

SOILS TABLE (WITHIN LOD)

SYMBOL	RATING	NAME	K FACTOR	MAP NO.
GgB	(B)	GLENELG LOAM, 3-8% SLOPES.	.20	16
GgC	(B)	GLENELG LOAM, 8-15% SLOPES.	.20	16
GmB	(C)	GLENVILLE SILT LOAM, 3 TO 8% SLOPE	.37	16

ESD NARRATIVE

- NO NATURAL RESOURCES SUCH AS STEEP SLOPES, STREAMS, STREAM BUFFERS OR VALUABLE FOREST LAND EXIST ON-SITE. THERE IS A SMALL AREA OF WETLAND ON SITE. NO DEVELOPMENT IS PROPOSED IN THE VICINITY OF THE WETLAND AREA. IT WILL BE LOCATED WITHIN NON-BUILDABLE PRESERVATION PARCEL I. THERE ARE ELEVEN SPECIMEN TREES ON-SITE. SEVEN OF THEM ARE TO BE REMOVED. THE PROPOSED DISCONNECTIONS AND MICRO-BIORETENTION FACILITY 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.
- THE USE OF NON-STRUCTURAL PRACTICES (ROOFTOP AND NON-ROOFTOP DISCONNECTION) WAS EXPLORED AND USED TO THE MAXIMUM EXTENT PRACTICAL.
- THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES WILL BE IN ACCORDANCE WITH THE LATEST MDE STANDARDS AND SPECIFICATIONS UTILIZING SILT FENCES AND SUPER SILT FENCES. NO CONCENTRATION FLOW IS PROPOSED. 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:
 - DISCONNECTION OF ROOFTOP (N-1) AND NON-ROOFTOP (N-2)
 - MICRO-SCALE PRACTICES (M-6)

SITE ANALYSIS DATA:

- AREA OF THE SITE:
 - PARCEL C = 14.67 AC±
 - PARCEL G = 3.34 AC±
 - TOTAL: 17.01 AC±
- AREA OF THE ROAD DEDICATION = 0
- AREA OF WETLANDS AND ITS BUFFERS = 6,540 S.F. OR 0.15 AC±
- AREA OF FLOODPLAIN = 0
- AREA OF STREAM BUFFER = 0
- AREA OF FOREST:
 - PARCEL C = 55,210 S.F. OR 1.22 AC±
 - PARCEL G = 108,900 S.F. OR 2.50 AC±
- AREA OF STEEP SLOPES = 0
- AREA OF ERODABLE SOILS = 25,900 S.F. OR 0.60 AC±
- LIMIT OF DISTURBANCE AREA = 64,980 S.F. OR 1.49 AC ±
- TWO NEW SINGLE FAMILY HOMES ARE PROPOSED.
- PROPOSED GREEN OPEN SPACE AREA = 135,912 S.F. OR 3.12 AC±
- PROPOSED IMPERVIOUS AREA:
 - DRIVEWAYS: 3,000 S.F.
 - WALKWAYS: 500 S.F.
 - HOUSES: 6,000 S.F. TOTAL: 9,500 S.F. (0.22AC±)
- PERCENT IMPERVIOUS (I): 6.59% (ROUND TO 10%) $P_e = 1"$

LEGEND

- IMPERVIOUS AREA TREATED BY M-6, MICRO-BIORETENTION
- IMPERVIOUS AREA TREATED BY N-1, ROOFTOP DISCONNECTION
- IMPERVIOUS AREA TREATED BY N-2, NON-ROOFTOP DISCONNECTION
- 75' @ 5% MAX. ROOFTOP DISCONNECTION (N-1) FLOW PATH WITH DISTANCE AND SLOPE
- TREATMENT AREA OF NON-ROOFTOP DISCONNECTION (N-2)
- DRAINAGE AREA TO MICRO-BIORETENTION (M-6)
- LIMIT OF DISTURBANCE
- SCE STABILIZED CONSTRUCTION ENTRANCE
- SSF SUPER SILT FENCE
- SF SILT FENCE
- RD ROOF DRAIN LEADER
- PROPOSED POTABLE WATER WELL
- SOIL DIVISION LINE
- SPECIMEN TREE
- GAS LINE EASEMENT
- PROPOSED TREE LINE

DEVELOPER
GREENBERRY, INC.
7350-B GRACE DRIVE
COLUMBIA, MARYLAND 21044
(410)997-0296

OWNER
ROBERT B. WILLIAMS
JOANNA K. BENEDICT
BARBARA B. CUSACK
WILLIAM I. SLADE, JR.
C/O MILDENBERG, BOENDER & ASSOC.
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(410)997-0296

