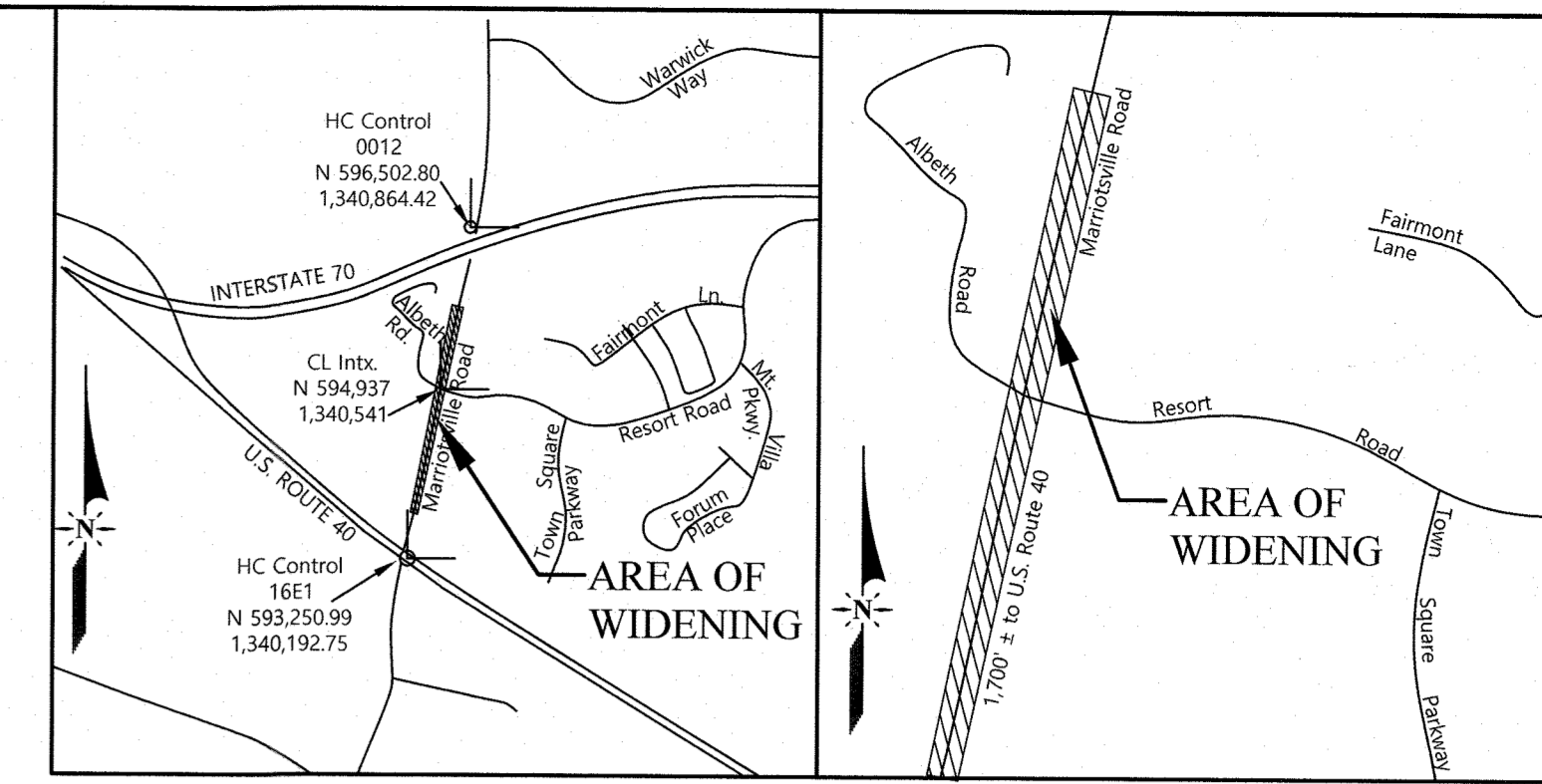


ENVIRONMENTAL CONCEPT PLAN

MARRIOTTSVILLE ROAD WIDENING

HOWARD COUNTY, MARYLAND



LOCATION MAP
SCALE: 1"=2,000'
ADC MAP 19/B3

VICINITY MAP
SCALE: 1"=600'

