



May 21, 2026

Mr. Christopher Spahr
Pulte Home Company, L.L.C.
9302 Route 29, Suite 1000
Fairfax, Virginia 22031

SUBJECT: 1455 Research Boulevard –Development Stormwater Management Concept
Approval; SMC2025-00004, 2026-101-STP

Dear Mr. Spahr:

The Development Stormwater Management (SWM) Concept (Concept) received on April 29, 2026, for the above referenced site is conditionally approved. Staff has determined that the Development SWM Concept, as described below, achieves the required level of on-site Environmental Site Design (ESD) to the Maximum Extent Practicable (MEP), $P_E = 1.00$ -inch, equivalent to 50 percent of the required ESD volume (ESD_V), as established by the Pre-Application SWM Concept letter dated July 1, 2025.

This site is 10.63 acres and is identified as Parcel 1, National Capital Research Park Subdivision. The site is north of the intersection of Key West Avenue and Research Boulevard, bordered by Research Boulevard to the west and Interstate 270 to the east. The proposed development includes the construction of 198 residential units. The property is located in the Watts Branch Watershed and is zoned Mixed-Use Employment (MXE). The on-site soils are predominately Glenelg silt loam which is classified as hydrologic soil group (HSG) B.

According to the Rockville City Code (Code), Chapter 19, Section 19-2 Definitions of the Rockville City Code, the Site qualifies as Development because it proposes construction on a property where existing imperviousness is greater than 40 percent of the site. The property is currently 69 percent impervious.

In accordance with the Code, Chapter 19, Section 19-45, SWM is required for all new and replacement impervious area within the entire site area including all impervious area previously existing on the site that does not have SWM to current standards. According to the submitted Concept, the total limit of disturbance is 10.63 acres which is 100 percent of the site, and the on-site impervious area subject to SWM is 7.04 acres.

Per the Code, Chapter 19, Section 19-46, SWM also must be provided for imperviousness in a portion of the adjacent Research Boulevard and Interstate 270 Rights-of-way (ROW). According to the submitted Concept, the total impervious area in the adjacent ROW subject to SWM is 0.76 acres.

Mr. Spahr
May 21, 2026
Page 2

Your proposed Development SWM Concept, as shown on the attachment, is summarized as follows:

ON-SITE SUMMARY

Proposed new or replacement impervious areas are summarized as:

- 198 residential units, including 78 townhomes, 56 stacked townhomes, and 64 condominium flats.
- Surface parking lot.
- Public/private infrastructure - roads, alleys and sidewalks.

Total on-site impervious area subject to SWM = 7.04 acres.

Environmental Site Design Measures

- The Concept proposes to provide a minimum P_E = one-inch equivalent to 50 percent of the required ESD_V in the following on-site measures:
 - 24 Micro-Bioretenction Planter Box Facilities.
 - 17 Roadside Micro-Bioretenction Planter Box Facilities.
 - One Micro-Bioretenction Facility.
 - One Grass Swale.
- Summary of ESD:
 - Total ESD_V provided = 24,935 cubic feet (cf.).
 - Total ESD_V required = 49,873 cf.
 - Percentage of ESD_V provided = 24,935 cf./ 49,873 cf. = 50 percent.

Structural Measures and/or Alternative Measures – Structural Measures

- Alternative Measures – two underground structural stormwater management facilities in-lieu of providing full ESD and in-lieu of providing Q_{p10} for the 7.04 acres of on-site impervious area.

ROW SUMMARY

Structural Measures and/or Alternative Measures – Monetary Contribution

- Alternative Measures – Monetary contribution in-lieu of providing WQ_V , Cp_V , and Q_{p10} for the 0.76 acres of impervious area in the adjacent ROW of Research Boulevard and Interstate 270.

Conditions of Approval

Staff has determined that ESD to the MEP has been met.

The next step in the City of Rockville (City) SWM approval process is submission of a SWM Construction Plan for review and approval by the Department of Public Works (DPW) prior to permit issuance. In accordance with the Code, Chapter 19, Section 19-44, SWM must be Provided by one of the following methods, which are listed in order of priority respectively on-site ESD measures, on-site structural measures, and alternative measures which may include a monetary contribution.

Mr. Spahr
May 21, 2026
Page 3

This Development SWM Concept is conditionally approved subject to the following conditions, which must be addressed at the stages in the process as indicated below:

1. Submit a Stormwater Management Permit (SMP) Application, including the application and plan review fee, which is based on an initially submitted SWM construction estimate, in conjunction with detailed SWM plans (24"x36") and computations signed and sealed by a Professional Engineer (PE) licensed in the State of Maryland, except as otherwise noted, for review and approval by DPW.
2. The submitted material must:
 - a) Demonstrate compliance with this Concept including locations, types, and sizing of ESD measures.
 - b) Include computations and construction details for review and approval by DPW:
 - i. Design shall be in conformance with the latest version of the Montgomery County Department of Permitting Services Design Specifications for Micro-Bioreentions, Grass Swale, and underground structural SWM facilities. Deviations from the specification must be approved by DPW.
 - ii. Computations and plans must show the ESD_v water surface elevation.
 - iii. Utilize flow splitters, curb cuts, flow through inlets, or other methods approved by DPW to direct runoff for required volume to the underground structural SWM facilities.
 - iv. Overflow structures, underdrains, and tee configurations within the Micro-Bioreintention facilities must be shown on the SWM construction plans and approved by DPW.
 - v. Where proximity of the Micro-Bioreintention facilities to the buildings is less than 10-feet, a licensed professional engineer in the State of Maryland must determine if any special treatment, including impermeable liners, is required. Evidence of such investigation and recommendation must be provided with the final engineering.
 - vi. The on-site structural water quality measure shall be designed to treat the remaining Cp_v. Plans must include structural drawings for the underground SWM facility with appropriate details and notes, sealed by a qualified PE licensed in the State of Maryland (PE seal for structural components cannot be on the same sheet as PE seal for SWM unless it is the same engineer sealing both aspects of the design).
 - vii. The existing pond must be replaced by current SWM best management practices, including underground structural measures. The totality of the best management practices proposed on the property must provide the same quality treatment and quantity control as previously provided by the existing pond. This includes the safe conveyance of the two-year and 10-year storms to not exceed existing flow rates via the existing storm drain outfall.
 - viii. Include the design, construction specifications, plant media depth, plant media specifications, planting schedule with types, sizes, and quantities of planting material for the Micro-Bioreintention facilities.
 - ix. SWM practices located within the public ROW must provide fall prevention barriers and follow MCDOT's requirements for SWM facilities in the ROW. SWM practices adjacent to pedestrian and parking uses shall meet MCDPS WRTP-8 design guidelines for safe placement and fall prevention barriers.

