

**GENERAL NOTES**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY STANDARDS AND SPECIFICATIONS. ALL WORK AND MATERIALS SHALL COMPLY WITH O.S.H.A. STANDARDS.
- EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND AND SEWER EXTENSION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. 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. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE EXISTING TOPOGRAPHIC INFORMATION FROM HOWARD COUNTY GIS, COUNTY RECORDS, A FIELD TOPOGRAPHICAL SURVEY WITH ONE FOOT CONTOUR INTERVALS PERFORMED BY NU ENGINEERING, DATED ON OR ABOUT FEB. 2017. EXISTING UTILITIES WERE LOCATED FROM PREVIOUSLY APPROVED ROAD CONSTRUCTION PLAN, FIELD SURVEYS, PUBLIC WATER AND SEWER EXTENSION PLANS AND AVAILABLE RECORD DRAWINGS.
- COORDINATES AND ELEVATIONS ARE BASED ON MARYLAND COORDINATE SYSTEM - NAD83(1991) AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 47FE AND 47FF.
- THE PROPERTY LINES SHOWN HEREON IS BASED ON FIELD RUN BOUNDARY SURVEY PERFORMED BY NU ENGINEERING, DATED ON OR ABOUT FEB 22 2017.
- ALL ELEVATIONS ARE TO FLOWLINE/BOTTOM OF CURB UNLESS OTHERWISE NOTED.
- THE GEOTECHNICAL ENGINEER TO CONFIRM PAVING SECTION PRIOR TO CONSTRUCTION. ALL PAVING TO BE PAVING PER GEOTECHNICAL RECOMMENDATIONS.
- THE SUBJECT PROPERTY IS ZONED B-2 PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN. THIS SITE IS A SUBJECT OF VARIANCE REQUEST SECTION 118.0.D.2.b TO REDUCE THE 30' STRUCTURE AND LAND USE SETBACK TO A RESIDENTIAL ZONING DISTRICT TO 5.8' FOR A PARKING LOT.
- PUBLIC WATER AVAILABLE THROUGH CONTRACT 24-1053-D. PUBLIC SEWER AVAILABLE THROUGH CONTRACT 1020-W5.
- THERE ARE NO BURIAL GROUNDS, CEMETERIES, OR HISTORIC STRUCTURES LOCATED ON THIS PROPERTY.
- THERE IS NO 100YR FLOODPLAIN, WETLANDS, WETLAND BUFFERS, STREAMS, OR STREAM BUFFERS, OR STEEP SLOPES ON SITE.
- ANY EXISTING STREET TREES DAMAGED OR DESTROYED DURING CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR.
- THERE ARE NO SPECIMEN OR CHAMPION TREES WITHIN THE LOD.
- THE FOREST CONSERVATION PLAN AND ASSOCIATED FOREST STAND DELINEATION WILL BE REVIEWED FOR COMPLIANCE WITH THE FOREST CONSERVATION ACT AT THE SUBDIVISION PLAN, SITE DEVELOPMENT PLAN OR GRADING PERMIT STAGES. UNDER COUNTY LAW, ONLY A MD LICENSED FORESTER, MD LICENSED LANDSCAPE ARCHITECT OR AN ISA CERTIFIED ARBORIST WHO IS ALSO A STATE QUALIFIED PROFESSIONAL MAY PREPARE FOREST STAND DELINEATIONS, FOREST CONSERVATION PLANS OR OTHER REQUIRED COUNTY FOREST CONSERVATION PROGRAM DOCUMENTS.
- A GEOTECHNICAL STUDY WILL BE PROPOSED IN CONJUNCTION WITH THE SITE DEVELOPMENT PLAN.
- ALL EXTERIOR LIGHTING SHALL BE IN ACCORDANCE WITH SECTION 134.0 OF THE HOWARD COUNTY ZONING REGULATIONS. ALL LIGHTING WILL BE DIRECTED DOWN AND AWAY FROM ADJACENT PROPERTIES AND ROADS.
- STORMWATER MANAGEMENT FOR THIS PROJECT IS BEING PROVIDED BY ENVIRONMENTAL SITE DESIGN UTILIZING MICRO-BIOTRETENTION FACILITIES AND POROUS PAVING (WITH ADDITIONAL STONE DEPTH) TO ACCOMMODATE THE TOTAL ESD VOLUME REQUIRED. SWM FACILITIES TO BE PRIVATELY OWNED AND MAINTAINED.
- ALL ROOF LEADERS TO DRAIN INTO STORM DRAIN SYSTEM.
- TRASH AND RECYCLING COLLECTION TO BE PRIVATE.
- THE PROPOSED BUILDING WILL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM.
- THE SUBJECT PROPERTY DOES NOT CONTAIN ANY ENVIRONMENTAL FEATURES, THEREFORE THERE IS NO DISTURBANCE TO ENVIRONMENTAL FEATURES.
- SIGNAGE SHALL BE PROVIDED ON THE BUILDING IDENTIFYING THE BUILDING ADDRESS, AND EACH SUITE SEPARATED BY LETTERS.
- APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (ECP) DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAN 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 AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAN AND/OR SITE DEVELOPMENT PLAN 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.
- APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (ECP) BY THE HOWARD SOIL CONSERVATION DISTRICT DOES NOT GRANT APPROVAL OF THE PROPOSED SEDIMENT CONTROL SCHEME. THE FINAL PLAN SHALL INCLUDE A SEQUENCE OF CONSTRUCTION WHICH SHALL DETAIL SEDIMENT & EROSION CONTROLS AND PAVING AND ADDRESS THE PROJECT TEMPORARY STORMWATER MANAGEMENT REQUIREMENTS.

