

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 (SFD)
 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 MANAGED BY ESDV (*THIS PLAN): 0.75 AC.
 IMPERVIOUS AREA: 0.19 AC.
 *GREEN AREA: 0.56 AC.

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	1318487.65
211	566892.16	1318507.11
212	566802.52	1318635.03
219	566793.03	1318631.86
220	566885.94	1318499.28

- GENERAL NOTES**
- STORM WATER MANAGEMENT TO BE PROVIDED FOR THIS PROJECT BY ENVIRONMENTAL SITE DESIGN UTILIZING TWO RAIN GARDEN FACILITIES (M-7) AND NON-ROOFTOP DISCONNECT CREDIT (N-2). ALL RAIN GARDENS AND DISCONNECT AREAS ARE TO BE PRIVATELY OWNED AND MAINTAINED BY THE HOMEOWNER. REFERENCE 2010 MDC STORMWATER DESIGN MANUAL (CHAPTER 5).
 - THE SUBJECT PROPERTY IS ZONED "RR-DEO" IN ACCORDANCE WITH THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN. THIS SITE IS NOT LOCATED WITHIN THE HISTORIC DISTRICT.
 - 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. 28HA AND 0046 WERE USED FOR THIS PROJECT.
 - 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.
 - SEDIMENT AND EROSION CONTROL WILL BE PROVIDED FOR THIS SITE.
 - AN ENVIRONMENTAL RESOURCES ASSESSMENT WAS PERFORMED BY JOHN CANOLES OF ECO-SCIENCE PROFESSIONALS, INC. DATED MARCH 13, 2017.
 - APPROVAL OF THIS ESDV DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PROCESS. 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.
 - A PRE-SUBMISSION COMMUNITY MEETING WAS HELD ON MAY 23, 2017 AT 6:00 PM AT THE TROTTER ROAD MEETING ROOM. 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. 16.202(b)(1)(vii), UNDER THIS SCENARIO, THE PROPOSED SUBDIVISION IS EXEMPT FROM THE REQUIREMENTS OF THE FOREST CONSERVATION PLAN INCLUDING THE FOREST STAND DELINEATION, FOREST CONSERVATION PLAN, AND REGULATIONS FOR THE PROTECTION OF SPECIMEN TREES.

INTRODUCTION

The subject property is zoned RR-DEO and is located on the south side of Harris Farm Lane (public local road) which was made public in 1987. The project is located in the Clarksville area of Howard County. The project consists of a 7.6 +/- acre parcel originally created by deed. The property contains an existing house, garage and driveway to remain and a barn to be removed. The existing house is intended to remain on a 3.2 +/- acre lot and the proposed lot will be approximately 4.4 acres. This project is exempt from the Forest Conservation Act. There are no wetlands or streams located on or in close proximity to the property.

The existing house is located on the high point/ridge. Part of the existing house and improved areas flow to Harris Farm Lane. The balance of the property flows to the south. A broad swale is directed to the southeast corner of the property and flows south between Tax Map 28, Parcels 61 and 64. The property flows to two different watersheds. The north portion of the property flows to the Middle Patuxent River watershed basin code 02131106 and the south part of the property (proposed lot) flows to the Brighton Dam/Patuxent River watershed basin code 02131108 via unnamed streams. Both are considered Use IV-P watersheds. The site is not listed on the Howard County Historic Sites Inventory or Maryland Historic Trust inventory.

The soils are predominantly Glenelg Loam (0%-3% slopes) which is classified as HSG 'B' and Glenelg Loam (3%-8% slopes) which is HSG 'C'.

The subject property is not shown on the DFIRM maps as floodplain and there are no streams present. The environmental resources have been delineated by the environmentalist (Eco-Science Professionals) and their report accompanies this submission.

The existing and proposed houses utilized private water and sewer (well and septic). The property was recently tested and the Howard County Health department approved a septic and well area for the proposed lot.

The project consists of subdividing one additional lot and to construct one additional house. The intent of the design is to minimize disturbance to the greatest extent possible and to provide environmental site design in accordance with MDE guidelines.

METHODOLOGY

The site ESDv was computed using the new development criteria for the limit of disturbance and the new impervious areas. The net project area is based on the limit of disturbance. The weighted site P_W was computed as 1.07 for the development area and the overall R_V factor is 0.32. The R_V factor for each individual practice is based on the total drainage area to that practice. The appendix includes the computations based on the individual subareas and a chart summarizing the ESDv required and provided and practices utilized for each area.

