

GENERAL NOTES

- SUBJECT PROPERTY ZONED RR-DEO PER COMPREHENSIVE ZONING PLAN EFFECTIVE 10-6-13.
- THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS EFFECTIVE APRIL 13, 2004.
- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON FIELD VERIFIED SURVEY BY BENCHMARK ENGINEERING, INC., DATED JULY, 2016.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 468E AND 468F WERE USED FOR THIS PROJECT.
- STORMWATER MANAGEMENT SHALL BE PROVIDED FOR THIS PROJECT BASED ON GUIDELINES ESTABLISHED BY THE 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUMES I & II AS AMENDED BY THE STORMWATER MANAGEMENT ACT OF 2007. ENVIRONMENTAL SITE DESIGN METHODS SHALL BE UTILIZED, INCLUDING NON-ROOFTOP DISCONNECTION (N-2), ROADSIDE GRASS SWALES (M-8), DRY WELLS (M-5) AND MICROBIOTRETMENT (M-6) FACILITIES. THESE PRACTICES WILL BE PRIVATELY OWNED & MAINTAINED.
- THE STORMWATER MANAGEMENT SYSTEMS SHOWN ON THIS PLAN ARE CONCEPTUAL IN SIZE, SHAPE AND LOCATION. THE ACTUAL DESIGN MAY CHANGE WITH FINAL DESIGN.
- A WETLAND DELINEATION AND FOREST STAND DELINEATION HAVE BEEN PERFORMED BY ECO-SCIENCE PROFESSIONALS, INC. AND A FINDINGS LETTER DATED MAY 24, 2016 WAS APPROVED WITH ECP-17-009.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE MARS GROUP, DATED 5/29/16, AND WAS APPROVED 12-1-2016.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM OR THEIR REQUIRED BUFFERS, 100-YR FLOODPLAIN, STEEP SLOPES AND FOREST CONSERVATION EASEMENTS UNLESS DEEMED NECESSARY BY THE DEPARTMENT OF PLANNING AND ZONING OR APPROVED VIA AN ALTERNATIVE COMPLIANCE.
- THERE ARE NO STEEP SLOPES (25% OR GREATER) ON THIS SITE.
- TO THE BEST OF OUR KNOWLEDGE THERE ARE NO CEMETERIES LOCATED ON THIS SITE.
- A NOISE STUDY IS NOT REQUIRED FOR THIS DEVELOPMENT.
- THIS SITE IS NOT LOCATED WITHIN THE METROPOLITAN DISTRICT. WATER AND SEWER WILL BE PRIVATE ON-SITE FACILITIES.
- THE FOREST CONSERVATION ACT OBLIGATION FOR THIS PROJECT WILL BE ADDRESSED USING FOREST BANKING ON A PARCEL OBTAINED BY THE DEVELOPER FOR THE PURPOSE OF DENSITY SAVING AND FOREST BANKING. THE FOREST CONSERVATION WILL BE FURTHER REVIEWED WITH THE SUBMISSION OF THE FINAL PLAN FOR THIS PROJECT.
- THE PREVIOUS DPZ FILES FOR THIS SITE ARE: P-86-034, F-91-172, ECP-17-009.
- THE GEOTECHNICAL INFORMATION FOR THIS PROJECT WAS OBTAINED FROM PERCOLATION TESTING PERFORMED JUNE 1-2 AND SEPTEMBER 1, 2016. ADDITIONAL TESTING WILL BE PERFORMED AS NECESSARY DURING THE DESIGN OF THE FINAL ROAD PLANS.
- COMMUNITY MEETING WAS HELD ON AUGUST 22, 2016 AT 11825 WEST MARKET PLACE, FULTON, MD. THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 S.F. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE REQUIRED.
- BUILDABLE PRESERVATION PARCEL 'A' IS TO BE PRIVATELY OWNED, WITH HOWARD COUNTY, MARYLAND AND THE HOMEOWNER'S ASSOCIATION AS EASEMENT HOLDERS. THE PARCEL WILL BE RESIDENTIAL.
- THE MODERATE INCOME HOUSING UNIT REQUIREMENT FOR THIS SUBDIVISION WILL BE FULFILLED BY PAYMENT OF FEE-IN-LIEU OF CONSTRUCTION.
- TRAFFIC CONTROL DEVICES:
 - THE R1-1 ("STOP") SIGN AND THE STREET NAME SIGN (SNS) ASSEMBLY FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED.
 - THE TRAFFIC CONTROL DEVICES LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-313-2430) PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES.
 - ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUMTCD).
 - ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED ("QUICK PUNCH"), SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE)-3" LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- A GROUNDWATER APPROPRIATIONS PERMIT MUST BE ISSUED BY MARYLAND DEPARTMENT OF THE ENVIRONMENT PRIOR TO HEALTH DEPARTMENT ISSUANCE OF WELL PERMITS.
- ALL WELLS MUST BE DRILLED PRIOR TO HEALTH OFFICER SIGNATURE OF THE RECORD PLAT.
- THIS PROPERTY IS DESIGNATED A TIER III PROPERTY PER THE SUSTAINABLE GROWTH AND AGRICULTURAL PRESERVATION ACT OF 2012, MAP 6-3, AS APPROVED BY THE HOWARD COUNTY COUNCIL AS PART OF PLANORDR 2030.
- EXISTING UTILITIES SHOWN ARE BASED ON FIELD SHOT INFORMATION, SUPPLEMENTED BY HOWARD COUNTY GIS INFORMATION, AND RECORD DRAWINGS.
- THERE IS NO 100-YEAR FLOODPLAIN ON THIS SITE.
- THE INTERSECTION OF THE PROPOSED ROAD IS WITHIN MARYLAND STATE HIGHWAY RIGHT OF WAY. BASED ON THE EXISTING USE OF THE DRIVEWAY, SHA DOES NOT REQUIRE SIGHT DISTANCE ANALYSIS. BENCHMARK ENGINEERING, INC. HAS OBSERVED THE SIGHT DISTANCE AT THE ENTRANCE AND BELIEVES ADEQUATE SIGHT DISTANCE IS AVAILABLE IN BOTH DIRECTIONS.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT. THE LOT SIZE FOR THESE LOTS WILL FULFILL THE REQUIREMENTS OF THE ZONING REGULATIONS.
- THE SEWER DISPOSAL SYSTEMS ON LOTS 1-4 WILL REQUIRE ADVANCED TREATMENT UTILIZING BEST AVAILABLE TECHNOLOGY FOR NITROGEN REDUCTION DUE TO SOIL COMPOSITIONAL AND FAST PERCOLATION RATES.

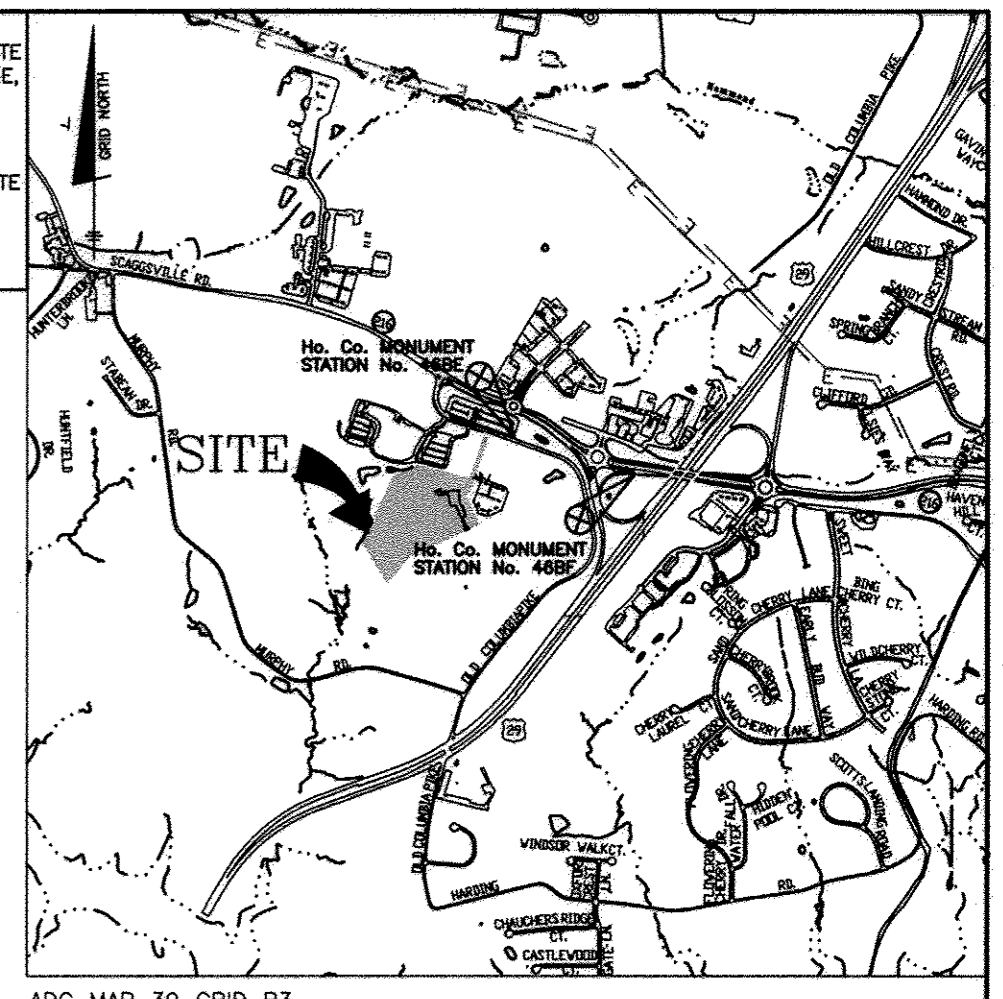
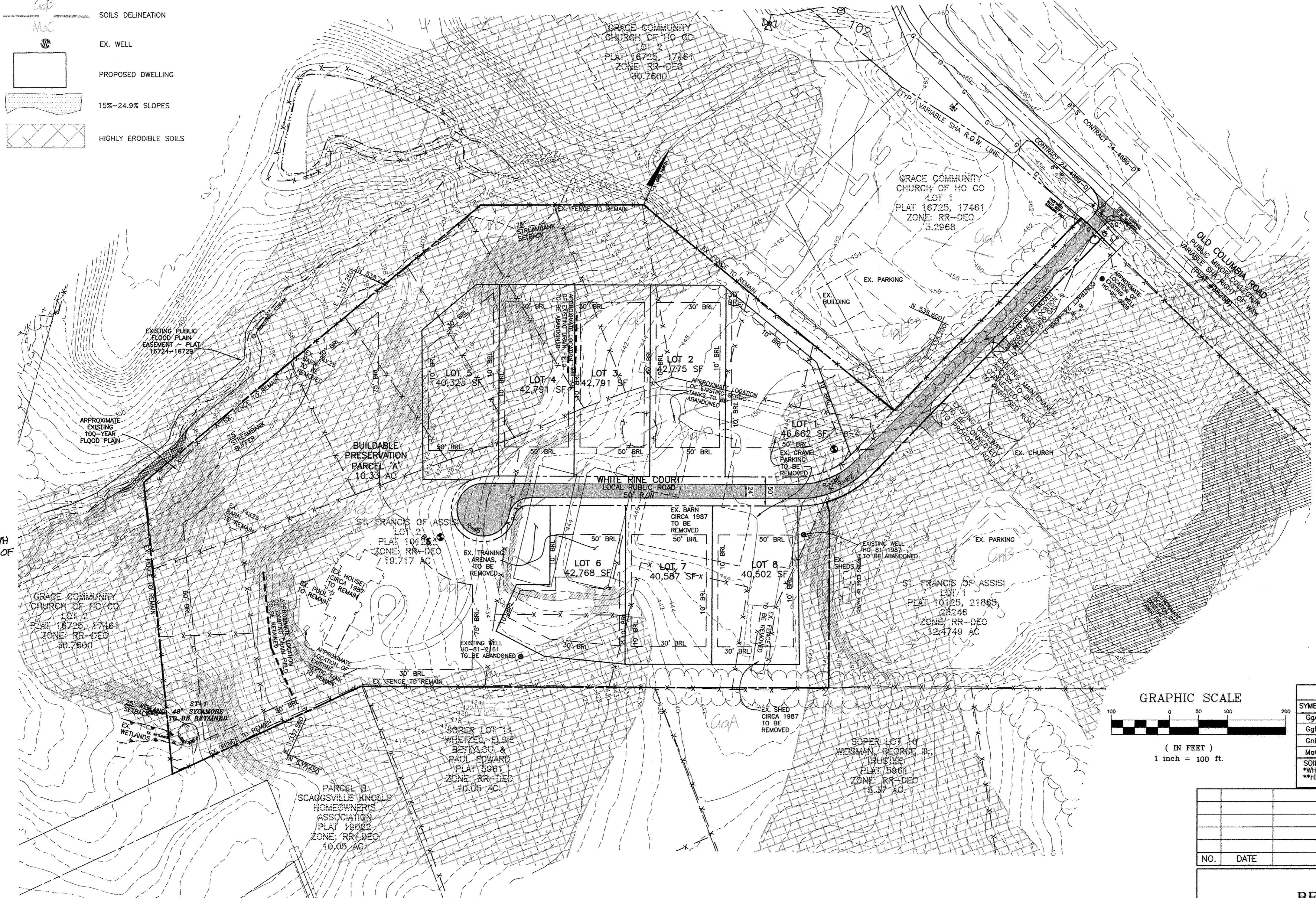
LEGEND

