

HC CONTROL STATIONS
 306A
 NORTHING: 566,053.574
 EASTING: 1352,171.604
 ELEVATION: 334.844
 (LATEST ADJ. FEB. 2014)
 306AA
 NORTHING: 562,804.842
 EASTING: 1344,906.240
 ELEVATION: 354.163
 (LATEST ADJ. FEB. 2014)

ADC MAP 33 GRID B-1

LEGEND

- 400 --- EXISTING CONTOUR
- 400 --- PROPOSED CONTOUR
- EXISTING TREE LINE
- EX. S --- EXISTING SANITARY SEWER
- EX. W --- EXISTING WATERLINE
- EX. D --- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- STRUCTURE NUMBER
- FIRE HYDRANT (FH)
- WATER LINE PUBLIC
- PUBLIC WATER EASEMENT
- SEWER LINE (PUBLIC)
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- EXISTING EDGE OF PAVEMENT
- EXISTING BUILDING
- T.B.R. --- TO BE REMOVED
- L.O.O. --- LIMIT OF DISTURBANCE
- SOIL BOUNDARY
- SOIL TYPE
- FP --- 100 YEAR FLOODPLAIN
- EXISTING BUILDING
- PROPOSED BUILDING
- EASEMENTS
- PROPERTY LINE
- ESD DRAINAGE DIVIDE
- T.B.R. --- TO BE REMOVED
- T.B.A. --- TO BE ABANDONED

SOILS (on site)

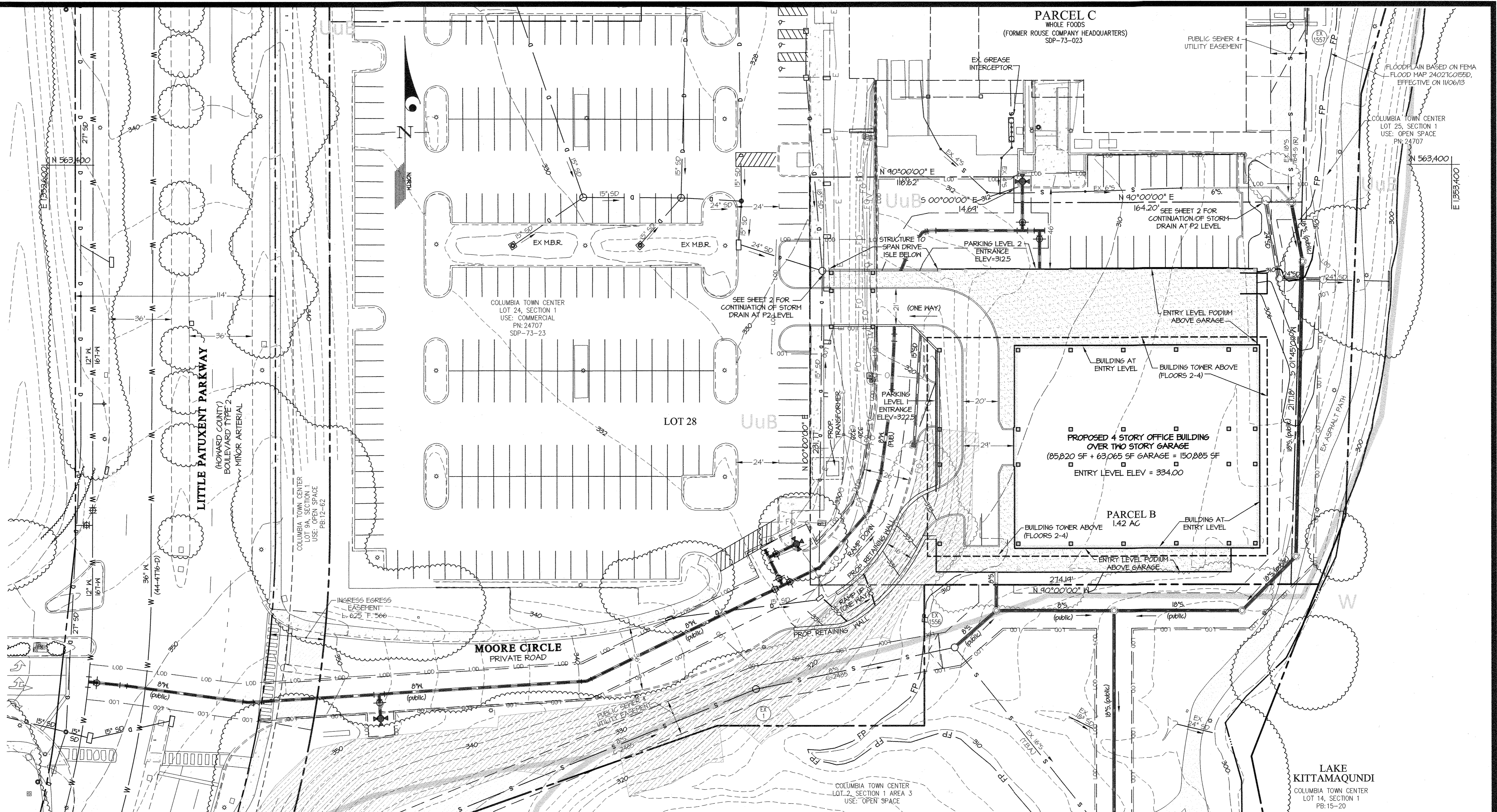
Map Unit Name	Type	K Factor
WB	Urban land-Use/roads complex, 0 to 8 percent slopes	0.28

