

SITE DATA

LOCATION: TAX MAP 28, BLOCK 20
 PARCEL: 201
 5TH ELECTION DISTRICT
 PRESENT ZONING: RR-DEO
 GROSS AREA OF PROJECT: 7.58 AC.
 AREA OF RIGHT-OF-WAY DEDICATION: 0.00 AC.
 LIMIT OF DISTURBANCE: 0.75 AC.
 PROPOSED USE OF SITE: RESIDENTIAL (STD)
 NUMBER OF RESIDENTIAL LOTS PROPOSED: 2 LOTS
 AREA OF RESIDENTIAL LOTS PROPOSED: 7.58 AC.
 OPEN SPACE REQUIRED: 0.00 AC.
 AREA OF STREAM/BUFFER: 0.00 AC.
 AREA OF WETLANDS/BUFFER: 0.00 AC.
 AREA OF MODERATE SLOPES (15%-24.99%): 0.00 AC.
 AREA OF STEEP SLOPES (25% OR GREATER): 0.00 AC.
 AREA OF FLOOD PLAIN: 0.00 AC.
 NET PROJECT AREA: 7.58 AC.
 AREA OF EXISTING FOREST COVER: 1.05 AC.
 AREA OF ERODIBLE SOILS: 0.00 AC.
 AREA MARKED BY ESD (THIS PLAN): 0.75 AC.
 *IMPERVIOUS AREA: 0.19 AC.
 *GREEN AREA: 0.56 AC.
 DRZ REFERENCES: ECP-17-055

COORDINATE TABLE

NO.	NORTH	EAST
110	566522.86	1317855.53
111	566520.78	1317940.00
119	566379.78	1318223.57
207	567144.43	1317959.27
208	567091.50	1318274.86
209	567084.10	1318305.57
210	566916.65	1318487.85
211	566897.10	1318507.11
212	566802.52	1318635.03
219	566793.03	1318631.86
220	566885.94	1318499.28

GENERAL NOTES

- THE SUBJECT PROPERTY IS ZONED "RR-DEO" PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 A) WIDTH - 12' (16' SERVING MORE THAN ONE RESIDENCE).
 B) SURFACE - 6" OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING. (1"-1.5" MIN.)
 C) GEOMETRY - MAX. 10% GRADE, MAX. 10% GRADE CHANGE AND MIN. OF 45' TURNING RADIUS.
 D) STRUCTURE (CULVERTS/BROCKS) - CAPABLE OF SUPPORTING 25 GROSS TONS (425 LOADINGS).
 E) DRAINAGE ELEMENTS - SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 F) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- FLAG AND PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JURISDICTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT ONTO THE PIPESTEM LOT DRIVEWAY.
- WATER AND SEWER SERVICE TO BE PROVIDED BY PRIVATE WELLS AND SEPTIC SYSTEMS.
- IF THERE ARE SEVERAL EXISTING STRUCTURES LOCATED ON LOT 1 TO REMAIN NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLINGS/STRUCTURES ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATION REQUIREMENTS.
- LANDSCAPING IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. A FINANCIAL SURETY IN THE AMOUNT OF \$5,400.00 FOR THE REQUIRED 18 SHADE TREES SHALL BE POSTED WITH THE BUILDERS GRADING PERMIT.
- THE PROJECT IS BEING PROPOSED FOR A SUBDIVISION THAT WILL CREATE ONE NEW LOT AND EXHAUST THE DEVELOPMENT POTENTIAL OF THE PROPERTY. PER COUNTY CODE SEC. 18.202(b)(1)(vi), UNDER THIS SCENARIO, THE PROPOSED SUBDIVISION IS EXEMPT FROM THE REQUIREMENTS OF THE FOREST CONSERVATION ACT INCLUDING THE FOREST STAND DELINEATION, FOREST CONSERVATION PLAN, AND REGULATIONS FOR THE PROTECTION OF SPECIMEN TREES.
- THIS PROPERTY IS LOCATED IN THE COUNTY'S DESIGNATED GROWTH TIER AREA III IN ACCORDANCE WITH PLAN HOWARD 2033. THE PROPOSED MINOR SUBDIVISION WILL NOT REQUIRE APPROVAL FROM THE HOWARD COUNTY PLANNING BOARD.
- AN ENVIRONMENTAL RESOURCES ASSESSMENT WAS PERFORMED BY JOHN CANOLES OF ECO-SCIENCE PROFESSIONALS, INC., DATED MARCH 13, 2017.
- NO RARE, THREATENED OR ENDANGERED SPECIES OR THEIR HABITATS WERE OBSERVED ON THE PROPERTY.
- THERE IS NO 100-YR FLOODPLAIN LOCATED WITHIN THE LIMITS OF THIS SITE.
- THERE ARE NO WETLANDS, STREAMS OR THEIR BUFFERS LOCATED ON THIS SITE.
- THE PROJECT BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED APRIL 26, 2017.
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM HOWARD COUNTY GIS AND SUPPLEMENTED WITH FIELD RUN TOPOGRAPHY BY ROBERT H. VOGEL ENGINEERING, INC., DATED AUGUST 27, 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. 3444 AND 3440 WERE USED FOR THIS PROJECT.
- THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS, UNLESS ALTERNATIVE COMPLIANCE REQUESTS HAVE BEEN APPROVED.
- THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS EFFECTIVE OCTOBER 6, 2013.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES.
- IN ACCORDANCE WITH SECTION 16.121(A)(2) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, A FEE-IN-LIEU PAYMENT IS REQUIRED FOR OPEN SPACE FOR NON-CLUSTER SUBDIVISIONS IN THE "RR" ZONING DISTRICT. A FEE-IN-LIEU PAYMENT IN THE AMOUNT OF \$1,500.00 WILL BE PAID WITH THE SUBMISSION OF THE PLAN ORIGINALS.
- MRU'S ARE REQUIRED FOR THIS PROJECT. THE DEVELOPER WILL PAY A FEE-IN-LIEU TO ADDRESS THIS REQUIREMENT.
- A PRE-SUBMISSION MEETING WAS HELD ON MAY 23, 2017 AT 6:00 PM AT THE RIVER HILL MEETING ROOM.
- AN ENVIRONMENTAL CONCEPT PLAN (ECP-17-055) WAS APPROVED ON AUGUST 10, 2017.
- TO THE BEST OF THE OWNER'S KNOWLEDGE, THERE ARE NO BURIAL GROUNDS OR CEMETERIES LOCATED ON THIS PROPERTY. THE EXISTING HOUSE ON THE PROPERTY IS A HISTORIC STRUCTURE THAT DATES TO 1893. IT IS TO REMAIN, AND WILL BE LOCATED ON LOT 1.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT OR IN THE METROPOLITAN DISTRICT.
- A TRAFFIC STUDY IS NOT REQUIRED FOR THIS PROJECT.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- SEDMIMENT AND EROSION CONTROL WILL BE PROVIDED FOR THIS SITE.
- STORM WATER MANAGEMENT TO BE PROVIDED FOR THIS PROJECT BY ENVIRONMENTAL SITE DESIGN UTILIZING TWO RAIN GARDEN FACILITIES (M-7) AND MICRO-BIO-RETENTION CREDIT (M-2). WELL SOAK GARDENS AND DISCONNECT AREAS ARE TO BE PRIVATELY OWNED AND MAINTAINED BY THE HOMEOWNER. REFERENCE 2010 MDE STORMWATER DESIGN MANUAL (CHAPTER 5).
- CERTIFIED TEST PITS HAVE BEEN PROVIDED TO VERIFY THAT GROUNDWATER AND ROCK ARE NOT PRESENT AT SOAK GARDEN AND MICRO-BIO-RETENTION LOCATIONS. INFORMATION REGARDING THE FINDINGS IS LOCATED IN THE SWM REPORT.
- LOCATION OF EXISTING WELL AND SEPTIC SYSTEM FEATURES ON PARCEL 201 ARE TAKEN FROM PUBLIC RECORDS AND FIELD SURVEYS.
- ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