- EXISTING CONTOURS
- EXISTING TREELINE
- LIMIT OF SUBMISSION
- PROPOSED SEPTIC AREA
- EXISTING SEPTIC AREA
- SOILS DELINEATION
- EX. WELL
- PROPOSED DWELLING
- 15%-24.9% SLOPES
- HIGHLY ERODIBLE SOILS

THE PRESERVE AT EVERGREEN FARM

5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

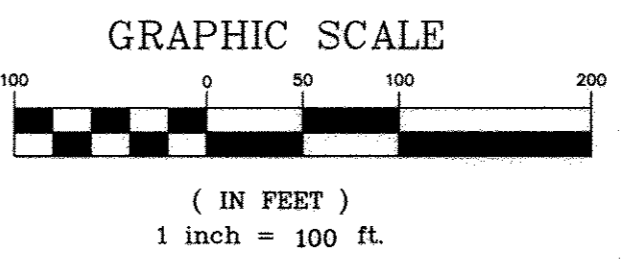
PRELIMINARY EQUIVALENT SKETCH PLAN



VICINITY MAP
SCALE: 1" = 2000'

SHEET INDEX	
NO.	DESCRIPTION
1	EXISTING CONDITIONS, SOILS MAP AND OFFSITE TOPOGRAPHY PLAN
2	PRELIMINARY LAYOUT PLAN
3	PRELIMINARY GRADING AND SEDIMENT CONTROL PLAN
4	SEDIMENT CONTROL NOTES AND DETAILS
5	PRELIMINARY ROAD PROFILES
6	PRELIMINARY LANDSCAPE PLAN, FOREST CONSERVATION PLAN AND STORM DRAIN DRAINAGE AREA MAP
7	PRELIMINARY STORMWATER MANAGEMENT PLAN AND DRAINAGE AREA MAP

DENSITY EXCHANGE CHART	
RECEIVING PARCEL INFORMATION	TAX MAP 46, GRID 03, PARCEL 337
TOTAL AREA OF SUBDIVISION	19.71 AC
DENSITY UNITS ALLOWED BY RIGHT	19.71 / 4.25 = 4 D.U.
MAXIMUM DEO UNITS ALLOWED	19.71 / 2 = 9 D.U.
NUMBER OF UNITS PROPOSED	9 (8 LOTS AND 1 BUILDABLE PRESERVATION PARCEL)
DEO DENSITY UNITS TO BE RECEIVED FROM SENDING PARCEL	5
SENDING PARCEL INFORMATION	TBD



SOILS LEGEND			
SYMBOL	TYPE	FACTOR	NAME
GgA	B	.20	GLENELG LOAM - 0 TO 3 PERCENT SLOPES
GgB	C	.20	GLENELG LOAM - 3 TO 8 PERCENT SLOPES
GnB	C	.37**	GLENVILLE-BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES
McC	B	.24**	MANOR LOAM - 8 TO 15 PERCENT SLOPES

SOIL MAPPING TAKEN FROM NRCS WEB SOIL SURVEY, MARCH 2016, MAP 23
**WHOLE SOIL K FACTOR
**HIGHLY ERODIBLE SOILS K>0.35, AND/OR 15% OR GREATER SLOPES

SITE DATA TABULATION

- GENERAL SITE DATA
 - PRESENT ZONING: RR-DEO
 - LOCATION: TAX MAP 46 - GRID 03 - PARCEL 337
 - APPLICABLE DPZ FILE REFERENCES: P-86-034, F-91-172
 - DEED REFERENCE: L.12556 / F.420
 - PROPOSED USE OF SITE: 8 SFD LOTS; 1 BUILDABLE PRESERVATION PARCEL; 1 PROPOSED WATER AND SEWER: PRIVATE WATER AND PRIVATE SEWER
- AREA TABULATION
 - TOTAL AREA OF SITE 19.71 Ac.±
 - AREA OF 100 YEAR FLOODPLAIN (APPROX.) 0.00 Ac.±
 - AREA OF STEEP SLOPES (25% OR GREATER) 0.00 Ac.±
 - NET AREA OF SITE 19.71 Ac.±
 - AREA OF THIS PLAN SUBMISSION 19.71 Ac.±
 - LIMIT OF DISTURBANCE (APPROX.) 8.41 Ac.±
 - AREA OF PROPOSED BUILDABLE LOTS 7.79 Ac.±
 - AREA OF BUILDABLE PRESERVATION PARCEL 10.33 Ac.±
 - AREA OF PROPOSED PUBLIC ROAD 0.84 Ac.±
 - AREA OF PROPOSED PUBLIC R/W DEDICATION 1.59 Ac.±
- DENSITY TABULATION
 - NET AREA OF SITE 19.71 Ac.±
 - TOTAL NUMBER OF LOTS ALLOWED PER ZONING
1 UNIT PER 4.25 GROSS ACRES ALLOWED BY RIGHT... 4
1 UNIT PER 2 NET ACRES (MAX) PER DEO PROVISION... 9
DENSITY UNITS TO BE RECEIVED..... 5
- UNIT/LOT TABULATION
 - TOTAL NUMBER OF BUILDABLE LOTS PROPOSED ON THIS SUBMISSION 8
 - TOTAL NUMBER OF NON-BUILDABLE PRESERVATION PARCELS PROPOSED ON THIS SUBMISSION 0
 - TOTAL NUMBER OF BUILDABLE PRESERVATION PARCELS PROPOSED ON THIS SUBMISSION 1

STORMWATER MANAGEMENT PRACTICES CHART			
LOT NO.	MICRO-BIOTRETMENT FACILITY (M-6)	DRY-WELLS (M-5)	
1	1	1	
2	1	1	
3	1	1	
4	1	1	
5	1	1	
6	1	1	
7	1	1	
8	1	1	

EXISTING CONDITIONS AND OFFSITE DRAINAGE PLAN
1" = 100'

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY
Valley Taylor 9-5-17
PLANNING DIRECTOR DATE

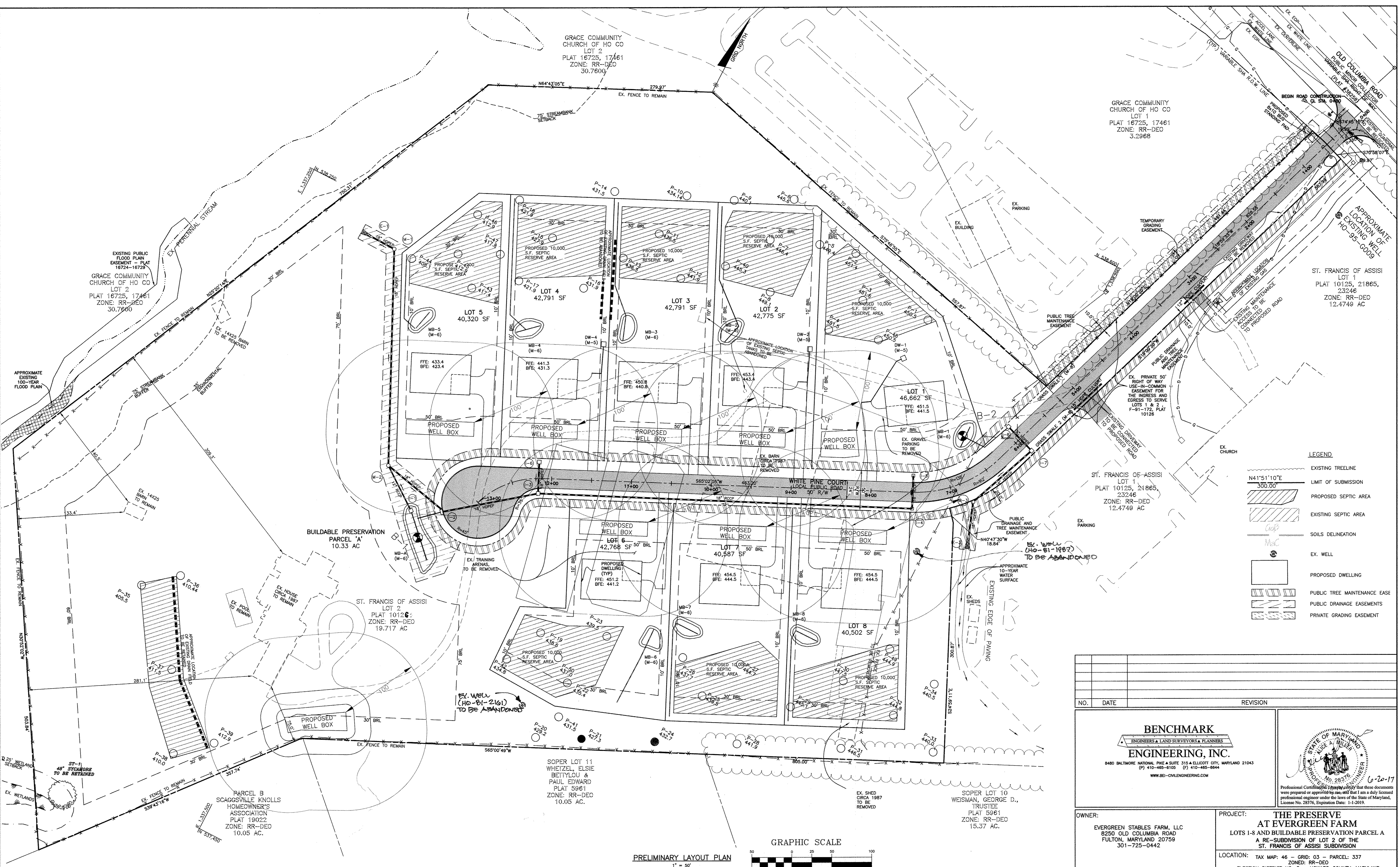
APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE June 15, 2017