APPROVED: DEPARTMENT OF PLANNING AND ZONING

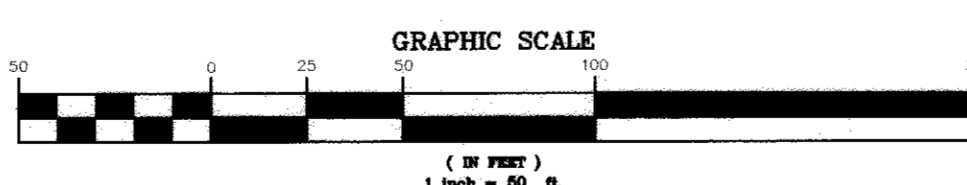
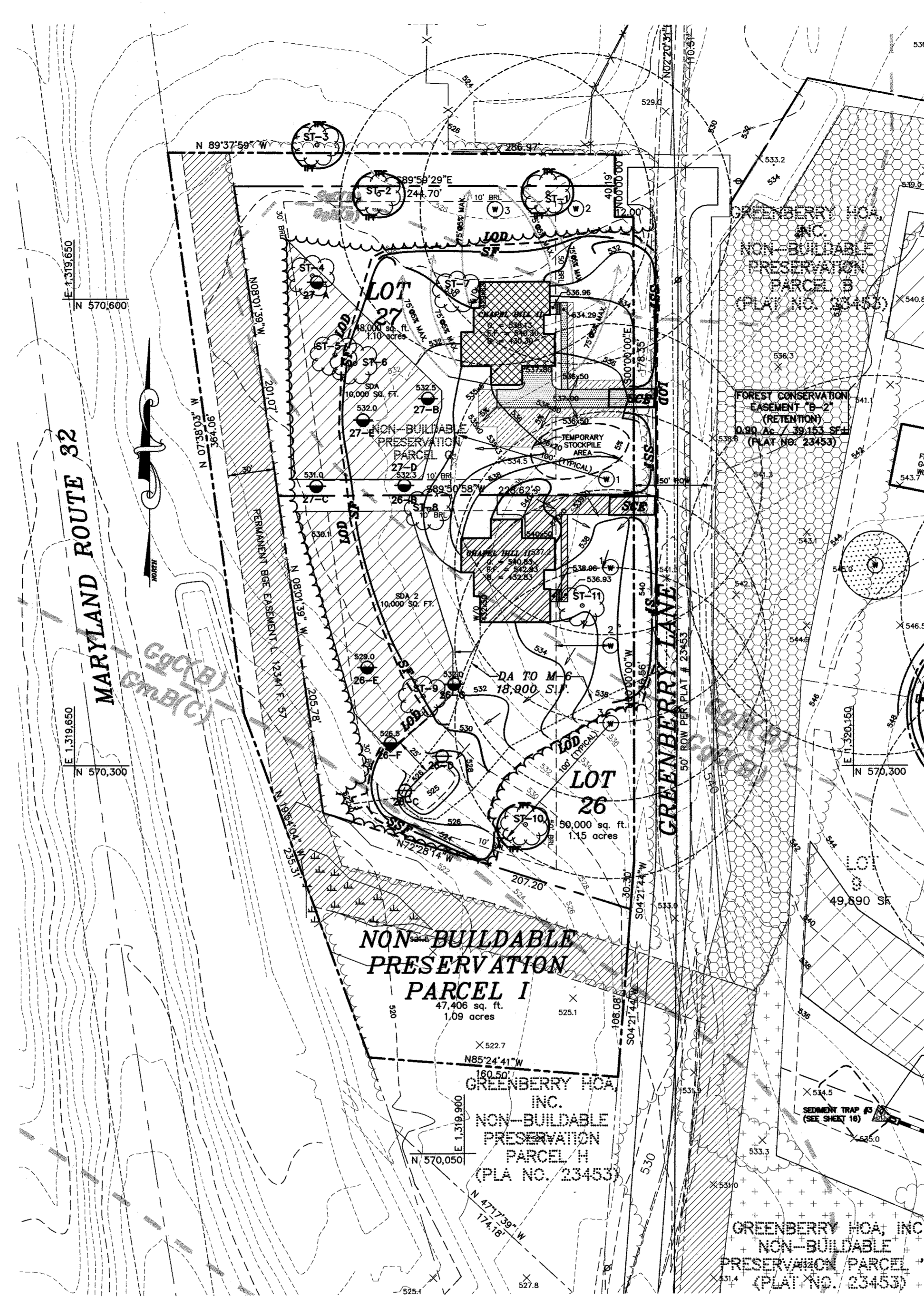
Ch. Edelman 9-23-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Neil Sledzinski 9-7-16
CHIEF, DIVISION OF LAND DEVELOPMENT 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. 17942, EXP DATE 9/03/18