**SITE DATA**

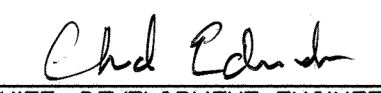
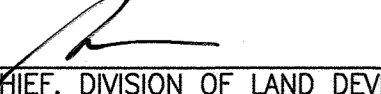
- TOTAL PROJECT AREA: PARCEL 458 = 0.88 AC  
PARCEL 691 = 0.08 AC  
TOTAL SITE = 0.96 AC
- AREA OF PLAN SUBMISSION: 0.96 AC
- AREA OF WETLANDS AND BUFFERS: 0.00 AC
- AREA OF 100 YEAR FLOODPLAIN: 0.00 AC (WITHIN PROJECT SITE)
- AREA OF FOREST: 0.00 AC (WITHIN PROJECT SITE)
- AREA OF STEEP SLOPES (15% OR GREATER): 0.00 AC (WITHIN PROJECT SITE)
- AREA OF ERODIBLE SOILS: 0.00 AC
- AREA OF LIMITS OF DISTURBANCE: 0.52 AC
- PROPOSED USES FOR SITE AND STRUCTURES: COMMERCIAL
- GREEN OPEN AREA: 0.41 AC (WITHIN PROJECT SITE)
- PROPOSED IMPERVIOUS AREA: 0.52 AC (WITHIN PROJECT SITE)
- PRESENT ZONING DESIGNATION: B1 (BUSINESS LOCAL)
- DPZ FILE REFERENCES: SDP-82-137; ECP-17-013