APPROVED FOR PRIVATE WATER AND PRIVATE SEPTIC
HOWARD COUNTY HEALTH DEPARTMENT
Patricia Manna Rossman 8/24/2017
HOWARD COUNTY HEALTH OFFICER DATE

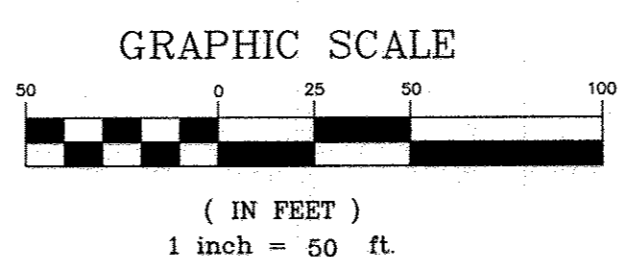
NO.	DATE	REVISION

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

OWNER: EVERGREEN STABLES FARM, LLC 8250 OLD COLUMBIA ROAD FULTON, MARYLAND 20759 301-725-0442	PROJECT: THE PRESERVE AT EVERGREEN FARM LOTS 1-8 AND BUILDABLE PRESERVATION PARCEL A A RE-SUBDIVISION OF LOT 2 OF THE ST. FRANCIS OF ASSISI SUBDIVISION
LOCATION: TAX MAP: 46 - GRID: 03 - PARCEL: 337 ZONED: RR-DEO ELECTION DISTRICT NO. 5 - HOWARD COUNTY, MARYLAND	TITLE: EXISTING CONDITIONS, SOILS MAP AND OFFSITE TOPOGRAPHY
DATE: SEPTEMBER, 2016 JUNE, 2017	PROJECT NO. 2761
DESIGN: AAM DRAFT: AAM CHECK: CAM	SCALE: AS SHOWN SHEET 1 OF 7



PRELIMINARY LAYOUT PLAN
1" = 50'



- LEGEND**
- EXISTING TRELLINE
 - LIMIT OF SUBMISSION
 - PROPOSED SEPTIC AREA
 - EXISTING SEPTIC AREA
 - SOILS DELINEATION
 - EX. WELL
 - PROPOSED DWELLING
 - PUBLIC TREE MAINTENANCE EASE
 - PUBLIC DRAINAGE EASEMENTS
 - PRIVATE GRADING EASEMENT

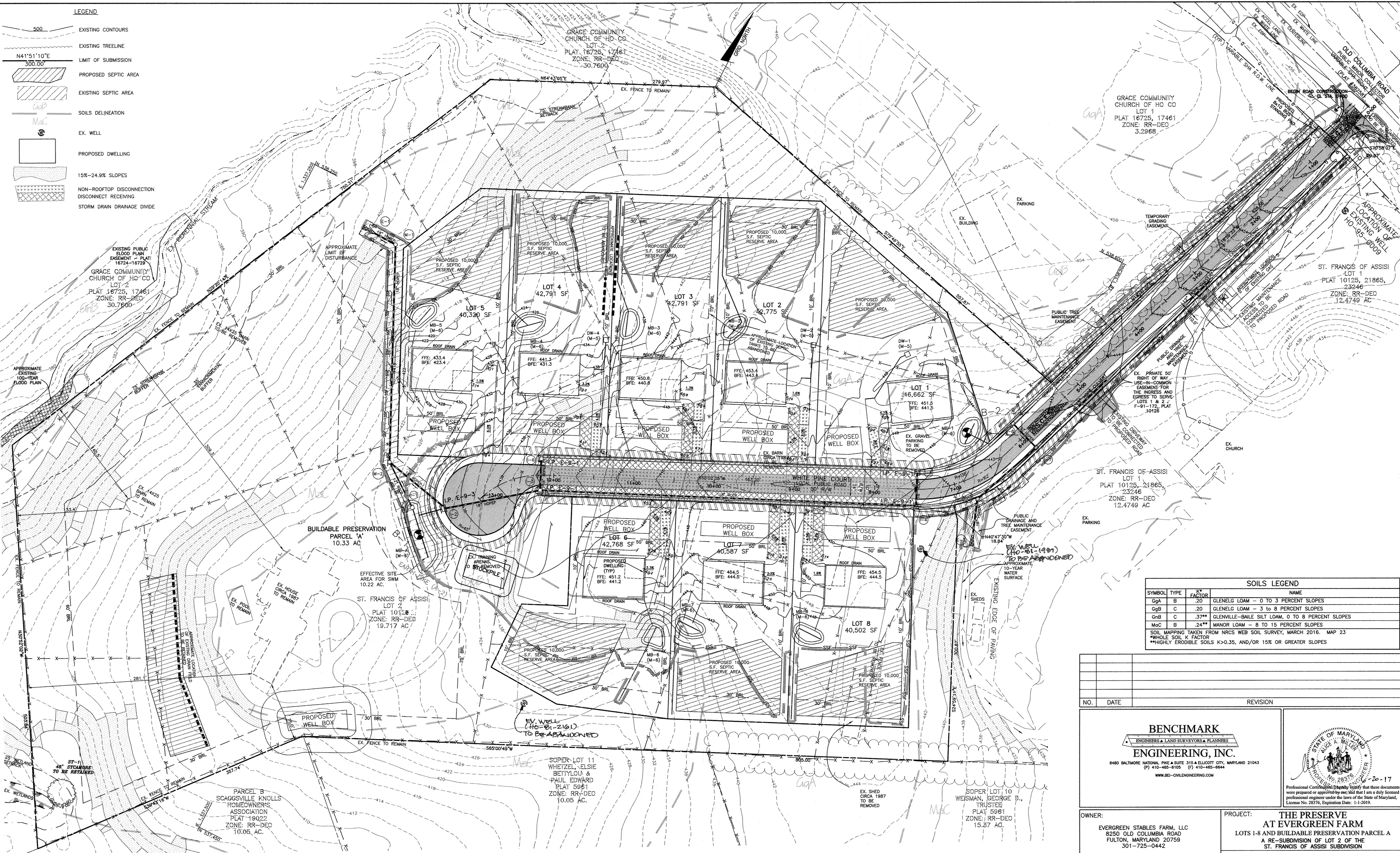
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ENGINEERING, INC.
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LOCATION: TAX MAP: 46 - GRID: 03 - PARCEL: 337 ZONED: RR-DEC ELECTION DISTRICT NO. 5 - HOWARD COUNTY, MARYLAND	TITLE: PRELIMINARY LAYOUT PLAN
DATE: SEPTEMBER 2016 JUNE 2017	PROJECT NO.: 2761
DESIGN: AAM	DRAFT: AAM
CHECK: CAM	SHEET: 2 OF 7
SCALE: AS SHOWN	SP-17-001

<p>TENTATIVELY APPROVED DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY</p> <p><i>Valerie Flynn</i> PLANNING DIRECTOR</p> <p>9-5-17 DATE</p>	<p>APPROVED PLANNING BOARD OF HOWARD COUNTY</p> <p>June 15, 2017 DATE</p>	<p>APPROVED FOR PRIVATE WATER AND PRIVATE SEPTIC HOWARD COUNTY HEALTH DEPARTMENT</p> <p><i>Bridgette Moore</i> HOWARD COUNTY HEALTH OFFICER</p> <p>8/24/2017 DATE</p>
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- LEGEND**
- 500 EXISTING CONTOURS
 - EXISTING TREELINE
 - 300.00' LIMIT OF SUBMISSION
 - PROPOSED SEPTIC AREA
 - EXISTING SEPTIC AREA
 - SOILS DELINEATION
 - EX. WELL
 - PROPOSED DWELLING
 - 15%-24.9% SLOPES
 - NON-ROOFTOP DISCONNECTION DISCONNECT RECEIVING
 - STORM DRAIN DRAINAGE DIVIDE



SOILS LEGEND		
SYMBOL	TYPE	NAME
GgA	B	20 GLENELG LOAM - 0 TO 3 PERCENT SLOPES
GgB	C	20 GLENELG LOAM - 3 TO 8 PERCENT SLOPES
GhB	C	37** GLENVILLE-BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES
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SOIL MAPPING TAKEN FROM NRCS WEB SOIL SURVEY, MARCH 2016. MAP 23
 **WHOLE SOIL K FACTOR
 ***HIGHLY ERODIBLE SOILS K>0.35, AND/OR 15% OR GREATER SLOPES

NO.	DATE	REVISION

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 ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 A ELICOTT CITY, MARYLAND 21043
 (P) 410-465-6199 (F) 410-465-6844
 WWW.BE-CVLENGINEERING.COM

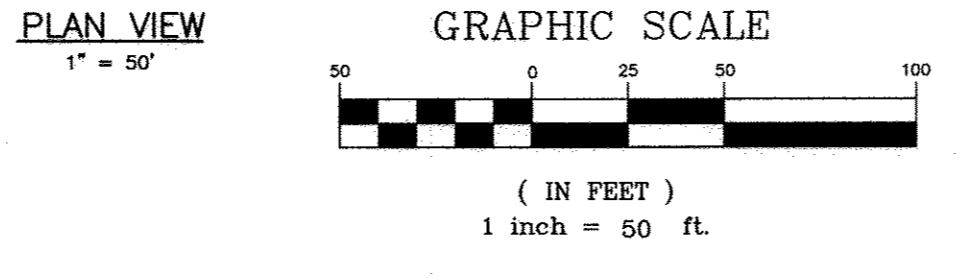
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	LOCATION: TAX MAP: 46 - GRID: 03 - PARCEL: 337 ZONED: RR-DEO ELECTION DISTRICT NO. 5 - HOWARD COUNTY, MARYLAND
TITLE: PRELIMINARY GRADING AND SEDIMENT CONTROL PLAN	DATE: SEPTEMBER 2016 PROJECT NO. 2761
DESIGN: AAM DRAFT: AAM CHECK: CAM	SCALE: AS SHOWN SHEET 3 OF 7

