

THE RESULTS OF THE ENVIRONMENTAL SITE DESIGN FOR THIS PROJECT WILL REFLECT "WOODS IN GOOD CONDITION".

- TARGET PE = 1.60' PROVIDED PE = 1.60'
 TARGET ESDV = 780 CUFT PROVIDED = 786 CUFT

7. NO DESIGN MANUAL WAIVERS ARE ANTICIPATED TO FULFILL THIS SWM CONCEPT.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad Johnson 5-23-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Keith Sledman 5-23-18
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

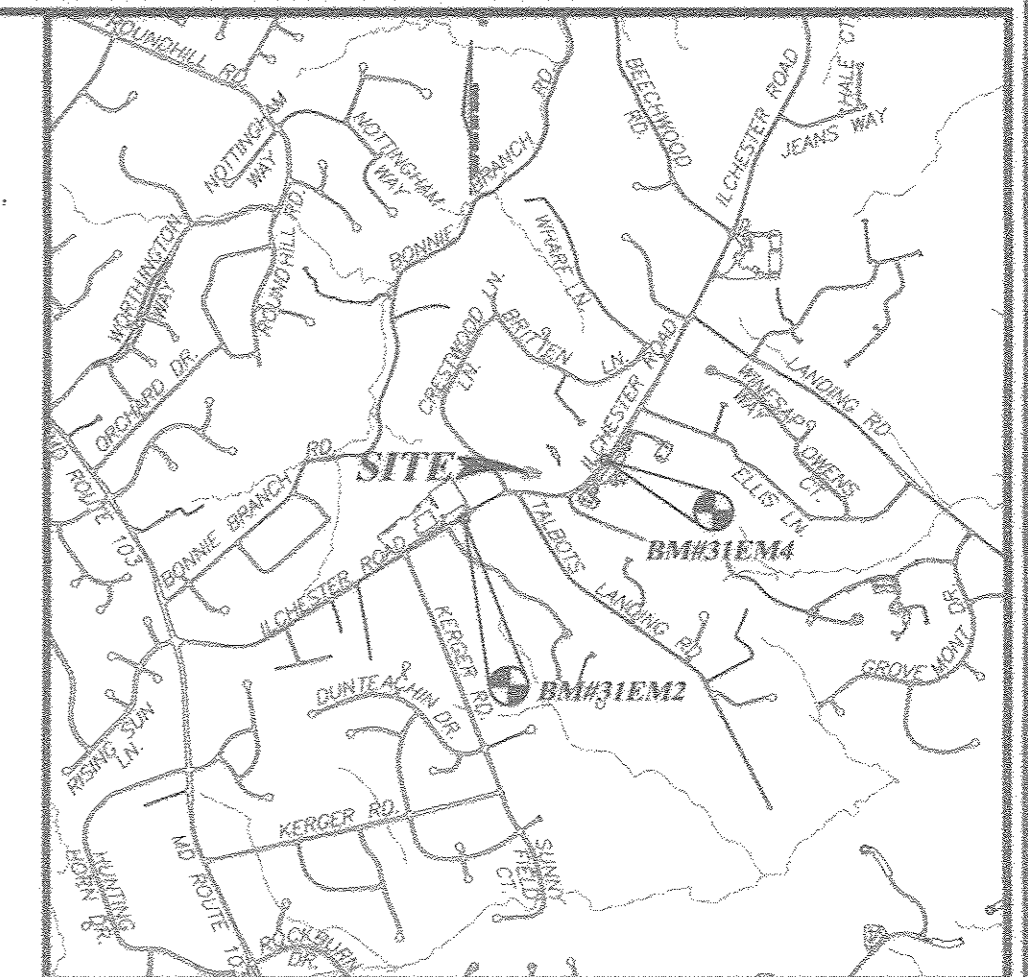
ENVIRONMENTAL CONCEPT PLAN

5078 ILCHESTER ROAD

L.04635 / F.00146

BENCHMARKS

HOWARD COUNTY BENCHMARK 31E2
 N 569,841.12 E 1,374,816.23 ELEV.: 465.05'
 HOWARD COUNTY BENCHMARK 31E4
 N 570,249.71 E 1,376,291.40 ELEV.: 481.289'



