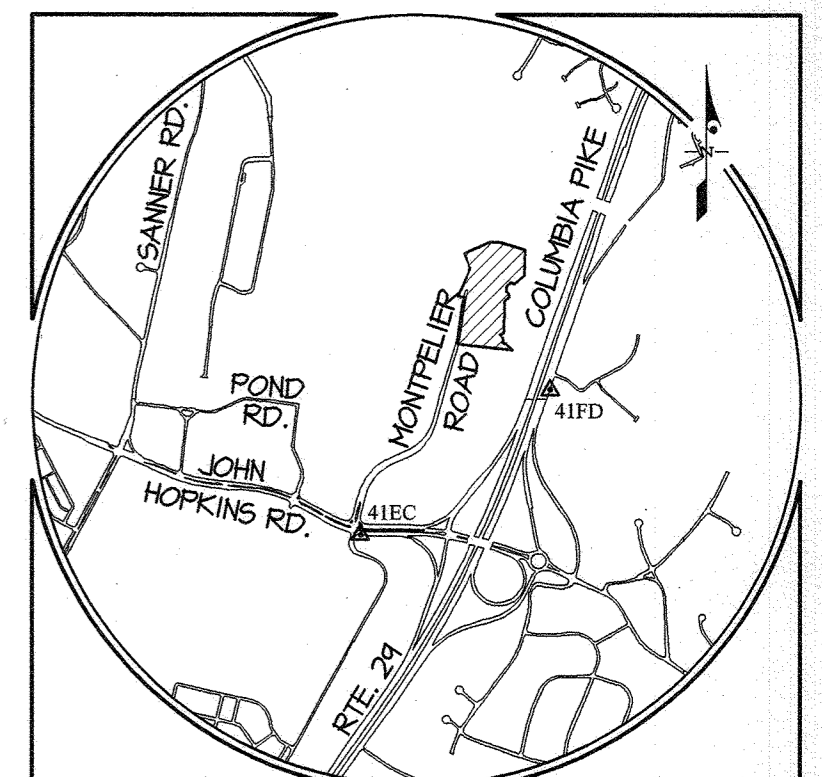


ENVIRONMENTAL CONCEPT PLAN

MONTPELIER RESEARCH PARK

PARCELS E-4D, E-4E, & E-4F

A RESUBDIVISION OF PARCELS E-4A, E-4B, & E-4C



VICINITY MAP
SCALE: 1" = 2,000'