Mr. Spahr
May 21, 2026
Page 4

- x. Architectural/plumbing plans for the building must clearly detail the routing of roof runoff through the building to the Micro-Bioretenion facilities and must be provided for review to DPW.
- xi. Include a landscape design that has been coordinated with the Forest Conservation Plan (FCP), where applicable. The plan should include a planting schedule with types, sizes, and quantities of planting material, planting details, and notes, signed and sealed by a Landscape Architect licensed in the State of Maryland. The plan should differentiate between what planting material will be approved, bonded, and permitted with the SWM plan and what will be part of the Forestry Permit. The Landscape plan must show all stormwater appurtenances including pipes, overflow structures, inflow protection, etc. to ensure there are no conflicts.
- c) Identify paths for safe overland flow of the 100-year storm event with flow arrows.
- d) Demonstrate that all components of the SWM system drain by gravity. Pumping of stormwater will not be permitted.
- 3. Storage provided exceeding the amount require to treat the one year, 24-hour design storm shall not be credited towards the total water quality (ESD or structural) volume provided.
- 4. The Applicant shall make a monetary contribution to the City Stormwater Fund as an Alternative to providing Cp_v , WQ_v , and Qp_{10} for the contiguous ROW. Calculations for the contribution shall be submitted with the SMP application utilizing the final engineering impervious area and the monetary contribution rate in effect at that time. The contribution must be paid prior to SMP permit issuance. Monetary contribution is required for the following:
 - a. Full Contiguous ROW Cp_v , WQ_v , and Qp_{10} for 0.76 acres.
- 5. The SWM facilities on-site shall be privately maintained. Submit to DPW staff a SWM Easement, Inspection, and Maintenance Agreement for the proposed SWM measures. The SWM Agreement is subject to review and approval by DPW and the City Attorney's Office and is to be executed by the property owner and other parties of interest. The SWM Agreement must be recorded in the Montgomery County Land Records prior to SMP permit issuance. Plans must delineate and label SWM easements.
- 6. Submit on-site Storm Drain plans (24"x36") and computations signed and sealed by a Professional Engineer (PE) licensed in the State of Maryland, except as otherwise noted, for review by DPW.
- 7. Post financial security based on the final approved SWM construction cost estimate in a format acceptable to the City Attorney, either by letter of credit or performance bond. Approval, which is coordinated through DPW staff, is required prior to SMP permit issuance.
- 8. Obtain approval of an FCP from the City Forester prior to DPW issuance of the SMP permit.

This SWM approval does not supersede or negate other required project approvals. The Concept approval is contingent upon compliance of all other City and other governmental agency requirements including, but not limited to, City Forestry, Traffic and Transportation, and Planning and Development Services.

Mr. Spahr
May 21, 2026
Page 5

Any significant changes to the proposed development may result in the requirement to submit a revised Development SWM Concept with review fee for approval by DPW.

If you have any questions, please contact Senior Civil Engineer Yi Kuo via email at ykuo@rockvillemd.gov or via telephone at 240-314-8520.

Sincerely,



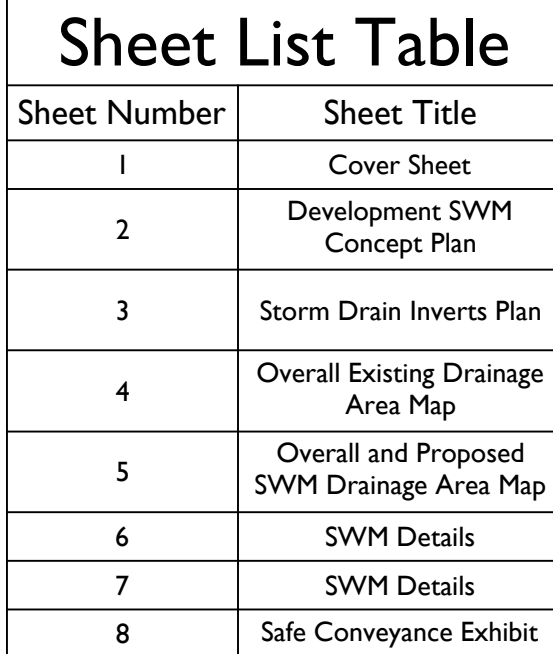
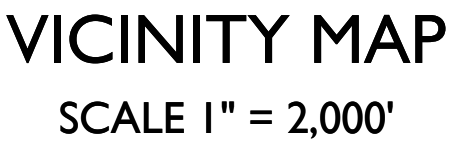
John Scabis, P.E.,
Chief of Engineering

JKS/YK/kmc

Attachments: 1455 Research Boulevard – Development SWM Concept Plan dated April 29, 2026.

cc: James Lapping, P.E., Engineering Supervisor
Shaun Ryan, Planning Supervisor
Christopher Davis, Senior Planner
Research Plaza Acquisitions, LLC; c/o Rubenstein Partners
Pat Harris, Lerch, Early & Brewer, Chtd.
Randall Rentfro, Rodgers Consulting, Inc
SWM Concept file
Permit plan, SMC2025-00004, 2026-101-STP