THIS AREA DESIGNATES A PRIVATE SEWAGE AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE AREAS 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 PRIVATE SEWAGE AREA. RECORDATION OF A MODIFIED SEWAGE AREA SHALL NOT BE NECESSARY.

LOT	GROSS AREA	PIPESTEM AREA	NET AREA	MIN. LOT SIZE
1	3.19 AC.	N/A	3.19 AC.	3.00 AC.
2	4.39 AC.	0.45 AC.	3.94 AC.	3.00 AC.



LOT	STREET ADDRESS
LOT 1	5435 HARRIS FARM LANE
LOT 2	5431 HARRIS FARM LANE

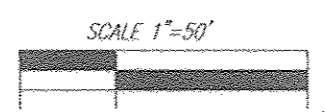
SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
HURRICANE HILL	N/A	PARCEL 201

DEED REF.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR. #
L 16420/F. 72	20	RR-DEO	28	5TH	605103

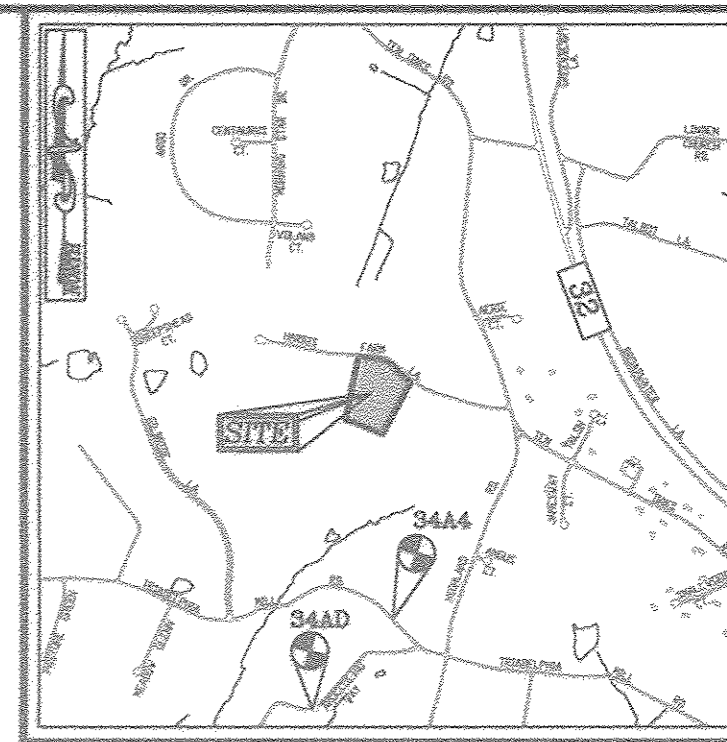
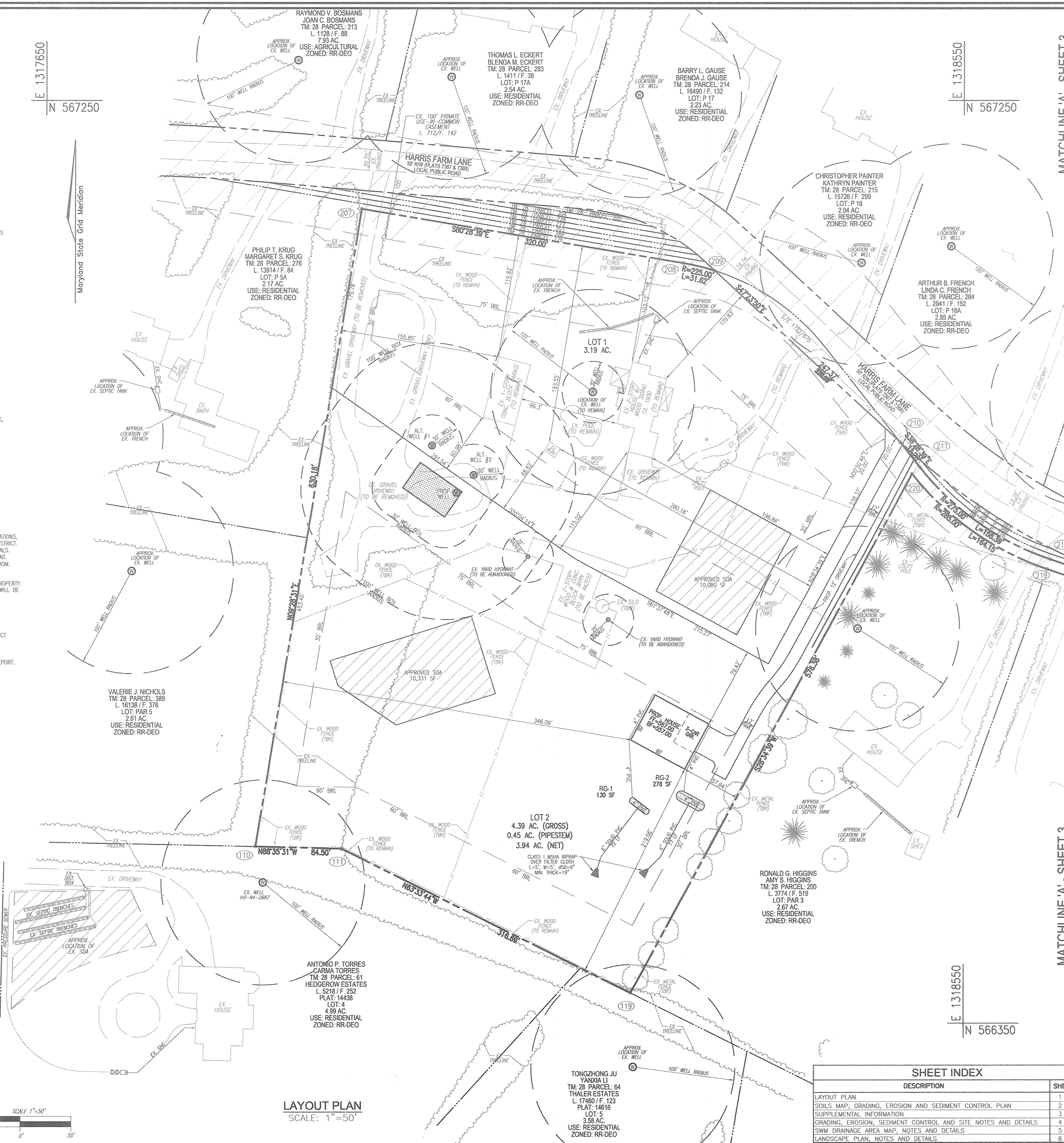
AREA	ESD PRACTICE
LOT 2	DISCONNECTION OF NON-ROOFTOP RUNOFF (M-2) AND MICRO BIO-RETENTIONS (M-6). PRIVATELY OWNED AND MAINTAINED BY THE HOMEOWNER.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 4-11-16 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION JP
 4-12-15 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT EB