GENERAL NOTES

- SUBJECT PROPERTY IS PART OF TAX MAP 16, BLOCK 10, MARRIOTTSVILLE ROAD RIGHT-OF-WAY. DEDICATION OF ADDITIONAL RIGHT-OF-WAY WILL OCCUR PRIOR TO CONSTRUCTION.
- EXISTING TOPOGRAPHY FROM 230+50 TO 251+00 IS TAKEN FROM A FIELD RUN SURVEY AT 2' CONTOUR INTERVALS PERFORMED BY BENCHMARK ENGINEERING, INC. DATED MAY 2019, SUPPLEMENTED WITH HOWARD COUNTY GIS AND WINGS AERIAL MAPPING DATED MARCH 2007.
- 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. 16E1 AND 16H3 WERE USED FOR HORIZONTAL DATUM, AND 16M3 WAS USED FOR VERTICAL DATUM FOR THIS PROJECT.
- THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT. WATER IS PUBLIC UNDER CONTRACT NUMBER 44-3480, SEWER IS PUBLIC UNDER CONTRACT NUMBER 24-3447.
- STORMWATER MANAGEMENT FOR THE PUBLIC PORTION OF THIS DEVELOPMENT WILL BE BY GRASS SWALES (M-8), A MICRO-BIORETENTION FACILITY (M-6) AND A SURFACE SAND FILTER (F-1). THESE FACILITIES WILL BE PUBLICLY OWNED AND MAINTAINED BY HOWARD COUNTY. THE REDUCED CURVE NUMBER METHOD DEMONSTRATES THAT THE 10-YEAR PROPOSED FLOWRATE EQUALS THAT OF THE EXISTING LANDCOVER.
- THE EXISTING UTILITIES ARE BASED ON FIELD RUN TOPOGRAPHY AND HOWARD COUNTY GIS AS WELL AS AS-BUILT DRAWINGS. THE EXISTING WATER CONTRACT IS #44-3480 AND THE EXISTING SEWER CONTRACT IS #24-3447.
- THE ORIGINAL FLOODPLAIN IS FROM DFRM MAP 240270070D (EFFECTIVE 11/6/13). THE EXISTING FLOODPLAIN AS SHOWN ON THIS PLAN IS UNDER REVIEW AS PART OF PLAN F-21-011 FOR THE IMPACTS OF THE CHAPEL GATE WOODS PROJECT. THE FLOODPLAIN IMPACTS OF THE PROPOSED CULVERT AS PART OF THIS PROJECT WILL BE SHOWN ON SUBSEQUENT SUBMISSIONS.
- WETLANDS AND STREAMS SHOWN ON SITE ARE BASED ON A WETLAND REPORT APPROVED ON APRIL 10, 2019, UNDER ECP-18-062. (REFERENCE MDE TRACKING NUMBER 201861491).
- PER SECTION 16.1202(b)(2)(v) OF THE COUNTY CODE, LINEAR PROJECTS THAT IMPACT LESS THAN 20,000 SF OF FOREST ARE EXEMPT FROM THE FOREST CONSERVATION PLAN REQUIREMENTS WITH THE CONDITION THAT A DECLARATION OF INTENT IS FILED FOR THE PROJECT, GIVEN THAT THIS ROAD PROJECT WILL HAVE UNIQUE IMPACTS TO ONLY 14,020 SF OF EXISTING FOREST, THE PROJECT QUALIFIES FOR THAT EXEMPTION.
- NO SPECIMEN TREES ARE IMPACTED. FOR FURTHER DETAIL, SEE DESIGN NARRATIVE ON THIS SHEET.
- THERE ARE NO IMPACTS TO STEEP SLOPES (25% OR GREATER) OF GREATER THAN 20,000 CONTIGUOUS SF.
- NO HISTORIC DISTRICTS ARE ADJACENT TO THIS SITE. SITE IS NOT ADJACENT TO A DESIGNATED SCENIC ROAD.
- SOILS ON SITE ARE BASED ON THE ONLINE SOIL SURVEY, EFFECTIVE JUNE 12, 2020.
- THE WIDENING INVOLVES RETENTION AND REMOVAL OF A PORTIONS OF THE EXISTING ROADWAY, WEDGE AND LEVEL IN AREAS AND PROPOSED FULL-SECTION WIDENING.
- CONSTRUCTION WITH THIS PLAN WILL BE COORDINATED WITH CHAPEL GATE WOODS (F-21-011) AND CAPITAL IMPROVEMENT PLAN CIP-4215, WITH PORTIONS TO BE CONSTRUCTED CONCURRENTLY. BOTH PLANS INVOLVE ROAD WIDENING AND STORM DRAINAGE THAT WILL REQUIRED COORDINATION DURING LATER STAGES OF DESIGN AND DURING CONSTRUCTION. PLEASE SEE PLAN FOR ADDITIONAL NOTES.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF THE SHOWN SEDIMENT CONTROLS.
- IMPACTS TO THE FLOODPLAIN AND EXISTING WETLANDS WILL BE ADEQUATELY SHOWN ON THE ROAD WIDENING CONSTRUCTION PLANS AND THE NECESSARY MDE/CORP PERMITS SHALL BE OBTAINED PRIOR FINAL APPROVAL OF THE FINAL CONSTRUCTION DRAWINGS.

DESIGN NARRATIVE

THE WIDENING ALONG MARRIOTTSVILLE ROAD REQUIRES ENVIRONMENTAL SITE DESIGN (ESD) STRATEGIES TO MEET THE STORMWATER REQUIREMENTS OF HOWARD COUNTY AS WELL AS THE MARYLAND DEPARTMENT OF THE ENVIRONMENT. THE WIDENING AND ASSOCIATED GRADING IS LIMITED TO BE AS TIGHT AS POSSIBLE TO THE EXISTING ROADWAY AND ATTEMPTING TO STAY WITHIN THE CLEARED MARRIOTTSVILLE ROAD RIGHT-OF-WAY. THE EXISTING DRAINAGE AREAS ARE GENERALLY HONORED IN THE PROPOSED DESIGN. THE WIDENING OCCURS PRIMARILY ON THE WEST SIDE OF THE ROADWAY, WHICH AVOIDS IMPACTING THE CONSTRUCTED WETLAND MITIGATION TO THE EAST (SDP-10-056). THE EXISTING IMPERVIOUSNESS WITHIN THE LIMIT OF DISTURBANCE IS OVER 40%, THEREFORE IS CONSIDERED REDEVELOPMENT.

EXISTING PAVEMENT AND SIDEWALK AREA: 2.48 ACRES
RIGHT-OF-WAY AREA: 6.51 ACRES
SUBTRACT ENV. BUFFER AREAS (FLOODPLAIN): 0.44 ACRES
2.48 / (6.51 - 0.44) = 41%

SOME OF THE EXISTING PAVEMENT WILL BE WEDGE AND LEVELED, WHICH WILL BE CONSIDERED REDEVELOPMENT, AND ONLY REQUIRE 50% OF THE AREA TO BE TREATED TO A $P_e=1$. THE PROPOSED WIDENING (FURTHER DEVELOPMENT) WILL REQUIRE TREATMENT OF $P_e=1.8$, AS WELL AS RECHARGE VOLUME. EACH OF THESE STUDY POINTS REACH THE MINIMUM $P_e=1$. THE OVERALL LOD REQUIRES A P_e OF 1.2" AND THE COMBINED PRACTICES PROVIDE 1.2".

SP#1- THE NORTH SWALES (UPPER AND LOWER) ARE 3'-WIDE GRASS SWALES AND PROVIDE SOME STORAGE USING EARTHEN BERMS. THEY ARE CAPTURED IN INLETS AND CONVEYED TO THE FOREBAY OF A SURFACE SAND FILTER. ADDITIONAL RUNOFF FLOWS DIRECTLY INTO THE SURFACE SAND FILTER AND ITS FOREBAY. THE TREATMENT TRAIN PROVIDES A $P_e=1.6$.