PRELIMINARY - NOT FOR CONSTRUCTION



ESDv and SVM Summary Table											
Drainage Area	DA (ft²)	Imp. Area (ft²)	% Imp.	Rv	Target ESDv (ft³)	Net ESDv (ft³)	Max ESDv (ft³=24.7)	ESDv Provided (ft³)	CPv Provided (ft³)	Pe Provided (in.)	Facility Type
DA #1	6,249	4,707	75	0.73	760	380	988	536	-	1.41	Micro-Bioretention (ROW)
DA #1A	4,361	3,288	75	0.73	531	265	690	334	-	1.26	Micro-Bioretention (ROW)
DA #2	10,923	5,068	46	0.47	856	428	1,112	1,112	-	2.60	Micro-Bioretention
DA #3	2,669	2,133	80	0.77	343	171	445	359	-	2.10	Micro-Bioretention (ROW)
DA #4	3,066	2,144	70	0.68	347	174	452	359	-	2.07	Micro-Bioretention (ROW)
DA #5	4,140	3,126	76	0.73	504	252	655	553	-	2.20	Micro-Bioretention (ROW)
DA #6	2,333	2,333	100	0.95	369	185	480	480	-	2.60	Micro-Bioretention
DA #7	3,232	3,232	100	0.95	512	256	665	665	-	2.60	Micro-Bioretention
DA #8	4,441	4,441	100	0.95	703	352	914	914	-	2.60	Micro-Bioretention
DA #9	3,662	3,662	100	0.95	580	290	754	750	-	2.59	Micro-Bioretention
DA #10	2,270	2,270	100	0.95	359	180	467	467	-	2.60	Micro-Bioretention
DA #11	2,346	1,298	55	0.55	215	108	280	280	-	2.60	Micro-Bioretention (ROW)
DA #11A	6,372	3,228	51	0.51	542	271	704	704	-	2.60	Micro-Bioretention (ROW)
DA #12	8,157	6,171	76	0.73	992	496	1,290	871	-	1.76	Micro-Bioretention (ROW)
DA #13	9,943	5,984	61	0.60	984	492	1,280	871	-	1.77	Micro-Bioretention (ROW)
DA #14	9,588	7,417	77	0.75	1,199	599	1,538	1,165	-	1.94	Micro-Bioretention (ROW)
DA #15	5,637	2,952	52	0.52	489	244	635	635	-	2.60	Micro-Bioretention (ROW)
DA #16	3,233	3,233	100	0.95	512	256	665	665	-	2.60	Micro-Bioretention
DA #17	3,632	3,632	100	0.95	575	288	748	680	-	2.33	Micro-Bioretention
DA #18	18,797	9,043	48	0.48	1,204	752	1,955	1,936	-	2.57	Micro-Bioretention
DA #19	3,990	2,751	69	0.67	446	223	579	557	-	2.50	Micro-Bioretention
DA #20	16,593	14,019	84	0.81	2,240	1,120	2,912	2,624	-	2.34	Micro-Bioretention
DA #21	7,001	4,290	61	0.60	700	350	910	468	-	1.28	Micro-Bioretention (ROW)
DA #21A	6,488	2,455	38	0.39	422	211	548	487	-	2.31	Micro-Bioretention
DA #22	1,239	1,008	65	0.64	164	82	213	213	-	2.60	Micro-Bioretention (ROW)
DA #23	3,902	2,083	52	0.52	340	170	442	273	-	1.61	Micro-Bioretention (ROW)
DA #24	2,082	1,317	65	0.63	213	107	277	182	-	1.71	Micro-Bioretention (ROW)
DA #25	3,552	1,876	53	0.53	314	157	400	220	-	1.40	Micro-Bioretention (ROW)
DA #26	1,845	1,105	60	0.59	181	91	236	161	-	1.77	Micro-Bioretention (ROW)
DA #27	3,534	2,280	62	0.61	259	188	467	388	-	2.12	Micro-Bioretention (ROW)
DA #28	18,247	13,330	73	0.71	2,159	1,080	2,807	2,602	-	2.41	Micro-Bioretention
DA #29	754	754	100	0.95	119	60	155	155	-	2.60	Micro-Bioretention
DA #30	754	754	100	0.95	119	60	155	155	-	2.60	Micro-Bioretention
DA #31	754	754	100	0.95	119	60	155	155	-	2.60	Micro-Bioretention
DA #32	754	754	100	0.95	119	60	155	155	-	2.60	Micro-Bioretention
DA #33	754	754	100	0.95	119	60	155	106	-	1.78	Micro-Bioretention
DA #34	754	754	100	0.95	119	60	155	155	-	2.60	Micro-Bioretention
DA #35	754	754	100	0.95	119	60	155	134	-	2.24	Micro-Bioretention
DA #36	754	754	100	0.95	119	60	155	155	-	2.60	Micro-Bioretention
DA #37	754	754	100	0.95	119	60	155	134	-	2.24	Micro-Bioretention
DA #38	754	754	100	0.95	119	60	155	155	-	2.60	Micro-Bioretention
DA #39	7,503	4,973	66	0.65	813	406	1,057	879	-	2.16	Micro-Bioretention (ROW)
DA #40	4,684	1,491	31	0.33	-	-	114	114	-	1.00	Grass Swale
DA #41	77,368	64,787	84	0.80	13,410	10,316	13,410	-	13,272	2.57	Underground Structure
DA #42	73,451	58,847	80	0.77	9,406	4,713	12,254	-	10,208	2.19	Underground Structure
					Total ESDv Provided = 24,935 ft³		Additional ESDv Required				
					Total ESDv Required = 49,873 ft³						
					Total P _i Provided = 1,000 in.						
					Total P _i Required = 2,000 in.						
Total Structural Provided for CPv = 23,580 ft³					CPv Requirements Met						
Additional WQv Required = - ft³											
CPv Required = 23,547 ft³											
Additional Q ₁₀ Volume Required for Site = 24,032 ft³					Additional Structural Required (See Q ₁₀ Computations)						

State of Maryland
AMANDA STAMPLER
PROFESSIONAL ENGINEER
26328

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NO.	DESCRIPTION OF REVISION	P.E. INITIAL	DATE	DPW	DATE	
APPROVAL OF REVISIONS AFTER INTIAL PLAN APPROVAL						
		DATE SUBMITTED: 2026/04/29	SCALE 1" = 50'	SHEET	FILE #	
				NO. 1		
				OF 8		



DEPARTMENT OF PUBLIC WORKS
CITY OF
ROCKVILLE
111 MARYLAND AVE. ROCKVILLE, MARYLAND

DESIGN PLAN APPROVAL			
	PWK# _____ SMP# _____	SCP# _____ REVIEWED BY _____	_____ _____
DIRECTOR OF PUBLIC WORKS	APPROVAL DATE		