HOWARD COUNTY SOIL MAP NUMBER: 18 - SAVAGE NN

SHEET INDEX

- ENVIRONMENTAL CONCEPT PLAN (GRADE LEVEL)
- ENVIRONMENTAL CONCEPT PLAN (PARKING LEVEL - 2)
- SEDIMENT CONTROL CONCEPT PLAN

GRAPHIC SCALE
 1 inch = 30 ft



1. SITE ANALYSIS DATA SHEET (PARCEL B)

AREA OF THE SITE	1421 AC.
WETLANDS	0.001 AC.
FLOODPLAINS	0.001 AC.
FORESTS	0.0 + AC.
STEEP SLOPES 15% AND GREATER	0.34 AC.
ERODIBLE SOILS PROJECT AREA	0.34 AC.
LIMIT OF DISTURBANCE AREA	2.1 AC.
PROPOSED SITE USES	OFFICE
GREEN OPEN AREA	1221 AC.
PROPOSED IMPERVIOUS AREA	0.201 AC.

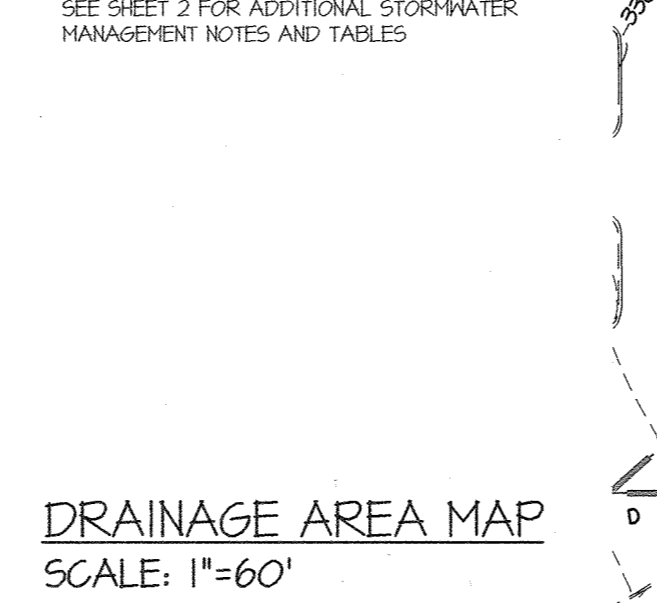
2. APPLICABLE DPZ FILE REFERENCE: FDF-DC-L-1, SDP-TB-29, NP-22-018

NOTES:

- THIS SITE IS EXEMPT FROM THE FOREST CONSERVATION ORDINANCE IN ACCORDANCE WITH SECTION 16.12(2)(B)(VII). A PLANNED UNIT DEVELOPMENT OF AT LEAST 75 ACRES WHICH HAS PRELIMINARY PLAN APPROVED BEFORE 12/31/02.
- THIS PROPERTY IS ZONED N1 PER THE OCTOBER 6, 2003 COMPREHENSIVE ZONING PLAN AND D1MA PER FDF-DC-L-1
- 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 HANOVERS HAVE BEEN APPROVED.
- WATER AND SEWER SERVICE WILL BE PUBLIC. WATER AND SEWER SERVICE TO THESE PARCELS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122B OF THE HOWARD COUNTY CODE.
- HDE PERMITS WILL BE OBTAINED FOR ALL ENVIRONMENTAL DISTURBANCES AT THE NEXT PLAN STAGE.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN, SITE DEVELOPMENT PLAN, OR GRADING 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.
- THIS SITE IS A REDEVELOPMENT OF AN EXISTING PARKING LOT. ALL STEEP SLOPES IN THE VICINITY OF THE L.O.D ARE MAN-MADE.
- IN AN EMAIL DATED 5/17/21 FROM AHY GOVANI, DPZ STIPULATED THREE CONDITIONS THAT WILL BE REQUIRED AS PART OF THE ALTERNATIVE COMPLIANCE TO DISTURB THE FLOODPLAIN.
 - SUBMIT A FLOODPLAIN STUDY USING THE CURRENT FEMA 100-YEAR FLOW RATE AND ANALYZE ANY CHANGES TO THE WATER SURFACE ELEVATION OR FLOW RATES USING THE ULTIMATE DEVELOPMENT OF THIS PARCEL. THIS STUDY WILL BE REVIEWED BY DPZ AND VERIFIED WITH DPZ'S STORMWATER DIVISION. THE EXPECTATION IS THAT NO STORAGE VOLUME WILL BE LOST WITHIN THE LIMITS OF THE FLOODPLAIN.
 - STORMWATER MANAGEMENT SHOULD BE PROVIDED FOR THE LIMIT OF DISTURBANCE USING ESO PRACTICES ASSURING A GREENFIELD CONDITIONS. ALL OPTIONS AND METHODS FOR PROVIDING MANAGEMENT FOR THE FIRST INCH OF RUNOFF ARE AVAILABLE INCLUDING REDEVELOPMENT PRACTICES, PROVIDING MANAGEMENT OF OFFSITE IMPERVIOUS AREA AT A 1:1 RATIO MAY ALSO BE CONSIDERED.
 - ALTHOUGH WASTE MANAGEMENT AREAS CANNOT BE INTENTIONALLY DIRECTED TO STORMWATER MANAGEMENT DEVICES, THE EXISTING STORM DRAIN AT THE LAKE FOODS LOADING DOCK AREA APPEARS TO BE AN OPPORTUNITY TO TREAT CURRENT RUNOFF THAT IS DISCHARGING TO THE LAKE AND TREAT IT FOR WATER QUALITY. THIS COULD BE DONE WITH A FILTER PRACTICE OR BIORETENTION TYPE FACILITY.