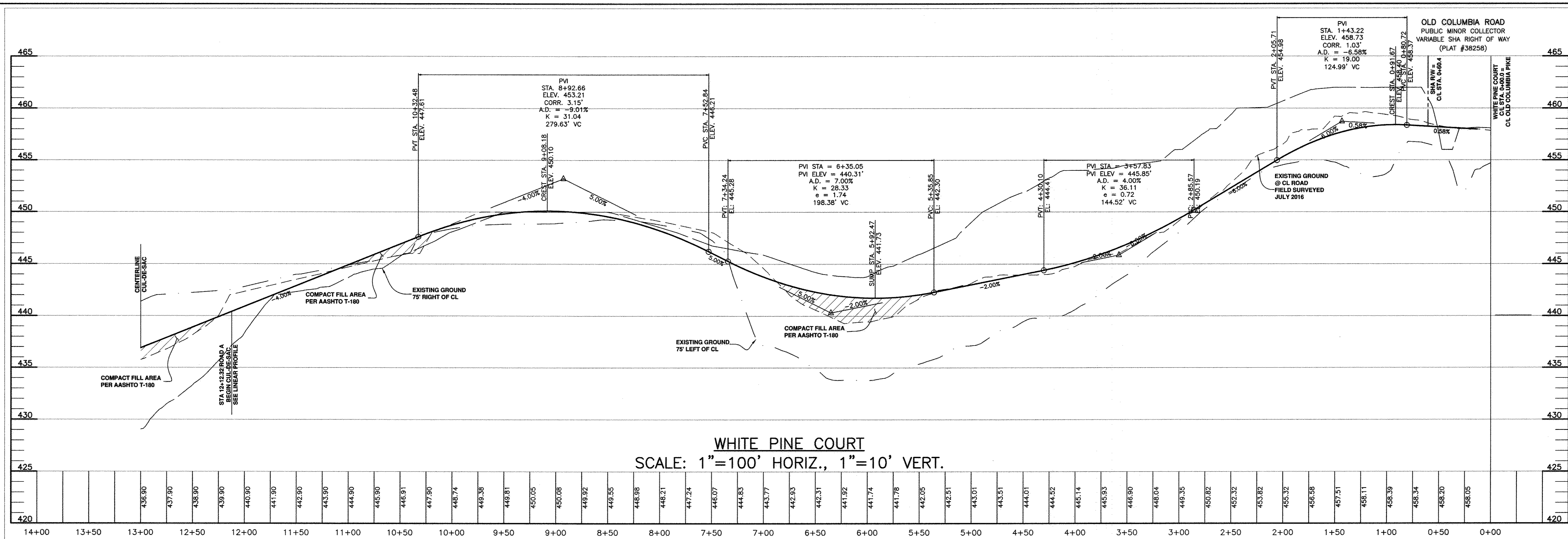
TENTATIVELY APPROVED DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE: June 15, 2017

PLANNING DIRECTOR: Valerie... 9-5-17

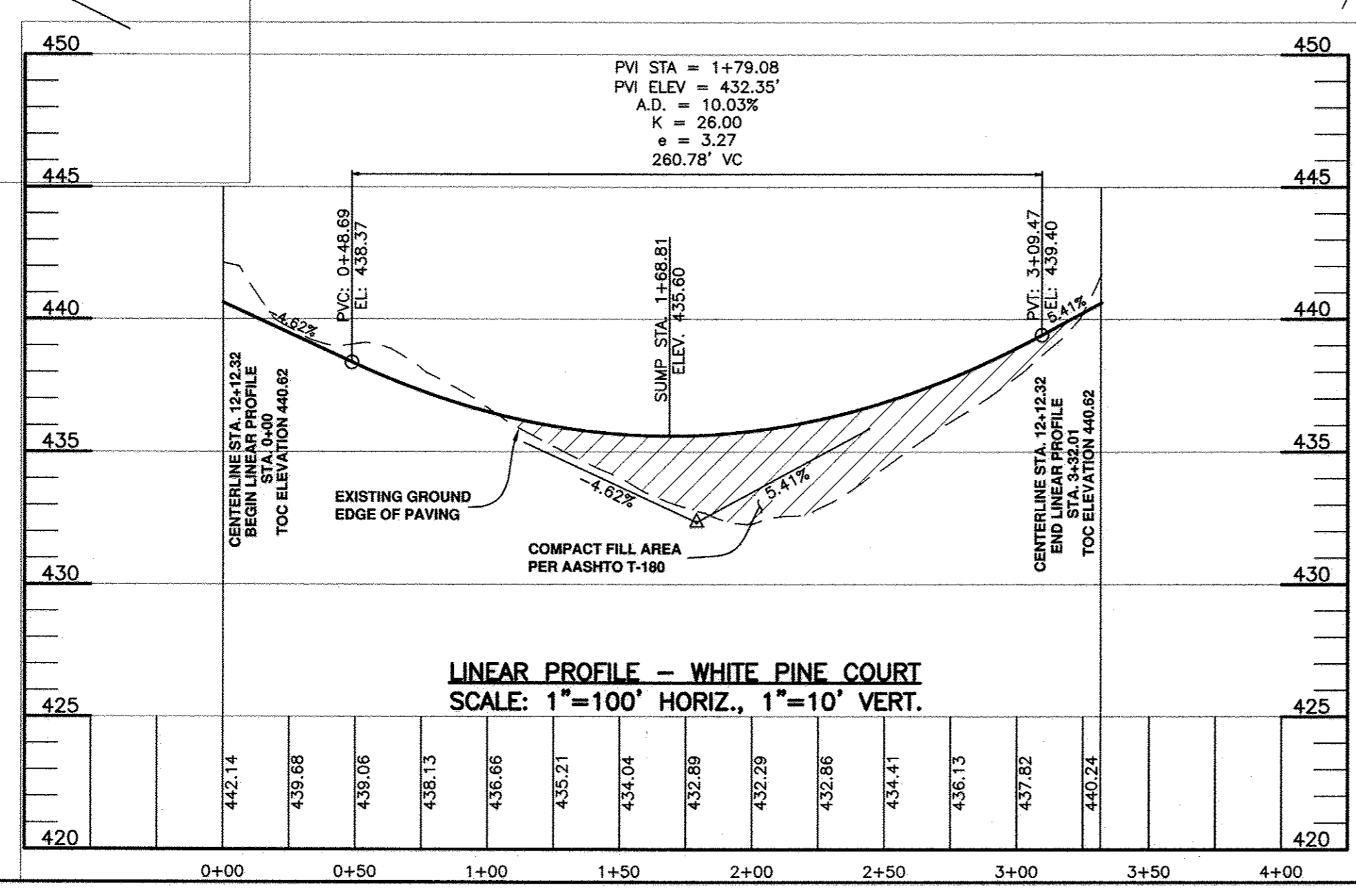
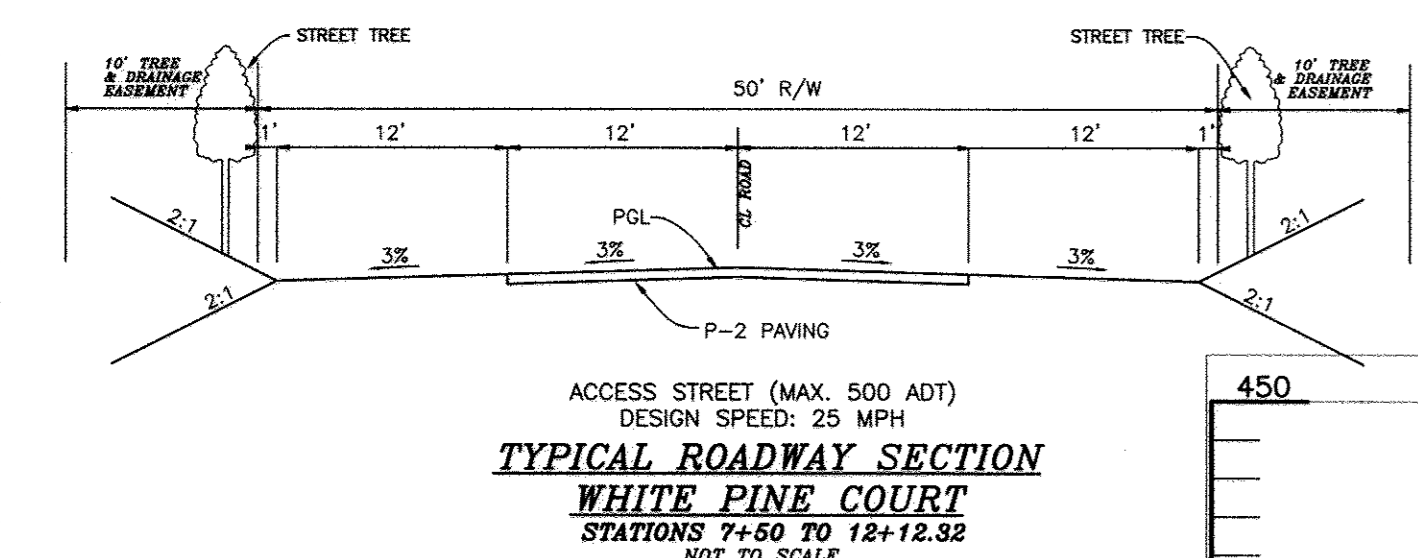
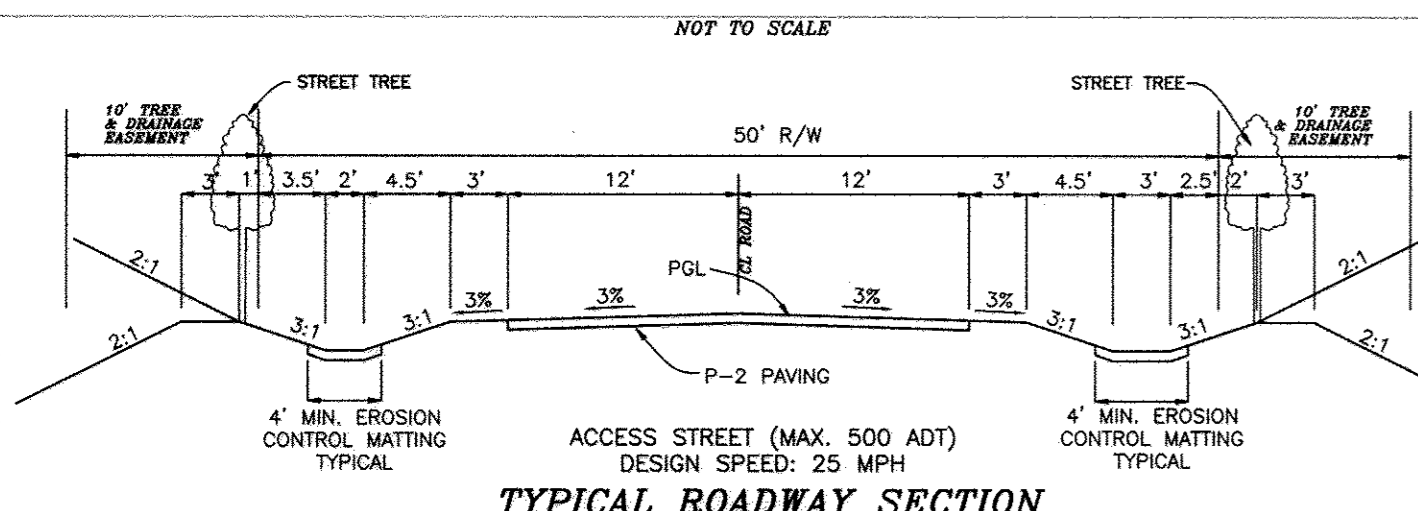
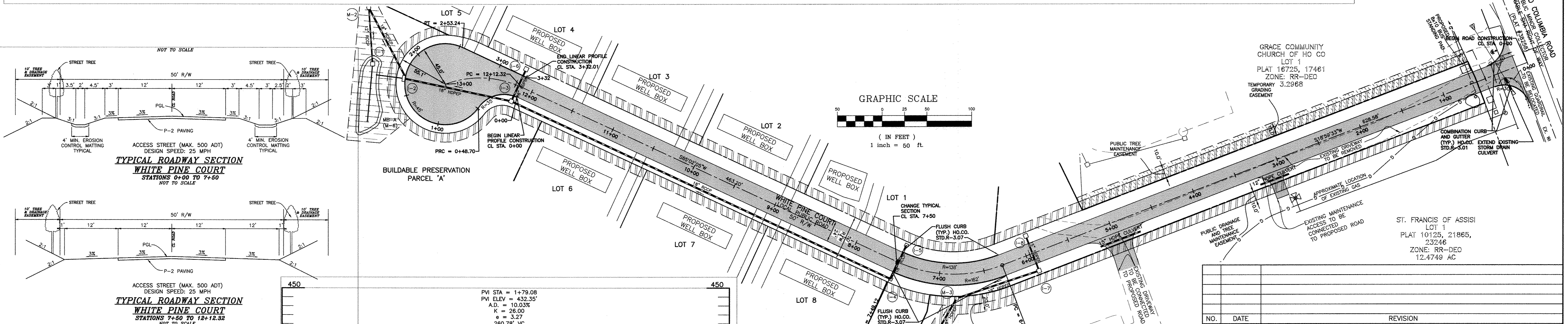




