# HOWARD COMMUNITY COLLEGE WORKFORCE DEVELOPMENT AND TRADES CENTER

HOWARD COUNTY, MARYLAND ENVIRONMENTAL CONCEPT PLAN ECP-24-045

**LEGEND** 

**EXISTING** 

24" HDPE

====(SD)=====

——/——>>

 $\bigcirc$ 

GATE

**PROPOSED** 

15" RCP

 $\wedge$ 

DESCRIPTION

**BUILDING ROOF LINE** 

**ASPHALT PAVING** 

MILL AND OVERLAY

**SWM FACILITY** 

**IMPERVIOUS AREA** 

DRAINAGE STUDY

STORM DRAIN

**TREELINE** 

CHAIN LINK FENCE

EDGE OF PAVING

PROPERTY LINE

PARKING STRIPING

CONDUIT/DUCTBANK

INLET PROTECTION

**OIL/WATER SEPARATOR** 

**EASEMENT** 

**ELECTRIC** 

STABILIZED

**ENTRANCE** 

CONSTRUCTION

**TREE** 

FENCE GATE

DOOR

SOIL DIVIDE AND SOIL

**BUILDING/SITE FEATURE** 

CONCRETE HEAVY DUTY

CONCRETE PAD/SIDEWALK

SAME DAY STABILIZATION

#### SHEET INDEX

1. ESD-1 COVER SHEET

**EXISTING** 

12"W

---- FO ----

\_\_\_\_\_T \_\_\_\_

---- G

—— CTV ——

----- UK(B) -----

ESD-2 ENVIRONMENTAL CONCEPT PLAN

PROPOSED

ESD-3 OVERALL DRAINAGE AREA MAP EXISTING CONDITIONS
 ESD-4 OVERALL DRAINAGE AREA MAP PROPOSED CONDITIONS

DESCRIPTION

MINOR CONTOUR

WATER VALVE

WATER METER

SILT FENCE ON

SUPER SILT FENCE

**DIVERSION FENCE** 

SANITARY SEWER

**ELECTRIC BOX** 

FIBER OPTIC

**TELEPHONE** 

NATURAL GAS

**UNKNOWN UTILITY** 

AND RIPRAP

PROTECTION

LIGHT POLE

ARROWS

**SOIL BORING** 

PASS THROUGH GRATE

**COMMUNICATION BOX** 

**DIVERSION FENCE FLOW** 

STORM DRAIN MANHOLE

STORM DRAIN INLET

CTV

SANITARY MANHOLE

PAVEMENT

SILT FENCE

SWM LIMIT OF DISTURBANCE

- 5. ESD-5 ESD DRAINAGE AREA MAP
- 6. ESD-6 CONCEPT EROSION AND SEDIMENT CONTROL PLAN

### BENCHMARK DATA

- 3: N 564330.9127, E 1345714.0185, ELEV. 470.68
- 4: N 564368.6549, E 1345873.3398, ELEV. 471.08
- 5: N 564166.0880, E 1345841.4212, ELEV. 461.88

## HOWARD COUNTY GEODETIC COORDINATES

35C5: N 562148.449, E 1344554.499 , ELEV. 451.541

35FA: N 559266.116, E 1344682.707, ELEV. 410.340

#### SITE ANALYSIS DATA CHART

TOTAL PROPERTY AREA: 97.46 ACRES
AREA OF PLAN SUBMISSION: 3.19 ACRES
LIMIT OF DISTURBED AREA (ESC): 3.19 ACRES
LIMIT OF DISTURBED AREA (SWM): 2.91 ACRES
PROPOSED IMPERVIOUS COVER: 2.01 ACRES
ALL AREAS BELOW ARE TAKEN FROM WITHIN THE LOD
STEEP SLOPES AREA: 0 SF
FLOODPLAIN AREA: 0 SF
WETLANDS AREA: 0 SF

STREAM, WETLANDS, OR FLOODPLAIN BUFFER AREA: 0 SF FORESTS: SEE SIMPLIFIED FOREST STAND DELINEATION PLAN ERODIBLE SOLLS: 0 SE

PRESENT ZONING DESIGNATION: POR & NT PROPOSED USES: EDUCATIONAL BUILDING

#### WAIVERS: NONE

CAMPUS DRIVE

**HETHERINGTON** 

THE ROUSE COMPANY

FOUNDATION STUDENT

SERVICES HALL

LETTLE PATUXENT PARKWAY

PETER AND ELIZABETI

HOROWITZ VISUAL AND

PERFORMING ARTS CENTER

APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN DOES NOT CONSTITUTE ANY APPROVAL

FOREST CONSERVATION OBLIGATIONS FOR THE ENTIRE CAMPUS HAVE BEEN PREVIOUSLY

MAY BE PROVIDED UPON THE REVIEW OF THE APPLICABLE DEVELOPMENT PLANS IN

OF SUBSEQUENT SUBDIVISION OR SITE DEVELOPMENT PLANS. ADDITIONAL PLAN COMMENTS

MET WITH 21.318 ACRES OF ON-SITE FOREST CONSERVATION EASEMENTS (SEE F-07-010 PLAT 19049) AND 2.61 ACRES OF OFF-SITE FOREST CONSERVATION EASEMENTS AT THE BELMONT

1" = 200'

ACCORDANCE WITH THE LAND DEVELOPMENT AND ZONING REGULATIONS.