The proposed design includes 2 rain gardens (M-7) and non-rooftop disconnect credit (N-2). The rain gardens are located in HSG 'C' soils and located approximately 150' from the approved septic areas (the percolation tests did not encounter ground water or rock). At the time of building permit the environmental site design will be adjusted to reflect the actual house and test pits will be performed. The driveway and adjacent area are at a 5% or less slope and therefore qualifies for non-rooftop disconnect credit. The impervious and pervious ratios are addressed in the computations and the 'a', 'b' and 'c' lengths are shown on the plan.

The 2011 Sediment and Erosion Control Standards will be utilized to protect existing environmental features through the implementation of silt fence and other appropriate practices.

CONCLUSION

The Environmental Concept Plan computations illustrate that ESD can be adequately accomplished to the maximum extent possible (MEP) for the proposed project. The natural drainage patterns are respected and maintained. The discharge from the site facilities will flow in accordance with the natural drainage divides.

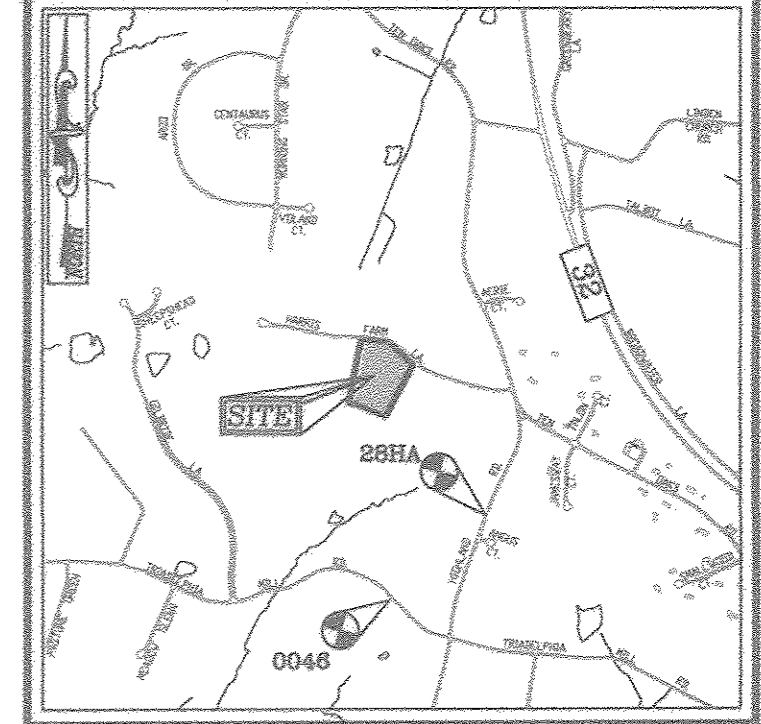
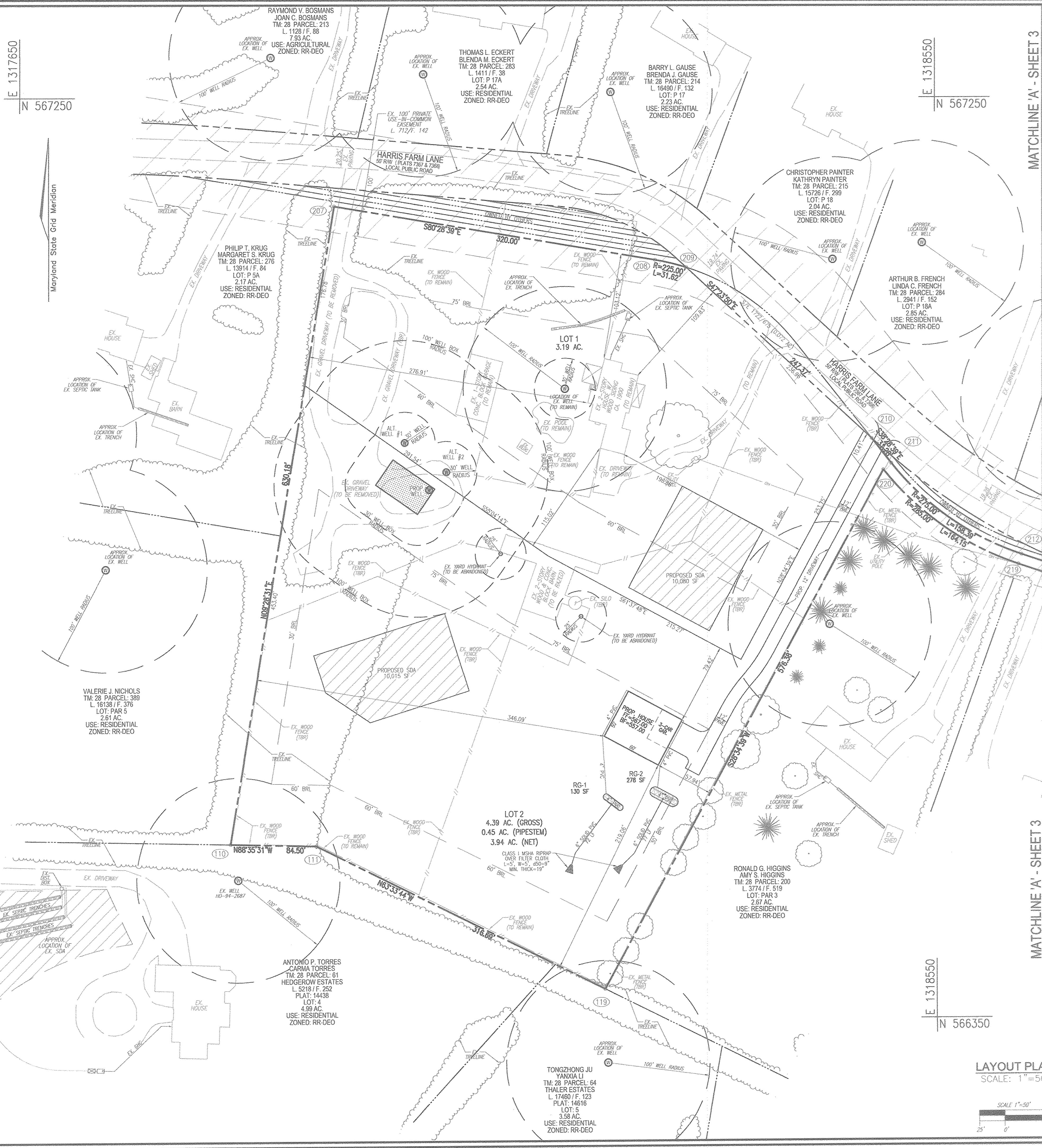
The facilities proposed for this project will be privately owned and maintained. There are no existing drainage easements located on site. This project is proposing the utilization of various ESD practices to meet the MDE and Howard County requirements.