**ENVIRONMENTAL SITE DESIGN NARRATIVE**

- THE PROPERTY DOES NOT CONTAIN ANY FOREST, WETLANDS, STREAMS OR 100 YEAR FLOODPLAIN. THERE ARE NO ENVIRONMENTAL FEATURES IMPACTED AND THE CONCEPT PLAN PROVIDES FOR THE SAFE DISCHARGE OF THE TREATED RUNOFF.
- THE SITE GENERALLY SLOPES FROM NORTHEAST TO SOUTHWEST. THE PROPOSED DEVELOPMENT WILL HAVE NO CHANGE IN THE EXISTING CHARACTER OF THE EXISTING NATURAL FLOW PATTERNS.
- 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 A MICRO-BIOTRETENTION FACILITY (M-6). THE MBR (M-6) WILL DISCHARGE INTO THE EXISTING STORM DRAIN SYSTEM AND SHALL BE PRIVATELY OWNED AND MAINTAINED.
- SEDIMENT CONTROL FOR THIS SPECIFIC SITE PLAN WILL BE PROVIDED THROUGH THE USE OF PERIMETER CONTROLS: SUPER SILT FENCE AND INLET PROTECTION. SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH THE CURRENT REQUIREMENTS AND SHALL BE APPROVED BY THE HOWARD SOIL CONSERVATION DISTRICT.
- IN ACCORDANCE WITH CHAPTER 5, SECTION 5.5.1, THE PROJECT IS CONSIDERED "REDEVELOPMENT" AS MORE THAN 40% OF THE EXISTING NET SITE AREA IS COVERED BY IMPERVIOUS SURFACES (52.1%). AN ADDITIONAL IMPERVIOUS AREA PROPOSED WILL BE MANAGED IN ACCORDANCE WITH THE "REDEVELOPMENT" CRITERIA AND THE COMPUTED  $P_{a=2.0}$ . ENVIRONMENTAL SITE DESIGN (ESD) STORMWATER MANAGEMENT FOR THE PROJECT IS BEING ACHIEVED THROUGH THE USE OF M-6 BIOTRETENTION ESDV FACILITY.  
-THE PROJECT SITE DRAINS TO THE LITTLE PATUXENT RIVER WATERSHED.  
-THE ESD FACILITY WILL BE PRIVATELY OWNED AND MAINTAINED.

CONCEPTUAL ESD SUMMARY	
TARGET PE = 1.0"	PROVIDED PE = 1.01"
TARGET ESDV = 1,204 CU.FT.	PROVIDED = 1,503 CU.FT.
TARGET REV = 59 CU.FT.	PROVIDED REV = 307 CU.FT.

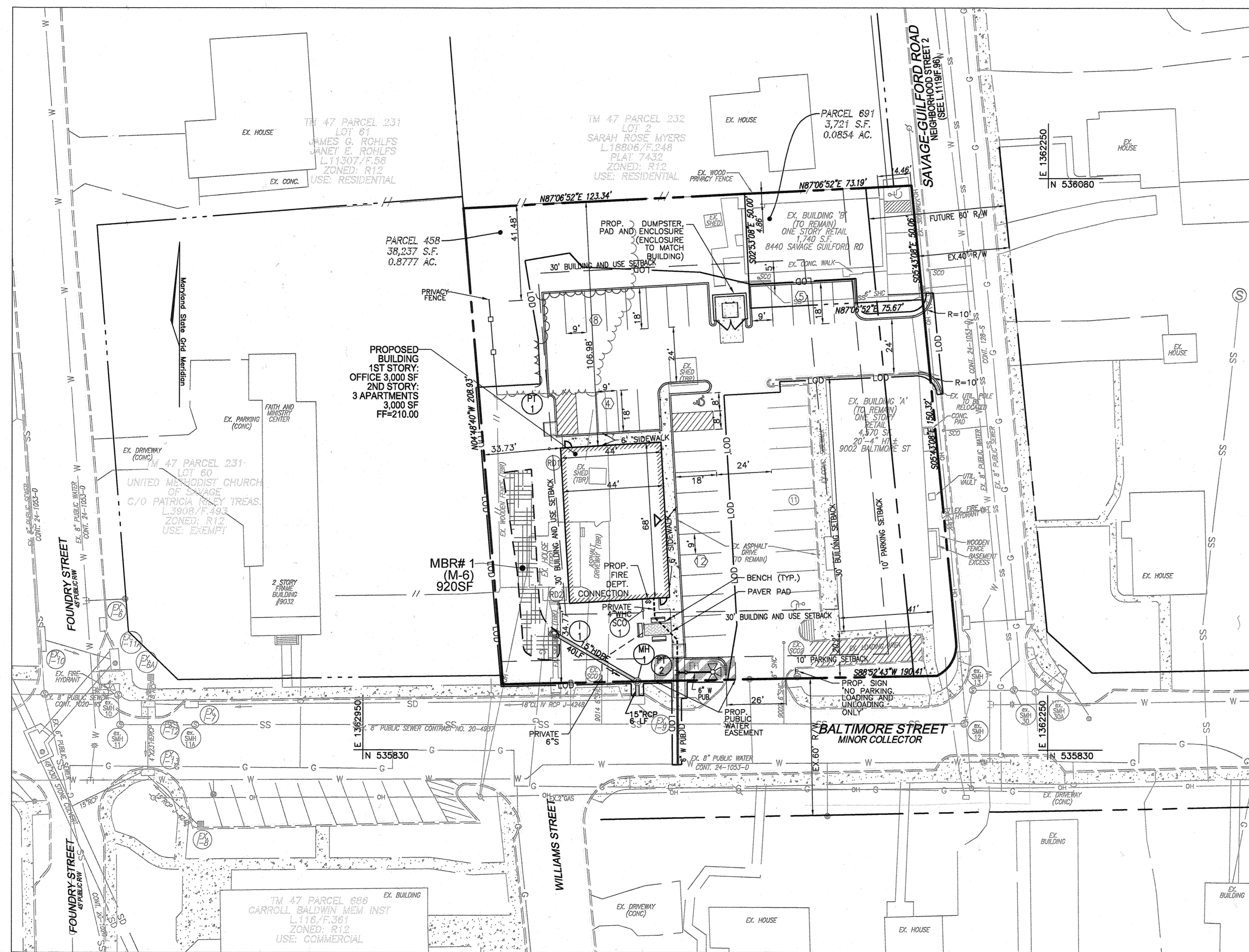
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 4.16.24  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION      DATE  
 4/16/24  
 CHIEF, DIVISION OF LAND DEVELOPMENT      DATE

