

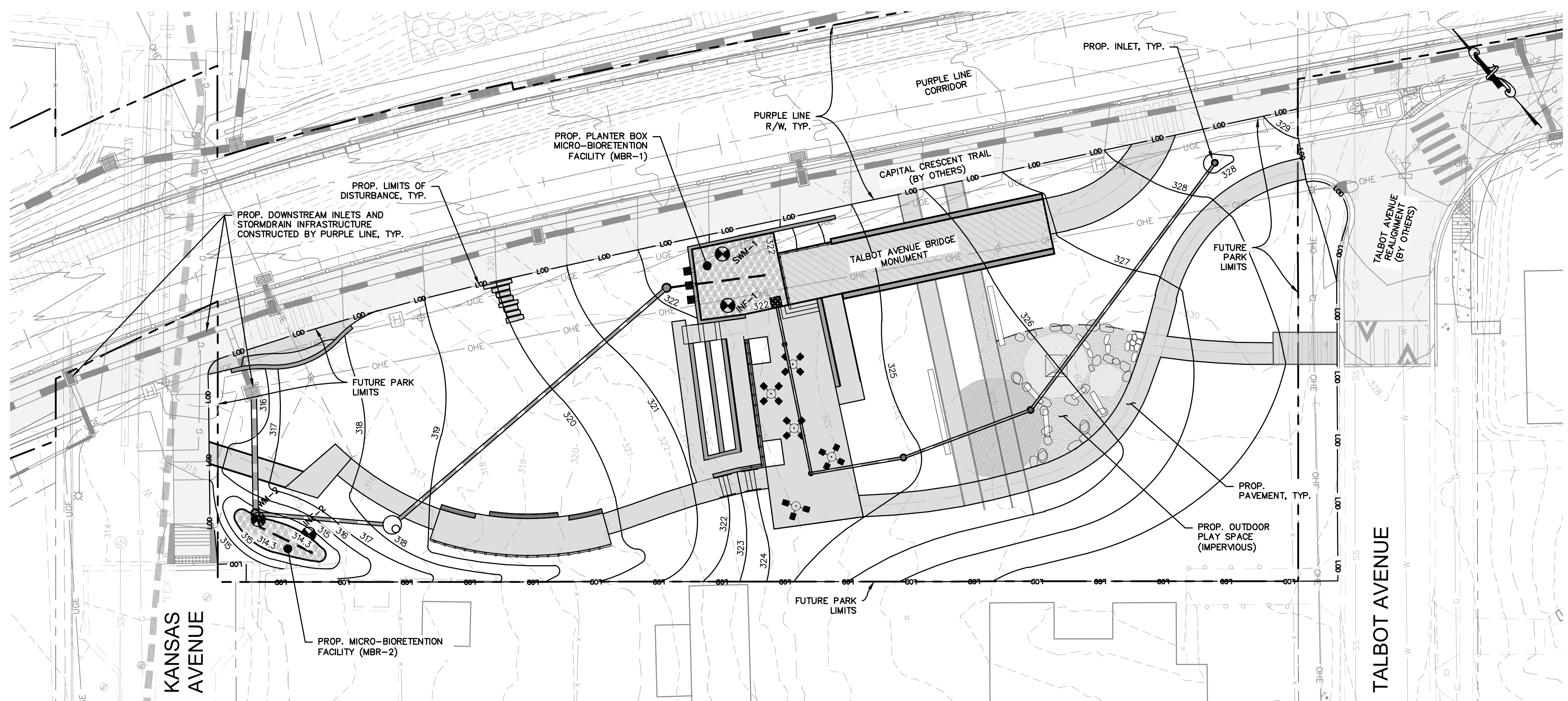
FINAL SCANNED:

PLAN SCANNED:

PARK CODE: TBD

Plotted By: Matt Edelman, 7/19/2023 12:09 PM.