WHITE PINE COURT
SCALE: 1"=100' HORIZ., 1"=10' VERT.

LEGEND

	LIMIT OF SUBMISSION
	PUBLIC TREE MAINTENANCE EASEMENTS
	PUBLIC DRAINAGE EASEMENTS
	PRIVATE GRADING EASEMENT



APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: June 15, 2017

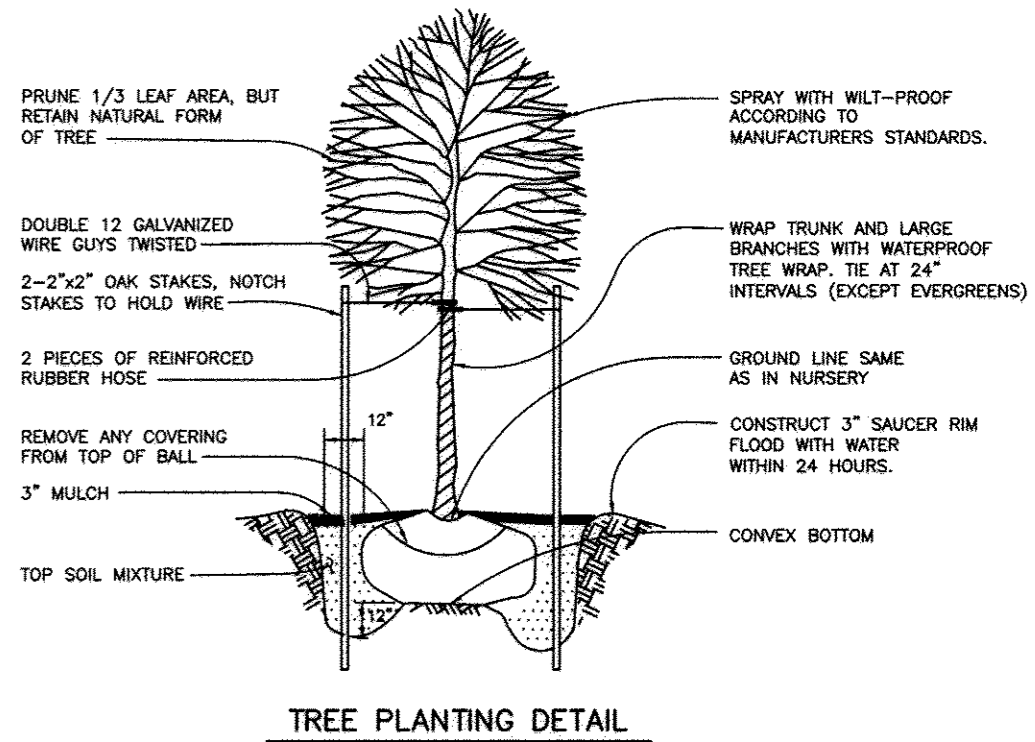
TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY
Valerie J. J. [Signature] 9-5-17
PLANNING DIRECTOR DATE

NO.		DATE	REVISION
BENCHMARK ENGINEERING, INC. ENGINEERS & LAND SURVEYORS & PLANNERS 8480 BALTIMORE NATIONAL PIKE A SUITE 315 A ELICOTT CITY, MARYLAND 21043 (P) 410-465-8105 (F) 410-465-8644 WWW.BEI-CVLENGINEERING.COM			
OWNER: EVERGREEN STABLES FARM, LLC 8250 OLD COLUMBIA ROAD FULTON, MARYLAND 20759 301-725-0442		PROJECT: THE PRESERVE AT EVERGREEN FARM LOTS 1-8 AND BUILDABLE PRESERVATION PARCEL A A RE-SUBDIVISION OF LOT 2 OF THE ST. FRANCIS OF ASSISI SUBDIVISION	
LOCATION: TAX MAP: 46 - GRID: 03 - PARCEL: 337 ZONED: RR-DEO ELECTION DISTRICT NO. 5 - HOWARD COUNTY, MARYLAND			
TITLE: PRELIMINARY ROAD PROFILES			
DATE: SEPTEMBER 2016	PROJECT NO: 2761	SHEET 5 OF 7	
DESIGN: AAM	DRAFT: AAM	CHECK: CAM	SCALE: AS SHOWN

SCHEDULE A PERIMETER LANDSCAPE EDGE			
CATEGORY	ADJACENT TO:	PERIMETER PROPERTY	PERIMETER PROPERTY
LANDSCAPE TYPE		① A	② A
LINEAR FEET OF PERIMETER		1266'	1086'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)		YES 210'	NO
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)		NO	NO
NUMBER OF PLANTS REQUIRED		26	27
SHADE TREES		-	-
EVERGREEN TREES		-	-
OTHER TREES (2:1 SUBSTITUTE)		-	-
SHRUBS		-	-
NUMBER OF PLANTS PROVIDED		26	27
SHADE TREES		-	-
EVERGREEN TREES		-	-
OTHER TREES (2:1 SUBSTITUTE)		-	-
SHRUBS (10:1 SUBSTITUTE)		-	-

LANDSCAPING NOTES

- PERIMETER LANDSCAPING SHALL BE PROVIDED BY THE DEVELOPER AS SHOWN ON THESE PLANS.
- TREES MUST BE A MINIMUM OF FOUR(4) FEET FROM PAVEMENT AND MUST BE A MINIMUM OF FIVE(5) FEET FROM ANY STORM DRAIN, IF APPLICABLE.
- TREES MUST BE PLANTED A MINIMUM OF TEN (10) FEET FROM A DRIVEWAY APPROX.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SEC.-16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
- THIS LANDSCAPE PLAN IS IN ACCORDANCE WITH SECTION 16.124 OF HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. SURETY IN THE AMOUNT OF \$15,000 FOR 53 SHADE TREES IS REQUIRED TO BE POSTED WITH THE DEVELOPER'S AGREEMENT.
- IF ANY TREE DESIGNATED FOR PRESERVATION FOR WHICH LANDSCAPING CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE HOWARD COUNTY LANDSCAPE MANUAL.
- THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERM, FENCES AND WALLS. PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION AND WHEN NECESSARY, REPAIRED OR REPLACED AT THE OWNER'S EXPENSE.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREIN LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTION OR REDUCTION OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DELAY FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.



STREET TREE REQUIREMENTS	
ROADWAY NAME:	ROAD A
LINEAR FEET OF PERIMETER ROADWAY	2604
STREET TREES REQUIRED 1:40	65
NUMBER OF PLANTS PROVIDED:	
SHADE TREES	65
EVERGREEN TREES	-
OTHER TREES (2:1 SUBSTITUTE)	-
SHRUBS (10:1 SUBSTITUTE)	-
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	

LEGEND

- EXISTING CONTOURS
- EXISTING TREELINE
- LIMIT OF SUBMISSION
- PROPOSED SEPTIC AREA
- EXISTING SEPTIC AREA
- SOILS DELINEATION
- EX. WELL
- PROPOSED DWELLING
- 15%-24.9% SLOPES
- STORM DRAIN DRAINAGE DIVIDE
- PUBLIC TREE MAINTENANCE EASEMENTS
- PUBLIC DRAINAGE EASEMENTS
- PRIVATE GRADING EASEMENT

FOREST CONSERVATION WORKSHEET
Version 1.0

Project: Evergreen Stables Farm
Date: May 24, 2016

NET TRACT AREA	Acres
A. Total tract area	19.7
B. Area within 100 Year Floodplain	
C. Area of existing impervious surface/unchanged use	
D. Net Tract Area	19.7

LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)
ARA MDR IDA HDR MPD CIA
XX

E. Afforestation Threshold (percentage)	20	3.9
F. Conservation Threshold (percentage)	25	4.9

EXISTING FOREST COVER:

G. Existing forest cover (excluding floodplain)	0
H. Area of forest above afforestation threshold	0
I. Area of forest above conservation threshold	0

BREAK EVEN POINT: NA

J. Forest retention above threshold with no mitigation
Break-Even Point

K. Clearing permitted without mitigation

PROPOSED FOREST CLEARING

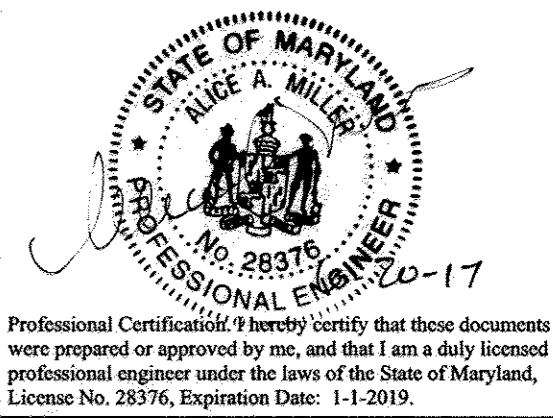
L. Total area of forest to be Cleared or Retained Outside FCE	0
M. Total area of forest to be Retained in FCE	0