DRAINAGE AREAS

AREA NO.	AREA (SF)	IMPERVIOUS
DA 1	50,686	94%
DA 2	9,830	100%



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development Date: 12/16/21

Chief, Development Engineering Division Date: 12-15-21

SEE SHEET 2 FOR NOTE #4 (NP-22-018)

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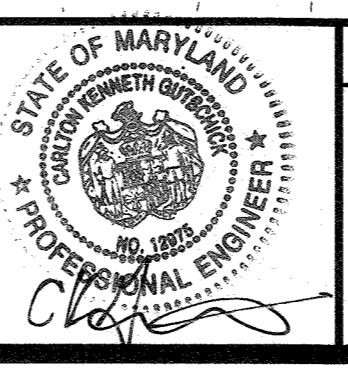
3909 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20886 | GLWPA.COM
 PHONE: 301-421-4024 | BALT: 410-880-1820 | DC&VA: 301-989-2524 | FAX: 301-421-4188

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

PREPARED FOR:
 OWNER: CLOVER ACQUISITIONS LLC
 C/O THE HOWARD HUGHES
 CORP.
 PO BOX 131298
 CARLSBAD CA 92013

DEVELOPER:
 THE HOWARD RESEARCH
 AND DEVELOPMENT CORP.
 10960 GRANTCHESTER
 WAY, SUITE 110
 COLUMBIA, MD 21044
 ATTN: GABRIEL CHUNG
 410-964-4800

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. 12975
 EXPIRATION DATE: MAY 26, 2022
 11/17/21

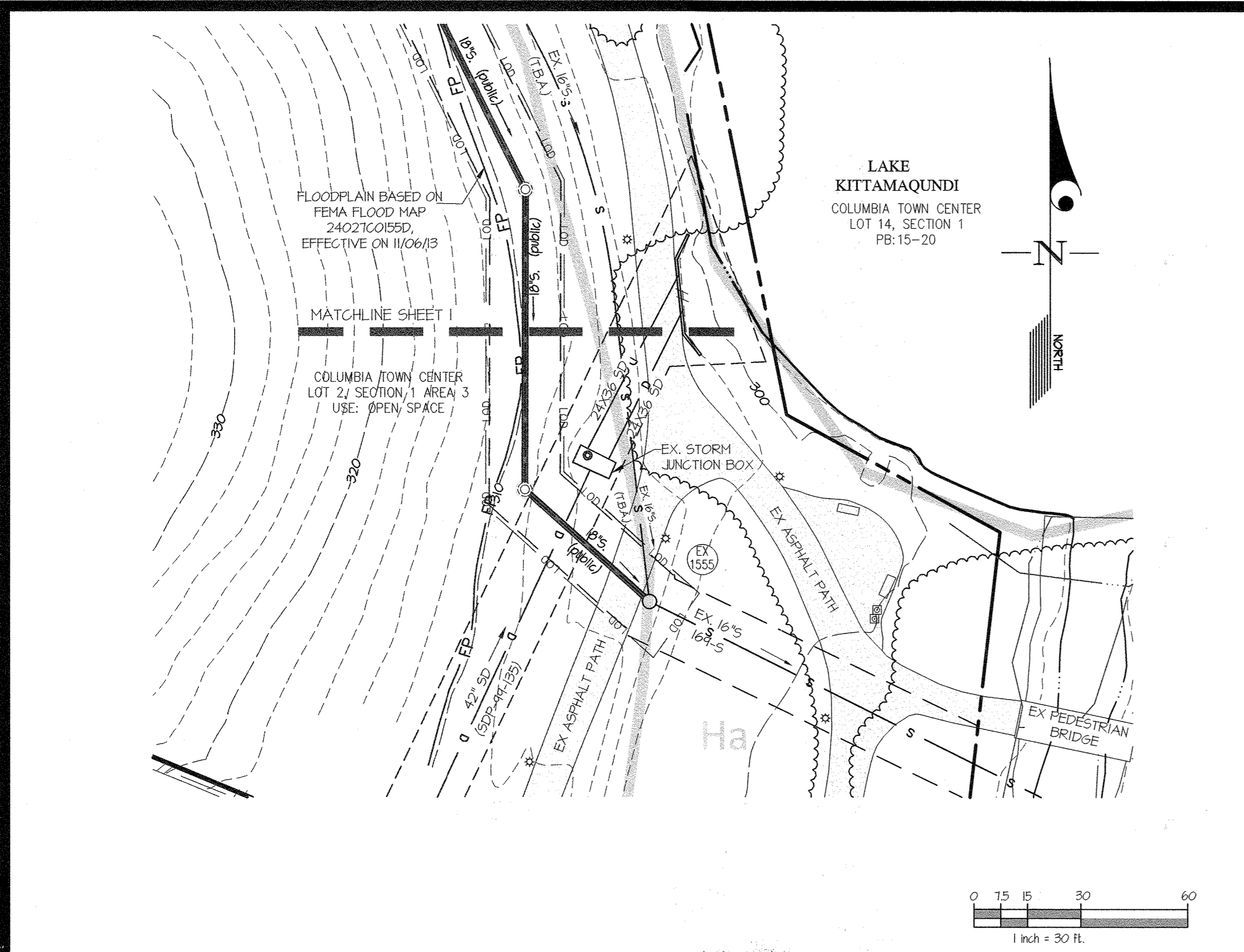


ENVIRONMENTAL CONCEPT PLAN - GRADE LEVEL

SOUTHLAKE OFFICE BUILDING
 DOWNTOWN COLUMBIA
 LAKEFRONT CORE NEIGHBORHOOD, PHASE I, PARCEL B
 A RESUBDIVISION OF SECTION 1, LOT 24 (PLAT No. 24707)