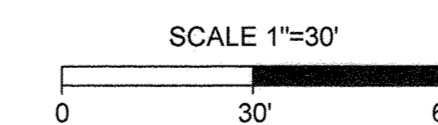
# SAVAGE STRIP CENTER

PARCEL 458; L.16041 / F.62  
 PARCEL 691; L.16041 / F.62  
 ZONED: B-1

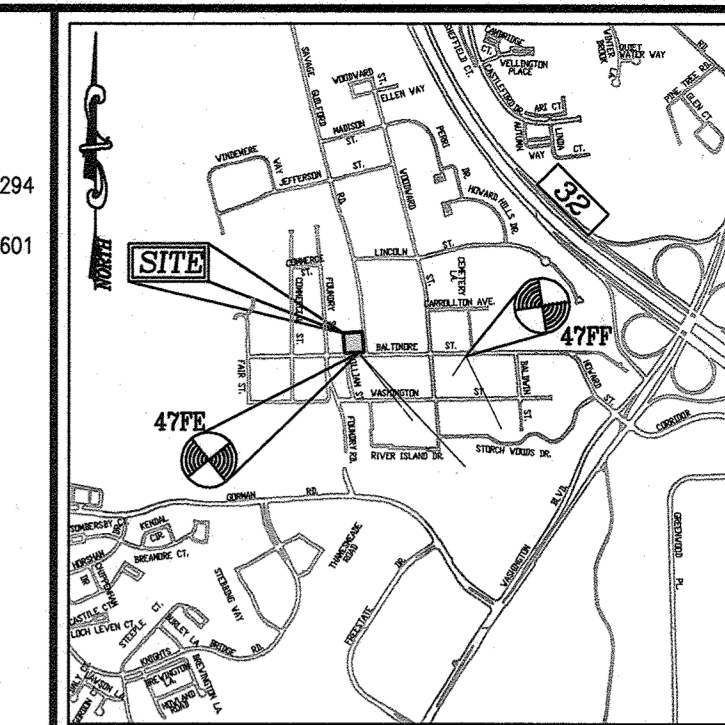
## ENVIRONMENTAL CONCEPT



LAYOUT PLAN  
SCALE: 1"=30'