PLANTING REQUIREMENTS

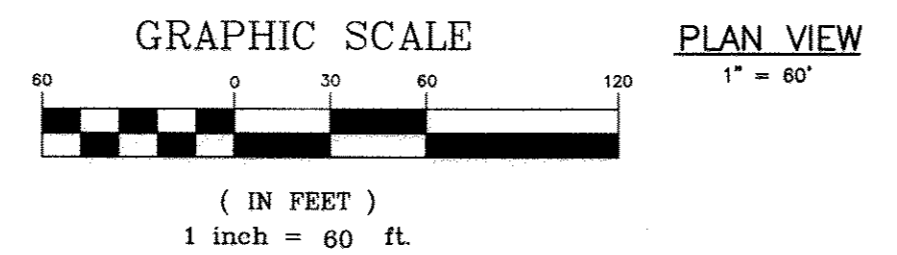
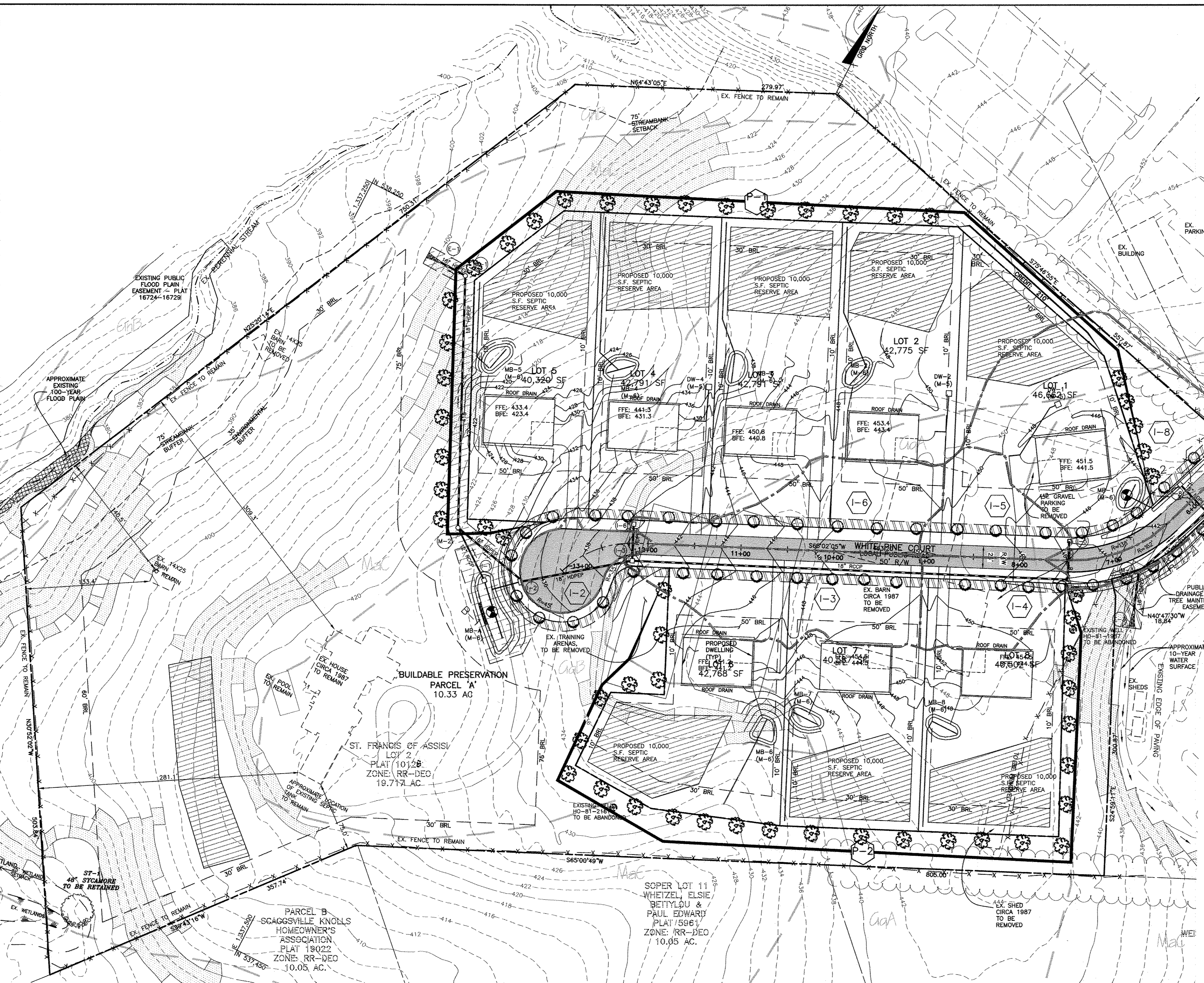
N. Reforestation for clearing above Conservation Threshold	0
O. Reforestation for clearing below Conservation Threshold	0
P. Credit for retention above conservation threshold	0
R. Total reforestation required	0
S. Total afforestation required	3.9
T. Total reforestation and afforestation required	3.9

NO.	DATE	REVISION

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELICOTT CITY, MARYLAND 21043
(P) 410-485-6105 (F) 410-485-8844
WWW.BE-CIVILENGINEERING.COM



OWNER: EVERGREEN STABLES FARM, LLC 8250 OLD COLUMBIA ROAD FULTON, MARYLAND 20759 301-725-0442	PROJECT: THE PRESERVE AT EVERGREEN FARM LOTS 1-8 AND BUILDABLE PRESERVATION PARCEL A A RE-SUBDIVISION OF LOT 2 OF THE ST. FRANCIS OF ASSISI SUBDIVISION
LOCATION: TAX MAP: 46 - GRID: 03 - PARCEL: 337 ZONED: RR-DEO ELECTION DISTRICT NO. 5 - HOWARD COUNTY, MARYLAND	TITLE: PRELIMINARY LANDSCAPE PLAN, FOREST CONSERVATION PLAN AND STORM DRAIN DRAINAGE AREA MAP
DATE: SEPTEMBER, 2016 JUNE, 2017	PROJECT NO. 2761
DESIGN: AAM DRAFT: AAM CHECK: CAM	SCALE: AS SHOWN SHEET 6 OF 7



SOILS LEGEND			
SYMBOL	TYPE	K* FACTOR	NAME
GgA	B	.20	GLENELG LOAM - 0 TO 3 PERCENT SLOPES
GgB	C	.20	GLENELG LOAM - 3 TO 8 PERCENT SLOPES
GnB	C	.37**	GLENVILLE-BAILLE SILT LOAM, 0 TO 8 PERCENT SLOPES
Mac	B	.24**	MANOR LOAM - 8 TO 15 PERCENT SLOPES

SOIL MAPPING TAKEN FROM NRCS WEB SOIL SURVEY, MARCH 2016. MAP 23
*WHOLE SOIL K FACTOR
**HIGHLY ERODIBLE SOILS K>0.35, AND/OR 15% OR GREATER SLOPES

STORM DRAIN DRAINAGE AREA DATA				
INLET NO.	ZONING	AREA (AC)	'C' FACTOR	% IMPERVIOUS
1-2	RR-DEO	0.19	0.86	100
1-3	RR-DEO	0.61	0.31	21
1-4	RR-DEO	0.30	0.22	21
1-5	RR-DEO	0.29	0.22	24
1-6	RR-DEO	0.49	0.30	26
1-7	RR-DEO	0.44	0.37	44
1-8	RR-DEO	1.88	0.56	16

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE: June 15, 2017

PLANNING DIRECTOR: *Valerie J. Ellis* 9-511

LEGEND

- 500 EXISTING CONTOURS
- EXISTING TREELINE
- LIMIT OF SUBMISSION
- PROPOSED SEPTIC AREA
- SOILS DELINEATION
- EX. WELL
- PROPOSED DWELLING
- 15%-24.9% SLOPES
- NON-ROOFTOP DISCONNECTION

GRAPHIC SCALE

1" = 60'

(IN FEET)