LAYOUT PLAN
SCALE: 1"=50'



VICINITY MAP
SCALE: 1"=2000'
ADC MAP; PAGE: 24, BLOCK: E7

BENCHMARKS
 HOWARD COUNTY BENCHMARK 3444 (CONC. MON.)
 N 564448.26 E 1318324.97 ELEV. 562.52
 LOCATION: TRADELPHIA MILL ROAD, ABOUT 670' WEST OF HIGHLAND ROAD
 HOWARD COUNTY BENCHMARK 344D (CONC. MON.)
 N 563524.88 E 1317493.85 ELEV. 506.84
 LOCATION: BROCCOLINO WAY, SOUTH OF TRADELPHIA MILL ROAD

- LEGEND:**
- PROPERTY LINE
 - ADJACENT PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - EXISTING EDGE OF PAVING
 - EXISTING FENCE LINE
 - EXISTING TREELINE
 - PROPOSED PRIVATE SEWAGE DISPOSAL AREA
 - EXISTING PRIVATE SEWAGE DISPOSAL AREA
 - EXISTING 100' PRIVATE USE-IN-COMMON EASEMENT (L 712 / F 142)
 - EXISTING WELL
 - PROPOSED WELL
 - PROPOSED RAIN GARDEN (M-7)

MHU AGREEMENT
 PLEASE NOTE THAT ALL LOTS/RESIDENTIAL UNITS IN THIS SUBDIVISION ARE SUBJECT TO THE MHU FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.

OWNER
 WASHINGTON SSI
 INVESTMENT HOLDINGS, INC.
 5435 HARRIS FARM LANE
 CLARKSVILLE, MD 21029
 (301) 674-4798

DEVELOPER
 DESIGN STUDIO 45, LLC
 2022 WALLACE AVE.
 SILVER SPRING, MD 20902
 (301) 674-4798

NO.	REVISION	DATE

SUPPLEMENTAL INFORMATION PLAN
LAYOUT PLAN
HURRICANE HILL
LOTS 1 AND 2
 A SUBDIVISION OF TAX MAP 28, PARCEL 201
 L 16420 / F. 72
 5435 HARRIS FARM LANE
 CLARKSVILLE, MD 21029
 ZONED: RR-DEO
 PARCEL: 201 (PAR 4)
 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: RHV
 DRAWN BY: JMR
 CHECKED BY: MARCH 2018
 DATE: MARCH 2018
 SCALE: AS SHOWN
 W.O. NO.: 15-51

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, LICENSE NO. 18183 EXPIRATION DATE: 08-27-2018

1 SHEET OF 6

DESCRIPTION	SHEET NO.
LAYOUT PLAN	1 OF 6
SOILS MAP, GRADING, EROSION AND SEDIMENT CONTROL PLAN	2 OF 6
SUPPLEMENTAL INFORMATION	3 OF 6
GRADING, EROSION, SEDIMENT CONTROL AND SITE NOTES AND DETAILS	4 OF 6
SWM DRAINAGE AREA MAP, NOTES AND DETAILS	5 OF 6
LANDSCAPE PLAN, NOTES AND DETAILS	6 OF 6

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR / ERODIBLE
GgA	GLENELEC LOAM, 0 TO 3 PERCENT SLOPES	B	26 NO
GgB	GLENELEC LOAM, 3 TO 8 PERCENT SLOPES	C	26 NO
GgC	GLENEVILLE-BALLE SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	43 YES

NOTE:
HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

NOTE:
SUPER SILT FENCE MAY BE REPLACED BY STANDARD SILT FENCE WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR

NOTE: STOCKPILING WILL BE PERMITTED ON LOT 2 ONLY.

NOTE:
DIVERSION FENCE SHALL BE INSTALLED AS SHOWN HEREON OR AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR

NOTE:
STABILIZATION IS TO BE DONE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE INTERVALS REQUIRED BY THE 2011 STDS. & SPECS, WHICHEVER IS MORE RESTRICTIVE.