This project is designed to minimize additional and unnecessary earthwork and utilize existing infrastructure. Final sediment and erosion control approval will be required from the Howard Soil Conservation District.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 9-8-17
 CHIEF, DEVELOPMENT ENGINEERING DIVISION JP DATE

[Signature] 8/31/17
 CHIEF, DIVISION OF LAND DEVELOPMENT eb DATE



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

BENCHMARKS
 HOWARD COUNTY BENCHMARK 28HA (CONC. MON.)
 N 565347.98 E 1319266.36 ELEV. 587.89
 LOCATION: HIGHLAND ROAD 500' S OF TEN OAKS ROAD

HOWARD COUNTY BENCHMARK 0046 (CONC. MON.)
 N 564468.98 E 1318257.48 ELEV. 560.34
 LOCATION: TRIADDELPHIA RD. 0.15 MI WEST OF HIGHLAND RD.

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)

SHEET INDEX

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

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

ENVIRONMENTAL CONCEPT PLAN

LAYOUT PLAN

5435 HARRIS FARM LANE
 CLARKSVILLE, MD 21029
 LOTS 1 AND 2

A SUBDIVISION OF TAX MAP 28, PARCEL 201
 L. 16420 / F. 72

ZONED: RR-DEO
 PARCEL: 201 (PAR 4)
 HOWARD COUNTY, MARYLAND

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

PROFESSIONAL CERTIFICATE

STATE OF MARYLAND
 ROBERT H. VOGEL
 PE No. 16193
 REGISTERED PROFESSIONAL ENGINEER

DESIGN BY: RHV
 DRAWN BY: JMR
 CHECKED BY: RHV
 DATE: AUGUST 2017
 SCALE: AS SHOWN
 W.D. 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. 16193 EXPIRATION DATE: 08-31-2018

1 SHEET OF 4

LAYOUT PLAN
 SCALE: 1"=50'

SCALE 1"=50'

25' 0' 50'

SOILS LEGEND					
SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE	
GgA	GLENELG LOAM, 0 TO 3 PERCENT SLOPES	B	.28	NO	
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	C	.28	NO	
GgB	GLENVILLE-BAILE SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	4.3	YES	

SOILS INFORMATION FROM USDA WEB SOIL SURVEY WEBSITE
HOWARD COUNTY SOILS MAP NUMBER 16 - CLARKSVILLE NW

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

E 1318550
N 567250

Maryland State Grid Meridian



E 1318550
N 567250

E 1318550
N 566350

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
	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 (N-7)
	PROPOSED SILT FENCE
	PROPOSED SUPER SILT FENCE
	PROPOSED DIVERSION FENCE
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED STABILIZED CONSTRUCTION ENTRANCE

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

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

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

DESIGN BY: RHY
DRAWN BY: JMR
CHECKED BY: RHY
DATE: AUGUST 2017
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 DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 09-27-2019