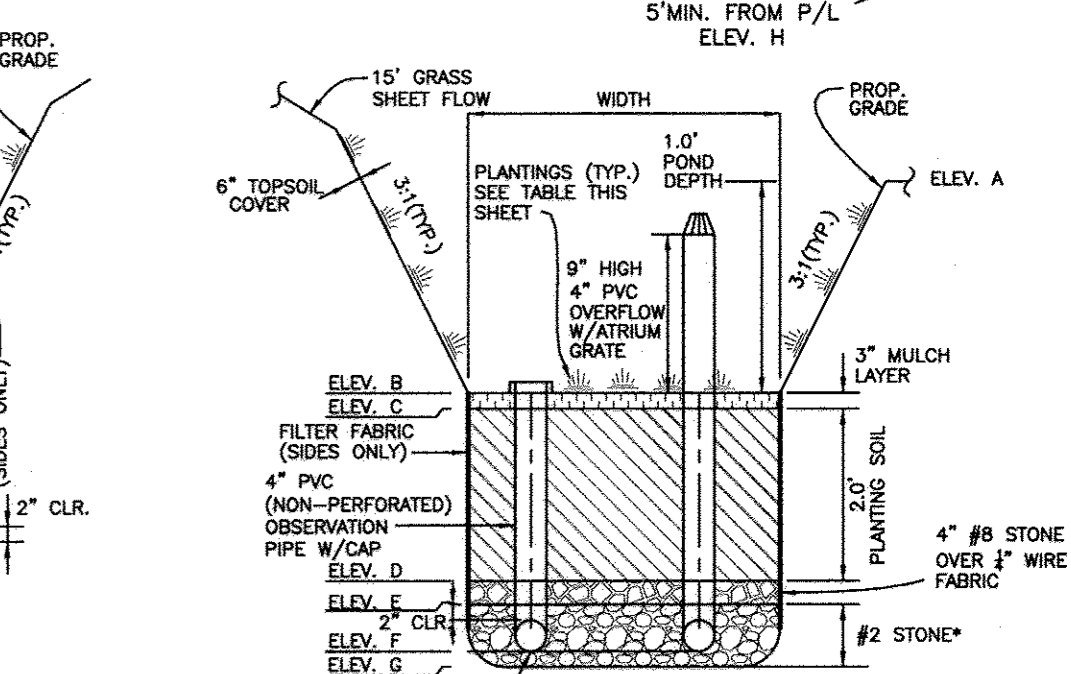
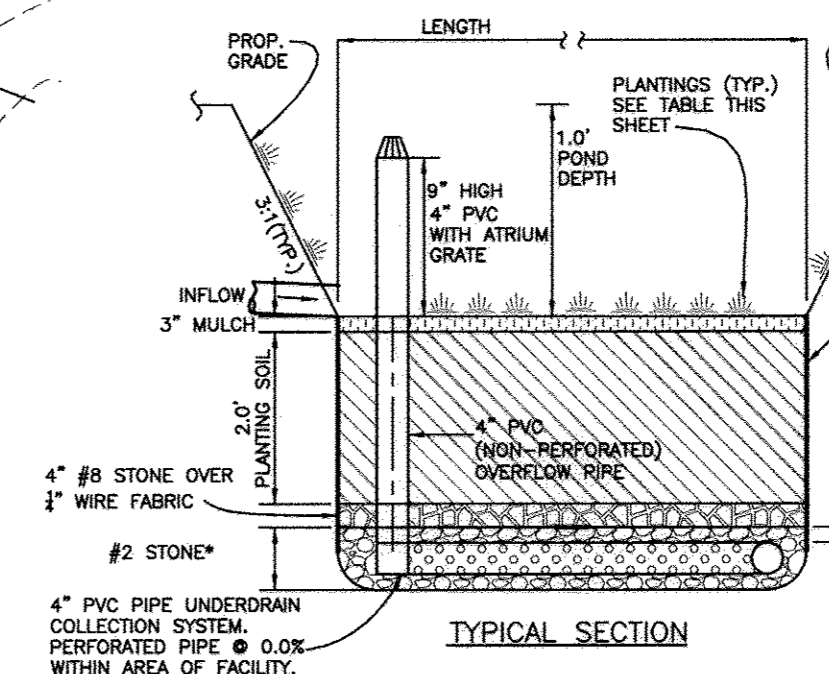
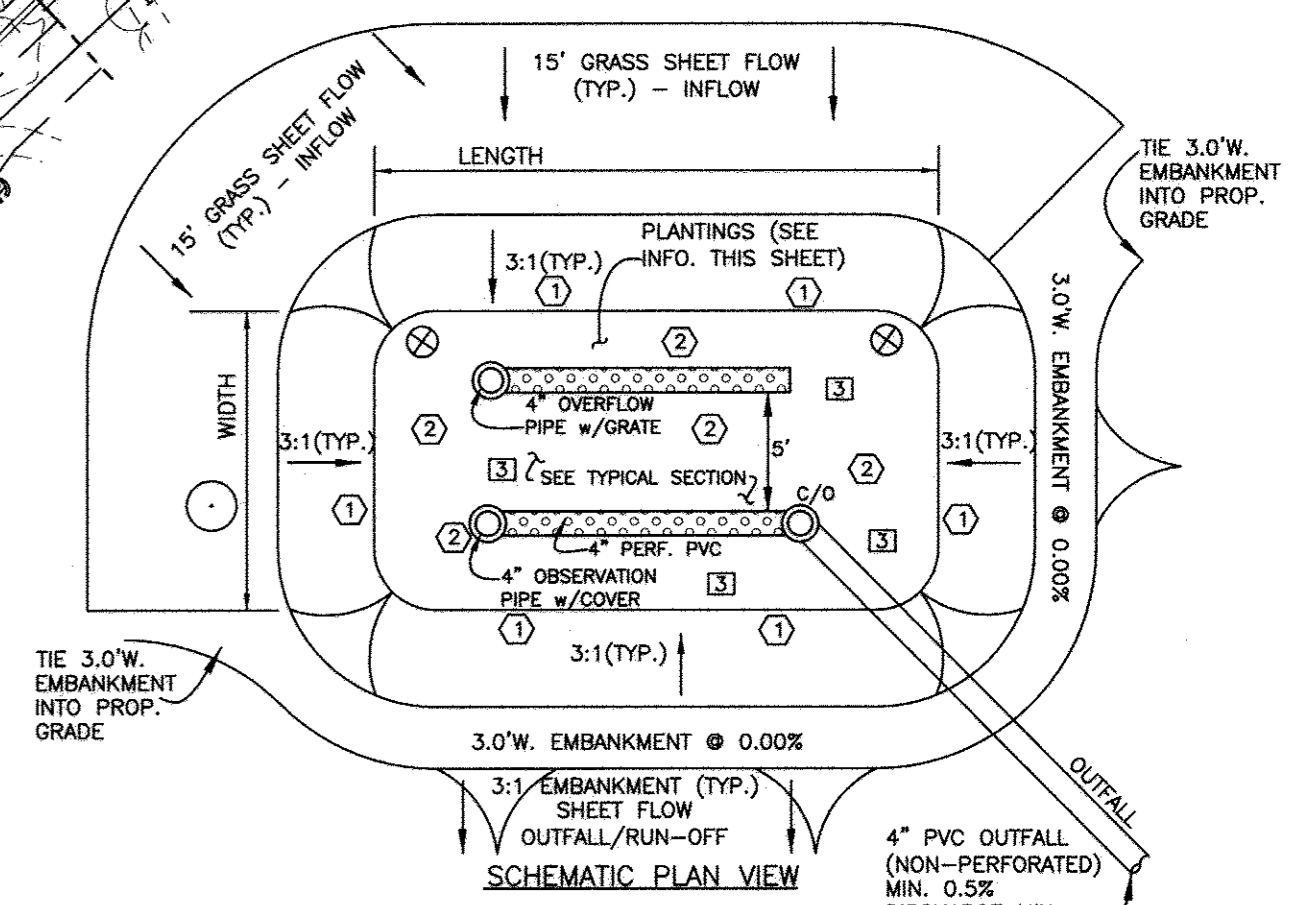
1 inch = 60 ft.

PLAN VIEW

1" = 60'

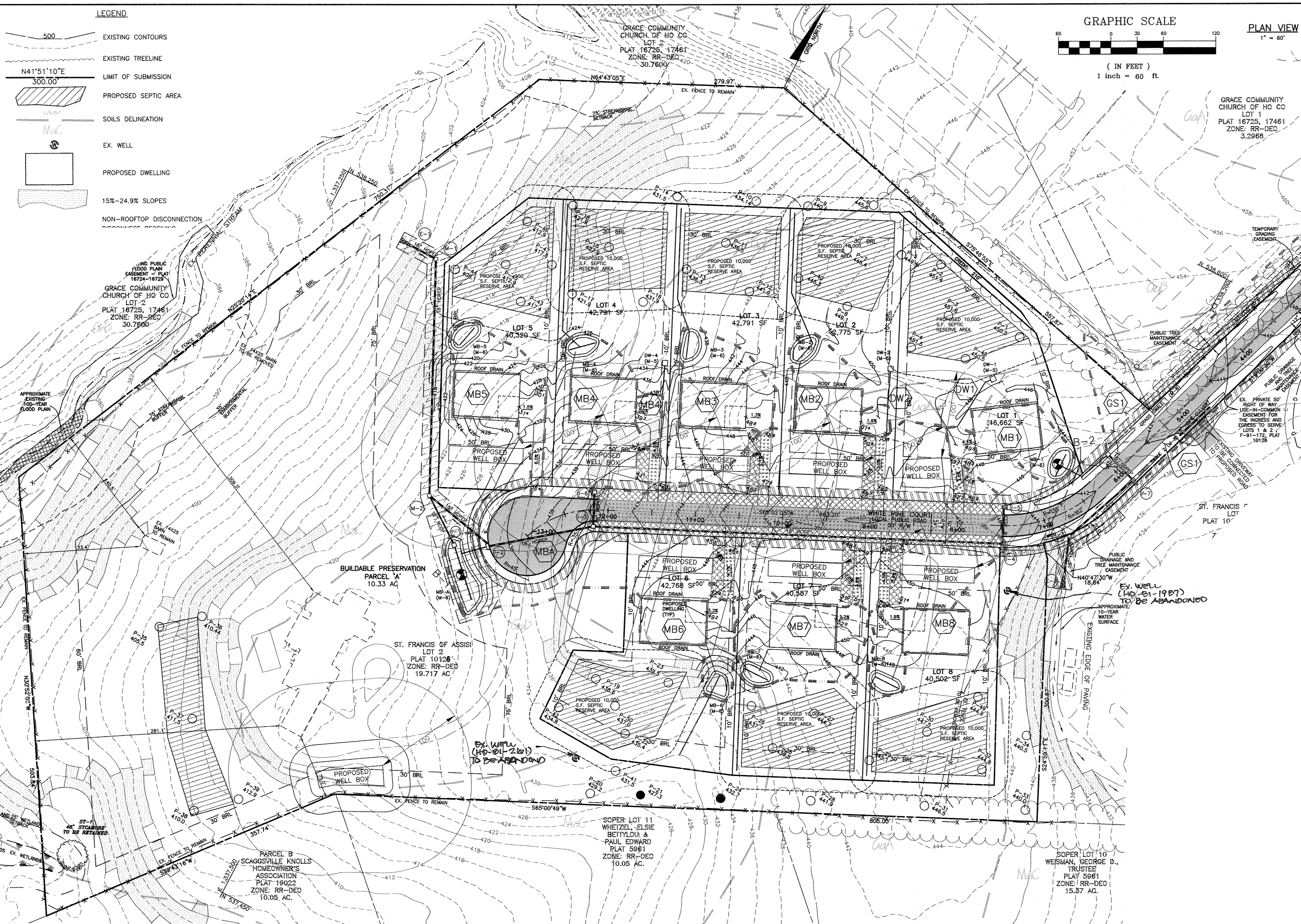
- MICROBIORETENTION PLANTING SCHEDULE**
(SPECIFIC NUMBER OF PLANTINGS SHALL BE DETERMINED WITH FINAL DESIGN AT PLOT PLAN PHASE)
- IRIS VERSICOLOR (IRIS)
 - LOBELIA CARDINALIS (CARDINAL FLOWER)
 - RUBRICKIA SUBTENTOSA - SWEET CONEFLOWER
 - CALLUNA VULGARIS (HEATHER) (2 PER FACILITY)
 - SALIX NIGRA (BLACK WILLOW) (1 PER FACILITY)

- MICROBIORETENTION PLANTING DATA**
- PLANTINGS WITHIN THE PONDING AREA OF THE MICRO-BIORETENTION FACILITY ARE TO BE OF A MEDIUM TO HIGH WATER TOLERANCE
 - PLANTINGS ALONG THE PERIMETER (BERM) AREA OF THE MICRO-BIORETENTION FACILITY ARE TO BE OF A LOW TO MEDIUM WATER TOLERANCE
 - AVOID PLANTINGS WITH EXCESSIVE ROOT MASS IN POND AREA OF THE MICRO-BIORETENTION FACILITY NEAR O.B. PIPE AND UNDERDRAIN.