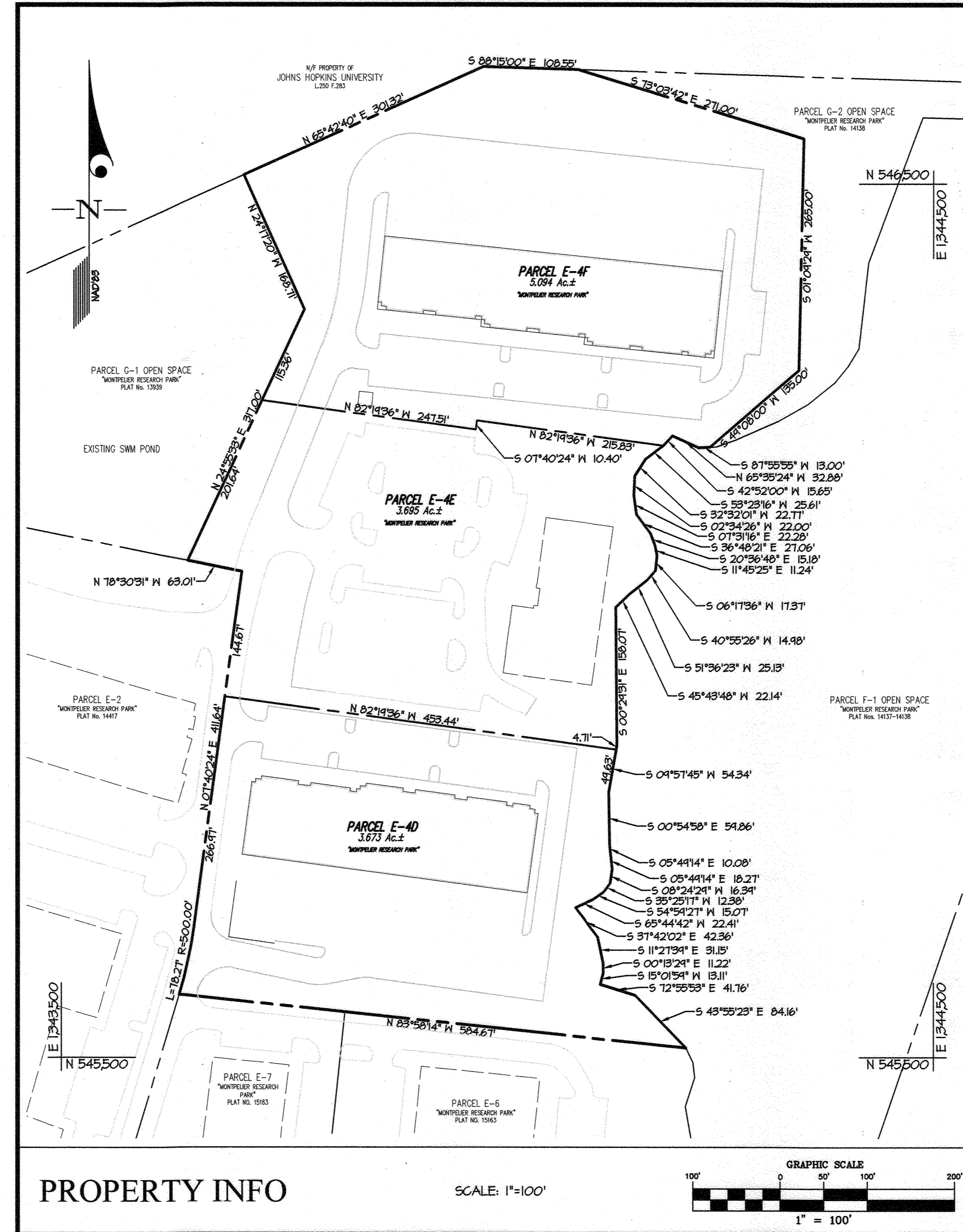
BENCHMARKS
41ED ELEV.=405.101 N = 544,800.610 E = 1,334,251.127
41FD ELEV.=353.255 N = 545,045.451 E = 1,344,610.162
ADC MAP, 32 GRID, D8

ESD SWM STRATEGY
THE STORMWATER MANAGEMENT REQUIREMENT FOR THE SITE WILL BE CALCULATED AS NEW DEVELOPMENT. AT A MINIMUM, 1" OF ESD VOLUME (MGV) WILL BE PROVIDED FOR ALL IMPERVIOUS AREA WITHIN THE STUDY AREA. THE REMAINING ESD VOLUME (CFV) IS PROVIDED WITHIN THE ADJACENT SWM POND ON PARCEL G-1. THIS POND WAS CONSTRUCTED UNDER SDP-49-042 AS A TYPE M-3, POND/WETLAND SYSTEM FACILITY.

STORMWATER MANAGEMENT REQUIREMENT	
DEVELOPMENT AREA :	0.54 Ac.
% IMPERVIOUS:	65%
TARGET Pe:	1.0" (SEE NOTE ABOVE)
REQUIRED ESDV:	$A \times R_v \times P_e / 12 =$ $(0.54 \times 43.56 \times 0.633 \times 1.0) / 12 = 19,737 \text{ cf}$

STORMWATER MANAGEMENT RECHARGE	
DEVELOPMENT AREA :	0.54 Ac.
% IMPERVIOUS:	65%
RECHARGE FACTOR:	0.26
REQUIRED RECHARGE:	$S \times R_v \times A / 12 =$ $(0.260 \times 0.646 \times 0.54 \times 43.560) / 12 = 5/32 \text{ cf}$
PROVIDED RECHARGE BY MICRO-BIOS:	5/32 cf

ESD SUMMARY TABLE				
AREA NO.	AREA (SF)	IMPERVIOUS	ESDV (CF)	Pe PROVIDED
MBR 1	21,128	71%	1,239	1.02
MBR 2	21,113	66%	1,139	1.00
MBR 3	39,960	69%	2,775	1.24
MBR 4A	43,166	79%	3,559	1.31
MBR 4B	57,225	82%	5,148	1.38
MBR 5	30,879	62%	1,630	1.05
MBR 6	30,238	69%	1,772	1.05
MBR 7	39,332	74%	2,816	1.20
TOTAL	283,041		20,078	
REQUIRED ESDV		PROVIDED ESDV		
19,737 cf		20,078 cf		