NOTE:
- SILT FENCE SHALL BE CURLED UPHILL NO MORE THAN 35 FEET APART
- DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

BY THE ENGINEER:
I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert H. Vogel
ROBERT H. VOGEL
DATE: 3/19/18

BY THE DEVELOPER:
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Bu-Tian Ji
SIGNATURE OF DEVELOPER
DATE: 3/19/18

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD S.C.D. DATE: 3/19/18

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad E. Clark
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 4-11-18

Kurt Stalovec
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 4-12-18



LEGEND:	
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	RIGHT-OF-WAY LINE
	EXISTING EDGE OF PAVING
	EXISTING FENCE LINE
	EXISTING TREELINE
	EXISTING 10' CONTOUR
	EXISTING 2' CONTOUR
	SOILS
	PROPOSED PRIVATE SEWAGE DISPOSAL AREA
	EXISTING PRIVATE SEWAGE DISPOSAL AREA
	EXISTING 100' PRIVATE USE-IN-COMMON EASEMENT (L. 712 / F. 142)
	EXISTING WELL
	PROPOSED WELL
	PROPOSED 10' CONTOUR
	PROPOSED 2' CONTOUR
	PROPOSED SPOT ELEVATION
	PROPOSED RAIN GARDEN (M-7)
	PROPOSED SILT FENCE
	PROPOSED SUPER SILT FENCE
	PROPOSED DIVERSION FENCE
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
	DRAINAGE AREA TO DIVERSION FENCE

OWNER: WASHINGTON SSI INVESTMENT HOLDINGS, INC. 5435 HARRIS FARM LANE CLARKSVILLE, MD 21029 (301) 674-4798

DEVELOPER: DESIGN STUDIO 45, LLC 2022 WALLACE AVE. SILVER SPRING, MD 20902 (301) 674-4798

NO.	REVISION	DATE

SUPPLEMENTAL INFORMATION PLAN
SOILS MAP, GRADING, EROSION AND SEDIMENT CONTROL PLAN
HURRICANE HILL LOTS 1 AND 2
A SUBDIVISION OF TAX MAP 28, PARCEL 201
L. 16420 / F. 72
5435 HARRIS FARM LANE CLARKSVILLE, MD 21029
ZONED: RR-DEO PARCEL: 201 (PAR 4) HOWARD COUNTY, MARYLAND

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8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961

DESIGN BY: RHV
DRAWN BY: JMR
CHECKED BY: RHV
DATE: MARCH 2018
SCALE: AS SHOWN
W.D. NO.: 15-51

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, LICENSE NO. 19193 EXPIRATION DATE 09-27-2018

2 SHEET OF 6

GRADING PLAN
SCALE: 1"=50'
SCALE 1"=50'

MATCHLINE 'B' - SHEET 3

MATCHLINE 'B' - SHEET 3

LEGEND:

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING EDGE OF PAVING
- EXISTING FENCE LINE
- EXISTING TREELINE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- SOILS
- EXISTING WELL
- EXISTING 100' PRIVATE USE-IN-COMMON EASEMENT (L. 712 / F. 142)

NO.	NORTH	EAST
213	566586.50	1319279.81
214	566579.03	1319427.83
215	566601.08	1319525.37
216	566591.33	1319527.58
217	566569.27	1319430.04
218	566577.01	1319276.63

MATCHLINE 'B' - SHEET 2

MATCHLINE 'B' - SHEET 2

MATCHLINE 'A' - SHEET 1

MATCHLINE 'A' - SHEET 1



SUPPLEMENTAL LAYOUT PLAN
SCALE: 1"=50'

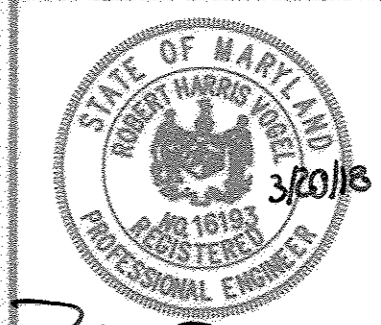
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WASHINGTON SSJ
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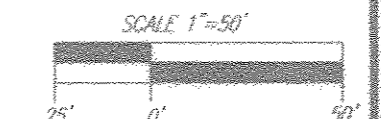
DESIGN BY: R/V
DRAWN BY: J/MR
CHECKED BY: R/V
DATE: MARCH 2018
SCALE: AS SHOWN
W.O. NO.: 15-51