HOWARD COUNTY, MARYLAND

SCALE	1" = 30'	ZONING	NT	G. L. W. FILE NO.	18046
DATE	NOV., 2021	TAX MAP - GRID	36 - 2	SHEET	1 OF 3



ESD DESIGN NARRATIVE:
 THIS SITE IS OVER 40% IMPERVIOUS AND QUALIFIES FOR REDEVELOPMENT UNDER MDE STANDARDS. HOWEVER, AS PART OF AN AGREEMENT WITH HOWARD COUNTY DPZ, THIS SITE WILL PROVIDE STORMWATER MANAGEMENT OVER AND ABOVE THE MDE REQUIREMENTS. THE DEVELOPMENT AREA OF THE SITE IS 83% IMPERVIOUS, WITH NEW DEVELOPMENT CONDITIONS, REQUIRES A PE OF 1.8". THE SWM VOLUME WILL BE PROVIDED BY AN UNDERGROUND STORAGE CHAMBER CONNECTED TO A STORMFILTER (F-2) AND TWO STORMCEPTORS. ALL SWM FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED. THE PROPOSED BUILDING AND PARKING AREA WILL BE TREATED BY A STORMCEPTOR AND STORMFILTER. THE WHOLE FOODS SERVICE AREA WILL BE TREATED BY A SECOND STORMCEPTOR. THE SITE DRAINS TO A LAKE KITTAMAQUUNDI AND TO THE LITTLE PATUXENT RIVER, A USE IV-P STREAM.

SINCE THIS SITE HAS BEEN FULLY DEVELOPED, THERE ARE FEW ENVIRONMENTAL FEATURES ON THE SITE. THE FLOODPLAIN IS BEING DISTURBED WITHIN THE PREVIOUSLY DEVELOPED AND IMPERVIOUS AREAS. THERE IS NO NATURAL OR WOODED FLOODPLAIN ON SITE. THE EXISTING FLOODPLAIN ON SITE WILL BE RECONFIGURED BUT THERE WILL BE NO NET LOSS OF FLOODPLAIN VOLUME ON THE SITE. ALL OF THE NATURAL FLOW PATTERNS WILL REMAIN THE SAME. OUTSIDE OF THE FLOODPLAIN, WHICH ON SITE IS MOSTLY PAVED, THERE ARE NO EXISTING NATURAL RESOURCES ON THE SITE. THE SEDIMENT CONTROLS PROPOSED AND SUPER SILT FENCE, WILL NOT INCREASE THE LIMIT OF DISTURBANCE.

- NOTES:**
- ON OCTOBER 23, 2021 AND PURSUANT TO SECTION 16.104, THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING, UPON THE ADVICE OF THE DEPARTMENT OF PUBLIC WORKS, DEPARTMENT OF RECREATION AND PARKS, DEPARTMENT OF LICENSES AND PERMITS, AND THE SOIL CONSERVATION DISTRICT, APPROVED WP-22-010, THE REQUEST FOR ALTERNATIVE COMPLIANCE WITH RESPECT TO SECTION 16.105(C)(2) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO PERMIT GRADING, CONSTRUCT A BUILDING AND RELOCATE UTILITIES IN THE FLOODPLAIN. APPROVAL OF THIS ALTERNATIVE COMPLIANCE IS SUBJECT TO THE FOLLOWING CONDITIONS:
 1. SUBMIT A FLOODPLAIN STUDY USING THE CURRENT FEMA 100-YEAR FLOW RATE AND ANALYZE ANY CHANGES TO THE WATER SURFACE ELEVATION OR FLOW RATES USING THE ULTIMATE DEVELOPMENT OF THIS PARCEL. THE STUDY WILL BE REVIEWED BY DPZ AND VERIFIED WITH DPM STORMWATER DIVISION. THE EXPECTATION IS THAT NO STORAGE VOLUME WILL BE LOST WITHIN THE LIMITS OF THE FLOODPLAIN.
 2. STORMWATER MANAGEMENT SHOULD BE PROVIDED FOR THE LIMIT OF DISTURBANCE USING ESD PRACTICES ASSUMING GREENFIELD CONDITIONS. ALL OPTIONS AND METHODS FOR PROVIDING MANAGEMENT FOR THE FIRST INCH OF RUNOFF ARE AVAILABLE, INCLUDING REDVELOPMENT PRACTICES, PROVIDING MANAGEMENT OF OFFSITE IMPERVIOUS AREA AT A 1:1 RATIO MAY ALSO BE CONSIDERED.
 3. ALTHOUGH WASTE MANAGEMENT AREAS CANNOT BE INTENTIONALLY DIRECTED TO STORMWATER MANAGEMENT DEVICES, THE EXISTING STORM DRAIN AT THE WHOLE FOODS LOADING DOCK AREA APPEARS TO BE AN OPPORTUNITY TO TREAT CURRENT RUNOFF THAT IS DISCHARGING TO THE LAKE AND TREAT IT FOR WATER QUALITY. THIS COULD BE DONE WITH A FILTER PRACTICE OR BIORETENTION TYPE FACILITY. PLEASE INVESTIGATE AS PART OF THE SITE DESIGN.
 4. PLEASE REVIEW AND ADDRESS THE COMMENTS PROVIDED BY THE DEVELOPMENT ENGINEERING DIVISION WITH THE SDP SUBMISSION.
 5. PROVIDE A REVISED EXHIBIT TO MODIFY THE SITE DESIGN TO INCLUDE ADDING FILL ALONG THE SOUTHERN BOUNDARY IN ORDER TO RAISE THE ELEVATION TO TIE INTO THE EXISTING SEWER OFF-SITE, WHICH WILL REDUCE THE LENGTH OF A SEWER PIPE REQUIRED IN THE FORESTED AREA SOUTH OF THE SITE CURRENTLY SHOWN ON EXHIBIT D. CONSULT WITH DEP AND DPM IF THE ADDITIONAL FILL HAS ANY IMPACTS ON THE FLOODPLAIN CALCULATIONS.
 6. THE FLOODPLAIN DISTURBANCE APPROVED IS LIMITED TO THE ULTIMATE AREA OF FLOODPLAIN ON PARCEL B AND THE MINIMUM AREA REQUIRED SOUTH OF THE SITE TO TIE THE RELOCATED SEWER LINE TO THE EXISTING SEWER OFFSITE.