J:\05.046 - Lyttonville Park Facility Plan\CAD\CONCEPTS\C-1 - STORMWATER MANAGEMENT CONCEPT PLAN.dwg SKC00001



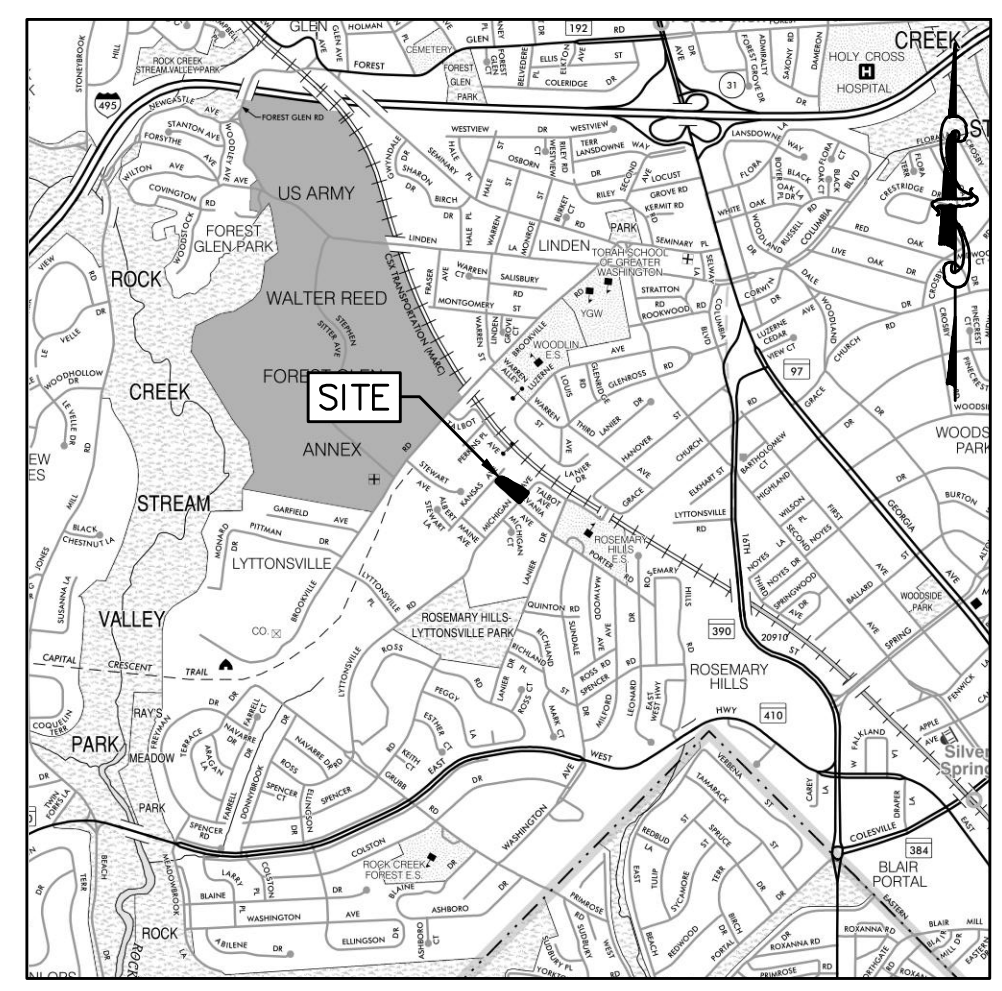
STORMWATER MANAGEMENT CONCEPT PLAN
SCALE: 1" = 20'

SWM CONCEPT SUMMARY TABLE

Contact Information for Design Engineer (for technical issues):
 Jason Azar, P.E.
 Vice President, Clark | Azar & Associates, Inc.
 20440 Century Boulevard, Suite 220
 Germantown, MD 20874
 mdpermitting@clarkazar.com
 (240) 912-3491

General Property Information:
 SM#: STORMWATER-289843
 Type of Concept: Combined SWM Concept/Site Development SWM Plan
 MNC&PC Process No.: N/A
 Property Address: 2205 Kansas Avenue, Silver Spring, Maryland 20910
 Property Legal Description: N/A; Lot/Block: N/A
 Property Size (ac./sq. ft.): 0.68 ac. / 29,576 sq. ft.
 Total Concept Area (ac./sq. ft.): 0.71 ac. / 30,898 sq. ft.
 Zoning: N/A - R/W (Unzoned)
 Watershed and Stream Class: Lower Rock Creek Watershed; Class I
 Special Protection Area: N/A
 100 YR Floodplain: N/A (Zone X - FEMA Floodplain Map 24031C0370D, 9/29/2006)
 Ex. % Impervious/Redevelopment or New Development: 0.0% - New Development