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 4/1/18
CHIEF, DEVELOPMENT ENGINEERING DIVISION 8P DATE

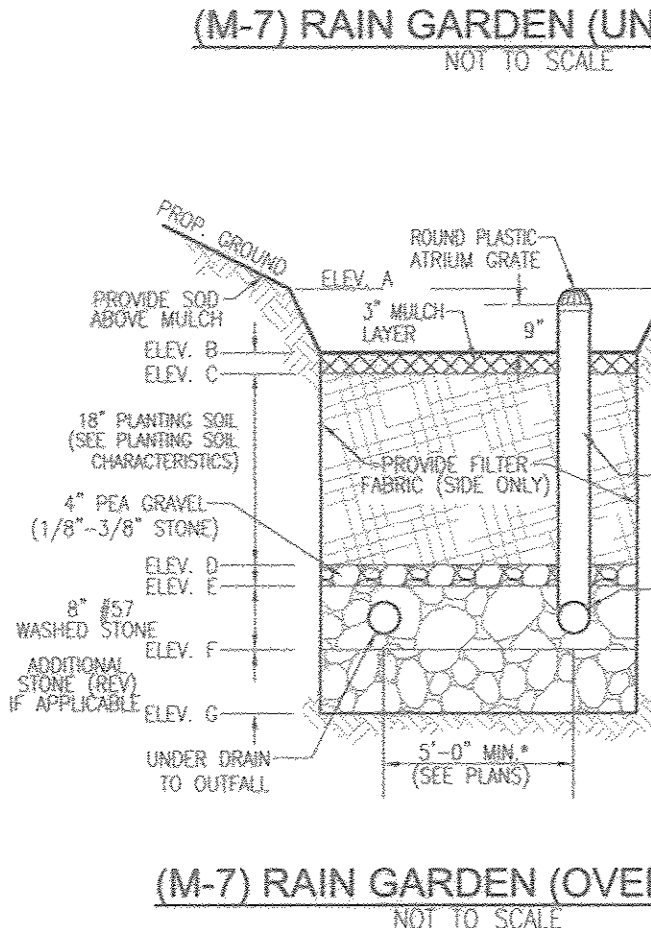
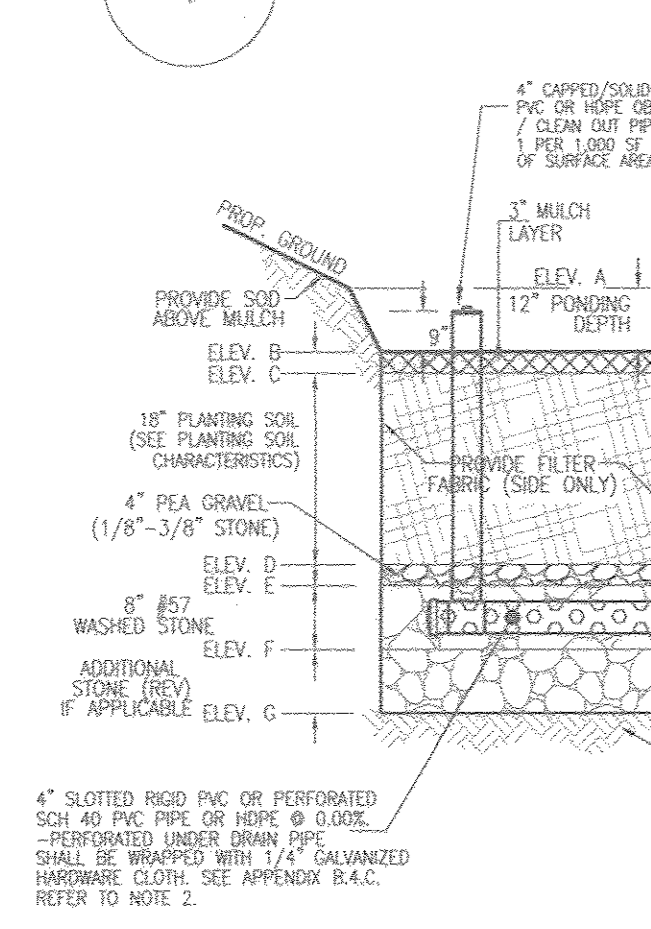
[Signature] 4-12-18
CHIEF, DIVISION OF LAND DEVELOPMENT 4 DATE

SUPPLEMENTAL GRADING PLAN
SCALE: 1"=50'



LEGEND:

- PROPERTY LINE
- ADJACENT PROPERTY LINE
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- EXISTING EDGE OF PAVING
- EXISTING FENCE LINE
- EXISTING TREELINE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- SOILS
- PROPOSED PRIVATE SEWAGE DISPOSAL AREA
- EXISTING PRIVATE SEWAGE DISPOSAL AREA
- EXISTING 100' PRIVATE USE - COMMON EASEMENT (L. 712 / F. 142)
- EXISTING WELL
- PROPOSED WELL
- PROPOSED 18" CONTOUR
- PROPOSED 2" CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED RAIN GARDEN (M-7)
- IMPERVIOUS AREA TO NON-ROOFTOP DISCONNECT (M-2) 2,580 SF
- IMPERVIOUS AREA TO RAIN GARDEN 1 (M-7) 1,500 SF
- IMPERVIOUS AREA TO RAIN GARDEN 2 (M-7) 4,196 SF
- PROPOSED SOIL BORING



STORMWATER TEST PITS

TEST PIT	SURFACE ELEVATION	BORING DEPTH	CONDITION
B-1	556.00	9'	NO ROCK OR WATER PRESENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad Chubb 4-11-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Vanessa Schuch 4-12-18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE



APPENDIX B.A.C. SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDEN, LANDSCAPE INFILTRATION & INFILTRATION BERMS

1. MATERIAL SPECIFICATIONS
THE ALLOWABLE MATERIALS TO BE USED IN THESE PRACTICES ARE DETAILED IN TABLE B.A.1.

2. FILTERING MEDIA OR PLANTING SOIL
THE SOIL SHALL BE A UNIFORM MIX. FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTITUTES SHALL BE USED OR DERIVED FROM THE MICRO-BIORETENTION PRACTICES THAT MAY BE HARMFUL TO PLANT GROWTH FROM THE HINDERANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING SOIL SHALL BE FREE OF BERMUDA GRASS, QUACKGRASS, JOHNSON GRASS, OR OTHER NOxious WEEDS AS SPECIFIED UNDER COMAR 15.06.01.01.
* PLANTING SOIL SHALL BE TESTED AND SHALL MEET THE FOLLOWING CRITERIA:
* SOIL COMPONENT - LOAMY SAND OR SANDY LOAM (USDA SOIL TEXTURAL CLASSIFICATION).
* DRAINAGE CAPACITY - MINIMUM USE OF 80% WEIGHT OF WATER IN 24 HOURS. MINIMUM CAN BE MET WITH A MIXTURE OF LOAMY SAND (60%-85%) AND COMPOST (35% TO 40%) OR SANDY LOAM (30%-35%), COMPOST (30%), AND COMPOST (40%).
* CLAY CONTENT - MEDIA SHALL HAVE A CLAY CONTENT OF LESS THAN 5%.
* PH RANGE - MEDIA SHALL HAVE A PH RANGE OF 6.5 TO 7.5. AMMONIUM NITRATE LINE WITH SULFURIC ACID (H2SO4) MAY BE ADDED TO THE SOIL TO INCREASE OR DECREASE PH.
THERE SHALL BE AT LEAST ONE SOIL TEST PER PROJECT. EACH TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR PH AND ADDITIONAL TESTS OF ORGANIC MATTER AND SOLUBLE SALTS. A TEXTURAL ANALYSIS IS REQUIRED FROM THE SITE STOCKPILED TOPSOIL IF TOPSOIL IS IMPORTED. THEN A TEXTURE ANALYSIS SHALL BE PERFORMED FOR EACH LOCATION WHERE THE TOPSOIL WAS OBTAINED.