MICRO-BIORETENTION DETAILS
NOT TO SCALE

TYPICAL PROFILE



ON-LOT BIORETENTION DIMENSIONS

FACILITY	A	B	C	D	E	F	G*	H*	FILTER (A)	PLANTINGS (1) (2) (3)	LINER
MB-1	444.00	443.00	442.75	440.75	440.42	439.92	TBD	TBD	503	22 17 17	N/A
MB-2	447.00	446.00	445.75	443.75	443.42	442.92	TBD	TBD	478	21 16 16	N/A
MB-3	436.00	435.00	434.75	432.75	432.42	431.92	TBD	TBD	432	19 14 14	N/A
MB-4	426.00	425.00	424.75	422.75	422.42	421.92	TBD	TBD	471	21 16 16	N/A
MB-5	417.00	416.00	415.75	413.75	413.42	412.92	TBD	TBD	440	20 15 15	N/A
MB-6	436.00	435.00	434.75	432.75	432.42	431.92	TBD	TBD	440	20 15 15	N/A
MB-7	440.00	439.00	438.75	436.75	436.42	435.92	TBD	TBD	440	20 15 15	N/A
MB-8	447.00	446.00	445.75	443.75	443.42	442.92	TBD	TBD	440	20 15 15	N/A
MB-A	428.00	427.00	426.75	424.75	424.42	423.92	TBD	TBD	1400	62 47 47	N/A

*25% WQV SHALL BE PROVIDED WITHIN THE STONE SECTION BELOW THE UNDERDRAIN.

APPROVED FOR PRIVATE WATER AND PRIVATE SEPTIC
HOWARD COUNTY HEALTH DEPARTMENT

Walter J. ... 8/24/2017
HOWARD COUNTY HEALTH OFFICER H.O. 2

DATE: June 15, 2017

APPROVED
PLANNING BOARD OF HOWARD COUNTY

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

Valerie ... 4-5-17
PLANNING DIRECTOR

PROJECT: The Preserve at Evergreen Farm DATE: 1/12/2017

PRACTICES AND SIZING

Pe: 1.1 inches

BIORETENTION FACILITIES (M-6) PRIVATELY OWNED AND MAINTAINED

FACILITY	Drainage Area	Impervious	I (%)	Rv	ESDv (cf)	75% ESDv (cf)	Volume Stored	Volume Treated (W/O 75)	Pe
MB-1	6620	3750	57%	0.560	3511.0	263.3	443.0	591.0	1.91
MB-2	7287	3750	52%	0.514	354.1	265.6	446.0	593.0	1.91
MB-3	9813	4570	47%	0.469	436.1	327.0	435.0	580.0	1.51
MB-4	6704	3750	56%	0.553	351.4	263.6	426.0	567.0	1.68
MB-5	10961	5715	52%	0.519	536.1	404.3	416.0	553.0	1.77
MB-6	7250	4570	63%	0.617	423.9	317.9	403.0	537.0	1.44
MB-7	13043	4570	35%	0.365	451.4	338.5	440.0	587.0	1.48
MB-8	7332	4570	61%	0.596	425.3	318.9	437.0	583.0	1.96
MB-A	94196	8302	9%	0.129	1274.1	120.3	1364.3	1401.0	1.84
MB-A (CONTINUED)									
TOTAL:							3445.0	6481.0	

DRYWELL FACILITIES (M-5) PRIVATELY OWNED AND MAINTAINED

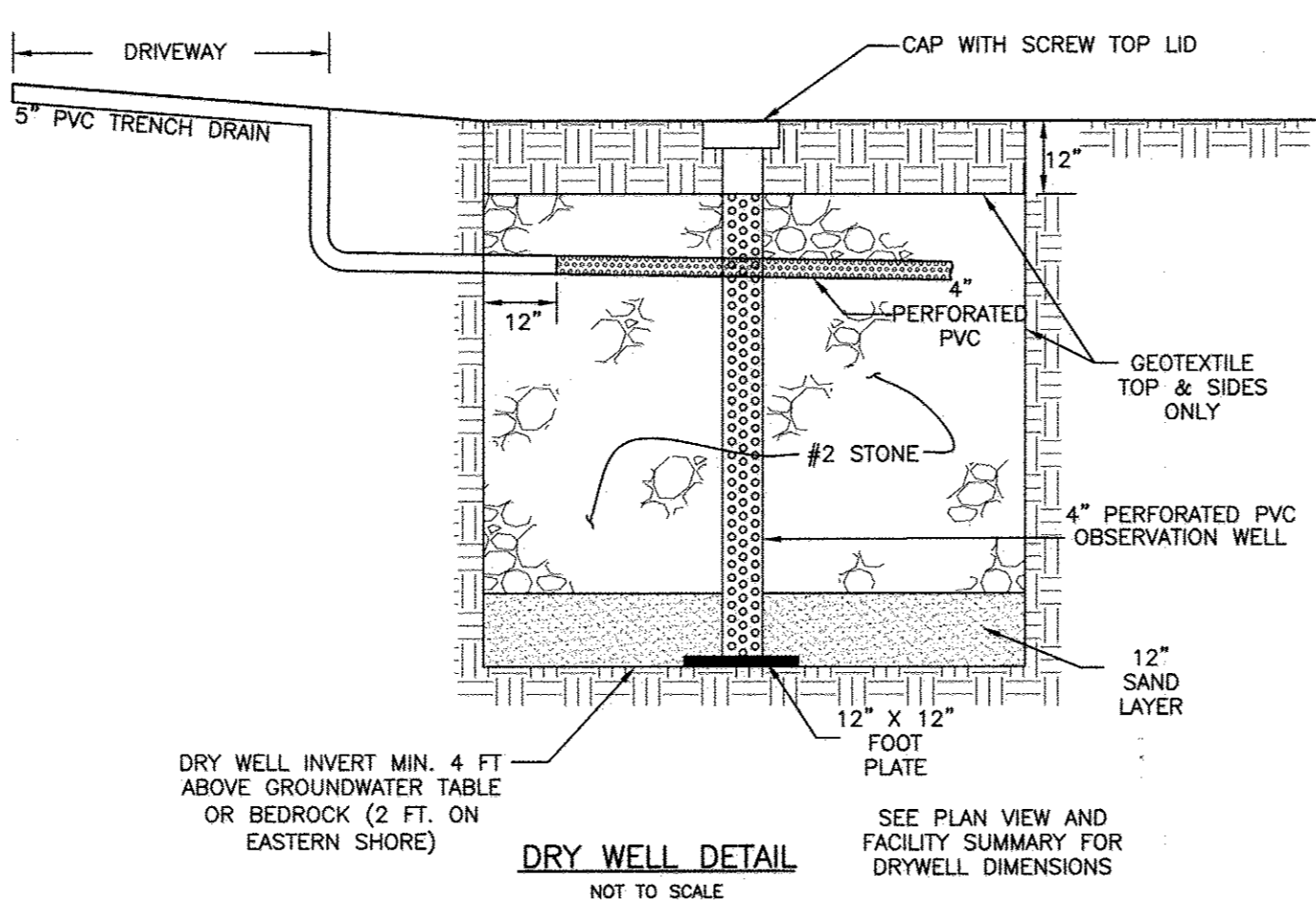
FACILITY	Drainage Area	Impervious	I (%)	Rv	ESDv (cf)	Depth	Porosity	Width	Length	Volume Stored	Pe
DW-1	826	826	100%	0.950	74.3	5.0	0.40	6	6	72	1.10
DW-2	826	826	100%	0.950	74.3	5.0	0.40	6	6	72	1.10
DW-4	826	826	100%	0.950	74.3	5.0	0.40	6	6	72	1.10
TOTAL:										216	3.30

ROADWAY TREATMENT PUBLICLY OWNED AND JOINTLY MAINTAINED

Area Treated	Pe	ESDv (cf)	Remaining ESDv
Grass Swales (M-8): 15000	1.200	11600	N/A
Non-rooftop Disconnection (N-2): 10562	1.000	880	120 (added to MBR-A)

DRIVEWAY TREATMENT PRIVATELY OWNED AND MAINTAINED

Area Treated	Pe	ESDv (cf)	Converted to ESDv
Non-rooftop Disconnection (N-2): 5200	1.000	433	



MATERIALS & SPECIFICATIONS FOR MICRO-BIORETENTION

MATERIAL	SPECIFICATION	SIZE	NOTES:
PLANTINGS	SEE APPENDIX A; TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2.0' TO 4.0' DEEP)	LOAMY SAND 60-65% COMPOST 35-40% OR SANDY LOAM 30% COARSE SAND 30% & COMPOST 40%	N/A	USDA SOIL TYPES: LOAMY SAND OR SANDY LOAM; CLAY CONTENT <5%
ORGANIC CONTENT	MIN 10% BY DRY WEIGHT ASTM D 2974	N/A	
MULCH	SHREDDED HARDWOOD	N/A	AGED 6 MONTHS, MINIMUM, NO PINE OR WOOD CHIPS
GEOTEXTILE (CLASS "C")	N/A	N/A	PE TYPE 1 NONWOVEN
GEOTEXTILE (1/4" WIRE MESH)	N/A	1/4" WIRE MESH	1/4" WIRE MESH
UNDERDRAIN GRAVEL	AASHTO M-43	NO. 57 OR NO. 6 0.375" TO 0.750"	
UNDERDRAIN PIPING	F750, TYPE PS28 OR AASHTO M-278	4" TO 6" RIGID	3/8" PERF. @ 6" O/C. 4 HOLES PER ROW. MINIMUM OF 2" OF GRAVEL OVER PIPES, NOT NECESSARY UNDERNEATH PIPES.
IMPERVIOUS LINER	ASTM-D-4833 (THICKNESS) ASTM-D-412 (TENSILE STRENGTH 1,100 LB. ELONGATION 200%) ASTM-D-824 (TEAR RESISTANCE - 150 LB./IN) ASTM-D-471 (WATER ADSORPTION: +8 TO -2% MASS) 30 MIL THICK		LINER TO BE ULTRAVIOLET RESISTANT. A GEOTEXTILE FABRIC SHOULD BE USED TO PROTECT THE LINER FROM PUNCTURE.
GEOTEXTILE (BELOW IMPERV. LINER)	ASTM-D-4833 (PUNCTURE STRENGTH 125LB) ASTM-D-4632 (TENSILE STRENGTH 300 LB.)		

BENCHMARK ENGINEERING, INC.
ENGINEERS & LAND SURVEYORS & PLANNERS

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(P) 410-466-6105 (F) 410-466-6544
WWW.BE-CHALLENGING.COM

STATE OF MARYLAND PROFESSIONAL ENGINEER 20-17

Professional Certification: 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. 28376, Expiration Date: 1-1-2019.

OWNER: EVERGREEN STABLES FARM, LLC
8250 OLD COLUMBIA ROAD
FULTON, MARYLAND 20759
301-725-0442

PROJECT: THE PRESERVE
AT EVERGREEN FARM
LOTS 1-8 AND BUILDABLE PRESERVATION PARCEL A
A RE-SUBDIVISION OF LOT 2 OF THE ST. FRANCIS OF ASSISI SUBDIVISION

LOCATION: TAX MAP: 46 - GRID: 03 - PARCEL: 337
ZONE: RR-DEO
ELECTION DISTRICT NO. 5 - HOWARD COUNTY, MARYLAND

TITLE: PRELIMINARY STORMWATER MANAGEMENT PLAN AND DRAINAGE AREA MAP

DATE: NOVEMBER, 2016
JUNE, 2017

PROJECT NO.: 2761

DESIGN: AAM **DRAFT:** AAM **CHECK:** CAM

SCALE: AS SHOWN

SHEET 7 OF 7

SP-17-001