SWM Summary:
 Target Pe /Proposed Pe: 1.6 in. /1.71 in
 Target ESDv/Provided ESDv: 1,261 cu. Ft. / 1,359 cu. ft.
 Provided CPv: N/A cu. ft.
 ESD Measures: (2) Micro-Bioretentation
 Cpv Measures: N/A
 Structural Storage Required/Provided: N/A
 Structural Measures: N/A
 Waiver Request/QL/QN/Both: No
 Provided ESDv + Structural Storage Provided + Requested to be Waived = 1,359 cu. ft.
 Other Information: N/A

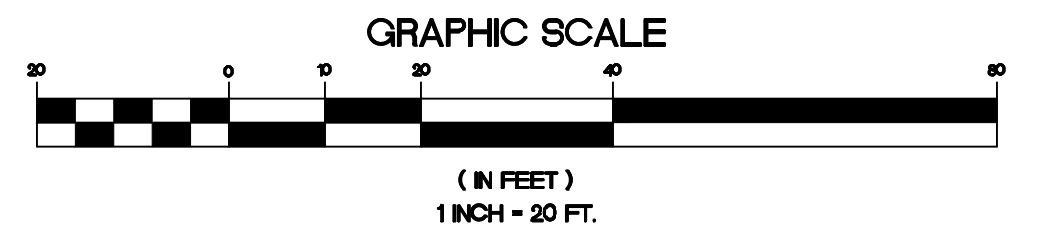


VICINITY MAP
SCALE: 1" = 2000'

STORMWATER CONCEPT LEGEND

	PROPOSED LIMITS OF DISTURBANCE
	PROPOSED PAVEMENT
	PROPOSED PLAY SPACE (IMPERVIOUS)
	PROPOSED MICRO-BIORETENTION AREA
	SOIL CLASSIFICATION BOUNDARY
	SOIL BORING/INFILTRATION TEST LOCATION

- GENERAL NOTES**
- OWNER: MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION (M-NCPPC)
 2425 REEDIE DRIVE, 11TH FLOOR
 WHEATON, MARYLAND 20902
- CONTACT: CHING-FANG CHEN, PROJECT MANAGER
 (301) 495-2557
 CHING-FANG.CHEN@MONTGOMERYPARKS.ORG
- WSSC MAP GRID: 211N02
 - TAX MAP: JP-11
 - ZONING: R/W (CURRENTLY UNZONED)
 - ELECTION DISTRICT: 13
 - TOPOGRAPHIC SURVEY AND ADJACENT PROJECT AREAS (PURPLE LINE/CAPITAL CRESCENT TRAIL) WERE PROVIDED BY PURPLE LINE.
 - THE LOCATION OF UNDERGROUND UTILITIES ARE SHOWN APPROXIMATE IN NATURE AND PER AVAILABLE PLANS AND SURVEY INFORMATION PROVIDED BY PURPLE LINE. ABOVE GROUND UTILITIES & IMPROVEMENTS ARE SHOWN PER SURVEY AND AVAILABLE PLANS PROVIDED BY PURPLE LINE; INVERT ELEVATIONS HAVE BEEN OBTAINED WHERE ACCESS IS AVAILABLE. ALL CONTRACTORS MUST CALL "MISS UTILITY" PRIOR TO ANY EXCAVATIONS.
 - NRCS WEB SOIL SURVEY IDENTIFIES SOILS AT THIS SITE AS GLENELG-URBAN LAND COMPLEX ("HSG-B"), AND URBAN LAND ("HSG-D").
 - THIS SITE IS CLASSIFIED AS "ZONE-X" (AREA OF MINIMAL FLOOD HAZARD) PER FEMA FLOOD INSURANCE RATE MAP NUMBER 24031C0370D, DATED SEPTEMBER 29, 2006.



CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDER GROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

CLARK | AZAR & ASSOCIATES
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 Germantown, MD, 20874
 T(301) 528-2010
 www.clarkazar.com
 A Woman Owned Small Business

DESIGN		
JON MALLORY Landscape Designer	23.07.13 Date	DAVID MITCHELL Checked By:
Architect	Date	Checked By:
JASON AZAR, P.E. Engineer	23.07.13 Date	DANA CLARK Checked By:
MATT EDELMAN, E.I.T. Drawn by	23.07.13 Date	JASON AZAR Checked By:

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. 31168
 Expiration Date 01/12/2025

The Maryland-National Capital Park and Planning Commission
 Montgomery County Department of Parks
 2425 Reedie Drive, 11th Floor
 Wheaton, Maryland 20902
 (301) 495-2595

REVIEW AND APPROVAL	
Project Manager	Date
Construction Manager	Date
Park Manager	Date

ISSUED FOR PROCUREMENT ON _____		
REVISIONS		
Rev. No.	Date	Description

Lyttonville Area Future Neighborhood Park
 2205 Kansas Avenue, Silver Spring, Maryland 20910

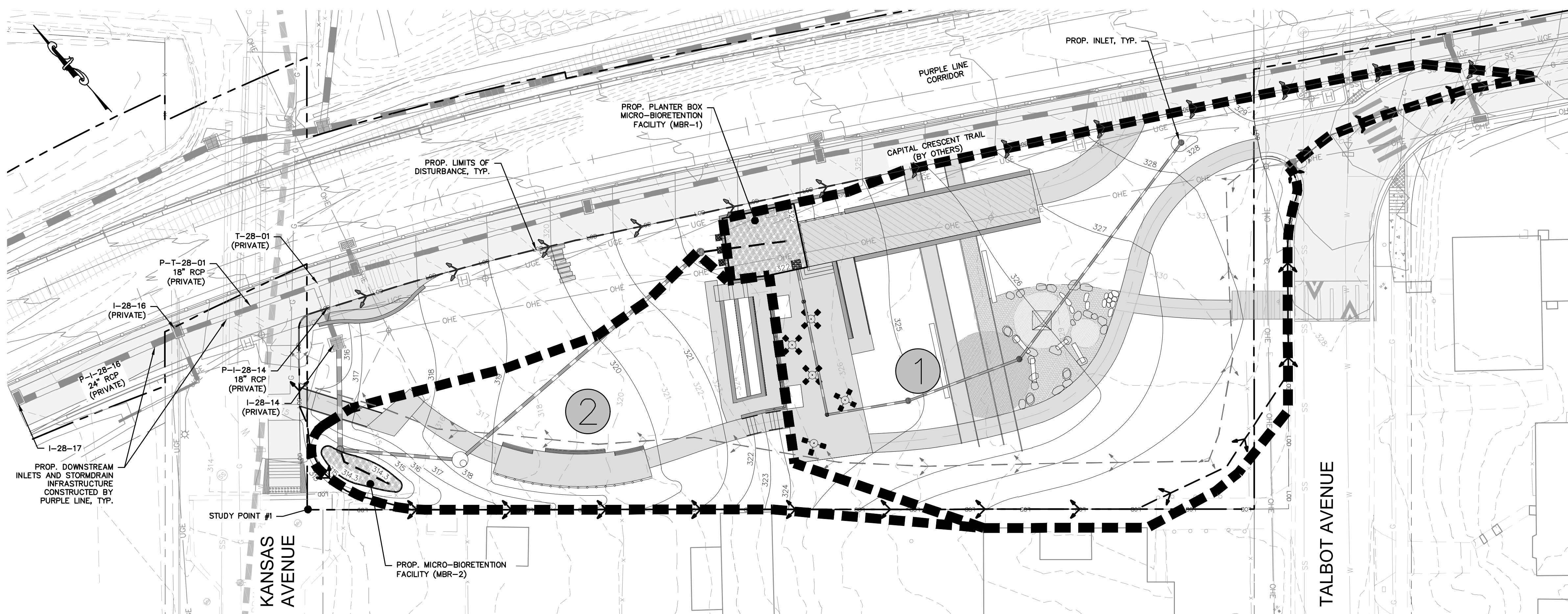
STORMWATER MANAGEMENT CONCEPT PLAN

SCALE: AS SHOWN

SUBDIVISION:
 PARCEL: LOT/BLOCK:
 LIBER/FOLIO:

DWG. #
C-1
SHT. # 1 of 2

FINAL SCANNED: PLAN SCANNED: PARK CODE: TBD



POST-DEVELOPMENT DRAINAGE AREA MAP
SCALE: 1" = 20'

LIMITS OF DISTURBANCE:
 TOTAL AREA = 30,898 SF
 PERVIOUS AREA = 22,045 SF
 IMPERVIOUS AREA = 8,853 SF
 PERCENT IMPERVIOUS = 28.7%