3. COMPACTION
IT IS VERY IMPORTANT TO MANAGE COMPACTION OF BOTH THE BASE OF BIORETENTION PRACTICES AND THE REQUIRED BACKFILL. WHEN POSSIBLE, USE EXCAVATION PILES TO REMOVE ORIGINAL SOIL. IF PRACTICES ARE EXCAVATED USING LOADER, THE CONTRACTOR SHOULD USE WIDE TRACK OR WASH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH FLARE TYRES. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TYRES, RUBBER TYRES WITH LARGE LUGS, OR HIGH-PRESSURE TYRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE.
COMPACTION CAN BE ALLEVIATED AT THE BASE OF THE BIORETENTION FACILITY BY USING A PRIMARY TILING OPERATION SUCH AS CHISEL PLUM, BERTER, OR HIGH-PRESSURE TYRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE.
ROTORILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENTION FACILITY BEFORE BACKFILLING THE ORIGINAL SAND LAYER. PUMP ANY POOLED WATER BEFORE PREPARING THE SAND LAYER.
WHEN BACKFILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTORILL THE SAND/TOPSOIL TO CREATE A GRADATION ZONE. BACKFILL THE REMAINDER OF THE TOPSOIL TO FINAL GRADE.
WHEN ROTORILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 1" TO 1.5". DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN. HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND SAND. GRADE BIORETENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH WASH TRACKS.

4. PLANT MATERIAL
RECOMMENDED PLANT MATERIAL FOR MICRO-BIORETENTION PRACTICES CAN BE FOUND IN APPENDIX A, SECTION A.2.3.

5. PLANT INSTALLATION
COMPOST IS A BETTER ORGANIC MATERIAL SOURCE, IS LESS LIKELY TO FLUAT, AND SHOULD BE PLACED IN THE INSET AND OTHER LOW AREAS. MULCH SHOULD BE PLACED IN SUBSEQUENT TO A UNIFORM THICKNESS OF 2" TO 3". SHREDDED OR CHIPPED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS WILL FLOAT AND MOVE TO THE PERIMETER OF THE BIORETENTION AREA DURING A STORM EVENT AND ARE NOT ACCEPTABLE. SHREDDED MULCH MUST BE WELL AGED (9 TO 12 MONTHS) FOR ACCEPTANCE.
PROTECTORS OF THE PLANT MATERIAL SHALL BE KEPT MOST DURING TRANSPORT AND ON-SITE STORAGE. THE PLANT BALL SHALL BE PLANTED SO 1/8TH OF THE BALL IS ABOVE FINAL GRADE SURFACE. THE DIAMETER OF THE PLANTING PIT SHALL BE AT LEAST 8 INCHES LARGER THAN THE DIAMETER OF THE PLANTING BALL. SET AND MAINTAIN THE PLANT STAKES DURING THE CIVIL PLANTING PROCESS. THROUGHOUT WATER GROUND RED COVER AFTER RESTORATION. STAKES SHALL BE BRIDGED USING 2" BY 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE SOIL BALL.
GRASSES AND LEGUME SEED SHOULD BE DRILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEGUME PLUSS SHALL BE PLANTED FOLLOWING THE NON-GROSS GROUND COVER PLANTING SPECIFICATIONS.
THE TOPSOIL SPECIFICATIONS PROVIDE DESIGN ORGANIC MATTER TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING. THE PRIMARY FUNCTION OF THE BIORETENTION STRUCTURE IS TO IMPROVE WATER QUALITY. ADDING FERTILIZERS, DEFOLIANTS, OR AT A MINIMUM, IMPRES THIS GOAL. ONLY ADD FERTILIZER IF WOOD CHIPS OR MULCH ARE USED TO AMEND THE SOIL. ROTORILL UREA FERTILIZER AT A RATE OF 2 POUNDS PER 1000 SQUARE FEET.

6. UNDERDRAINS
UNDERDRAINS SHOULD MEET THE FOLLOWING CRITERIA:
* PIPE - SHOULD BE 4" TO 6" DIAMETER, SLOTTED OR PERFORATED RIGID PLASTIC PIPE (ASTM F50, TYPE PS 28, OR AASHTO-M-278) IN A GRASS LAYER. THE PREFERRED MATERIAL IS SLOTTED, 4" RIGID PIPE (E.G., PVC OF HDPE).
* PERFORATIONS - IF PERFORATED PIPE IS USED, PERFORATIONS SHOULD BE 3/8" DIAMETER LOCATED 6" ON CENTER WITH A MINIMUM OF FOUR HOLES PER ROW. PIPE SHALL BE WRAPPED WITH 1/4" (NO. 4 OR 4A) GALVANIZED HARDWARE CLOTH.
* GRASS - THE GRASS SHOULD BE PERFORATED UNDERDRAIN PIPE WITH 1/4" MESH (4x4) OR SMALLER GALVANIZED HARDWARE CLOTH.
* PROTECT - PROVIDE 5" MINIMUM SPACING BETWEEN UNDER DRAIN AND PERFORATED PIPE THROUGH STONE RESERVOIR OR SPACE PIPE EQUALLY ACROSS BOTTOM FOR SMALL BIOS. (SEE PLANS)
* MIN. NON-PERFORATED OBSERVATION WELL MUST BE PROVIDED (ONE PER EVERY 1000 SQUARE FEET) TO PROVIDE A CLEAN-OUT PORT AND MONITOR PERFORMANCE OF THE UNDERDRAIN.
* A 4" LAYER OF FRA GRASS (1/8" TO 3/8" STONES) SHALL BE LOCATED BETWEEN THE FILTER MEDIA AND UNDERDRAIN TO PREVENT MIGRATION OF FINES IN TO THE UNDERDRAIN. THIS LAYER MAY BE CONSIDERED PART OF THE FILTER BED WHEN BED THICKNESS EXCEEDS 2".
THIS MARK COLLECTOR PIPE FOR UNDERDRAIN SYSTEMS SHALL BE CONSTRUCTED AT A MINIMUM SLOPE OF 0.5%. OBSERVATION WELLS AND/OR CLEAN-OUT PIPES SHALL BE PROVIDED (ONE MINIMUM PER EVERY 1000 SQUARE FEET OF SURFACE AREA).