L. SITE ANALYSIS DATA SHEET

AREA OF THE SITE	12.461 AC.
WETLANDS	0.001 AC.
FLOODPLAINS	0.01 AC.
FORESTS	0.26 AC. FOREST EASEMENT (SEE NOTE 1)
STEEP SLOPES 5% AND GREATER	2.71 AC.
ERODIBLE SOILS PROJECT AREA	2.71 AC.
LIMIT OF DISTURBANCE AREA	8.94 AC.
PROPOSED SITE USES	FLEX BUILDINGS
GREEN GREEN AREA	4.74 AC.
PROPOSED IMPERVIOUS AREA	7.81 AC.

2. APPLICABLE DPZ FILE REFERENCE: SDP-48-01, SDP-44-042, SDP-01-51, F-00-44, F-00-166, F-02-17

- NOTES**
- THE FOREST CONSERVATION REQUIREMENTS FOR THIS SITE HAVE BEEN PREVIOUSLY ADDRESSED BY SDP-48-01, F-48-45, SDP-44-02, AND F-44-41 ZONING PLAN.
 - THIS PROPERTY IS ZONED PEC PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
 - NO GRADING, REMOVAL OF VEGETATIVE COVER, OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN WETLANDS STREAMS OR THEIR REQUIRED BUFFERS, AND 100 YEAR FLOODPLAIN AREAS UNLESS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING AS NECESSARY. DISTURBANCES OR WAIVERS.
 - WATER AND SEWER SERVICE WILL BE PUBLIC. WATER AND SEWER SERVICE TO THESE PARCELS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 10.22B OF THE HOWARD COUNTY CODE.
 - APPROVAL OF THIS ECP DOES NOT CONSTITUTE APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN, SITE DEVELOPMENT PLAN, OR GRADINGS OR BUILDING PERMIT 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 SITE DEVELOPMENT PLAN, OR GRADING AND BUILDING PERMIT STAGES. 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.
 - ANTICIPATED WAIVERS:
 - BUILDING A - DRIVEWAY SPACING

LEGEND

- 400 --- EXISTING CONTOUR
- 400 --- PROPOSED CONTOUR
- --- EXISTING TREE LINE
- EX. 8"W S --- EXISTING SANITARY SEWER
- EX. 8"W W --- EXISTING WATERLINE
- EX. SD D --- EXISTING STORM DRAIN TO BE ABANDONED TO BE REMOVED
- T.B.R. --- PROPOSED STORM DRAIN
- --- STRUCTURE NUMBER
- --- WATER LINE PUBLIC
- --- PUBLIC EASEMENT
- --- SEWER LINE (PUBLIC)
- --- SEWER LINE (PRIVATE)
- --- PROPOSED CURB AND GUTTER
- --- EXISTING CURB AND GUTTER
- --- EXISTING EDGE OF PAVEMENT
- --- LIMIT OF DISTURBANCE
- --- SOIL BOUNDARY
- --- SOIL TYPE
- --- EXISTING BUILDING
- --- PROPOSED BUILDING
- --- EASEMENTS
- --- PROPERTY LINE
- --- SWM DRAINAGE DIVIDE

ESD DESIGN NARRATIVE:
The stormwater management for this site will be provided by a combination of micro-scale practices within the development area and by an existing adjacent regional stormwater pond. The stormwater analysis for the project was split into study areas. Building 'A' will be calculated as redevelopment and Building 'B' will be calculated as new development. See the individual analysis for additional information.
There are no existing natural resources on the site. The site has previously been mass-graded for future development. There will be no disturbance to any existing forest conservation easement. The natural flow patterns of the site will be maintained. The site will continue to drain to the existing stormwater pond. As a flex type building project, the reduction of impervious areas is not feasible for this project. The sediment controls will not increase the limit of disturbance.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Chief, Division of Land Development
Chief, Development Engineering Division
Date: 7.29.24

GLW
PLANNING | ENGINEERING | SURVEYING
3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20886 | GLWPA.COM
PHONE: 301-421-4024 | BAL: 410-880-1820 | DC&VA: 301-889-2524 | FAX: 301-421-4186

DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE	REVISION	BY	APPR.
DDS	AWL	DDS				

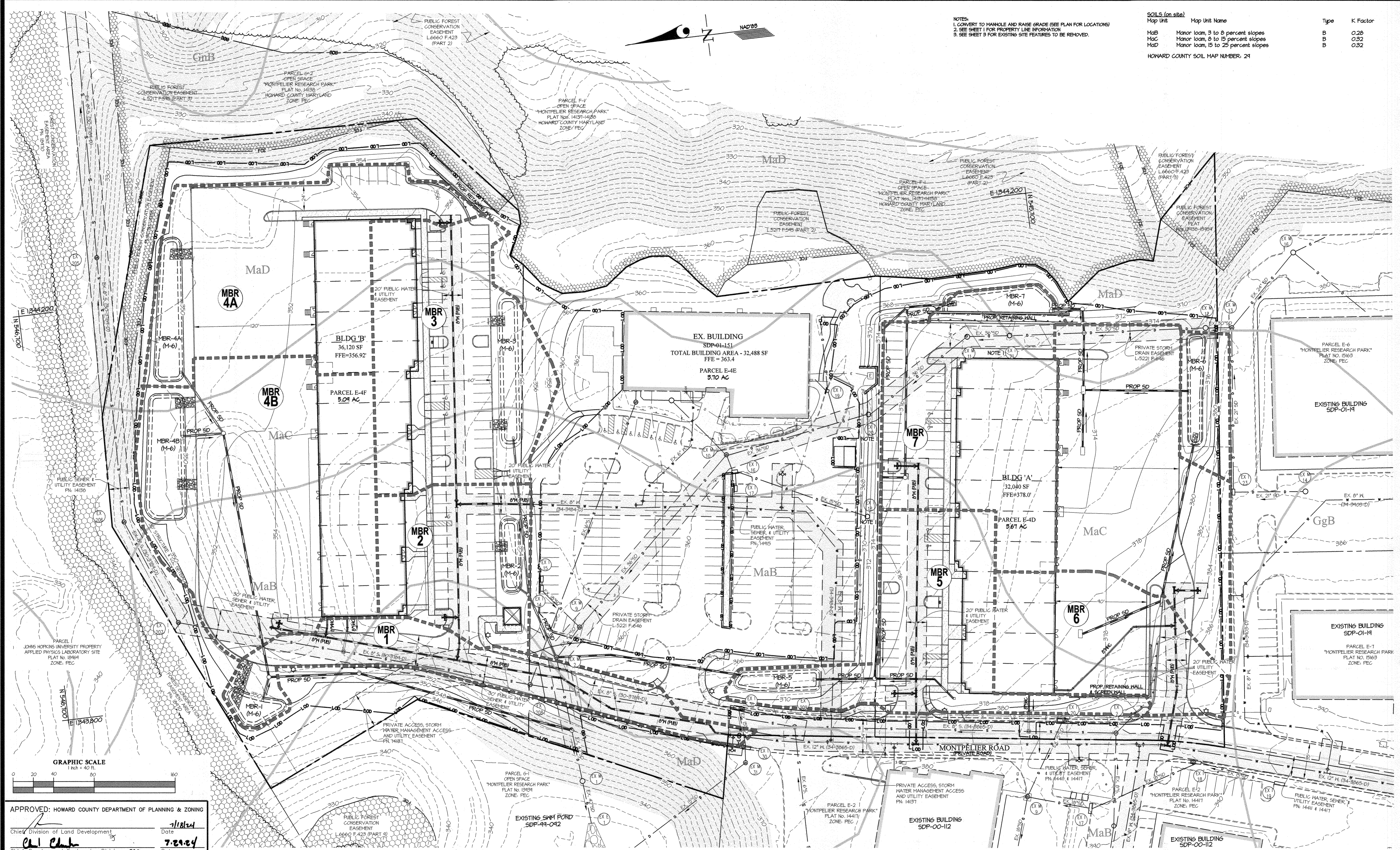
OWNER/PREPARED FOR:
MP BUSINESS PARK LLC
2560 LORD BALTIMORE DR
BALTIMORE MD 21244
ATTN: Karen Watsic

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE PLANS 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. 54280
EXPIRATION DATE: MAY 14, 2025