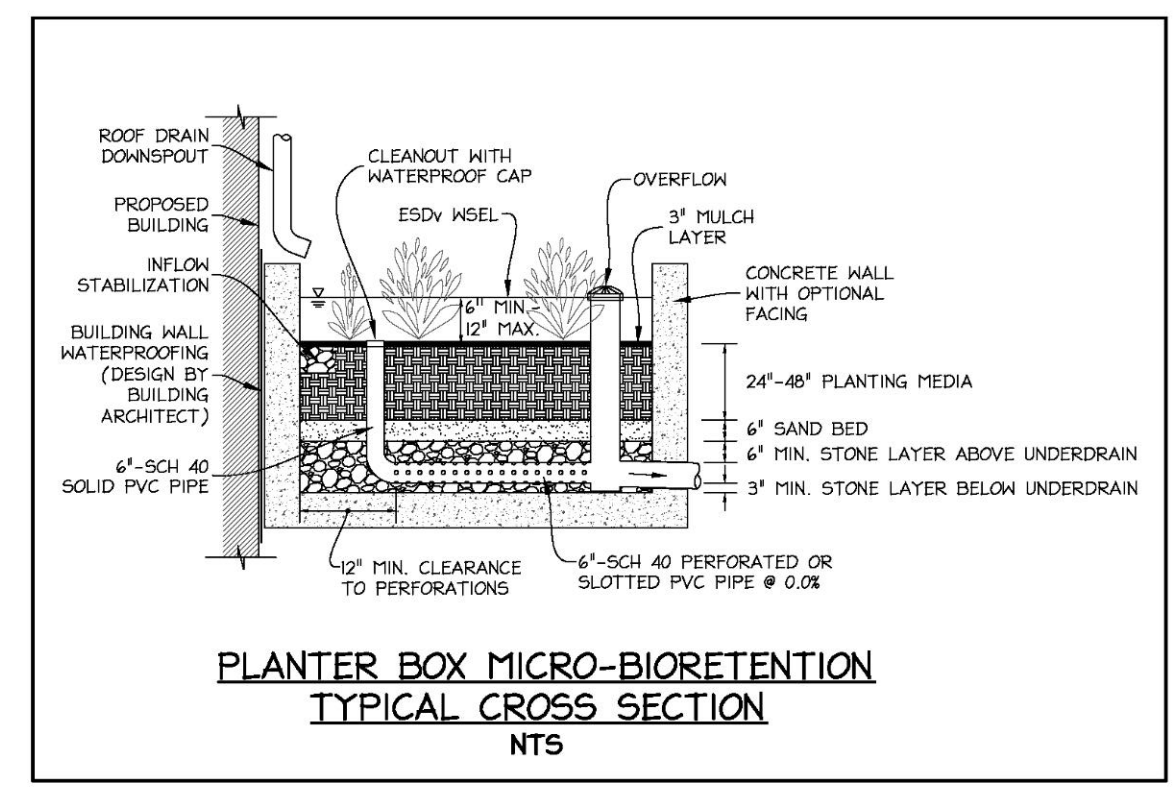
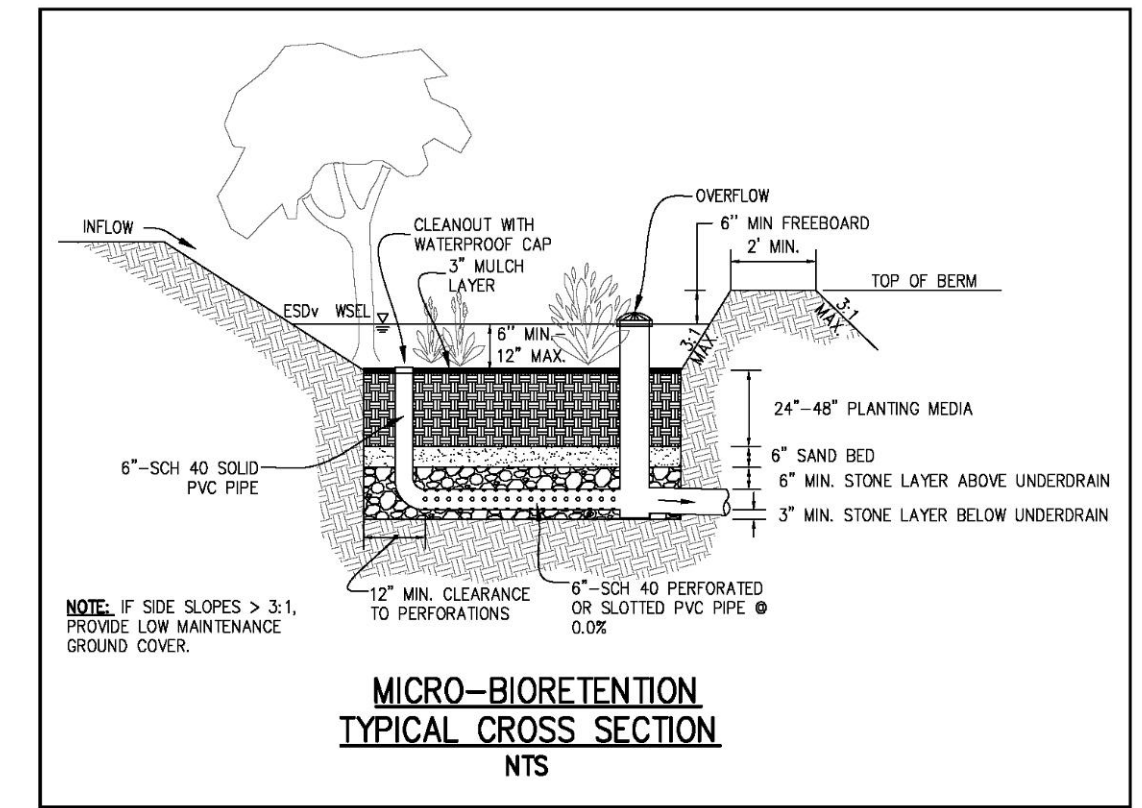
DRAINAGE AREA 1 (TO MBR-1):
 TOTAL AREA = 19,447 SF
 PERVIOUS AREA = 12,071 SF
 IMPERVIOUS AREA = 7,376 SF
 PERCENT IMPERVIOUS = 37.9%