CENTER 9SEE SDP-06-106FC, PLAT NOS 21640 & 21641)

**LOCATION MAP** 

SCIENCE ENGINEERING AND TECHNOLOGY

JOHNS HOPKINS HOWARD \ \

**GENERAL NOTES** 

COUNTY MEDICAL

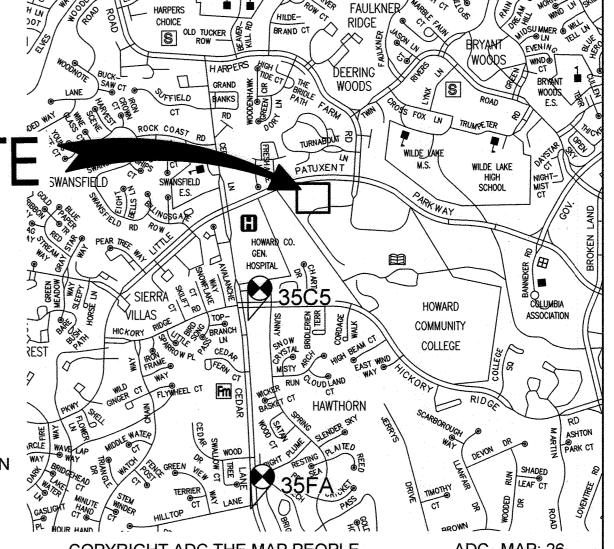
CENTER

MIN

 $\subseteq$ 

BUILDING

APPLICABLE DPZ FILE NUMBERS: SDP-03-156, SDP-11-020, SDP-14-066, GP-09-81



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PERMITTED USE NUMBER 21002224

ADC MAP: 26 GRID: D8

VICINITY MAP

1" = 1500'

## ENVIRONMENTAL SITE DESIGN/SWM NARRATIVE

THE SITE WAS EVALUATED FOR STORMWATER MANAGEMENT, AS REQUIRED BY THE STORMWATER MANAGEMENT ACT OF 2007 AND THE HOWARD COUNTY DESIGN MANUAL VOLUME THESE REGULATIONS REQUIRE THAT ENVIRONMENTAL SITE DESIGN (ESD) BE IMPLEMENTED TO THE MAXIMUM EXTENT PRACTICABLE FOR EVERY NEW PROJECT. ENVIRONMENTAL SITE DESIGN STRATEGY TO:

- OPTIMIZE CONSERVATION OF NATURAL FEATURES.
- MINIMIZE IMPERVIOUS SURFACES.
- SLOW DOWN RUNOFF TO MAINTAIN DISCHARGE TIMING AND INCREASE INFILTRATION AND EVAPOTRANSPIRATION.
- USE OTHER NONSTRUCTURAL PRACTICES AND INNOVATIVE TECHNOLOGIES AS APPROVED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE).

BY IMPLEMENTING ESD, THE ULTIMATE GOAL IS TO MAINTAIN THE RUNOFF CHARACTERISTICS OF THE SITE TO MIMIC PREDEVELOPMENT WOODS IN GOOD CONDITION.

IN THIS PROJECT, THE OVERALL PROPOSED DRAINAGE PATTERNS ARE MOSTLY MAINTAINED TO EXISTING DRAINAGE CONDITIONS. THE LIMIT OF DISTURBANCE IS MINIMIZED BY CLUSTERING THE MICRO-BIORETENTION FACILITIES, ADJACENT TO IMPERVIOUS AREAS AND TOWARDS THE INTERIOR OF THE SITE. PAVEMENT WIDTHS ARE REDUCED WHERE POSSIBLE. NO STRUCTURAL STORMWATER MANAGEMENT FACILITIES ARE REQUIRED. HOWARD COUNTY COMMUNITY COLLEGE WILL MAINTAIN ALL OF THE PROPOSED ESD PRACTICES.

THE ENTRANCES TO THE SITE MEET ALL HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS STANDARDS.

\*\*\*EROSION AND SEDIMENT CONTROLS WILL BE PROVIDED THROUGH A USE OF A STABILIZED CONSTRUCTION ENTRANCE, SUPER SILT FENCE, INLET PROTECTION, DIVERSION FENCE, AND OTHER APPROVED MEASURES.