SP#2- THE RUNOFF TO THE UPPER SOUTH SWALE IS TREATED IN AN 8'-WIDE GRASS SWALE WITH EARTHEN BERMS. THE FINAL DESIGN WILL REFLECT AN INLET TO INTERCEPT THE RUNOFF AND TIE INTO A STORM DRAIN TRUNKLINE CROSSING MARRIOTTSVILLE ROAD. THE SWALE PROVIDES A $P_e=1.3$.

SP#3- THE RUNOFF TO THE LOWER SOUTH SWALE IS TREATED IN AN 4'-WIDE BIO-SWALE WITH EARTHEN BERMS. THE RUNOFF IS INTERCEPTED BY AN INLET (I-10) AND FLOWS INTO A STORM DRAIN TRUNKLINE CROSSING MARRIOTTSVILLE ROAD. THE SWALE PROVIDES A $P_e=1.0$.

SP#4- SEVERAL INLETS DRAIN TO A MICRO-BIORETENTION FACILITY. THIS FACILITY IS LIKELY TO BE A SUBMERGED GRAVEL WETLAND IN THE FINAL DESIGN. THE MICRO-BIO. PROVIDES A $P_e=2.2$.

THE PROVIDED STORAGE RESULTS IN A REDUCED CURVE NUMBER SO THAT THE 10-YEAR PEAK RUNOFF MATCHES THAT OF THE EXISTING CONDITIONS. NOTE THAT THERE ARE SOME DRAINAGE AREAS BYPASSING THE TREATMENT. HOWEVER, GREATER AREAS OF EXISTING IMPERVIOUS ARE BEING TREATED THROUGH OVER-COMPENSATION.

EROSION AND SEDIMENT CONTROL WILL BE PROVIDED BY A GABION OUTLET STRUCTURE AND INLET PROTECTION. ELEMENTS OF THE SAND FILTER AND MICRO-BIORETENTION WILL BE CONSTRUCTED LAST, IF POSSIBLE, WITH THE SAND, STONE, AND BIO-MEDIA INSTALLED ONLY AFTER UPHILL AREAS HAVE BEEN STABILIZED.

THE CHAPEL GATE PLANS (F-21-011) OVERLAP WITH THESE PLANS, WITH ONLY A PORTION OF THE TOTAL LIMIT OF DISTURBANCE BEING UNIQUE TO THESE PLANS. PLEASE SEE THE FOREST STAND DELINEATION AND FOREST CONSERVATION EXEMPTION PLAN FOR A GRAPHICAL SUMMARY OF THE AREAS. A LETTER DATED FEBRUARY 18, 2021 BY ECO-SCIENCE PROFESSIONALS, INC. ADDS ADDITIONAL DETAIL.

THE OVERALL DISTURBED AREA IMPACTS WETLANDS, FLOODPLAIN AND TREES. THE TOTAL LIMIT OF DISTURBANCE ALSO IMPACTS A STREAM (BRANCH OFF OF LITTLE PATUXENT RIVER). THERE ARE NO CONTIGUOUS AREAS GREATER THAN 20,000 SF OF STEEP SLOPES IMPACTED, BUT SMALLER AREAS ARE SHOWN ON THE PLAN. PER THE ABOVE REPORT, NO SPECIMEN TREES ARE LOCATED IN THE LIMIT-OF-DISTURBANCE. FINAL IMPACTS TO ENVIRONMENTAL FEATURES WILL BE DETERMINED AND WAIVERS OR PERMITS WILL BE PURSUED DURING THE NEXT STAGE OF DEVELOPMENT. A JOINT PERMIT APPLICATION WILL LIKELY BE REQUIRED FOR IMPACTS TO THE FLOODPLAIN, WETLANDS, AND STREAM.

TOTAL LIMIT OF DISTURBANCE- SUBTRACT OVERLAP: 4.9 ACRES
W/ CHAPEL GATE (F-21-011): 2.1 ACRES

REMAINING LIMIT OF DISTURBANCE- (BELOW ARE WITHIN THE REMAINING LOD): 2.8 ACRES
WETLANDS IMPACTED- 0.37 ACRES
WETLAND BUFFERS IMPACTED- 0.33 ACRES
FLOODPLAIN IMPACTED- 0.52 ACRES
STREAM IMPACTED- 103 LINEAR FEET
STREAM BUFFER IMPACTED- 0.50 ACRES
FOREST IMPACTED- 0.32 ACRES
SLOPES >15%-25% IMPACTED- 0.46 ACRES
SLOPES >25% IMPACTED- 0.20 ACRES
EX. IMPERVIOUS AREA WITHIN LOD- 1.4 ACRES
EX. PERVIOUS AREA WITHIN LOD- 3.5 ACRES
PROP. IMPERVIOUS AREA WITHIN LOD- 2.56 ACRES
PROP. PERVIOUS AREA WITHIN LOD- 0.24 ACRES

LEGEND EXISTING CONDITIONS

- Ex. Sanitary Manhole
- Ex. Storm Drain Manhole
- Ex. Storm Drain Pipe
- Ex. Stone Rip-Rap
- Ex. Waterline
- Ex. Water Valve
- Ex. Fire Hydrant
- UTILITIES (ELECTRIC, GAS, CABLE, PHONE, ETC.)
- Ex. Gas Manhole/Meter
- Ex. Electric Lines
- Ex. Light Pole
- Ex. Utility Pole
- Ex. Overhead Utility Lines
- Ex. Conc. Vault Box
- Ex. Telecomm MH
- TOPOGRAPHIC FEATURES
- Ex. Major Contour (10')
- Ex. Minor Contour (2')
- Ex. Fenceline
- Ex. Guard Rail
- Ex. Sign
- Existing Concrete Curb and Gutter
- Existing Tree/Vegetation
- Ex. Sidewalk
- Ex. Paving
- ENVIRONMENTAL
- Ex. Soils/Soil Types
- Ex. Floodplain
- Ex. Stream
- Ex. Wetlands
- Ex. Steep Slopes- >15%-25%
- Ex. Steep Slopes- >25% (steep slopes shown are less than 20,000 sf contiguous and therefore may be disturbed)