DRAINAGE AREA 1 (TO MBR-2):
 TOTAL AREA = 8,161 SF
 PERVIOUS AREA = 6,347 SF
 IMPERVIOUS AREA = 1,814 SF
 PERCENT IMPERVIOUS = 22.2%

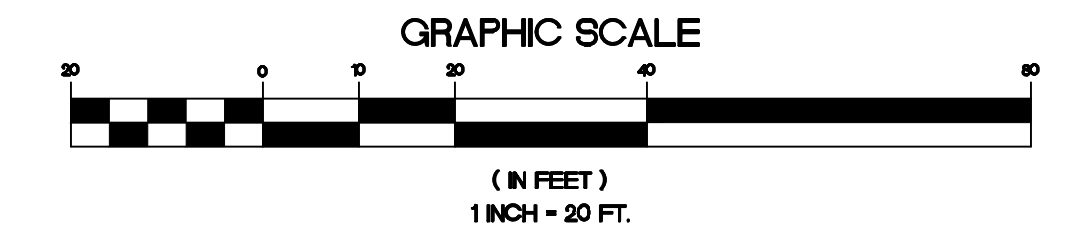
Measure Number	Type of Measure	Drainage Area to Measure (SF)	Impervious Area to Measure (SF)	% Impervious	Rv for ESD Calculations	Min ESDv (CF)	Max ESDv (CF)	Credited Volume (CF)
ESD								
MBR-1	Bioretention	19,447	7,376	37.93%	0.391	634 cf	1,649 cf	1,071 cf
MBR-2	Micro-Bioretention	8,161	1,814	22.23%	0.250	170 cf	442 cf	288 cf
Total		27,608	9,190					1,359 cf
Structural								
Total		0	0					0
Does not drain to a SWM measure								
QN Waiver acres and % impervious								
QL Waiver acres and % impervious								
Project Total		27,608	9,190					1,359 cf

ESDv Required: 1,261
 ESDv Provided: 1,359
 CPv Volume Provided: 0

Structural Required: 0
 Structural Provided: 0



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STORMWATER MANAGEMENT CONCEPT DETAILS

SCALE: AS SHOWN

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DWG. # **C-2**
 SHT. # 2 of 2