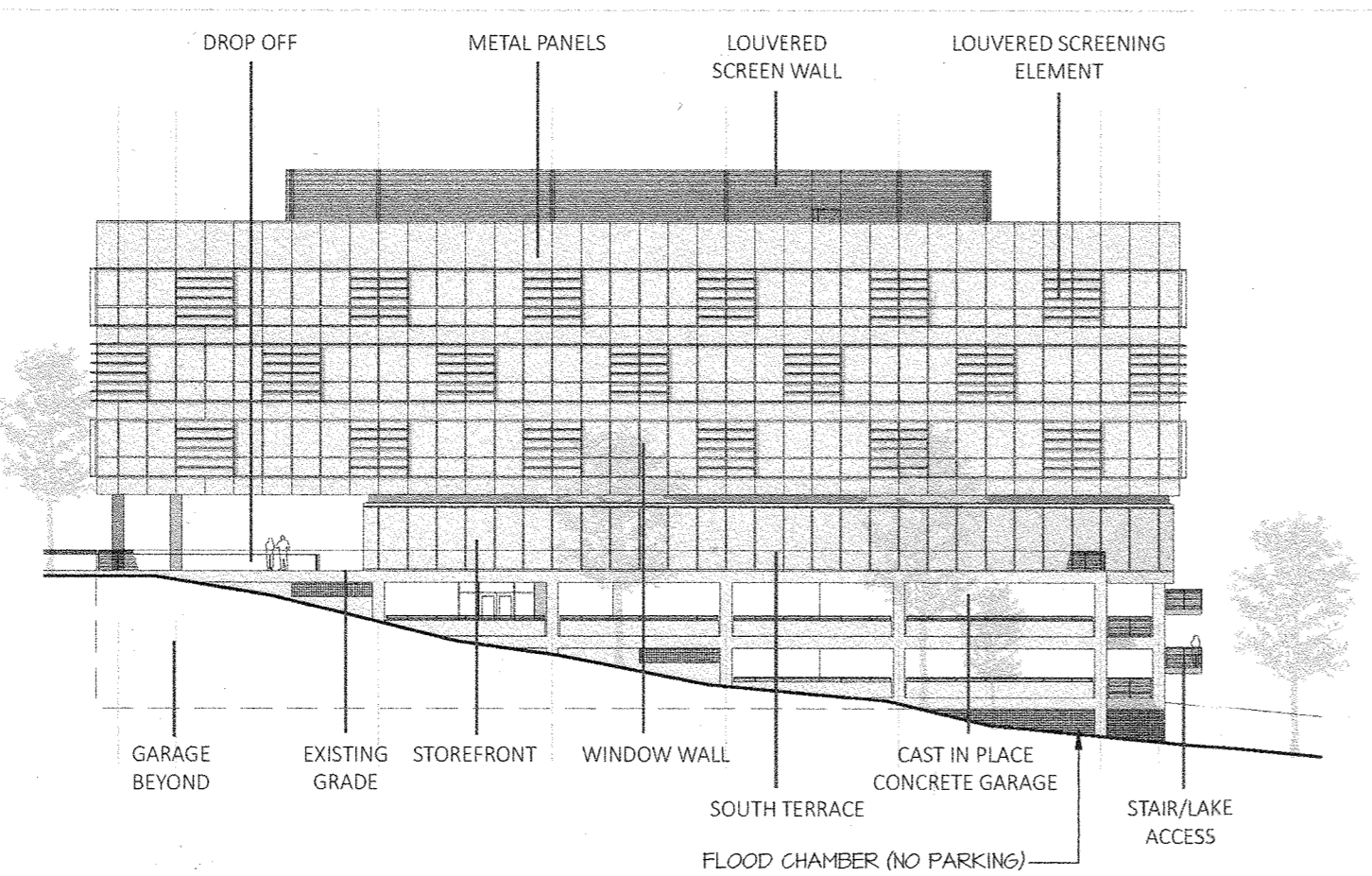
STORMWATER MANAGEMENT REQUIREMENT	
DEVELOPMENT AREA :	85,910 SF.
% IMPERVIOUS:	65.7%
Rv:	0.641
TARGET Pp (100% D SOILS):	1.8"
REQUIRED ESDV:	$A \times Rv \times Pp / 12 = (85,910 \times 0.641 \times 1.8) / 12 = 8,268 \text{ cf}$

STORMWATER MANAGEMENT PROVIDED BY DEVICE	
STORM FILTER (F-2):	3,765 CU-FT
STORMCEPTOR:	4,563 CU-FT
TOTAL:	8,328 CU-FT

STORMWATER MANAGEMENT RECHARGE	
DEVELOPMENT AREA :	85,910 SF.
% IMPERVIOUS:	65.7%
Rv:	0.641
RECHARGE FACTOR:	0.07
REQUIRED RECHARGE:	$5 \times Rv \times A / 12 = (0.07 \times 0.746 \times 85,910) / 12 = 322 \text{ cf}$
RECHARGE PROVIDED BY MICRO-BIOS IN UPPER PARKING LOT	