LEGEND-PROPOSED CONDITIONS

- L.O.D. Prop. Limits of Disturbance
- S.C.E. Prop. Stabilized Construction Entrance
- FL-18 Prop. Proposed Filter Log
- Prop. Temporary Soil Stabilization Matting
- Prop. Stone Check Dam
- IMPROVEMENTS/UTILITIES/FEATURES
- Prop. 7" Standard Curb and Gutter
- Prop. Storm Drain Structure
- Prop. Painted Traffic Direction Arrow
- Prop. Minor Contour
- Prop. Major Contour
- Prop. Spot Elevation
- Prop. Paving
- Prop. Wedge and Level over Ex. Paving
- Prop. Guard Rail

SITE DATA

DEED REFERENCE: SHA PLATS 31492, 31494, 31498, 31499
PARCEL INFO: TAX MAP 16, GRID 10, ROAD RIGHT-OF-WAY
ELECTION DISTRICT: 3RD
LOCATION: MARRIOTTSVILLE ROAD / US ROUTE 40 / US ROUTE 70
EXISTING USE OF SITE: PUBLIC ROADWAY
PROPOSED USE OF SITE: PUBLIC ROADWAY
DPZ REFERENCES:

Stormwater Management Information						
Lot/Parcel Number	Facility Name & Number	Practice Type (Quantity)	Public	Private	Misc.	Private
ROW	North Grass Swale-Upper	ESD M-8 (Quality)	X		w/ check dams	
ROW	North Grass Swale-Lower	ESD M-8 (Quality)	X		w/ check dams	
ROW	South Grass Swale-Upper	ESD M-8 (Quality)	X		w/ check dams	
ROW	South Bio-swale-Lower	ESD M-8 (Quality)	X		w/ check dams	
ROW	Micro-bioretenation	ESD M-6 (Quality)	X			
ROW	Surface Sand Filter	F-1 (Quality and Quantity)	X			

STORMWATER MANAGEMENT SUMMARY TABLE															
Practice	DA (sf)	Imp Area (sf)	% Imp	Rv	Pe Required	Total ESDv Required	75% ESDv Provided	25% ESDv (if below Required)	Total ESDv Provided	Final ESDv Provided	Pe Provided	Outlet Study Point	Rev (if Required)	Rev (if Provided)	Ownership
North Grass Swale-Upper	35,656	20,700	58%	0.57	1.00	1701	NA	NA	NA	354	0.2				Public
North Grass Swale-Lower	32,860	23,028	70%	0.58	1.00	1864	NA	NA	NA	765	0.4			765	Public
Surface Sand Filter	28,145	4,628	16%	0.20	1.00	464	348	5326	116	0				0	Public
Treatment Train- includes above	96,691	48,353	50%	0.50	1.00	4029			6445	1.6	SP#1				
South Grass Swale-Upper	25,093	15,123	60%	0.59	1.00	1238	NA	NA	NA	1606	1.3	SP#2		1606	Public
South Bio-swale-Lower	8,792	5,318	60%	0.59	1.00	435	NA	NA	NA	443	1.0	SP#3		443	Public
Micro-bioretenation	22,923	22,279	97%	0.92	1.00	1766	NA	NA	NA	3970	2.2	SP#4		0	Public
Totals						7470			12484				565	3168	

Note: Swales do not require ponding for ESD treatment.
The micro-bioretenation facility will utilize SHA Bio Soil Media provides the ESDv with only 55% storage above the facility.
The North Grass Swales empty into the Surface Sand Filter where they are further treated.
The overall Pe requirement is 1.2 inches, and the combined facilities provide 1.2 inches.

BENCHMARKS

HC. CO. #186M3 (NAD '83) ELEV. 473.980
BEGIN RAMP FROM MARRIOTTSVILLE ROAD TO RT-70 EBL - 3/4" REBAR

HC. CO. #16H3 (NAD '83) ELEV. 469.648
STANDARD DISC ON CONCRETE MONUMENT
RT-40 0.45 MI. WEST OF TURF VALLEY RD.
N 592408.074 E 1341524.016

HC. CO. #16E1 (NAD '83) ELEV. 463.834
STANDARD DISC ON CONCRETE MONUMENT
ISLE AT CORNER RT-40 & MARRIOTTSVILLE RD.
N 593250.989 E 1340192.746

SHEET INDEX	
TITLE	SHEET No.
COVER SHEET	1
EXISTING CONDITIONS PLAN	2
CONCEPT GEOMETRY PLAN	3
CONCEPT GRADING PLAN	4
CONCEPT EROSION AND SEDIMENT CONTROL PLAN	5
CONCEPT DRAINAGE AREA MAP	6

NO.	DATE	REVISION

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. 30736, Expiration Date: 08-03-22.

BENCHMARK ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043
(P) 410-485-8105 (F) 410-465-6844
WWW.BE-CIVILENGINEERING.COM

OWNER: HOWARD COUNTY MARYLAND
DIRECTOR'S OFFICE OF DEPARTMENT OF PUBLIC WORKS
3430 COURTHOUSE DRIVE
ELLICOTT CITY, MD 21043
410-313-4401

MARRIOTTSVILLE ROAD WIDENING ENVIRONMENTAL CONCEPT PLAN ECP-21-037

TAX MAP: 16 - GRID: 10 - ROAD RIGHT-OF-WAY
TAX MAP: 16 - GRID: 10 - PARCEL: 110
ELECTION DISTRICT NO. 3 - HOWARD COUNTY, MARYLAND

DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP
1205 YORK ROAD, FENTHOUSE LUTHERVILLE, MARYLAND 21093
410-825-8400