AS BUILT PLAN APPROVAL	
CHIEF, CONSTRUCTION MANAGEMENT	APPROVAL DATE

STORMWATER MANAGEMENT
CONCEPT PLAN

Cover Sheet

1455 RESEARCH BLVD
ROCKVILLE, PARCEL 1

Election District No. 4 City of Rockville, Maryland

SHEET NOTES

I. PIPES SHOWN ARE CONCEPTUAL AT THIS TIME.

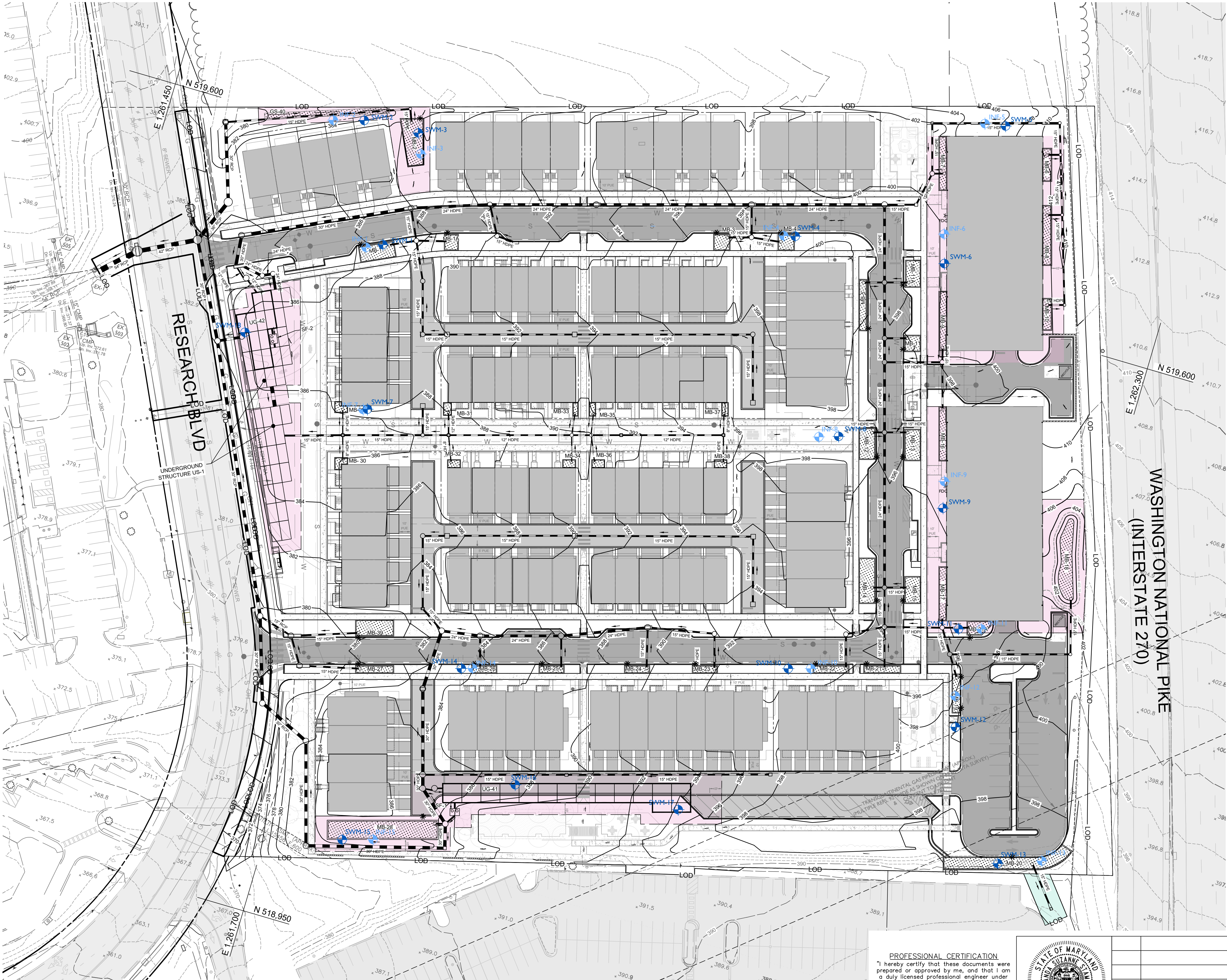
LEGEND

- EXISTING IMPERVIOUS AREA
- PROPOSED IMPERVIOUS AREA - PAVEMENT
- PROPOSED IMPERVIOUS AREA - BUILDING
- PROPOSED IMPERVIOUS AREA - SIDEWALK
- PROPOSED MICRO-BIORETENTION
- *

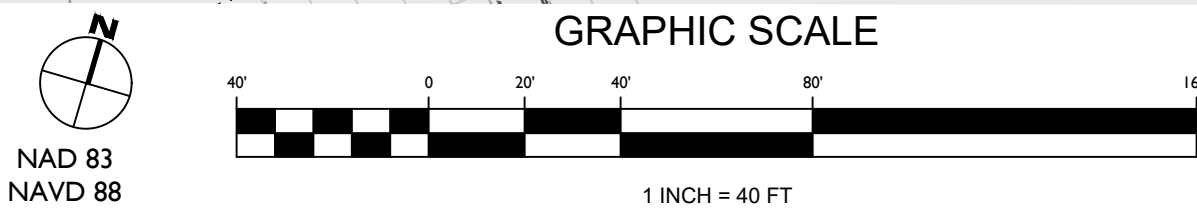
PROPOSED MICRO-BIO CURBCUT OPENING
- PROPOSED UNDERGROUND SWM STRUCTURES
- PROPERTY BOUNDARY
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CONTOUR
- EXISTING CONTOUR
- PROPOSED STORM DRAIN
- EXISTING STORM DRAIN
- INF-1

SOIL BORING - INFILTRATION
- SWM-1

SOIL BORING - SWM
- PROPOSED SWM EASEMENT AREA
- PROPOSED PRIVATE STORM DRAIN EASEMENT AREA



DEVELOPMENT SWM CONCEPT PLAN
SCALE: 1" = 40'



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.26328, Expiration Date: 1/15/28."



Digitally signed by Amanda Stammer, P.E.
Date: 2026.04.28 15:43:11 -0400

BEFORE BEGINNING CONSTRUCTION
CONTACT
"MISS UTILITY"
WWW.MISSUTILITY.NET
OR
1-800-257-7777
OR 811
AT LEAST 48 HOURS
PRIOR TO EXCAVATION