2 SHEET OF 4

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 9.8.17
CHIEF, DEVELOPMENT ENGINEERING DIVISION SP DATE

[Signature] 8/31/17
CHIEF, DIVISION OF LAND DEVELOPMENT ES DATE

GRADING PLAN
SCALE: 1"=50'

SCALE 1"=50'

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)

COORDINATE TABLE

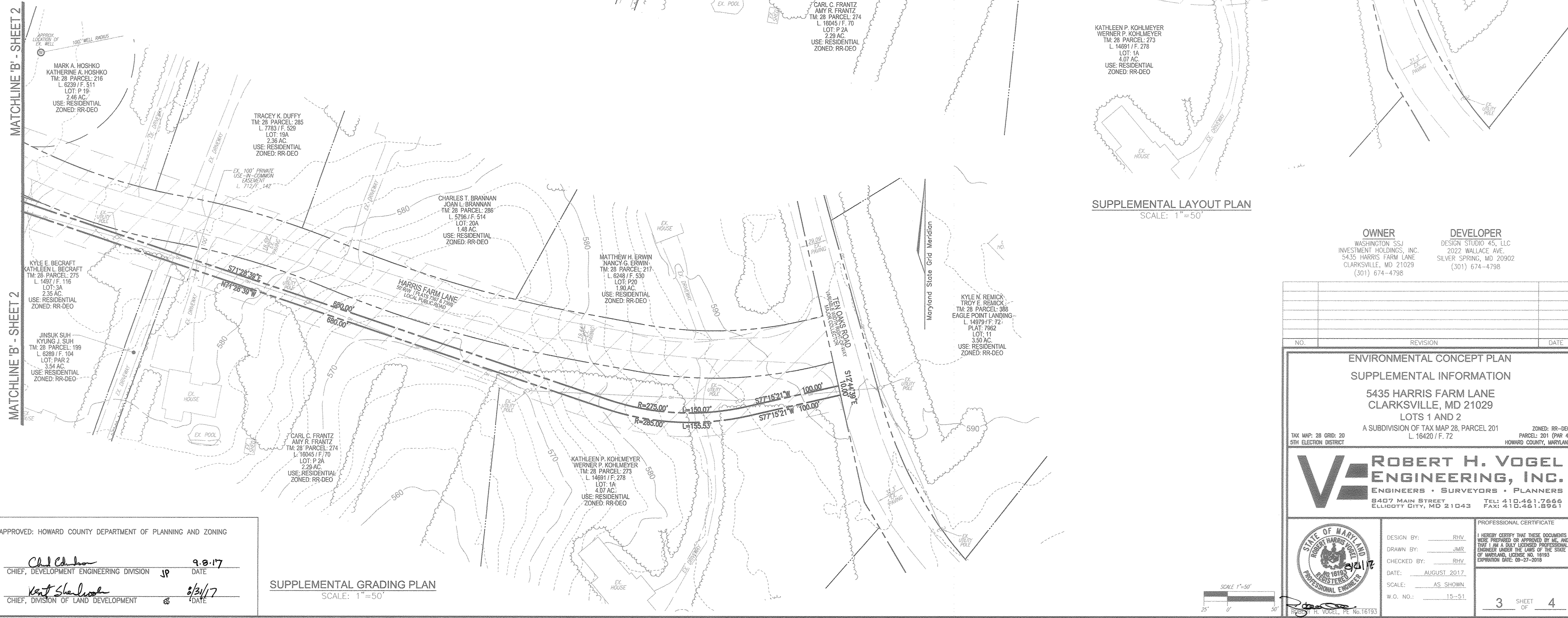
NO.	NORTH	EAST
213	566586.50	1319279.81
214	566579.03	1319427.83
215	566601.08	1319525.37
216	566591.33	1319527.58
217	566569.27	1319430.04
218	566577.01	1319276.63

MATCHLINE 'B' - SHEET 2

MATCHLINE 'B' - SHEET 2

MATCHLINE 'A' - SHEET 1

MATCHLINE 'A' - SHEET 1



SUPPLEMENTAL LAYOUT PLAN
SCALE: 1"=50'

OWNER
WASHINGTON SSJ
INVESTMENT HOLDINGS, INC.
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DEVELOPER
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ENVIRONMENTAL CONCEPT PLAN
SUPPLEMENTAL INFORMATION
5435 HARRIS FARM LANE
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LOTS 1 AND 2
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3 SHEET OF 4

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad Chason 9.8.17
CHIEF, DEVELOPMENT ENGINEERING DIVISION JP DATE

Kent Shearlock 8/31/17
CHIEF, DIVISION OF LAND DEVELOPMENT 88 DATE

SUPPLEMENTAL GRADING PLAN
SCALE: 1"=50'