HOWARD COUNTY GEODETIC COORDINATES:  
 CONTROL POINT 47FE  
 N 535856.186      E 1362155.35      ELEV. 208.294  
 CONTROL POINT 47FF  
 N 535829      E 1363271      ELEV. 211.601



VICINITY MAP  
 SCALE: 1"=2000'  
 ADC MAP COORDINATE: 40/E4  
 5053/J8 (OLD)

SHEET INDEX	
DESCRIPTION	SHEET NO.
COVER SHEET AND LAYOUT PLAN	1 OF 2
GRADING, EROSION AND SEDIMENT CONTROL PLAN AND SWM DRAINAGE AREA MAP, NOTES AND DETAILS	2 OF 2

**LEGEND**

	EXISTING CONTOUR		EXISTING FENCE
	EXISTING CURB AND GUTTER		PROPERTY LINE
	EXISTING UTILITY POLE		RIGHT-OF-WAY LINE
	EXISTING LIGHT POLE		EXISTING TREELINE
	EXISTING MAILBOX		PROPOSED TREELINE
	EXISTING SIGN		PROPOSED STORM DRAIN
	EXISTING SANITARY MANHOLE		PROPOSED STORM DRAIN INLET
	EXISTING SANITARY LINE		PROPOSED CURB AND GUTTER
	EXISTING CLEANOUT		PROPOSED CONC. SIDEWALK
	EXISTING FIRE HYDRANT		PROPOSED MICRO-BIOTRETENTION
	EXISTING WATER LINE		

NO.	REVISION	DATE

ENVIRONMENTAL CONCEPT PLAN  
 COVER SHEET AND LAYOUT PLAN

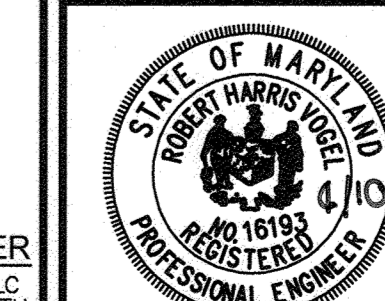
SAVAGE STRIP CENTER  
 L.16041 / F.62

2ND ELECTION DISTRICT      PARCELS: 458, 691  
 TAX MAP: 47 GRIP: 11      HOWARD COUNTY, MARYLAND

**VOGEL ENGINEERING**

**TIMMONS GROUP**

3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
 P: 410.461.7666 F: 410.461.8961 www.timmons.com