DEPARTMENT OF PUBLIC WORKS
CITY OF
ROCKVILLE
111 MARYLAND AVE. ROCKVILLE, MARYLAND

DESIGN PLAN APPROVAL

DIRECTOR OF PUBLIC WORKS	APPROVAL DATE	PWK#	SCP#
		SMP#	REVIEWED BY

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CHIEF, CONSTRUCTION MANAGEMENT	APPROVAL DATE

STORMWATER MANAGEMENT
CONCEPT PLAN
DEVELOPMENT SWM
CONCEPT PLAN

1455 RESEARCH BLVD
ROCKVILLE, PARCEL 1

Election District No. 4 City of Rockville, Maryland

NO.	DESCRIPTION OF REVISION	P.E. INITIAL	DATE	DPW	DATE

APPROVAL OF REVISIONS AFTER INITIAL PLAN APPROVAL

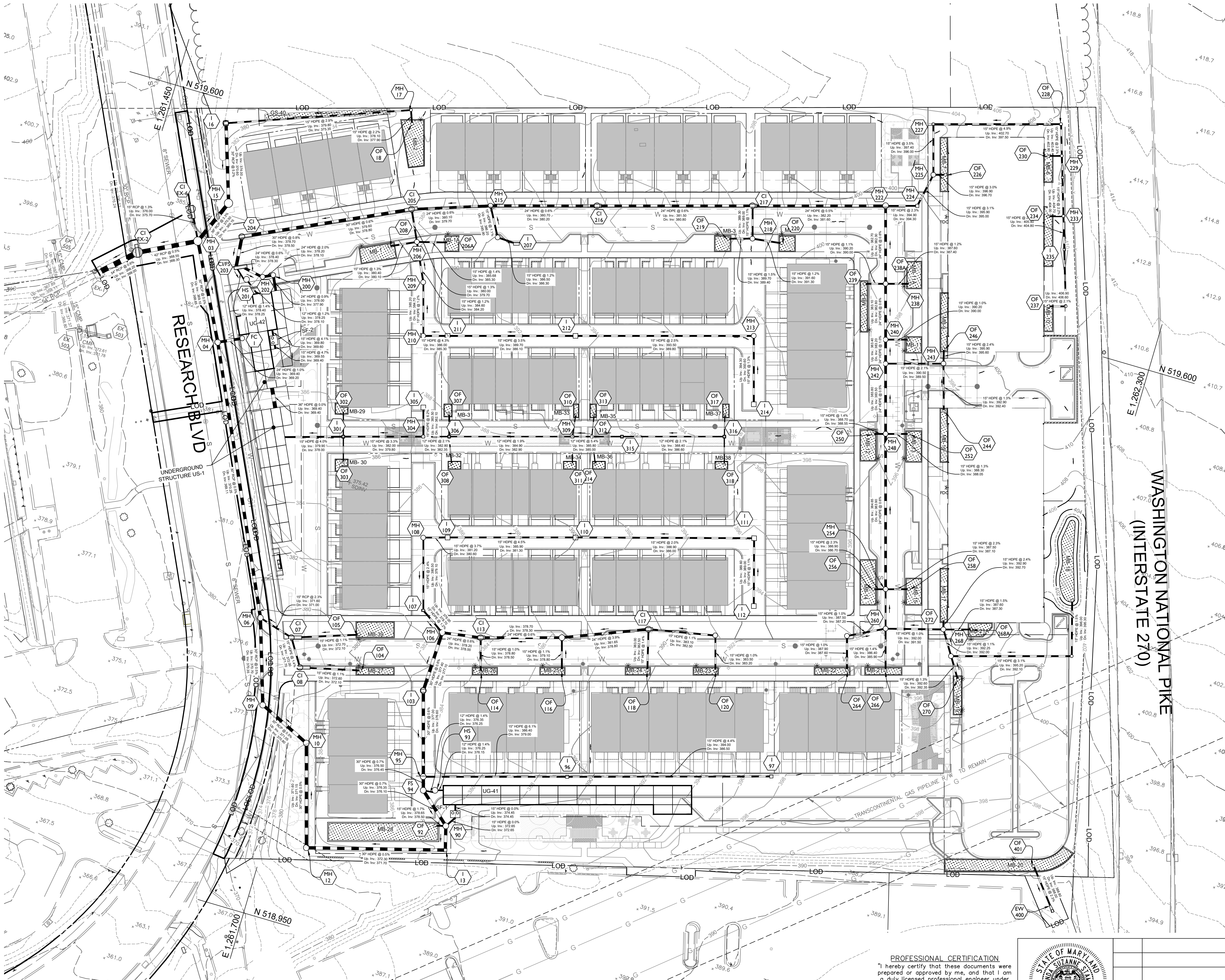
DATE SUBMITTED: 2026/04/29	SCALE 1" = 40'	SHEET NO. 2 OF 8	FILE #
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SHEET NOTES

I. PIPES SHOWN ARE CONCEPTUAL AT THIS TIME.

LEGEND

- EXISTING IMPERVIOUS AREA
- PROPOSED BUILDING
- PROPOSED MICRO-BIORETENTION
- PROPOSED UNDERGROUND SWM STRUCTURES
- SWM MICROBIO FENCE
- PROPERTY BOUNDARY
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CONTOUR
- EXISTING CONTOUR
- PROPOSED STORM DRAIN
- EXISTING STORM DRAIN

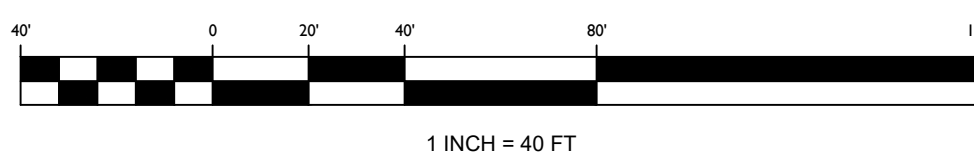


STORM DRAIN INVERTS PLAN

SCALE: 1" = 40'



GRAPHIC SCALE



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.26328, Expiration Date: 1/15/28."



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Date: 2026.04.28 15:43:32-0400

NO.	DESCRIPTION OF REVISION	P.E. INITIAL	DATE	DPW	DATE
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APPROVAL OF REVISIONS AFTER INTIAL PLAN APPROVAL

DATE SUBMITTED: 2026/04/29	SCALE 1" = 40'	SHEET NO. <u>3</u> OF <u>8</u>	FILE #
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OR 811
AT LEAST 48 HOURS
PRIOR TO EXCAVATION



DEPARTMENT OF PUBLIC WORKS
CITY OF
ROCKVILLE
111 MARYLAND AVE. ROCKVILLE, MARYLAND

DESIGN PLAN APPROVAL

PWK# _____ SCP# _____
SMP# _____ REVIEWED BY _____
DIRECTOR OF PUBLIC WORKS APPROVAL DATE _____

AS BUILT PLAN APPROVAL

CHIEF, CONSTRUCTION MANAGEMENT APPROVAL DATE _____

STORMWATER MANAGEMENT
CONCEPT PLAN
STORM DRAIN
INVERTS PLAN

1455 RESEARCH BLVD
ROCKVILLE, PARCEL 1

Election District No. 4 City of Rockville, Maryland

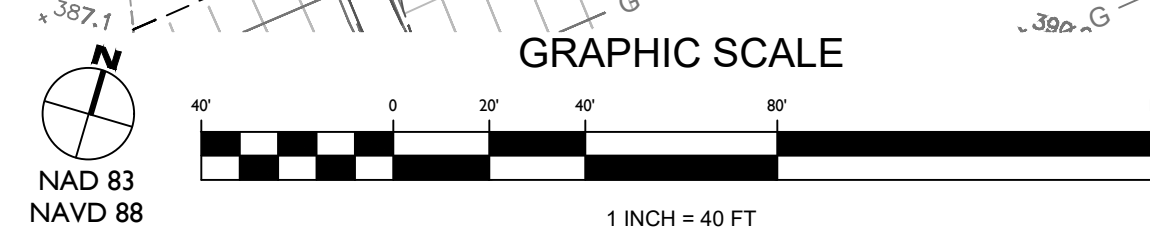
I. OFFSITE DA TO STUDY POINT REMAINS THE SAME IN POST-DEVELOPMENT CONDITIONS, THEREFORE IT HAS NOT BEEN QUANTIFIED ON THIS PLAN.

PROPERTY BOUNDARY
 434 - EXISTING CONTOUR
 18" RCP EXISTING STORM DRAIN
 EXISTING DRAINAGE DIVIDE
 STUDY POINT

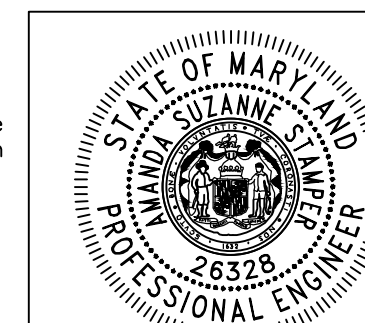


Tax I.D. #04-0014770
Research Plaza Acquisitions, LLC
B.56623 P.183
Lot 1
"National Capital Research Park"
Plat No.6390
463215 Sq.Ft. or
10.6340 Acres

OVERALL EXISTING DRAINAGE AREA MAP
SCALE: 1" = 40'



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.26328, Expiration Date: 1/15/28."