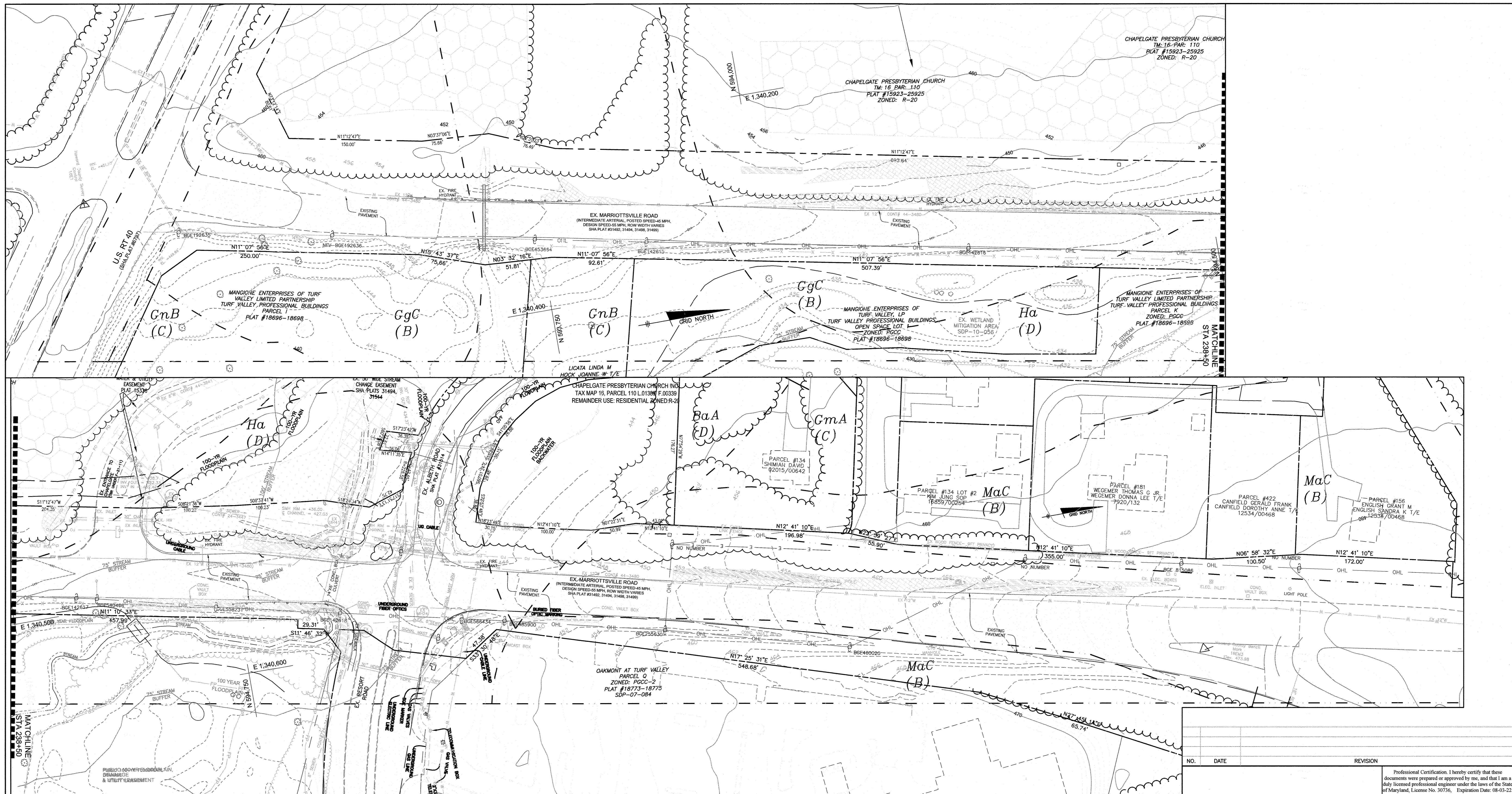
DESIGN: MLS DRAFT: MLS

DATE: MAY 2021 BEI PROJECT NO. 2769
SCALE: AS SHOWN SHEET 1 OF 6

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

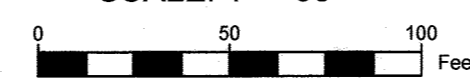
[Signature] 7/7/21
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 7/7/21
CHIEF, DIVISION OF LAND DEVELOPMENT DATE



EXISTING CONDITIONS PLAN

SCALE: 1" = 50'




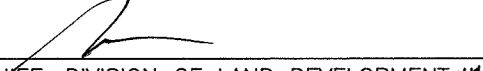
SOILS TABLE

SYMBOL	SOIL TYPE	HSG	K FACTOR (WHOLE)
BaA	Baile silt loam, 0% to 3%	GD	0.37 **
GgC	Glenelg loam, 8% to 15%	C	0.24
GmA	Glenville silt loam, 0% to 3%	C	0.43 **
GnB	Glenville-Baile silt loams, 0% to 8%	C	0.43 **
Ha	Hatboro-Codonus silt loams, 0% to 3%	B/D	0.37 **
MaC	Manor loam 8% to 15% slope	B	0.28
MaD	Manor loam 15% to 25% slope	B	0.28
UaF	Udorthents, Highway, 0% to 65%		

** Soils over 0.35 are considered highly erodible and will need additional areas stabilized with soil stabilization matting.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING


 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 6/21/21


 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 6/21/21

NO.	DATE	REVISION

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. 30736, Expiration Date: 08-03-22

BENCHMARK ENGINEERING, INC.
 ENGINEERS - LAND SURVEYORS - PLANNERS
 8480 BALTIMORE NATIONAL PIKE • SUITE 315 • BELLEFLORE CITY, MARYLAND 21043
 (P) 410-485-6100 (F) 410-485-8554
 WWW.BE-ENR.COM



OWNER:
 HOWARD COUNTY MARYLAND
 DIRECTOR'S OFFICE OF
 DEPARTMENT OF PUBLIC WORKS
 3430 COURTHOUSE DRIVE
 ELLICOTT CITY, MD 21043
 410-313-4401