R. JACOB HIKMAT, P.E. DATE 8/31/16

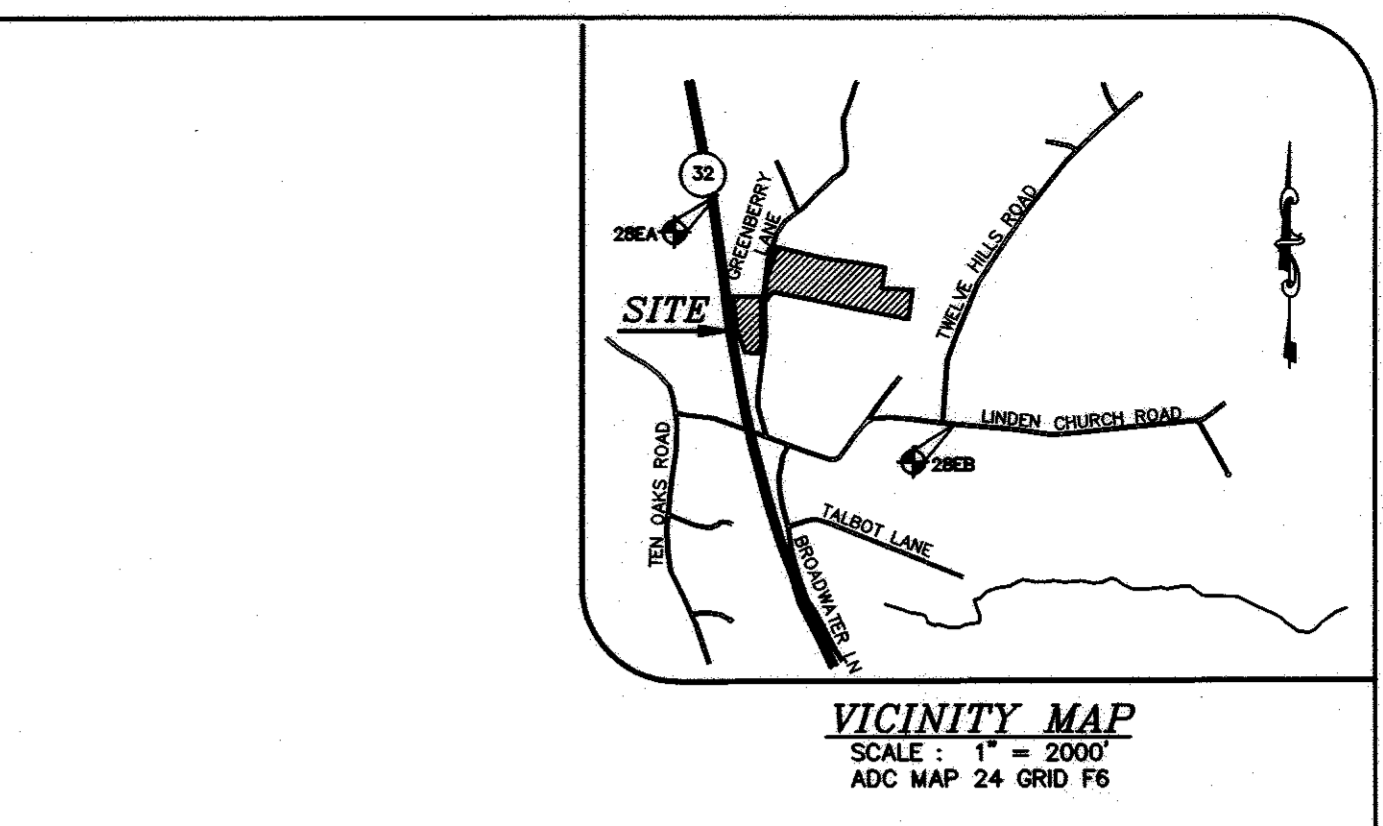


SWM PRACTICES SCHEDULE

LOT #	PROPOSED PRACTICES	REQUIRED ESDV	PROVIDED ESDV
26	M-6, MICRO-BIORETENTION	375 CF	458 CF
27	N-1, ROOFTOP DISCONNECTION N-2, NON-ROOFTOP DISCONNECTION	375 CF	375 CF