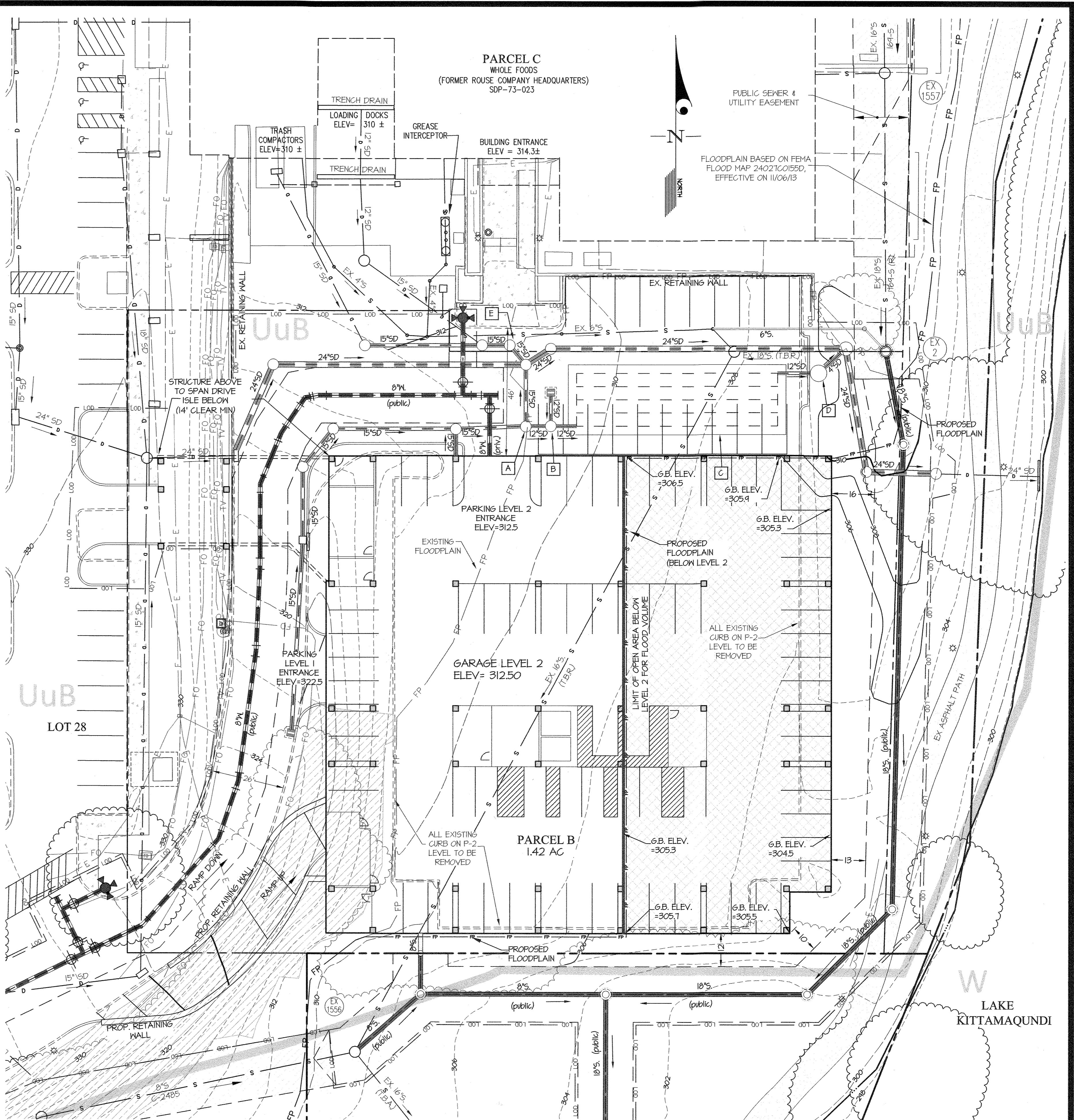
ESD SUMMARY TABLE				
AREA NO.	AREA (SF)	IMPERVIOUS	ESDV (CF)	Pp PROVIDED
DA 1	50,686	94%	7,550	1.99"
DA 2	9,830	100%	778	1.00"
TOTAL	60,516	95%	8,328	---
REQUIRED ESDV			8,134 cf	
PROVIDED ESDV			8,328 cf	

NOTE: ALL STORMWATER MANAGEMENT FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED BY THE PROPERTY OWNER.



BUILDING SOUTH ELEVATION
SCALE: NTS

- LEGEND**
- A SPLITTER MANHOLE
 - B STORMCEPTOR STC-400 (OR EQUIV)
 - C 50' STORMTECH SC-140 CHAMBERS SURROUNDED IN STONE WRAP FACILITY WITH IMPERMEABLE LINER. 3,765 CF OF STORAGE (OR EQUIV)
 - D STORMFILTER SFMHT2 W SEVEN 18" CARTRIDGES (OR EQUIV)
 - E STORMCEPTOR STC-450I (OR EQUIV)
 - T.B.R. TO BE REMOVED
 - T.B.A. TO BE ABANDONED
 - OPEN AREA BELOW LEVEL 2 FOR FLOOD VOLUME (NO PARKING OR OTHER USES)
- NOTE: G.B. ELEV. IS THE GROUND ELEVATION IN THE OPEN AREA BELOW LEVEL 2



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Chief, Division of Land Development: *[Signature]* Date: 12/15/21
 Chief, Development Engineering Division: *[Signature]* Date: 12/15/21