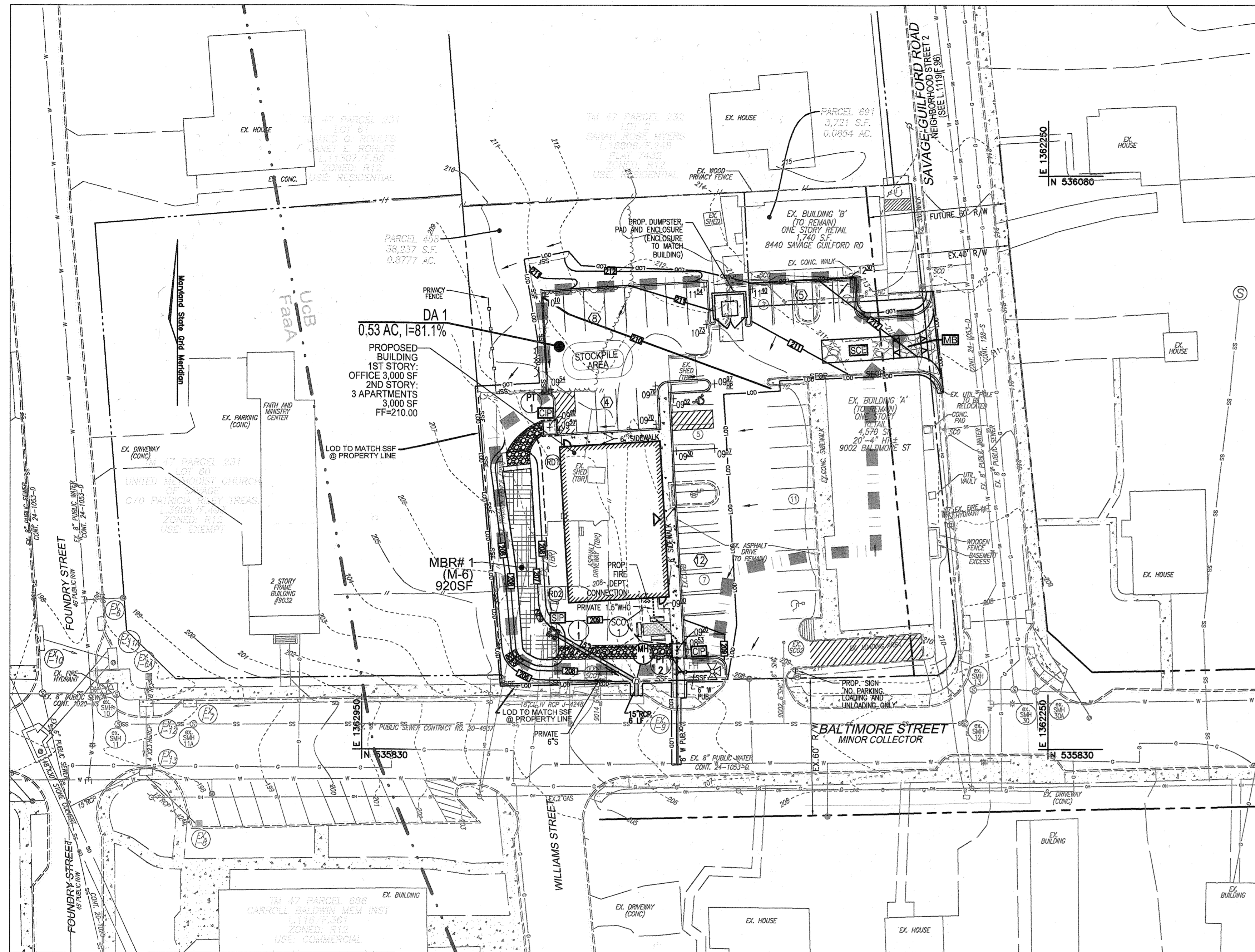
PROFESSIONAL CERTIFICATE  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 09-27-2024