Digitally signed by Amanda Stamper, P.E.
Date: 2026.04.28 15:43:50-04'00'

REVISIONS						
	NO.	DESCRIPTION OF REVISION	P.E. INITIAL	DATE	DPW	DATE

APPROVAL OF REVISIONS AFTER INTIAL PLAN APPROVAL

DATE SUBMITTED: 2026/04/29	SCALE	SHEET	FILE #
	1" = 40'	NO. <u>4</u> OF <u>8</u>	



DEPARTMENT OF PUBLIC WORKS
CITY OF
ROCKVILLE
111 MARYLAND AVE. ROCKVILLE, MARYLAND

DESIGN PLAN APPROVAL

PWK# _____ SCP# _____
SMP# _____ REVIEWED BY _____

AS BUILT PLAN APPROVAL

CHIEF, CONSTRUCTION MANAGEMENT APPROVAL DATE

STORMWATER MANAGEMENT
CONCEPT PLAN

1455 RESEARCH BLVD
ROCKVILLE, PARCEL 1

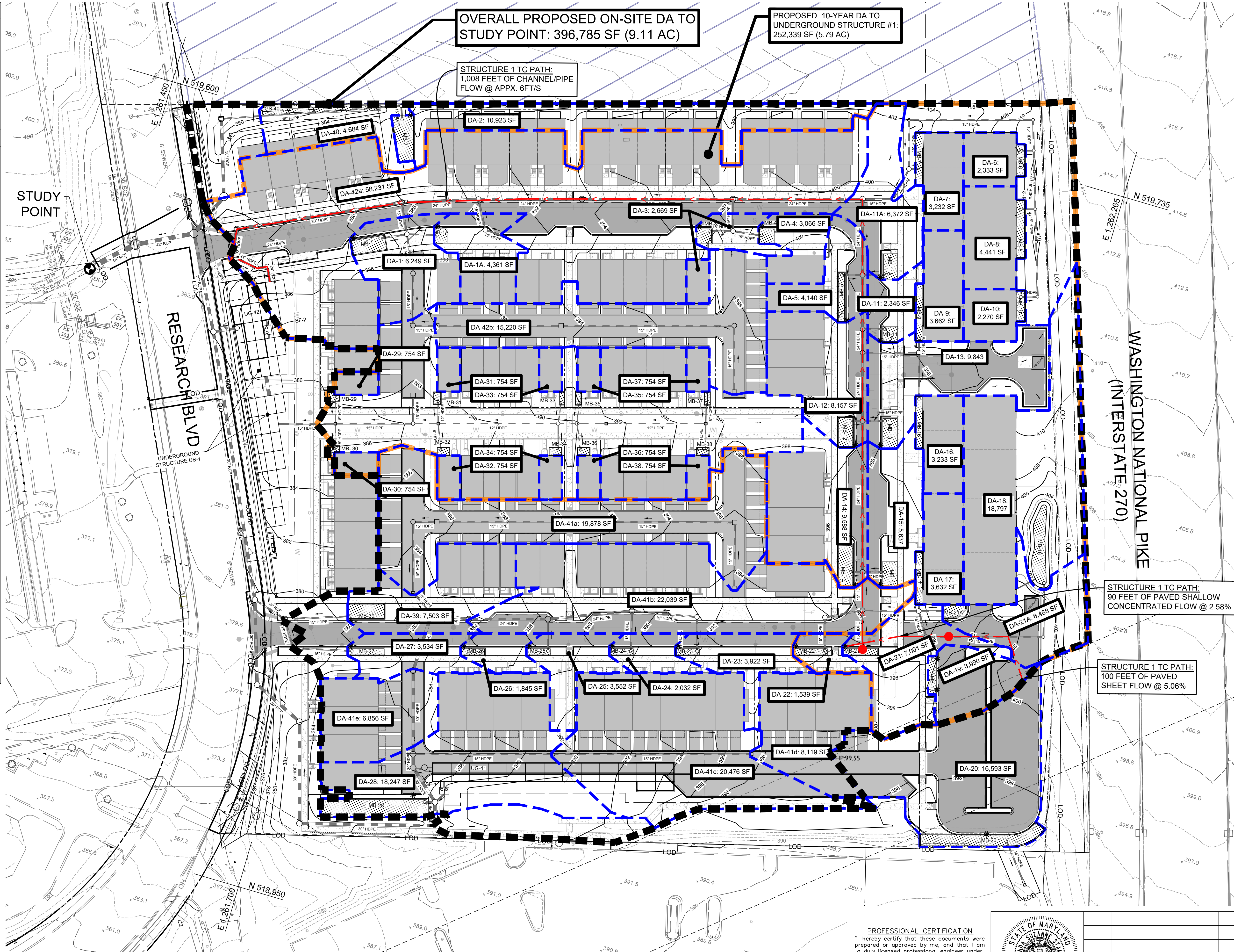
Election District No. 4 City of Rockville, Maryland

SHEET NOTES

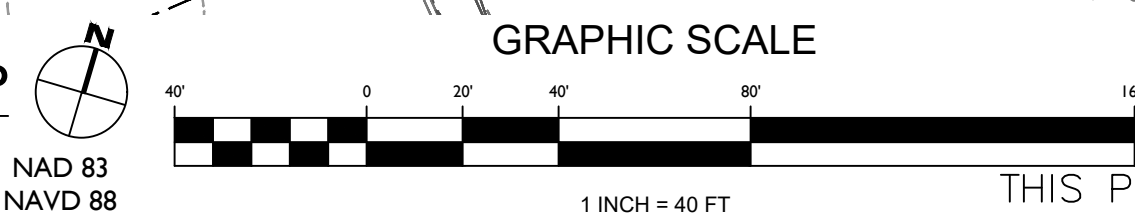
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2. PIPES SHOWN ARE CONCEPTUAL AT THIS TIME.

LEGEND

- EXISTING IMPERVIOUS AREA
- PROPOSED IMPERVIOUS AREA - PAVEMENT
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- PROPOSED IMPERVIOUS AREA - SIDEWALK
- PROPOSED MICRO-BIORETENTION
- PROPOSED MICRO-BIO CURBCUT OPENING
- PROPOSED UNDERGROUND SWM STRUCTURES
- PROPERTY BOUNDARY
- PROPOSED LIMIT OF DISTURBANCE
- EXISTING TREE LINE
- PROPOSED CONTOUR
- EXISTING CONTOUR
- PROPOSED ESD & C_p DRAINAGE DIVIDES
- PROPOSED 10-YEAR DRAINAGE DIVIDES
- OVERALL DRAINAGE DIVIDES
- PROPOSED STORM DRAIN
- EXISTING STORM DRAIN
- PROPOSED FLOW PATH
- STUDY POINT



OVERALL AND PROPOSED SWM DRAINAGE AREA MAP
SCALE: 1" = 40'



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.26328, Expiration Date: 1/15/28."