THE SITE WILL MAXIMIZE THE USE OF ESD PRACTICES BY INCORPORATING MICRO-BIORETENTION

THE VOLUMETRIC REQUIREMENTS FOR REDEVELOPMENT ARE BASED ON A PE OF ONE (1) INCH FOR PROPOSED IMPERVIOUS AREA THAT DOES NOT EXCEED THE EXISTING IMPERVIOUS AREA TOTAL. ANY ADDITIONAL PROPOSED IMPERVIOUS AREA EXCEEDING THE EXISTING IMPERVIOUS AREA IS SUBJECT TO MDE'S NEW DEVELOPMENT CRITERIA. HOWEVER, THE CURRENT SITE LAYOUT CONTAINS LESS IMPERVIOUS AREA THAN EXISTING CONDITIONS. THE PROJECT'S SWM LIMIT OF DISTURBANCE (LOD) IS UTILIZED FOR THE SWM REQUIREMENT CALCULATIONS, WITH UTILITY WORK FOR THE PROJECT THAT WILL NOT RESULT IN A LAND USE CHANGE FROM EXISTING CONDITIONS EXCLUDED FROM THE SWM CALCULATIONS. THESE AREAS ARE NOT INCLUDED IN THE CALCULATIONS BUT ARE INCLUDED AS A LIMIT OF WORK (LOW). A TARGET ESD VOLUME IS THEN CALCULATED FOR THE DRAINAGE AREA BASED ON THE PE AND THE PROPOSED SITE IMPERVIOUS AREAS. THE TARGET ESD VOLUME IS 7,087 CF AND THE TARGET PE VAULE IS 1 INCH.

INDIVIDUAL ESD PRACTICES ARE LOCATED WITHIN THE SITE AND SIZED BASED ON THE DRAINAGE AREA AND IMPERVIOUS AREA FLOWING TO THE PRACTICE. THE TOTAL OF THE ESD VOLUMES CAPTURED BY EACH ESD PRACTICE MEETS THE TARGET ESD VOLUME INITIALLY CALCULATED FOR THE ENTIRE SITE.

BY MEETING THE ESD VOLUME, WATER QUALITY VOLUME (WQV) REQUIREMENTS ARE MET.

FOR THIS PROJECT, A TOTAL OF 3 INDIVIDUAL ESD PRACTICES ARE PROPOSED: 3 MICRO-BIORETENTION FACILITIES.

ADDRESS CHART	
PARCEL#	STREET ADDRESS
47	10901 LITTLE PATUXENT PARKWAY

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CL CL C TOURS TO THE TOUR

DEVELOPER: STREET ADDRESS WATER CODE SEWER CODE BUILDING HOWARD COMMUNITY COLLEGE HOWARD COMMUNITY COLLEGE PUBLIC PUBLIC N/A 10901 LITTLE PATUXENT PARKWAY 10901 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 COLUMBIA, MARYLAND 21044 PROJECT NAME SECTION/AREA PARCEL ATTN: MR. TRAVIS HOPKINS ATTN: MR. TRAVIS HOPKINS HOWARD COMMUNITY COLLEGE WORKFORCE DEVELOPMENT AND 443-518-4751 ZONING TAX MAP BLOCK ELEC. DIST. CENSUS TRACT GRID #6 POR/NT 6056.02

REVISIONS

OWNER/DEVELOPER



10901 LITTLE PATUXENT PARKWAY COLUMBIA, MD 21044 443-518-1000

WORKFORCE DEVELOPMENT AND TRADES CENTER

PROPERTY

TAX MAP: 35

DADOEL 4

GRID: 6

PARCEL: 47

ZONING: POR & NT ELECTION DISTRICT: NO. 5

GRAPHIC SCALES

0 1500' 3000 SCALE: 1" = 1500'

SCALE: 1" = 200'

SIGNATURE



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. 19376

EXPIRATION DATE: 09/22/2025



Whitman, Requardt & Associates, LLP 801 South Caroline Street, Baltimore, Maryland 21231