VICINITY MAP

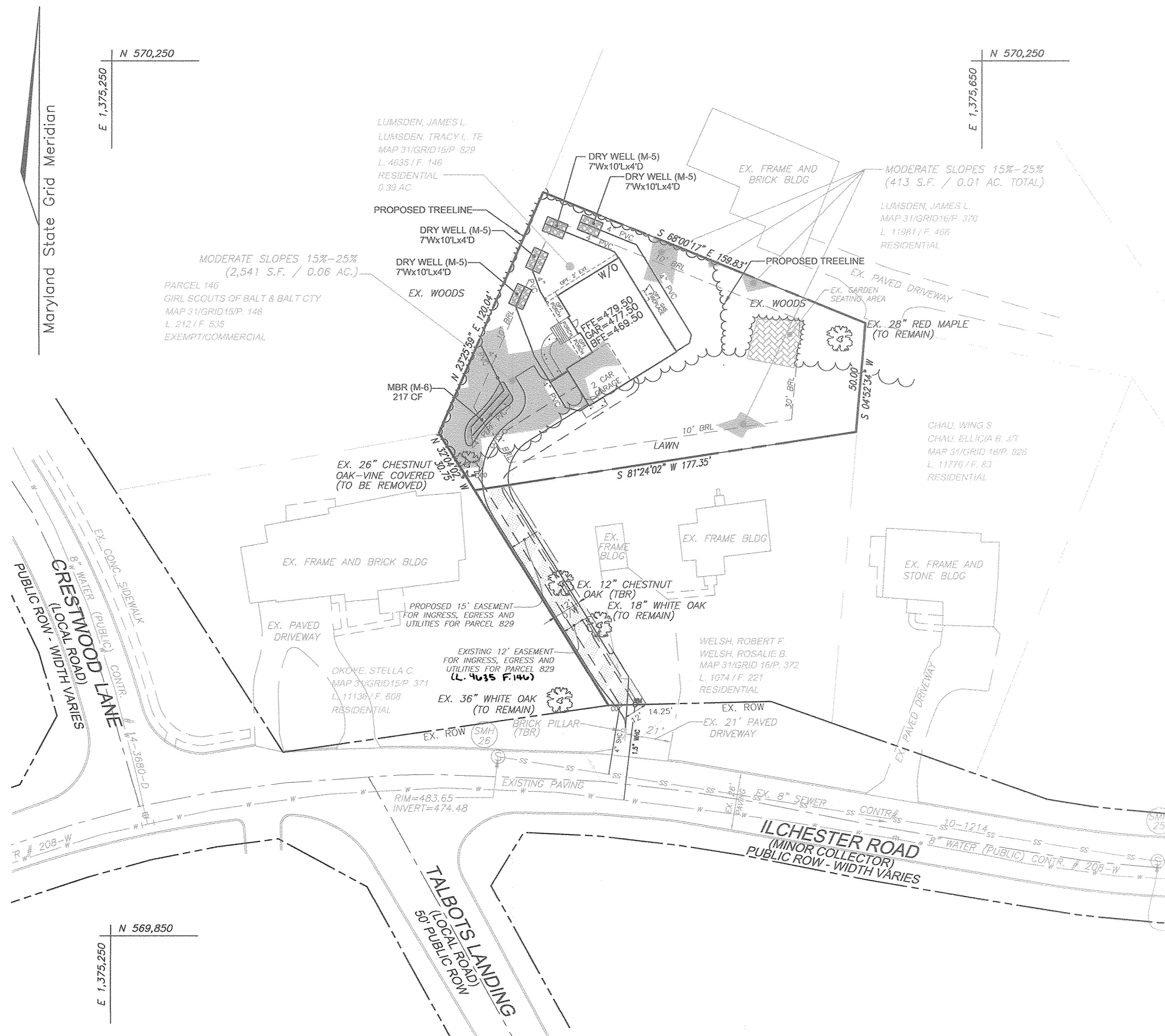
SCALE: 1"=2000'
 ADC MAP COORDINATES: MAP 28, GRID D-6

SHEET INDEX

DESCRIPTION	SHEET NO.
COVER SHEET	1 OF 2
GRADING EROSION AND SEDIMENT CONTROL PLAN, ESDV, DRAINAGE AREA, MAP AND DETAILS	2 OF 2

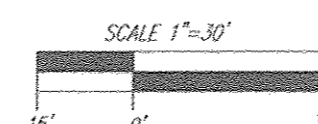
LEGEND

	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	EXISTING TREELINE
	PROPOSED TREELINE
	15' EASEMENT FOR INGRESS/EGRESS AND UTILITIES



PLAN VIEW

SCALE: 1"=30'



NOTES:

1. APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED BUILDING AND/OR GRADING PERMIT
 2. REVIEW OF THIS PLAN FOR COMPLIANCE WITH ZONING AND SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE PERMIT STAGES, AND THEREFORE, THIS PLAN IS SUBJECT TO ADDITIONAL AND MORE DETAILED COMMENTS AS THE PLAN PROGRESSES THROUGH THE PERMIT PROCESS.
 3. ENVIRONMENTAL FEATURES:
 THERE ARE NO WETLANDS, STREAMS OR STEEP SLOPES WITHIN THE DEVELOPED AREA. THE SITE IS PARTIALLY FORESTED WITH A GARDEN SEATING AREA AND AN AREA MAINTAINED AS LAWN FOR THE BENEFIT OF THE ADJACENT PROPERTY OWNER.
- NO DISTURBANCE TO ANY STREAMS, FLOODPLAIN, WETLANDS OR THEIR BUFFERS ARE PROPOSED.

OWNER

JAMES L. LUMSDEN
 TRACY L. LUMSDEN T/E
 5056 ILCHESTER ROAD
 ELLICOTT CITY, MD 21043
 (410) 719-0430

DEVELOPER

EVERGREEN HOMES
 C/O MR. BRIAN MACARI
 1400 FOREST GLEN CT, SUITE A
 BALTIMORE, MD 21228
 (410) 747-7144

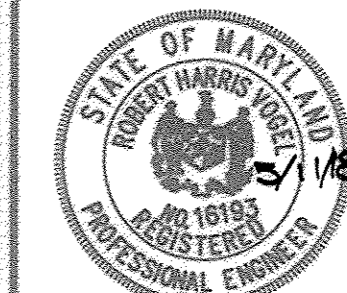
**ENVIRONMENTAL CONCEPT PLAN
 TITLE SHEET**

5078 ILCHESTER ROAD
 L. 04635/ F. 00146

TAX MAP 31 BLOCK 16
 1ST ELECTION DISTRICT

ZONED: R-20
 PARCEL 829
 HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET ELLICOTT CITY, MD 21043
 TEL: 410.461.7666 FAX: 410.461.8961



DESIGN BY: GAH
 DRAWN BY: GAH
 CHECKED BY: RHY
 DATE: NOVEMBER 2017
 SCALE: AS SHOWN
 W.O. NO.: 17-34

PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. EXPIRATION DATE: 06-27-2018

1 SHEET OF 2