Digitally signed by Amanda Stampler, P.E.
Date: 2026.04.28 15:44:07-0400'

NO.	DESCRIPTION OF REVISION	P.E. INITIAL	DATE	DPW	DATE

BEFORE BEGINNING CONSTRUCTION
CONTACT
"MISS UTILITY"
WWW.MISSUTILITY.NET
OR
1-800-257-7777
OR 811
AT LEAST 48 HOURS
PRIOR TO EXCAVATION



DEPARTMENT OF PUBLIC WORKS
CITY OF
ROCKVILLE
111 MARYLAND AVE. ROCKVILLE, MARYLAND

DESIGN PLAN APPROVAL
PWK# _____ SCP# _____
SMP# _____ REVIEWED BY _____
DIRECTOR OF PUBLIC WORKS APPROVAL DATE _____

AS BUILT PLAN APPROVAL
CHIEF, CONSTRUCTION MANAGEMENT APPROVAL DATE _____

STORMWATER MANAGEMENT
CONCEPT PLAN
Overall and Proposed SWM Drainage
Area Map

1455 RESEARCH BLVD
ROCKVILLE, PARCEL 1

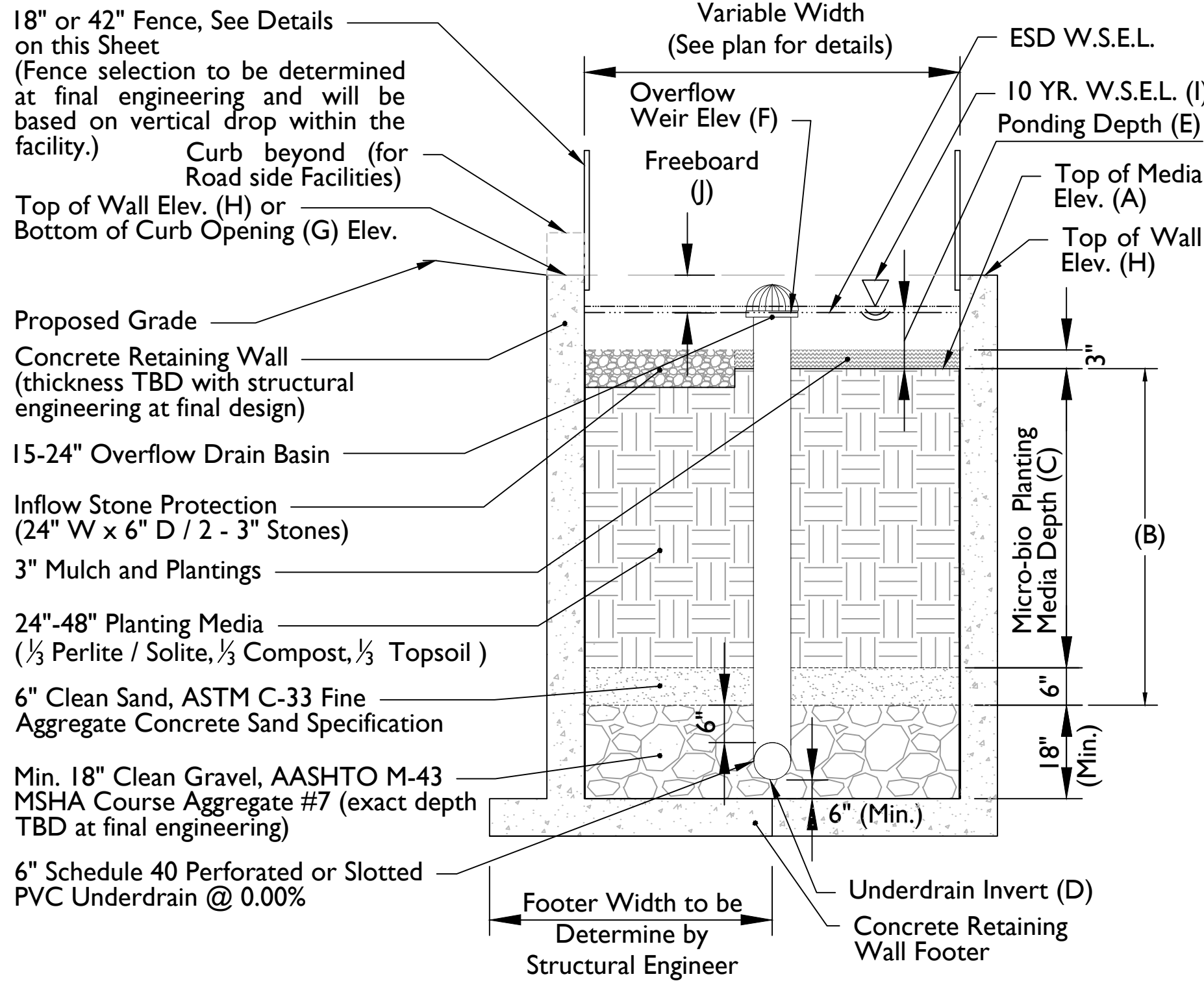
Election District No. 4 City of Rockville, Maryland