Phone: 410-235-3450 Fax: 410-243-5716

COVER SHEET

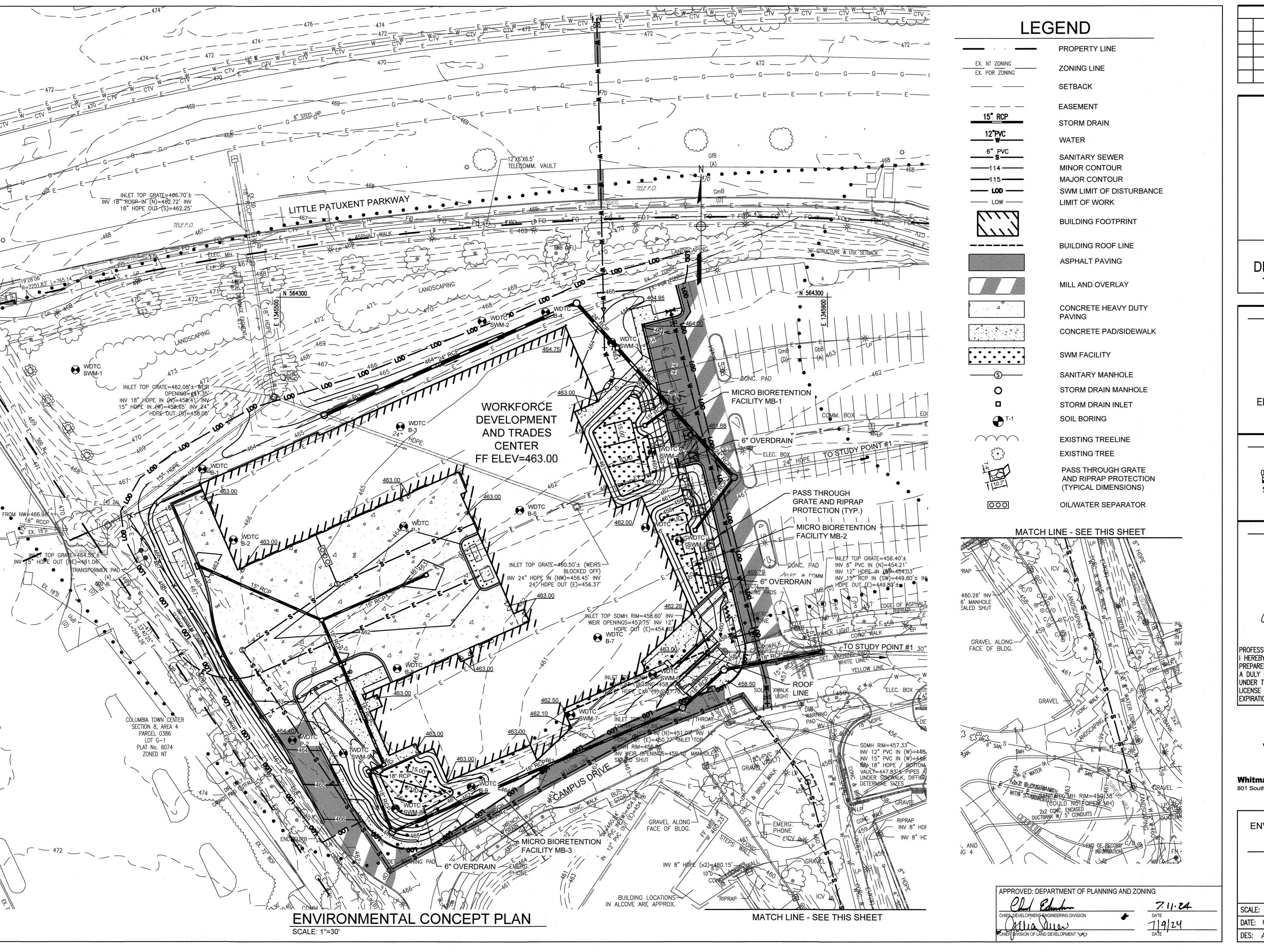
DRAWING NO.

ESD-1

DATE: 6/26/2024 SHEET 1 OF 6

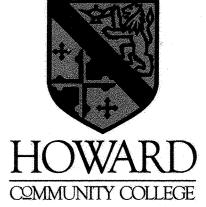
DES: AKC DRAWN: AKC CHECK: BWJ

ECP-24-045



REVISIONS

OWNER/DEVELOPER



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WORKFORCE DEVELOPMENT AND TRADES CENTER

PROPERTY

TAX MAP: 35 GRID: 6 PARCEL: 47

ZONING: POR & NT
ELECTION DISTRICT: NO. 5

GRAPHIC SCALES

0 15' 30' 60' SCALE: 1" = 30'

SIGNATURE



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ENVIRONMENTAL CONCEPT PLAN

DRAWING NO.