7. MISCELLANEOUS
THESE PRACTICES MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.

MICROBIORETENTION NOTES

- ONLY THE SIDES OF MICROBIORETENTION ARE TO BE WRAPPED IN FILTER FABRIC. FILTER FABRIC BETWEEN LAYER OR AT THE BOTTOM OF THE MICROBIORETENTION WILL CAUSE THE MBR TO FAIL, AND THEREFORE SHALL NOT BE INSTALLED.
- WRAP THE PERFORATED MBR UNDERDRAIN PIPE WITH 1/4" MESH (4x4) OR SMALLER GALVANIZED HARDWARE CLOTH.
- PROTECT 5" MINIMUM SPACING BETWEEN UNDER DRAIN AND PERFORATED PIPE THROUGH STONE RESERVOIR OR SPACE PIPE EQUALLY ACROSS BOTTOM FOR SMALL BIOS. (SEE PLANS)

OPERATION AND MAINTENANCE SCHEDULE FOR (M-6) MICROBIORETENTION AREAS

- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CONTRIBUTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.A.1 AND
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT. TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER. INSPECT EVERY 1 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

RAIN GARDEN ELEVATIONS (M-7)

FACILITY	A	B	C	D	E	F	G	UNDERDRAIN INV. OUT	OUTFALL INV.	FACILITY SIZE
RG-1 (M-7)	556.00	554.75	553.25	552.92	552.25	551.50	552.42	551.00	551.00	130 SF
RG-2 (M-7)	558.00	557.00	556.75	555.25	554.92	554.25	553.35	554.42	553.00	278 SF

OWNER
WASHINGTON SSJ INVESTMENT HOLDINGS, INC.
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(301) 674-4798

NO. REVISION DATE

NO.	REVISION	DATE

SUPPLEMENTAL INFORMATION PLAN

SWM DRAINAGE AREA MAP, NOTES AND DETAILS

HURRICANE HILL
LOTS 1 AND 2
A SUBDIVISION OF TAX MAP 28, PARCEL 201
L. 16420 / F. 72
5435 HARRIS FARM LANE
CLARKSVILLE, MD 21029
ZONED: RR-DEO
PARCEL: 201 (PAR 4)
HOWARD COUNTY, MARYLAND

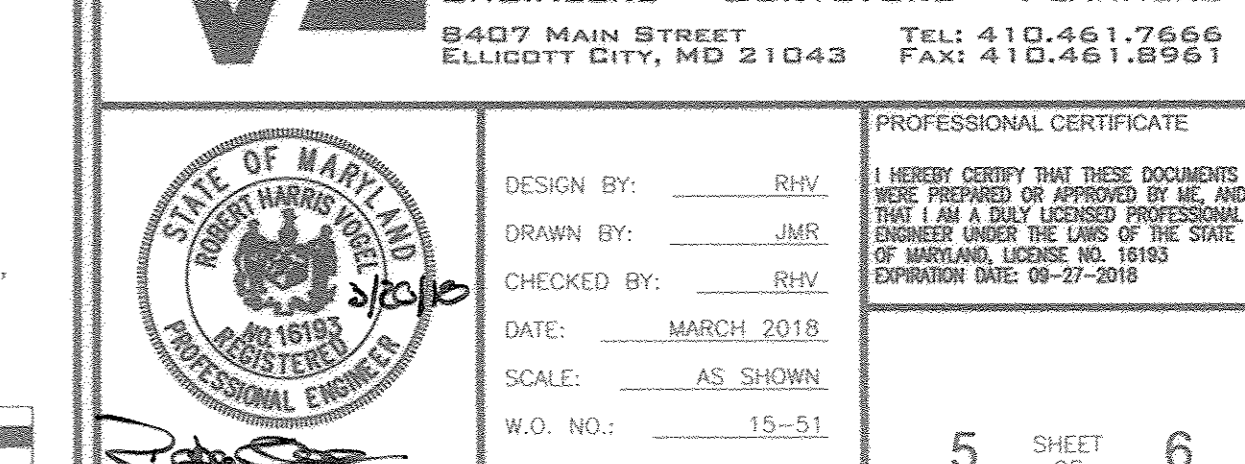
ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELLIOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

PROFESSIONAL CERTIFICATE

DESIGN BY: RHV
DRAWN BY: JMR
CHECKED BY: RHV
DATE: MARCH 2018
SCALE: AS SHOWN
W.O. NO.: 19-51

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND I AM A duly LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 18163 EXPIRATION DATE: 08-27-2018

5 SHEET OF **6**



LEGEND:

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING EDGE OF PAVING
- EXISTING FENCE LINE
- EXISTING TREELINE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- PROPOSED PRIVATE SEWAGE DISPOSAL AREA
- EXISTING PRIVATE SEWAGE DISPOSAL AREA
- EXISTING 100' PRIVATE USE-IN-COMMON EASEMENT (L 712 / F 142)
- EXISTING WELL
- PROPOSED WELL
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR
- PROPOSED RAIN GARDEN (M-7)
- EXISTING BRACK GREEN ZONE
- EXISTING BRACK YELLOW ZONE

GENERAL NOTE:

- LANDSCAPING FOR LOT 2 IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. A FINANCIAL SURETY IN THE AMOUNT OF \$5,400 FOR THE REQUIRED 18 SHADE TREES. SURETY SHALL BE POSTED WITH THE BUILDERS GRADING PERMIT.

LANDSCAPE NOTES

- AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREES LISTED AND APPROVED ON THE LANDSCAPE PLAN, SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THE APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO THE APPLICABLE PLANS.
- THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL 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.
- SHOULD 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.
- PLANTINGS SHOWN HEREON ARE THE RESPONSIBILITY OF THE DEVELOPER TO INSTALL DURING THE CONSTRUCTION OF THE DWELLING ON LOT 2.

LANDSCAPE SCHEDULE					
SYMBOL	KEY	QUAN.	BOTANICAL NAME	SIZE	REMARKS
+	AR	6	ACER RUBRUM 'RED SUNSET' RED SUNSET RED MAPLE	2 1/2"-3" CAL.	B & B
○	QP	6	QUERCUS PHELLOS WILLOW OAK	2-1/2"-3" CAL.	B & B
○	OG	6	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE	2 1/2"-3" CAL.	B & B

SCHEDULE 'A' PERIMETER LANDSCAPE EDGE				
CATEGORY	AMOUNT TO PERIMETER PROPERTIES			TOTAL
	1	2	3	
PERIMETER/FRONTAGE DESIGNATION	1	2	3	
LANDSCAPE TYPE	A	A	A	
LINEAR FEET OF ROADWAY FRONTAGE / PERIMETER	576'	401'	453'	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	YES 86'	YES 259'	
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	
NUMBER OF PLANTS REQUIRED	576	315	194	
SHRUBS	1,600	1,500	1,600	18
EVERGREEN TREES	-	-	-	-
NUMBER OF PLANTS PROVIDED	10	5	3	18
SHRUBS (1:1 SUBSTITUTION)	-	-	-	-
OTHER TREES (2:1 SUBSTITUTION) DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	-	-	-	-