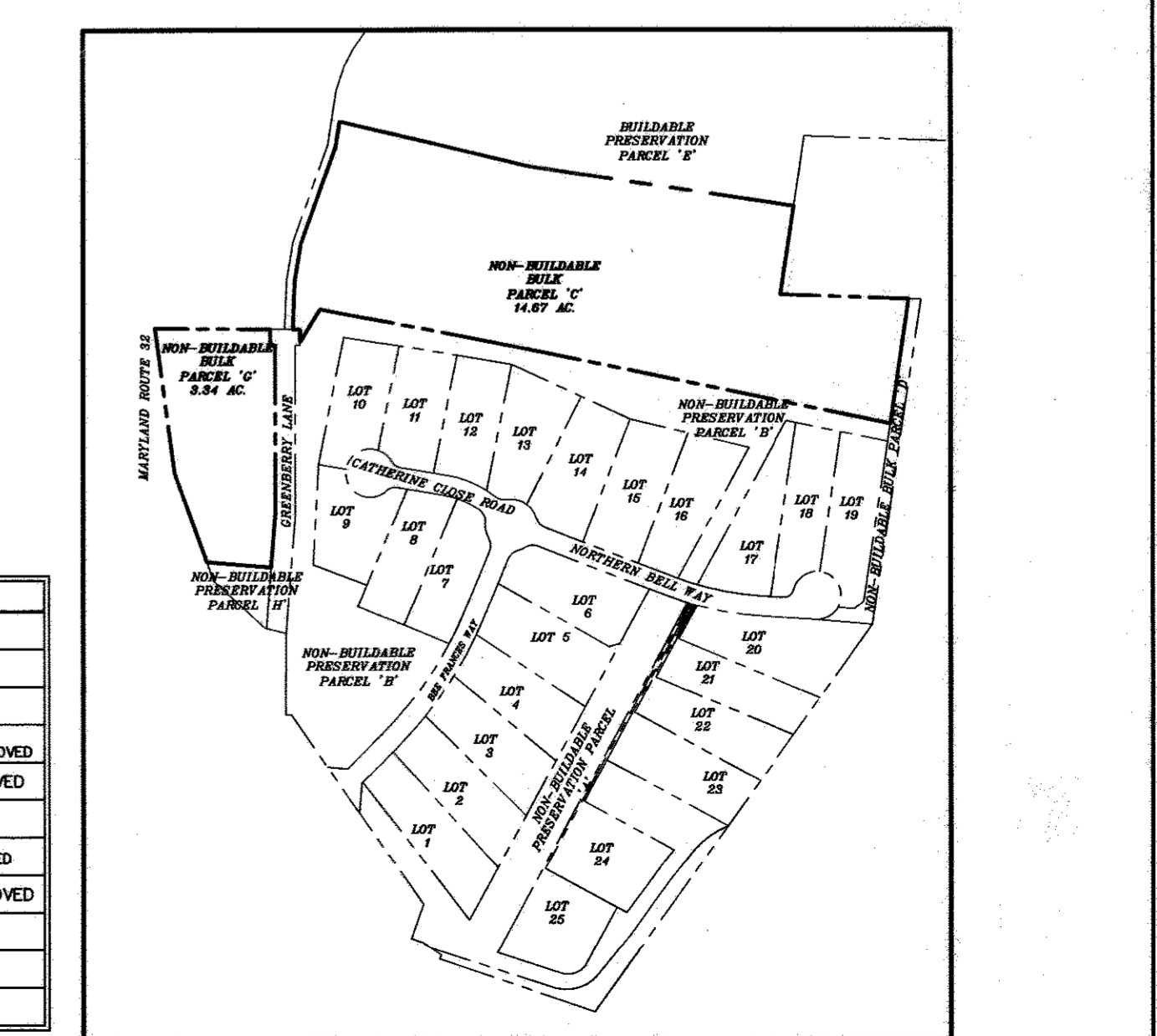
SPECIMEN TREE CHART

KEY	SPECIES	SIZE	COMMENTS
1	TULIP POPLAR	38"	TO REMAIN
2	BLACK OAK	32"	TO REMAIN
3	WHITE OAK	30"	TO REMAIN
4	BLACK OAK	33"	FAIR CONDITION, LIMB DIEBACK NOTED, CRZ IMPACT BY LOG STORAGE FOR CLEARING OF ADJACENT GAS LINE. TO BE REMOVED
5	BLACK OAK	33.5"	FAIR CONDITION, LIMB DIEBACK NOTED. TO BE REMOVED
6	RED OAK	30"	TO BE REMOVED
7	WHITE OAK	31"	FAIR CONDITION, TRUNK IS SEVERELY LEANING. TO BE REMOVED
8	BLACK OAK	33.5"	POOR CONDITION, LIMB DIEBACK NOTED, TO BE REMOVED
9	RED OAK	30"	TO BE REMOVED
10	WHITE OAK	35"	TO REMAIN
11	WHITE OAK	32.5"	TO BE REMOVED