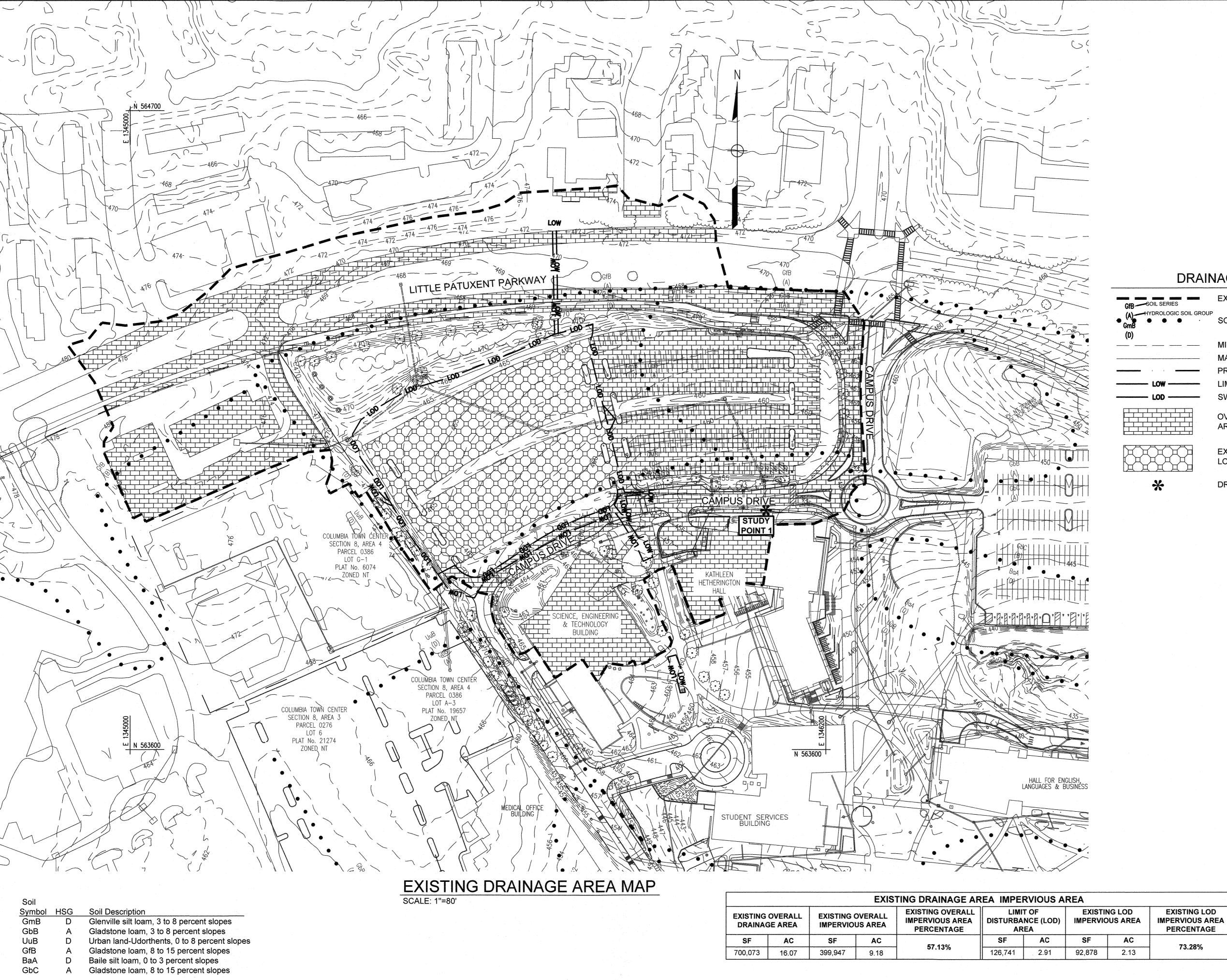
ESD-2

SCALE: 1"=30'

DATE: 6/26/2024

DATE: 6/26/2024 SHEET 2 OF 6

DES: AKC DRAWN: AKC CHECK: BWJ



HYDROLOGIC SOIL GROUP
SOIL DIVIDE AND SOIL LABEL

PERCENTAGE

73.28%

IVISION OF LAND DEVELOPMENT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

PROPERTY BOUNDARY LIMIT OF WORK SWM LIMIT OF DISTURBANCE

AREA OUTSIDE THE LOD

DRAINAGE LEGEND

EXISTING DRAINAGE DIVIDE

MINOR EXISTING CONTOUR (1-FT) MAJOR EXISTING CONTOUR (5-FT)

**OVERALL EXISTING IMPERVIOUS** 

EXISTING IMPERVIOUS AREA INSIDE THE LOD, (BASIS OF SWM CALCULATIONS)