COVER SHEET
MONTPELIER RESEARCH PARK
PARCELS E-4D, E-4E, & E-4F
FLEX BUILDINGS
ELECTION DISTRICT No. 5
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	PEC	23093
DATE	TAX MAP - GRID	SHEET
JUNE, 2024	41 - 17	1 OF 3

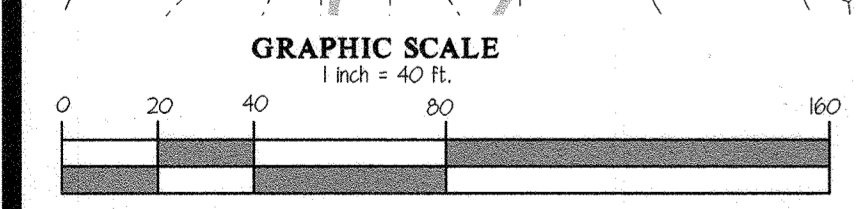
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NOTES:
 1. CONVERT TO MANHOLE AND RAISE GRADE (SEE PLAN FOR LOCATIONS)
 2. SEE SHEET 1 FOR PROPERTY LINE INFORMATION
 3. SEE SHEET 3 FOR EXISTING SITE FEATURES TO BE REMOVED.

SOILS (on site)	Map Unit Name	Type	K Factor
MaB	Manor loam, 3 to 8 percent slopes	B	0.28
MaC	Manor loam, 8 to 15 percent slopes	B	0.32
MaD	Manor loam, 15 to 25 percent slopes	B	0.32

HOWARD COUNTY SOIL MAP NUMBER: 24



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Chief, Division of Land Development Date: 7/18/24
 Chief, Development Engineering Division Date: 7-29-24

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DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE	REVISION	BY	APPR.
dds	dds					

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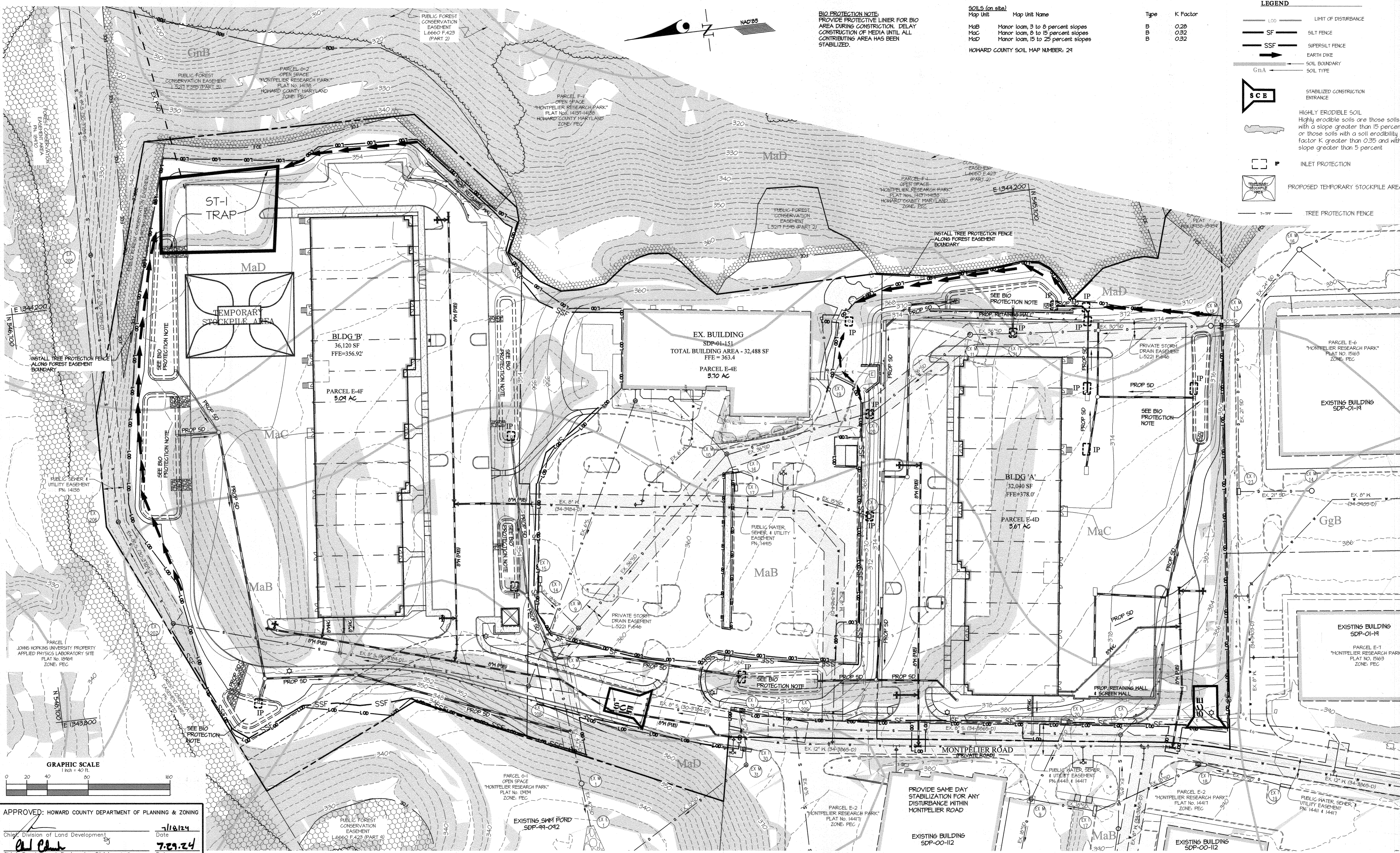
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 EXPIRATION DATE: MAY 14, 2025