GLW
 PLANNING | ENGINEERING | SURVEYING
 3809 NATIONAL DRIVE | SUITE 250 | BURTONSVILLE, MD 20886 | GLWPA.COM
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DESIGNED BY:	DATE	REVISION	BY	APPR.
dds				
dds				
CHECKED BY:				

PREPARED FOR:
 OWNER: CLOVER ACQUISITIONS LLC
 C/O THE HOWARD RESEARCH
 CORP.
 PO BOX 131298
 CARLSBAD CA 92013

DEVELOPER:
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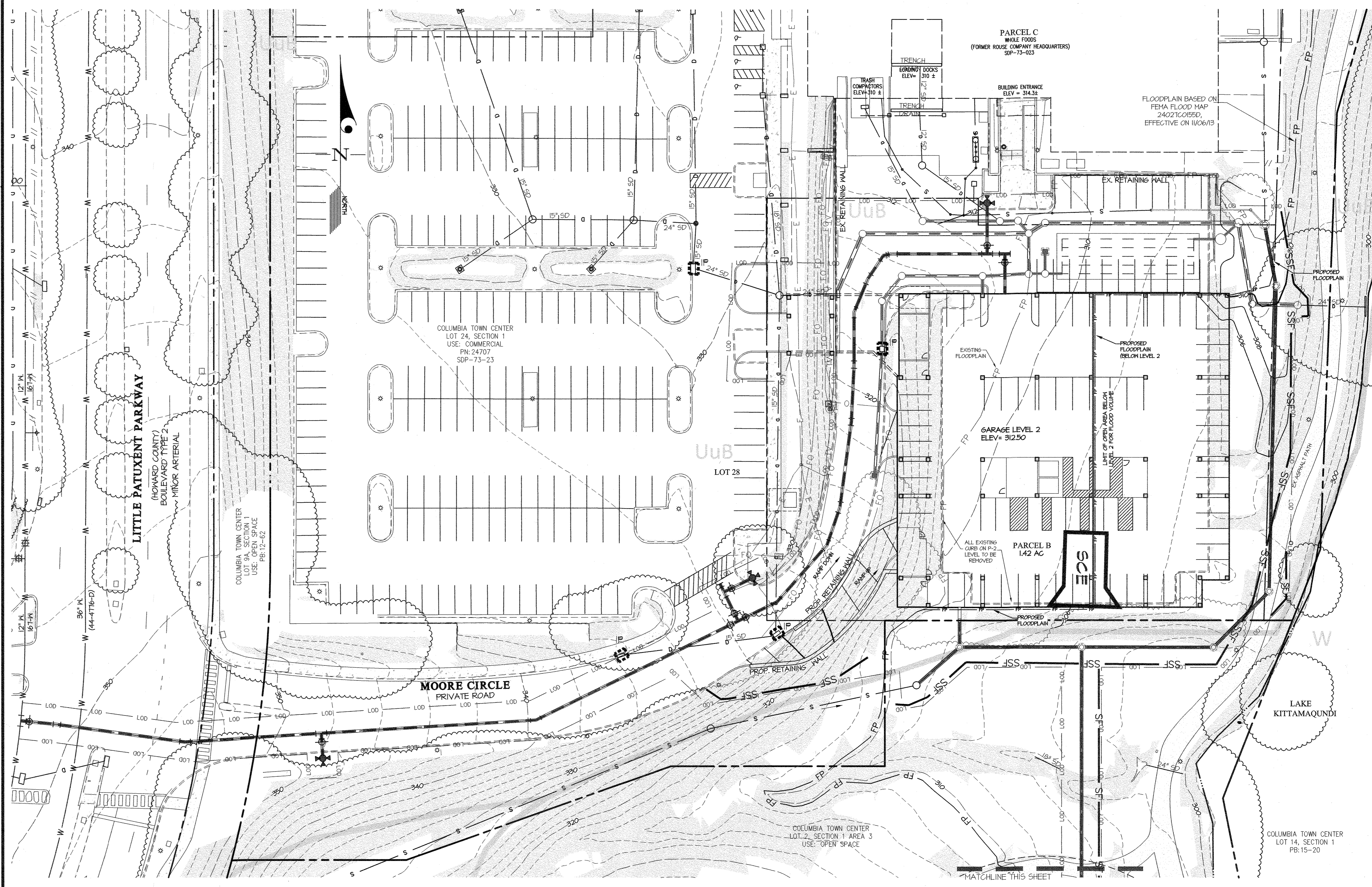
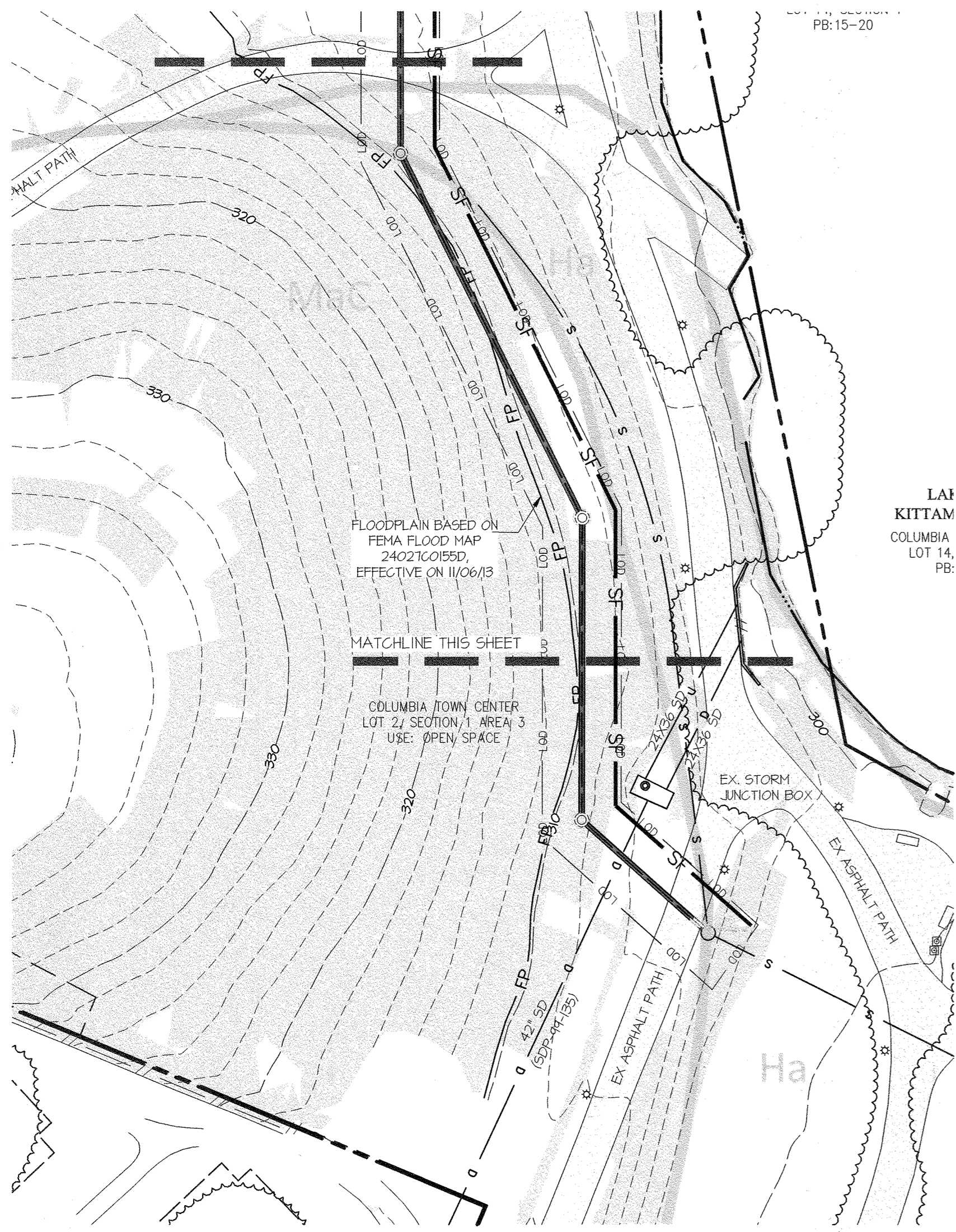
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 12975
 EXPIRATION DATE: MAY 26, 2022
 11/17/21