DRAINAGE STUDY POINT

HOWARD COMMUNITY COLLEGE 10901 LITTLE PATUXENT PARKWAY COLUMBIA, MD 21044 443-518-1000 WORKFORCE

**REVISIONS** 

OWNER/DEVELOPER

DEVELOPMENT AND TRADES CENTER

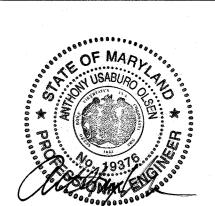
TAX MAP: 35 GRID: 6

PARCEL: 47

**ZONING: POR & NT ELECTION DISTRICT: NO. 5** 

GRAPHIC SCALES

SIGNATURE



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OVERALL DRAINAGE AREA MAP **EXISTING CONDITIONS** 

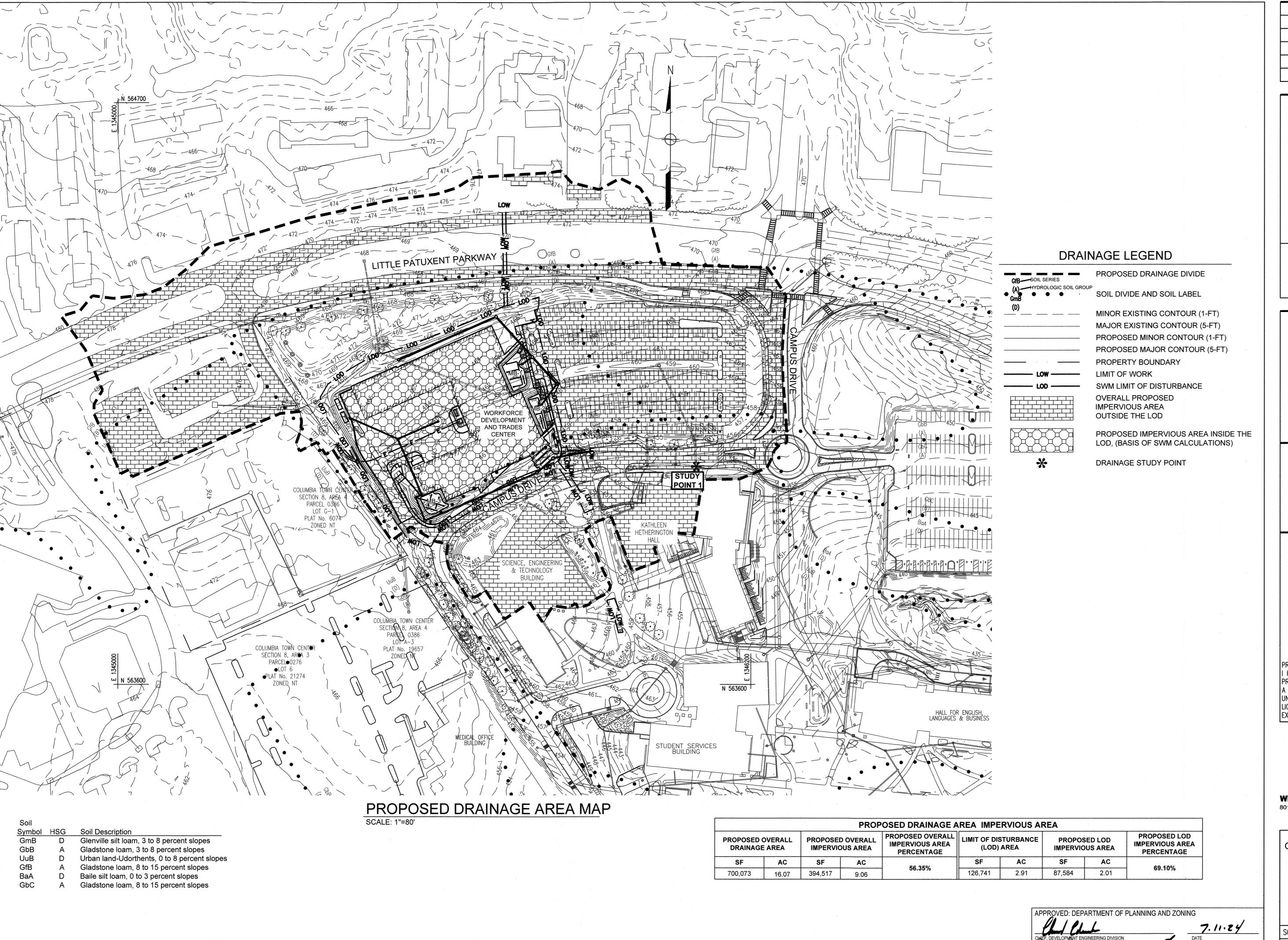
DRAWING NO.

ESD-3

SCALE: 1"=80'

SHEET 3 OF 6 DATE: 6/26/2024 DES: AKC DRAWN: AKC CHECK: BWJ

ECP-24-045



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10901 LITTLE PATUXENT PARKWAY COLUMBIA, MD 21044 443-518-1000

WORKFORCE DEVELOPMENT AND TRADES CENTER

TAX MAP: 35

**PROPERTY** 

GRID: 6
PARCEL: 47

ZONING: POR & NT ELECTION DISTRICT: NO. 5

GRAPHIC SCALES

0 40' 80' 160' SCALE: 1" = 80'

SIGNATURE



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OVERALL DRAINAGE AREA MAP PROPOSED CONDITIONS

DRAWING NO.