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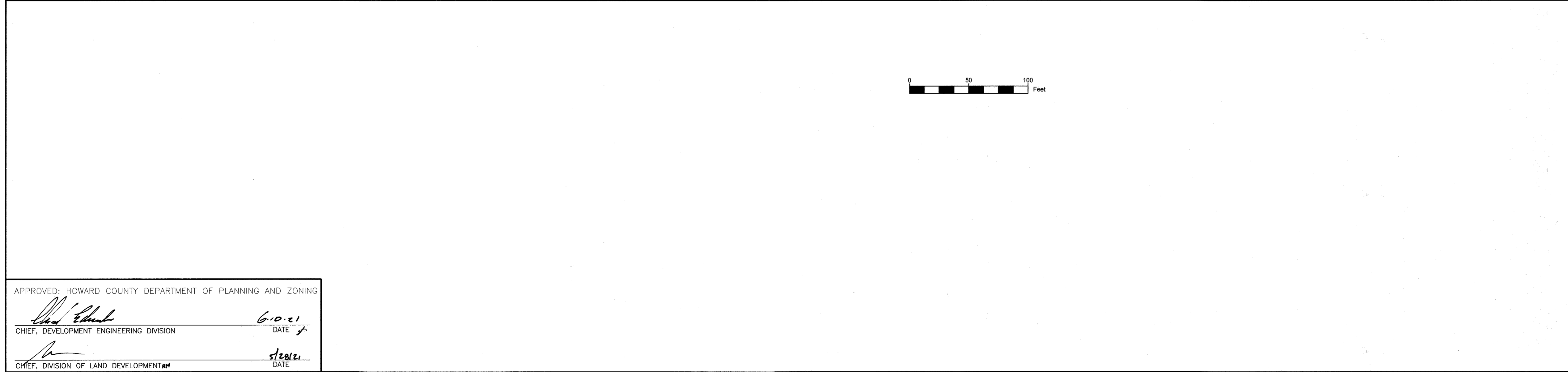
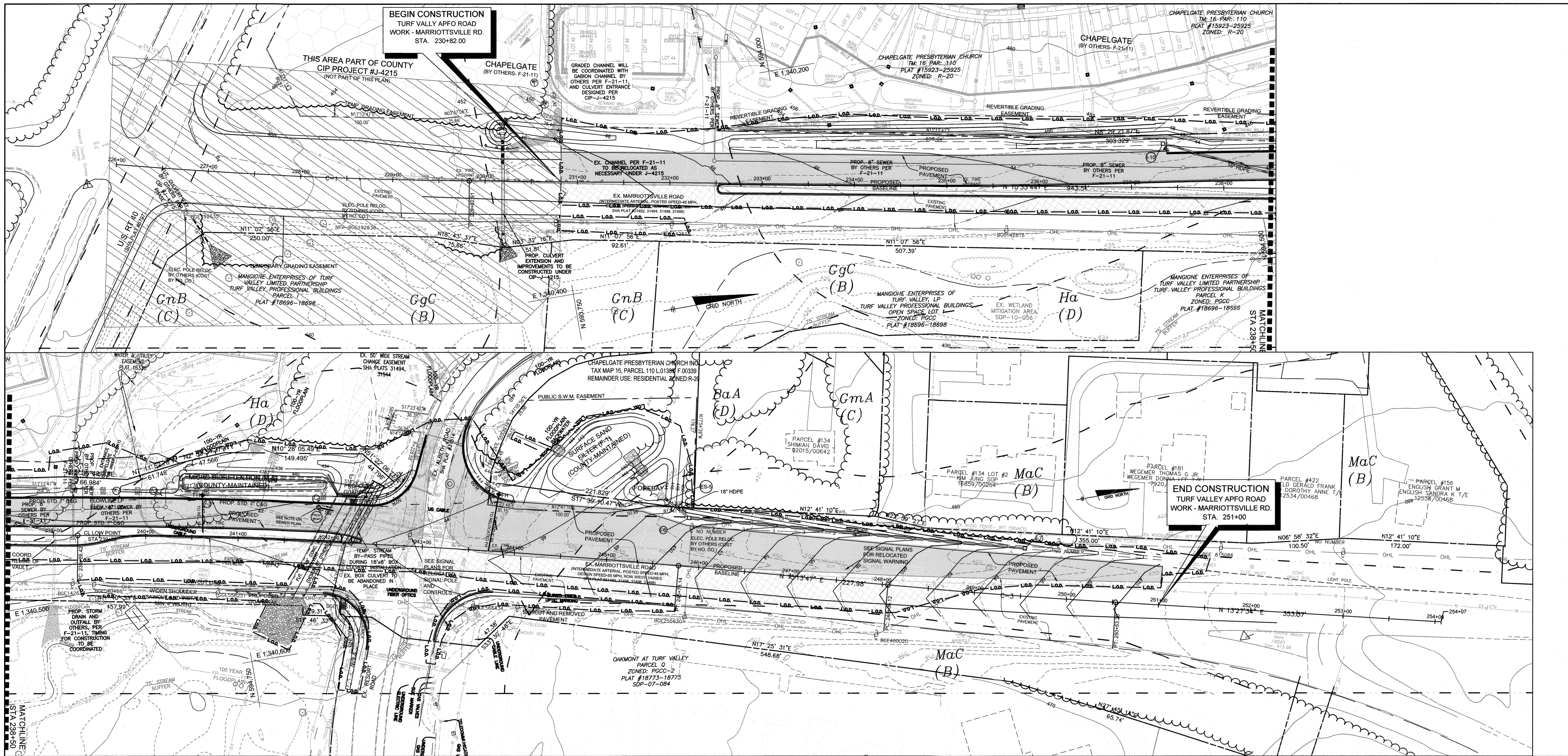
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MARRIOTTVILLE ROAD WIDENING ENVIRONMENTAL CONCEPT PLAN ECP-21-037

TAX MAP: 16 - GRID: 10 - ROAD RIGHT-OF-WAY
 TAX MAP: 16 - GRID: 10 - PARCEL: 110
 ELECTION DISTRICT NO. 3 - HOWARD COUNTY, MARYLAND

EXISTING CONDITIONS PLAN

DATE: MAY 2021 BEI PROJECT NO. 2769
 SCALE: 1" = 50' SHEET 2 OF 6



NO.	DATE	REVISION

0 50 100 Feet

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ENGINEERING, INC.