LANDSCAPE SCHEDULE NOTE:

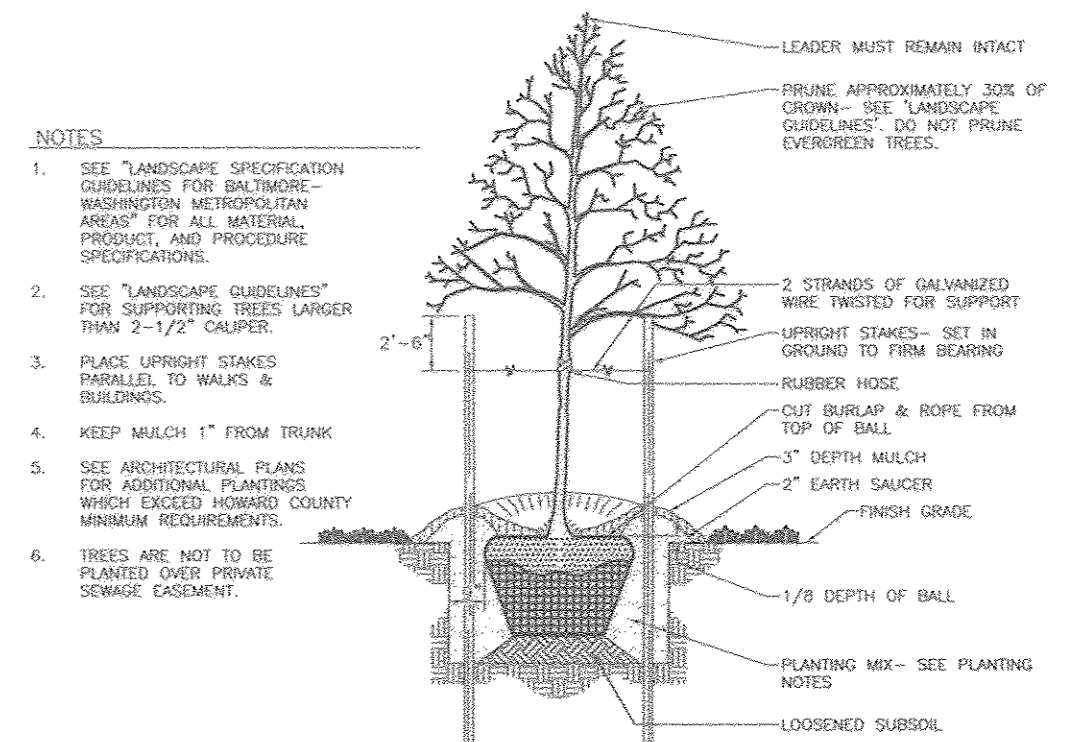
- ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AMM SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH HED PLANTING SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
- CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

DPZ'S POLICIES GOVERNING THE PLACEMENT OF LANDSCAPING AND STREET TREES IN PROXIMITY TO BOE'S POWER LINES OR TRANSMISSION RIGHT-OF-WAY ARE BASED ON BOE'S PUBLISHED "PLANTING ZONE CONCEPT" WHICH STIPULATES THE MAXIMUM ALLOWABLE SIZE OF PLANT MATERIALS FOR THREE DEFINED ZONES. AS THE DISTANCE FROM BOE EQUIPMENT INCREASES, SO DOES THE SIZE OF THE ALLOWABLE PLANT MATERIALS. THESE THREE ZONES AREA DEFINED AS FOLLOWS:

ZONE	DISTANCE FROM THE BOE POWER LINE OR TRANSMISSION RIGHT-OF-WAY	MAXIMUM HEIGHT OF VEGETATION
GREEN	UP TO 20 FEET	25 FEET
YELLOW	BETWEEN 20 FEET AND 45 FEET	40 FEET
RED	BETWEEN 45 FEET AND 100 FEET	ABOVE 40 FEET

B & E NOTES:

- BOE RESERVES THE RIGHT TO TRIM, TOP OR CUT DOWN ANY TREE IN PROXIMITY TO THE LINE THAT IN THE OPINION OF BOE SHALL BE DEEMED A HAZARD TO THE SAFE AND RELIABLE DELIVERY OF ELECTRICITY.
- THE DEPARTMENT OF PLANNING AND ZONING MAY AUTHORIZE THE REMOVAL OF TREES OR VEGETATION IMMEDIATELY ADJACENT TO THE BOE R/W OR EASEMENT, IF BOE DETERMINES THE TREES ARE COMPROMISING THE SAFETY OF A TRANSMISSION LINE LOCATED WITHIN THEIR UTILITY R/W OR EASEMENT. IF BOE INTENDS TO TRIM OR REMOVE TREES WITHIN A FOREST CONSERVATION EASEMENT, A LETTER SPECIFYING THE LOCATION AND SCOPE OF WORK NEEDS TO BE SENT TO DPZ AT LEAST 30 DAYS IN ADVANCE OF UNDERMINING THE WORK. DPZ UNDERSTANDS CONSULTATION ENDS HEREIN TO PROTECT ITS TRANSMISSION LINES AND WILL NOT UNDERTAKE UNNECESSARY PERMISSION.



TREE PLANTING AND STAKING
DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE

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SUPPLEMENTAL INFORMATION PLAN
LANDSCAPE PLAN, NOTES AND DETAILS
HURRICANE HILL
LOTS 1 AND 2
A SUBDIVISION OF TAX MAP 28, PARCEL 201
L. 16420 / F. 72
ZONED: RR-DEO
TAX MAP: 28 GRID: 20 5435 HARRIS FARM LANE PARCEL: 201 (PAR 4)
5TH ELECTION DISTRICT CLARKSVILLE, MD 21029 HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
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8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.9961

PROFESSIONAL CERTIFICATE
DESIGN BY: RHY
DRAWN BY: JMR
CHECKED BY: RHY
DATE: MARCH 2018
SCALE: AS SHOWN
W.O. NO.: 15-51

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. 8193 EXPIRATION DATE: 09-27-2018

6 SHEET OF 6

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chie... 4/11/18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kurt... 4.12.18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Bu-Tian Ji 3/19/18
SIGNATURE OF DEVELOPER DATE

LANDSCAPE PLAN
SCALE: 1"=50'

SCALE 1"=50'
25' 0' 50'