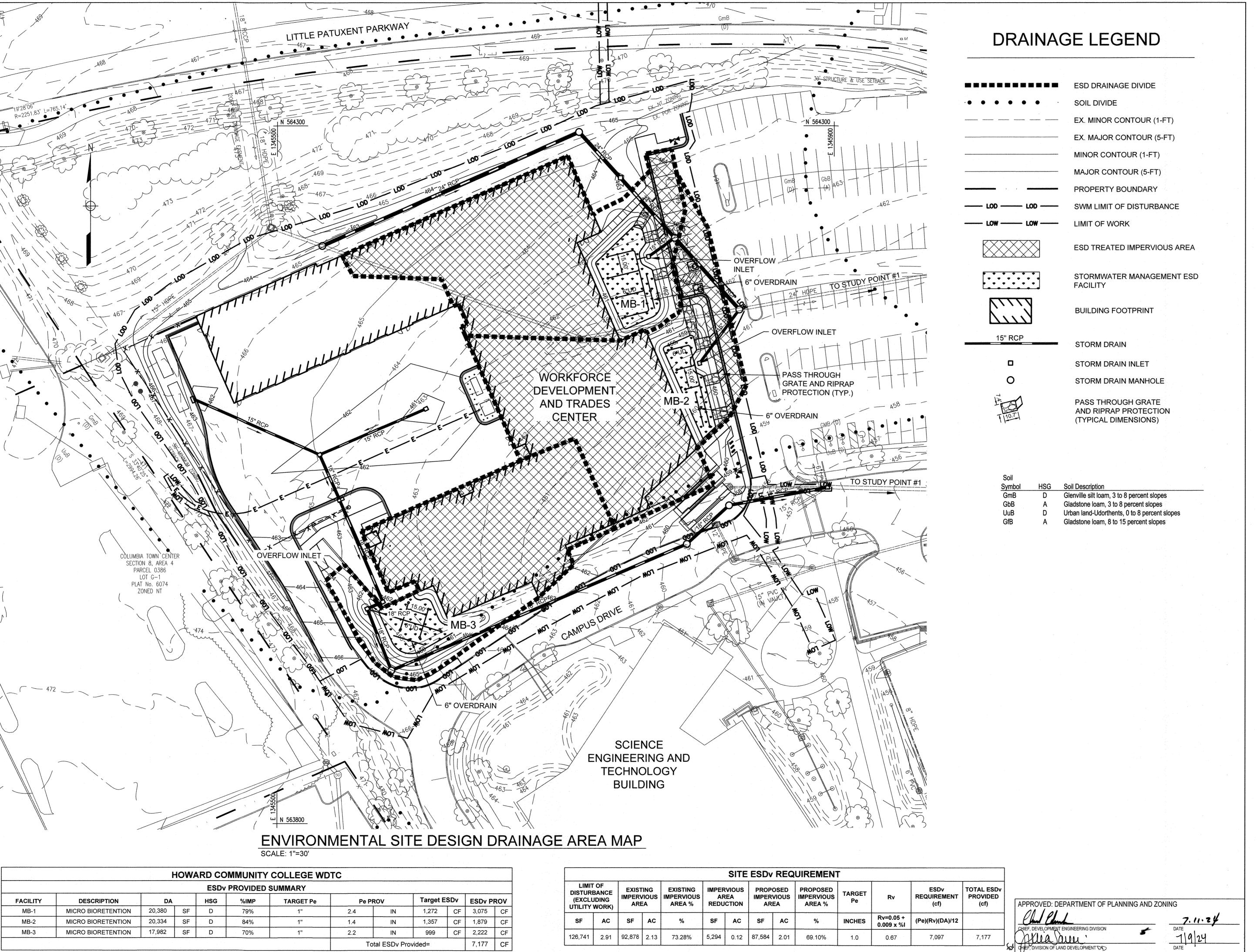
ESD-4

SCALE: 1"=80'

CHIEF DIVISION OF LAND DEVELOPMENT

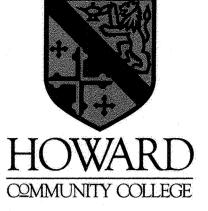
DATE: 6/26/2024 SHEET 4 OF 6
DES: AKC DRAWN: AKC CHECK: BWJ

ECP-24-045



REVISIONS

OWNER/DEVELOPER



10901 LITTLE PATUXENT PARKWAY COLUMBIA, MD 21044 443-518-1000

WORKFORCE DEVELOPMENT AND TRADES CENTER

TAX MAP: 35

GRID: 6

PARCEL: 47

ZONING: POR & NT

ELECTION DISTRICT: NO. 5

PROPERTY

0 15' 30' 60' SCALE: 1" = 30'

SIGNATURE

GRAPHIC SCALES

TO SABURO

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Phone: 410-235-3450 Fax: 410-243-5716