3480 BALTIMORE NATIONAL PIKE SUITE 315 ELICOTT CITY, MARYLAND 21043
(P) 410-488-8100 (F) 410-465-6864
WWW.BSE-ONLINEENGINEERING.COM

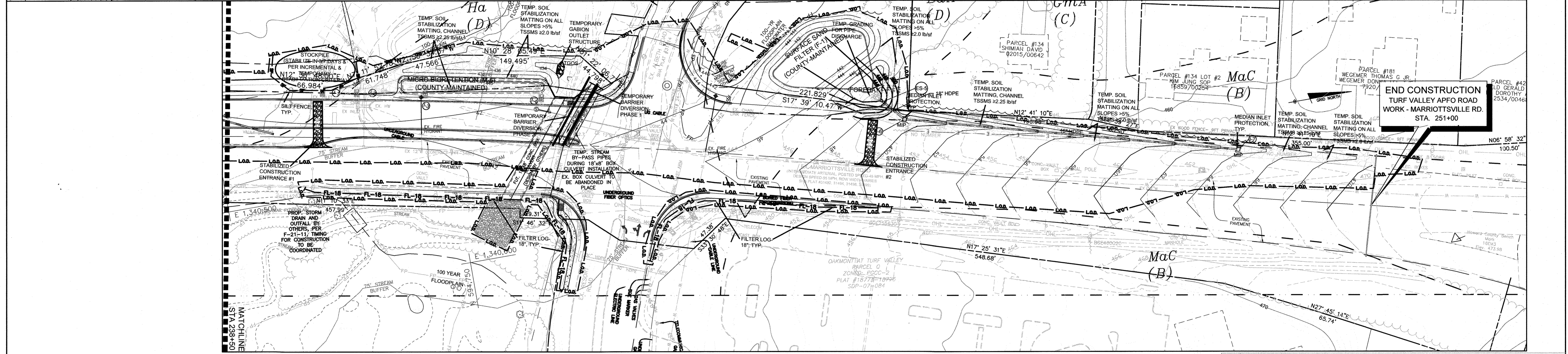
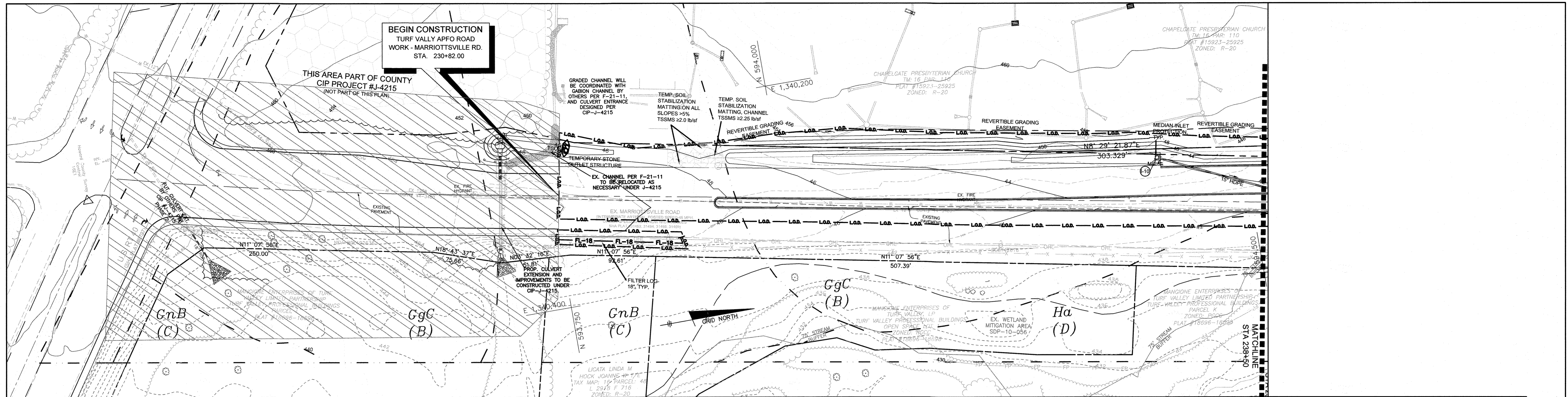


5-19-21

<p>OWNER: HOWARD COUNTY MARYLAND DIRECTOR'S OFFICE OF DEPARTMENT OF PUBLIC WORKS 3430 COURTHOUSE DRIVE ELICOTT CITY, MD 21043 410-313-4401</p>	<p>MARRIOTTVILLE ROAD WIDENING ENVIRONMENTAL CONCEPT PLAN ECP-21-037</p> <p>TAX MAP: 16 - GRID: 10 - ROAD RIGHT-OF-WAY TAX MAP: 16 - GRID: 10 - PARCEL: 110 ELECTION DISTRICT NO. 3 - HOWARD COUNTY, MARYLAND</p>
<p>DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400</p>	<p>CONCEPT GRADING PLAN</p> <p>DATE: MAY 2021 BEI PROJECT NO. 2769 SCALE: 1" = 50' SHEET 4 OF 6</p>

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] **G.O. 21**
DATE: 5/19/21
CHIEF, DIVISION OF LAND DEVELOPMENT



ESC LEGEND

- L.O.D. — LIMIT OF DISTURBANCE
- SF — SILT FENCE
- FL-18 — FILTER LOG 18"
- TEMPORARY STONE OUTLET STRUCTURE
- TEMPORARY GABION OUTLET STRUCTURE
- STABILIZED CONSTRUCTION ENTRANCE
- MIP MEDIAN INLET PROTECTION
- TSSMS-2.0 lb/sf TEMPORARY SOILS STABILIZATION MATTING FOR SLOPE - >5% TO 3:1 MIN. 2.0 lb/sf SHEAR STRESS
- TSSMC-2.25 lb/sf TEMPORARY SOILS STABILIZATION MATTING FOR CHANNEL MIN. 2.25 lb/sf SHEAR STRESS
- ROCK OUTLET PROTECTION

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 6/10/21
 [Signature]
 CHIEF, DIVISION OF LAND DEVELOPMENT/WH
 DATE: 5/25/21

NO.	DATE	REVISION

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. 30736, Expiration Date: 08-03-22.