ENVIRONMENTAL CONCEPT PLAN
MONTPELIER RESEARCH PARK
 PARCELS E-4D, E-4E, & E-4F
 FLEX BUILDINGS

ELECTION DISTRICT No. 5
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE NO.
1" = 40'	PEC	23093
DATE	TAX MAP - GRID	SHEET
JUNE, 2024	41 - 17	2 OF 3

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BIO PROTECTION NOTE:
 PROVIDE PROTECTIVE LINER FOR BIO AREA DURING CONSTRUCTION. DELAY CONSTRUCTION OF MEDIA UNTIL ALL CONTRIBUTING AREA HAS BEEN STABILIZED.

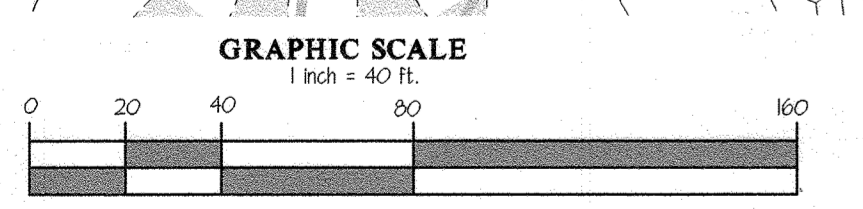
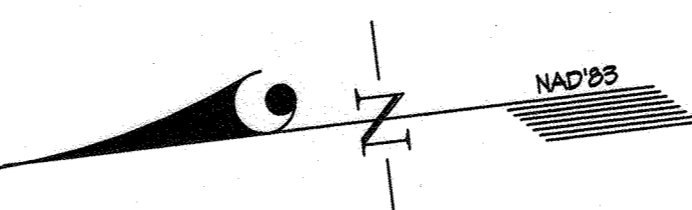
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HOWARD COUNTY SOIL MAP NUMBER: 24

LEGEND

	L00	LIMIT OF DISTURBANCE
	SF	SILT FENCE
	SSF	SUPERSILT FENCE
	ED	EARTH DIKE
	GnA	SOIL BOUNDARY
		SOIL TYPE
	SCB	STABILIZED CONSTRUCTION ENTRANCE
		HIGHLY ERODIBLE SOIL 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.
	IP	INLET PROTECTION
		PROPOSED TEMPORARY STOCKPILE AREA
	T-PP	TREE PROTECTION FENCE



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development *[Signature]* Date: 7/18/24
 Chief, Development Engineering Division *[Signature]* Date: 7-29-24

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dds	dds					

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 EXPIRATION DATE: MAY 14, 2025

[Signature]

SEDIMENT CONTROL CONCEPT PLAN
MONTPELIER RESEARCH PARK
PARCELS E-4D, E-4E, & E-4F
FLEX BUILDINGS

ELECTION DISTRICT No. 5
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
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L:\CAD\DRAWINGS\23093\PLANS BY GLW\ECP\23093 ECP_SHE_040.dwg
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