DESIGN BY: RHV/DZE  
 DRAWN BY: ONB/DZE  
 CHECKED BY: RHV  
 DATE: AUGUST 2023  
 SCALE: AS SHOWN  
 W.O. NO.: 52528

OWNER/DEVELOPER  
 SHREE HARI KRISHNA LLC  
 8640 VINTAGE EARTH PATH  
 LAUREL, MD 20723  
 PHONE: (240) 529-4312

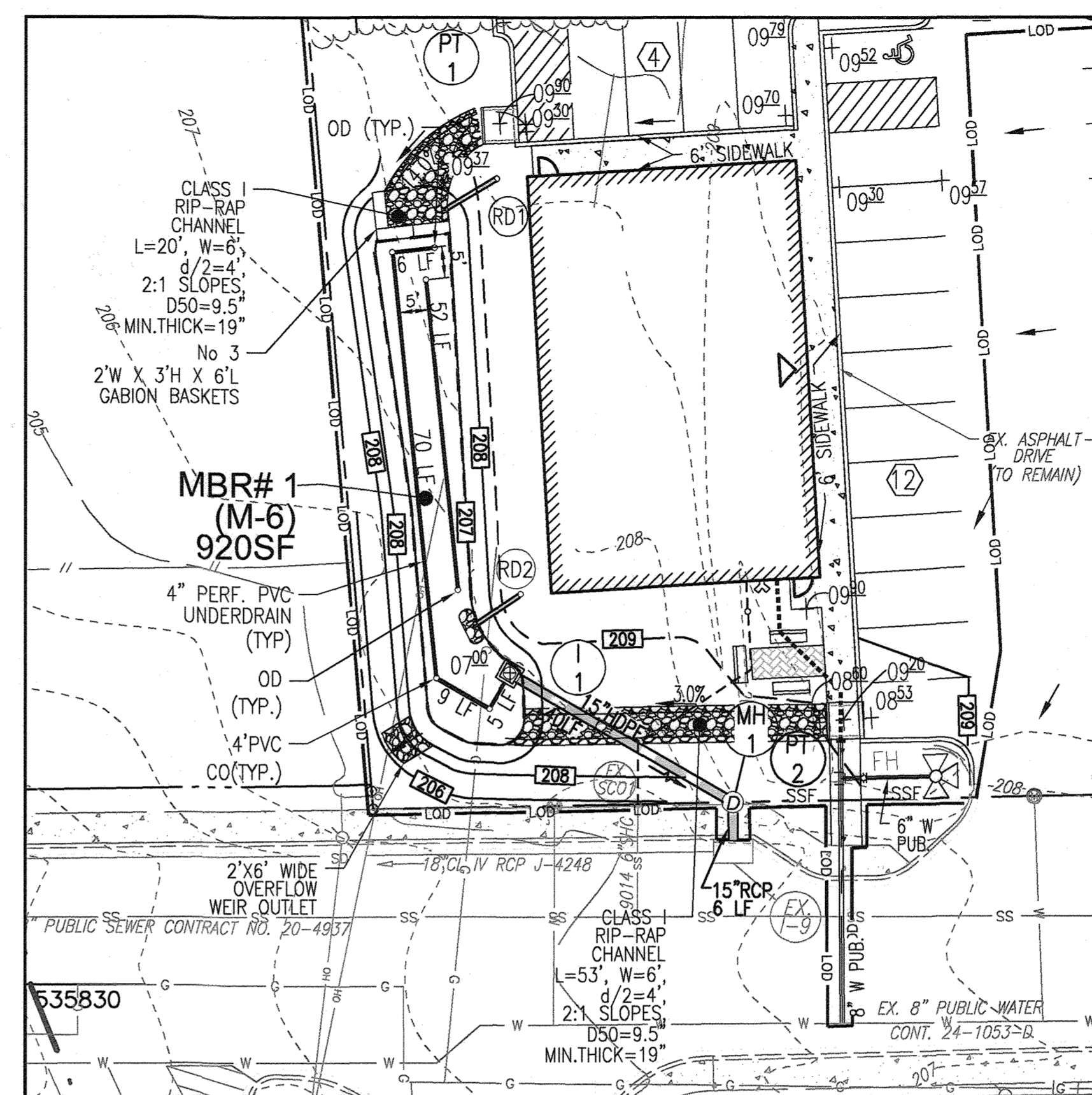
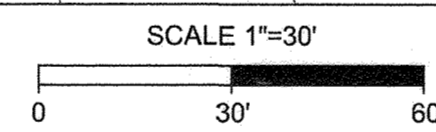
ROBERT H. VOGEL, PE No.16193

1 SHEET OF 2



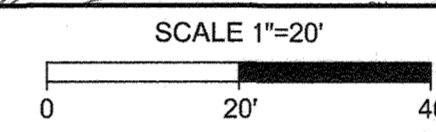
GRADING, EROSION AND SEDIMENT CONTROL PLAN AND SWM DRAINAGE AREA MAP

SCALE: 1" = 30'



MBR#1 DETAILS

SCALE: 1" = 20'