NOTES:

- THE SUBJECT PROPERTY IS ZONED RR-DEO PER THE OCTOBER 6, 2013 ZONING REGULATIONS
- SITE ANALYSIS DATA:
LOCATION: TAX MAP: 28 GRID: 9 PARCEL: 48 NON-BUILDABLE BULK PARCEL G AND C
ELECTION DISTRICT: FIFTH
ZONING: RR-DEO
TOTAL AREA: PARCEL C = 14.67 AC±; PARCEL G = 3.34 AC±; TOTAL: 18.01 AC±
LIMIT OF DISTURBED AREA: 1.49 AC±
PROPOSED USE FOR SITE: RESIDENTIAL
TOTAL NUMBER OF UNITS: 2
TYPE OF PROPOSED UNIT: SFD
DEED REFERENCE: 5891 / 307
PREVIOUS DPZ FILE #S: ECP-13-026, SP-13-010, F-14-095
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 28EA & 28EB
STA. NO. 28EA N 572,158.9652 E 1,319,400.6816 EL. 485.012
STA. NO. 28EB N 569,357.3657 E 1,322,113.5747 EL. 536.733
- TOPOGRAPHY WITHIN 200' OF SITE BOUNDARY SHOWN HEREON IS BASED ON AERIAL SURVEY FLOWN BY WINGS TOPOGRAPHY INC. DATED ON OR ABOUT MARCH 2007. TOPOGRAPHY WAS FIELD REVISION IN NOVEMBER 2012. OFF SITE TOPOGRAPHY SHOWN IS BASED ON HOWARD COUNTY GIS.
- MILDENBERG, BOENDER & ASSOCIATES, INC. CERTIFIES THAT THE ON SITE TOPOGRAPHY ILLUSTRATED ON THE PLAN IS AN ACCURATE REPRESENTATION OF FIELD CONDITIONS. SOILS LOCATION AND CLASSIFICATION BASED ON HOWARD COUNTY GIS SOIL SURVEY DATA.
- THIS AREA DESIGNATES A SEWAGE DISPOSAL AREA OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE SEWAGE DISPOSAL AREA AND RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.
- 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.
- FINAL PLAN APPROVAL FOR THE CREATION OF LOTS 26 AND 27 BY THE DEPARTMENT OF PLANNING AND ZONING IS REQUIRED PRIOR TO BUILDING PERMITS BEING ISSUED FOR THE CONSTRUCTION OF RESIDENTIAL DWELLINGS ON THESE LOTS.
- 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.
- APPROVAL OF THIS ECP BY THE HOWARD SOIL CONSERVATION DISTRICT DOES NOT PROVIDE APPROVAL OF THE SHOWN SEDIMENT CONTROL SCHEME.
- WETLANDS AND FOREST STAND DELINEATION WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. IN MARCH 2016.
- LANDSCAPING AND FOREST CONSERVATION REQUIREMENTS WILL BE REVIEWED AND FINALIZED AT TIME OF REVIEW OF THE FINAL SUBDIVISION PLAN.
- IN ACCORDANCE WITH SECTION 16.1205(a) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, AN ALTERNATIVE COMPLIANCE PETITION IS REQUIRED FOR THE REMOVAL OF THE SPECIMEN TREES. ALTERNATIVE COMPLIANCE PETITION HAS TO BE GRANTED PRIOR TO THE FINAL PLAN APPROVAL.
- PLANNING BOARD APPROVAL IS REQUIRED FOR THE FURTHER SUBDIVISION OF THIS PROPERTY.



LOCATION MAP
SCALE: 1" = 400'

project	15-008	date	AUG. 2016
illustration	MMM	engineering	MMM
scale	1"=50'	approval	MMM
revisions			RJH

no.		description	date

GREENBERRY, PARCEL II
LOTS 26, 27 AND NON-BUILDABLE PRESERVATION PARCEL I
TAX MAP 28, PARCEL 48, NON-BUILDABLE BULK PARCEL G & C
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
ENVIRONMENTAL CONCEPT PLAN

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