ENVIRONMENTAL CONCEPT PLAN - PARKING LEVEL 2

SOUTHLAKE OFFICE BUILDING
 DOWNTOWN COLUMBIA
 LAKEFRONT CORE NEIGHBORHOOD, PHASE I, PARCEL B
 A RESUBDIVISION OF SECTION 1, LOT 24 (PLAT No. 24707)
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	18046
DATE	TAX MAP - GRID	SHEET
NOV., 2021	36 - 2	2 OF 3

L:\CADD\DRAWINGS\18046\PLANS BY GWL\ECIP\18046 ECP SHEET 2.dwg, PLOTTED: 11/17/2021 10:48 AM, LAST SAVES: 11/17/2021 10:38 AM, PLOTTED BY: Don Sweeney



LEGEND

- LOD LIMIT OF DISTURBANCE
- SF SILT FENCE
- SSF SUPERSILT FENCE
- GnA SOIL BOUNDARY
- SOIL TYPE
- SCE STABILIZED CONSTRUCTION ENTRANCE
- IP INLET PROTECTION
- PROPOSED TEMPORARY STOCKPILE AREA
- HIGHLY ERODIBLE SOIL
- FP 100 YEAR FLOODPLAIN

NOTE: INITIALLY STOCKPILING WILL OCCUR WITHIN THE BUILDING FOOTPRINT. STOCKPILE WILL BE RELOCATED AS BUILDING CONSTRUCTION PROGRESSES. ONCE THE BUILDING IS CONSTRUCTED ANY STOCKPILING MUST BE WITHIN THE LIMITS OF THE PERIMETER SEDIMENT CONTROLS

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.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development *JAM* 12/14/21 Date
Chief, Development Engineering Division *WJX* 12-15-21 Date

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

PREPARED FOR:
OWNER: CLOVER ACQUISITIONS LLC
C/O THE HOWARD HUGHES CORP.
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LICENSE NO. 12975
EXPIRATION DATE: MAY 26, 2027

GABRIEL CHUNG
PROFESSIONAL ENGINEER

CONCEPTUAL SEDIMENT CONTROL PLAN

SOUTHLAKE OFFICE BUILDING
DOWNTOWN COLUMBIA
LAKEFRONT CORE NEIGHBORHOOD, PHASE I, PARCEL B
A RESUBDIVISION OF SECTION 1, LOT 24 (PLAT No. 24707)
HOWARD COUNTY, MARYLAND

ELECTION DISTRICT No. 5

GRAPHIC SCALE
1 inch = 30 ft.

SCALE	ZONING	G. L. W. FILE No.
1" = 30'	NT	18046
DATE	TAX MAP - GRID	SHEET
NOV., 2021	36 - 2	3 OF 3

L:\CAD\DRAWINGS\18046\PLANS BY GLW\LEOP\18046 ECP SHEET 3.dwg
PLOT: 11/17/2021 10:53 AM, LAST SAVED: 11/9/2021 10:52 AM, PLOTTED BY: Dan Sawney