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 (P) 410-485-8105 (F) 410-485-8849
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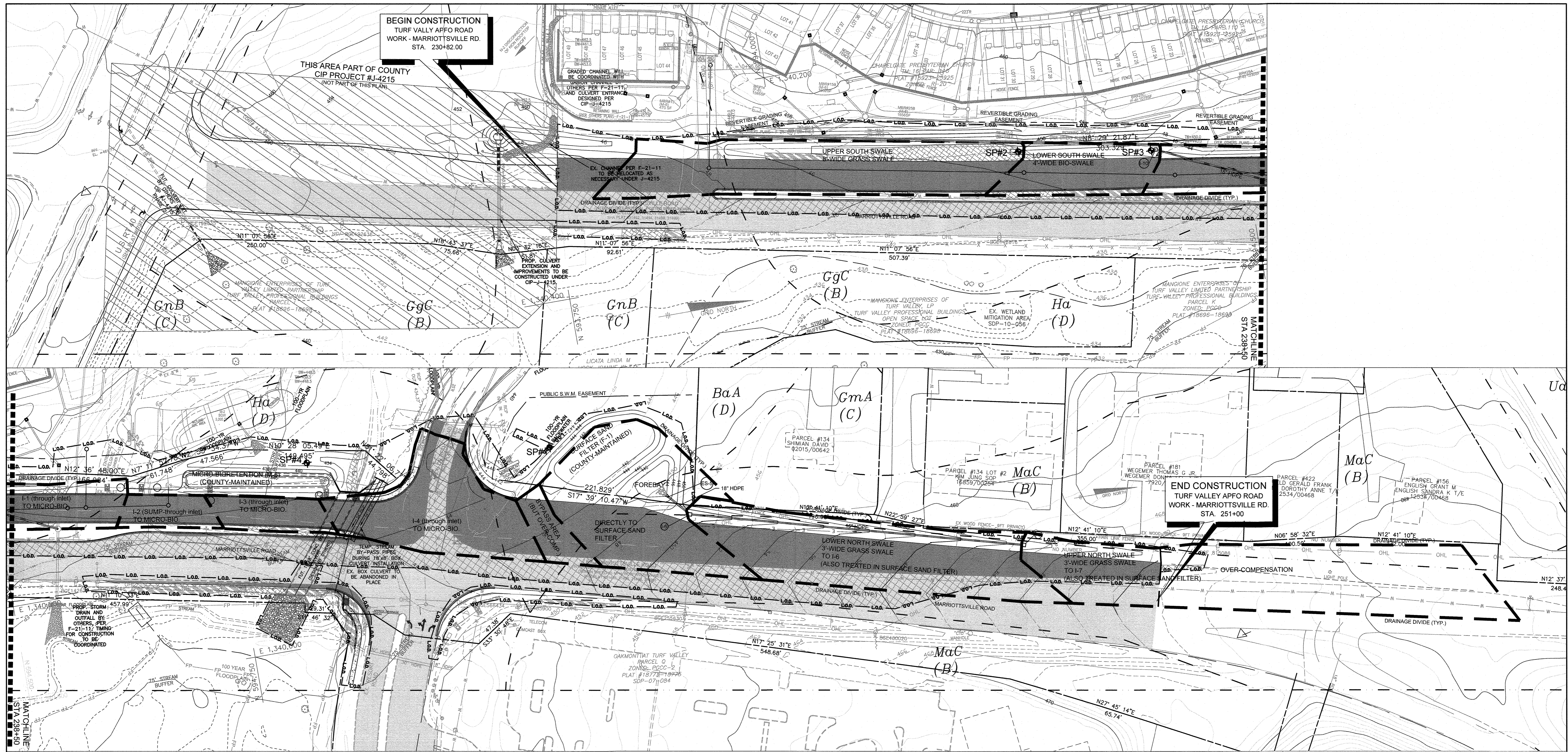
**MARRIOTTVILLE ROAD WIDENING
 ENVIRONMENTAL CONCEPT PLAN
 ECP-21-037**

TAX MAP: 16 - GRID: 10 - ROAD RIGHT-OF-WAY
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 ELECTION DISTRICT NO. 3 - HOWARD COUNTY, MARYLAND

DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY
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 1205 YORK ROAD, PENTHOUSE
 LUTHERVILLE, MARYLAND 21093
 410-825-8400

**CONCEPT EROSION AND SEDIMENT
 CONTROL PLAN**

DATE: MAY 2021	BEI PROJECT NO. 2769
DESIGN: MLS	DRAFT: MLS
SCALE: 1" = 50'	SHEET 5 OF 6



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 7/7/21
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 7/1/24
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

NO.	DATE	REVISION

BENCHMARK
 ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043
 (P) 410-485-8105 (F) 410-485-8844
 WWW.BD-CIVILENGINEERING.COM

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7-1-21

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DESIGN: MLS DRAFT: MLS

**MARRIOTTVILLE ROAD WIDENING
 ENVIRONMENTAL CONCEPT PLAN
 ECP-21-037**

TAX MAP: 16 - GRID: 10 - ROAD RIGHT-OF-WAY
 TAX MAP: 16 - GRID: 10 - PARCEL: 110
 ELECTION DISTRICT NO. 3 - HOWARD COUNTY, MARYLAND

**CONCEPT DRAINAGE AREA MAP-
 ESD AND STORM DRAIN**

DATE: MAY 2021 BEI PROJECT NO. 2769
 SCALE: 1" = 50' SHEET 6 OF 6