**LEGEND**

	EXISTING CONTOUR
	EXISTING 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
	EXISTING WATER METER
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	SOILS BOUNDARY
	DRAINAGE DIVIDE
	EXISTING TREE LINE
	PROPOSED TREE LINE
	PROPOSED STORM DRAIN
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	PROPOSED CONC. SIDEWALK
	PROPOSED MICRO-BIORETENTION
	PROPOSED SEWER HOUSE CONNECTION
	PROPOSED WATER HOUSE CONNECTION
	PROPOSED STORM DRAIN INLET
	PROPOSED CURB AND GUTTER
	FLOW ARROWS

**SEDIMENT CONTROL LEGEND**

	LIMIT OF DISTURBANCE
	SURFER SILT FENCE
	SILT FENCE ON PAVEMENT
	SILT FENCE
	CURB INLET PROTECTION
	STANDARD INLET PROTECTION
	STABILIZED CONSTRUCTION ENTRANCE

**NOTES:**

- APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED BUILDING AND/OR GRADING PERMIT 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.

**SAVAGE STRIP CENTER INDIVIDUAL PRACTICE ESDv DESIGN COMPUTATIONS**

Target P <sub>e</sub> (Redevelopment Criteria):		1.0 in.																	
Total ESDv Required (Ex. & Prop.):		1,204 CF																	
ESDv = (Pe x Rv x A) / 12																			
Rv = 0.05 + 0.009 x I																			
Vmin 1yr rainfall = 1" (1.0 x Rv x A) / 12																			
Vmax 1yr rainfall = 2.6" (2.6 x Rv x A) / 12																			
PRACTICE DA #	PRACTICE DA (SF)	PRACTICE DA (AC)	IMPERV (SF)	IMPERV (AC)	PERV (SF)	PERV (AC)	% IMPERV	Rv	MIN VOLUME	PRACTICE TARGET P <sub>e</sub> VOLUME	PRACTICE 2.6" MAX VOLUME	TOTAL ESDv VOLUME PROVIDED	Rev REQUIRED	Rev PROVIDED	CF	SF	REMARKS	depth	porosity
MBR#1	22,988	0.53	18,639	0.43	4,349	0.10	81.1	0.78	1,494	1,494	3,884	1,503	307	307			BIO-RETENTION (F-6)		
																	Surface Area of MBR with 1' of ponding depth (75% above)		
																	Rev Recharge	0.83 x 0.4	
																	(Recharge Vol Req. = 25% of total volume provided below)		
																	Additional Stone (Below)	1.00 x 0.3	
<b>TOTALS</b>	<b>22,988</b>	<b>0.53</b>	<b>18,639</b>	<b>0.43</b>	<b>4,349</b>	<b>0.10</b>	<b>81.1</b>	<b>0.78</b>	<b>1,494</b>	<b>1,494</b>	<b>TOTALS 1,503</b>	<b>307</b>	<b>307</b>						

Pe = 1.01

**SOILS LEGEND**

SYMBOL	NAME/DESCRIPTION	SOIL TYPE	ERODIBLE	'K' VALUE	HYDRIC
UcB	URBAN LAND-CHILLUM-BELTSVILLE COMPLEX, 0-5% SLOPES	C	NO	0.43	NO

**SOILS 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.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

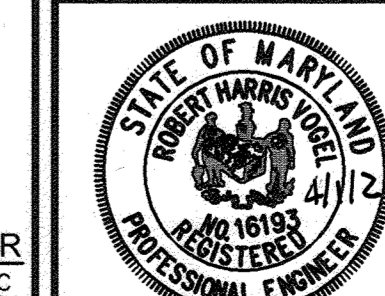
*Chief, Development Engineering Division* 4/16/24  
*Chief, Division of Land Development* 4/16/24

NO.	REVISION	DATE

ENVIRONMENTAL CONCEPT PLAN  
 GRADING, EROSION AND  
 SEDIMENT CONTROL PLAN  
 AND SWM DRAINAGE AREA MAP,  
 NOTES AND DETAILS  
**SAVAGE STRIP CENTER**  
 L16041/F.62

2ND ELECTION DISTRICT PARCELS 458, 581  
 TAX MAP: 47, GRID: 11 HOWARD COUNTY, MARYLAND

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2 SHEET OF 2