ESD DRAINAGE AREA MAP

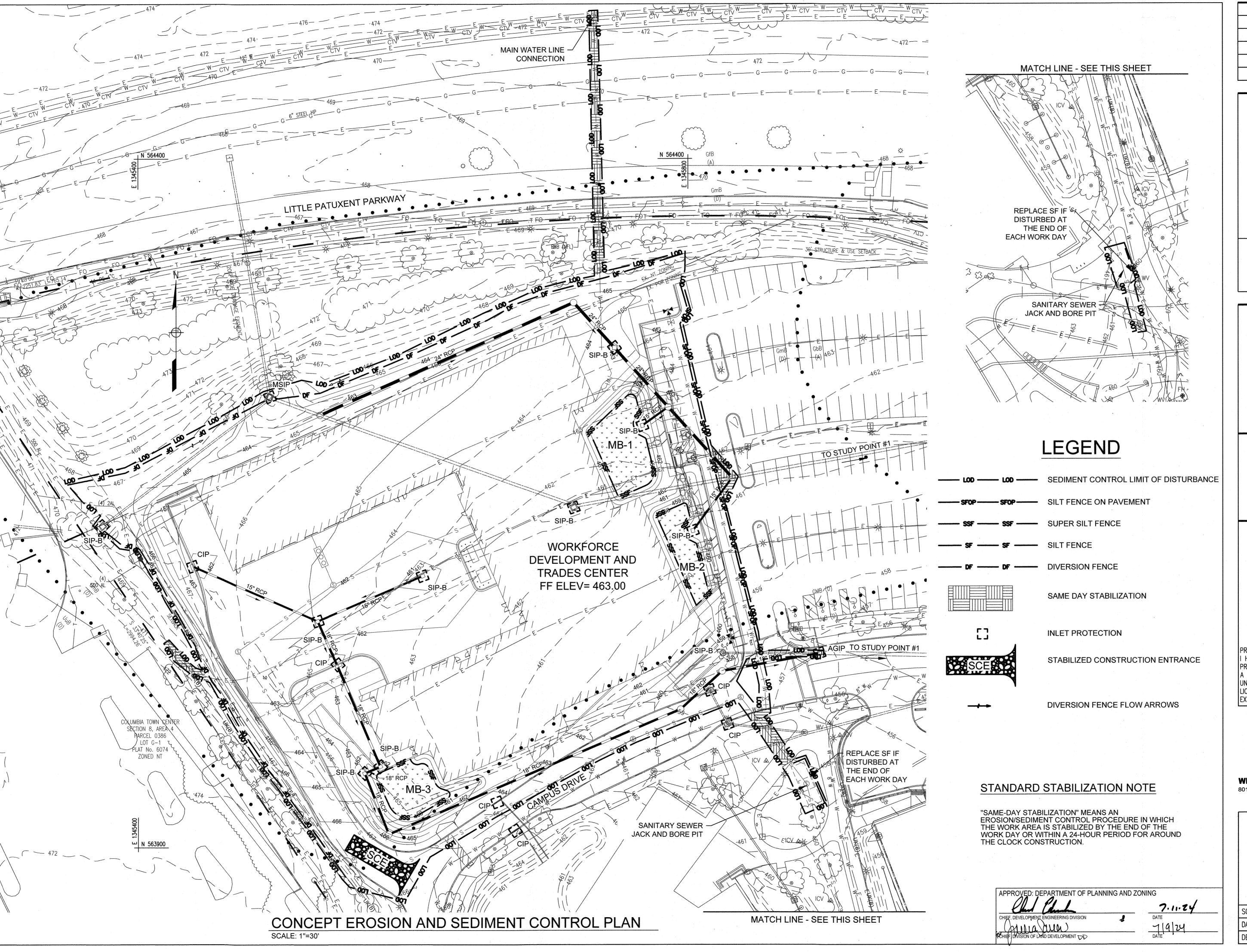
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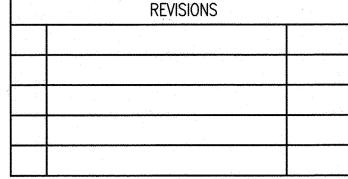
ESD-5

SCALE: 1"=30'

DATE: 6/26/2024 SHEET 5 OF 6

DES: AKC DRAWN: AKC CHECK: BWJ





OWNER/DEVELOPER



COMMUNITY COLLEGE

10901 LITTLE PATUXENT PARKWAY COLUMBIA, MD 21044 443-518-1000

WORKFORCE DEVELOPMENT AND TRADES CENTER

PROPERTY

TAX MAP: 35

PARCEL: 47

GRID: 6

ZONING: POR & NT

**ELECTION DISTRICT: NO. 5** 

GRAPHIC SCALES

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CONCEPT EROSION AND SEDIMENT CONTROL PLAN

DRAWING NO.

ESD-6

SCALE: 1"=30'

DATE: 6/26/2024 SHEET 6 OF 6
DES: AKC DRAWN: AKC CHECK: BWJ