DATE SUBMITTED:
2026/04/29

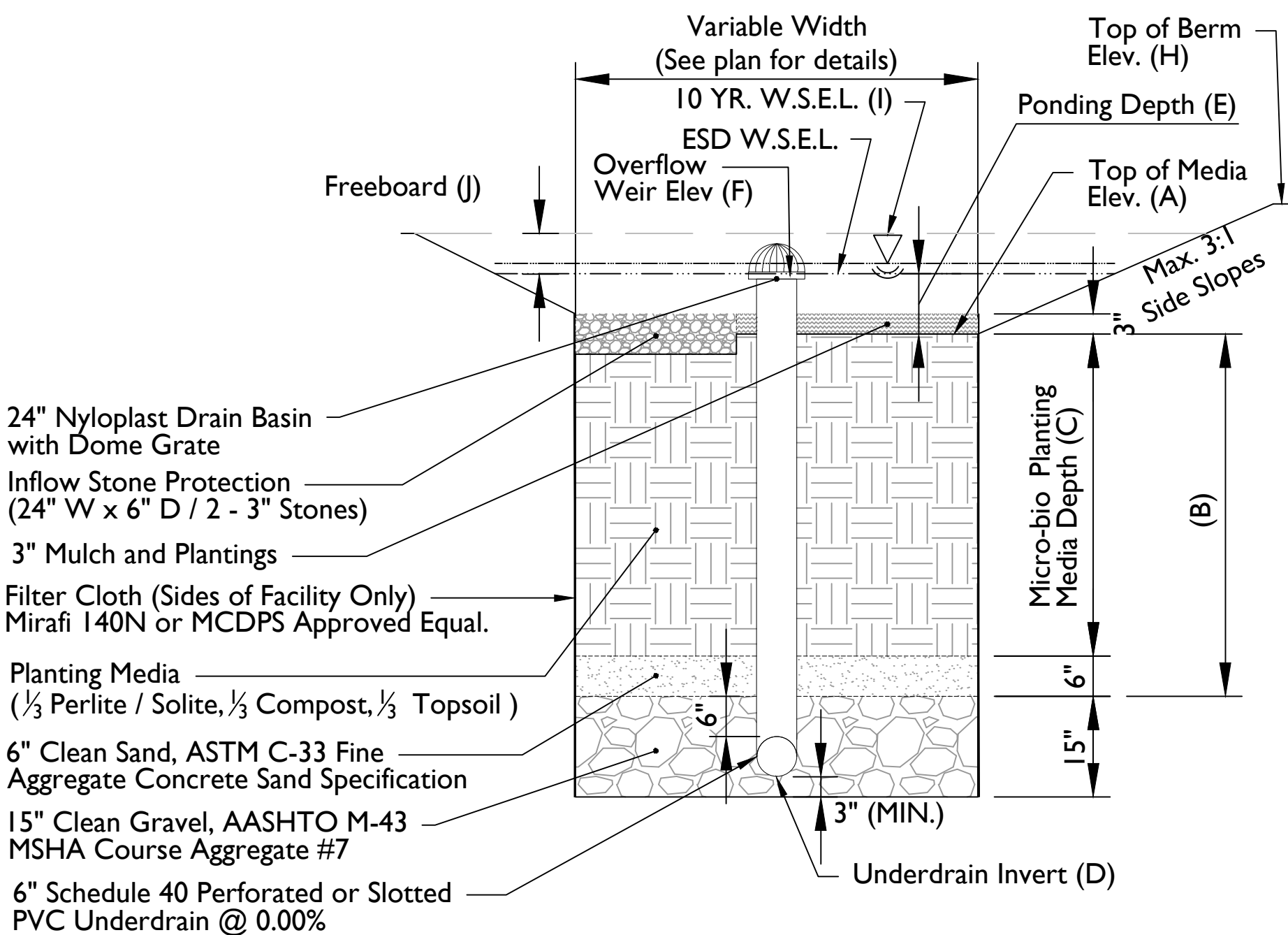
SCALE
1" = 40"

SHEET
NO. 5
OF 8

FILE #

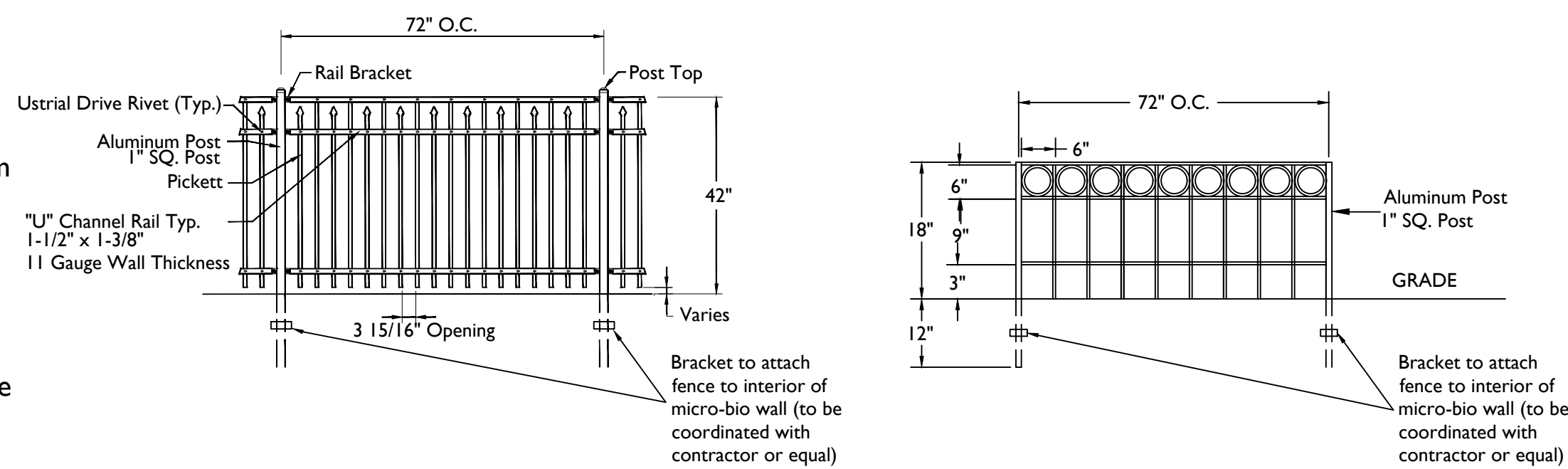


1 WALLED MICRO-BIORETENTION (N.T.S.)



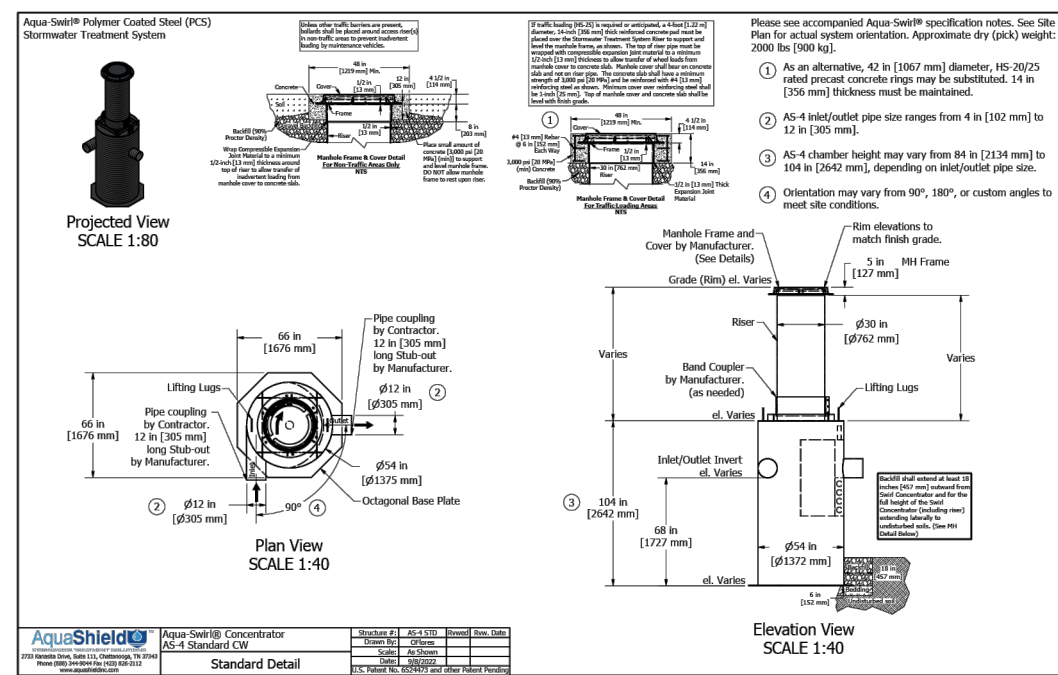
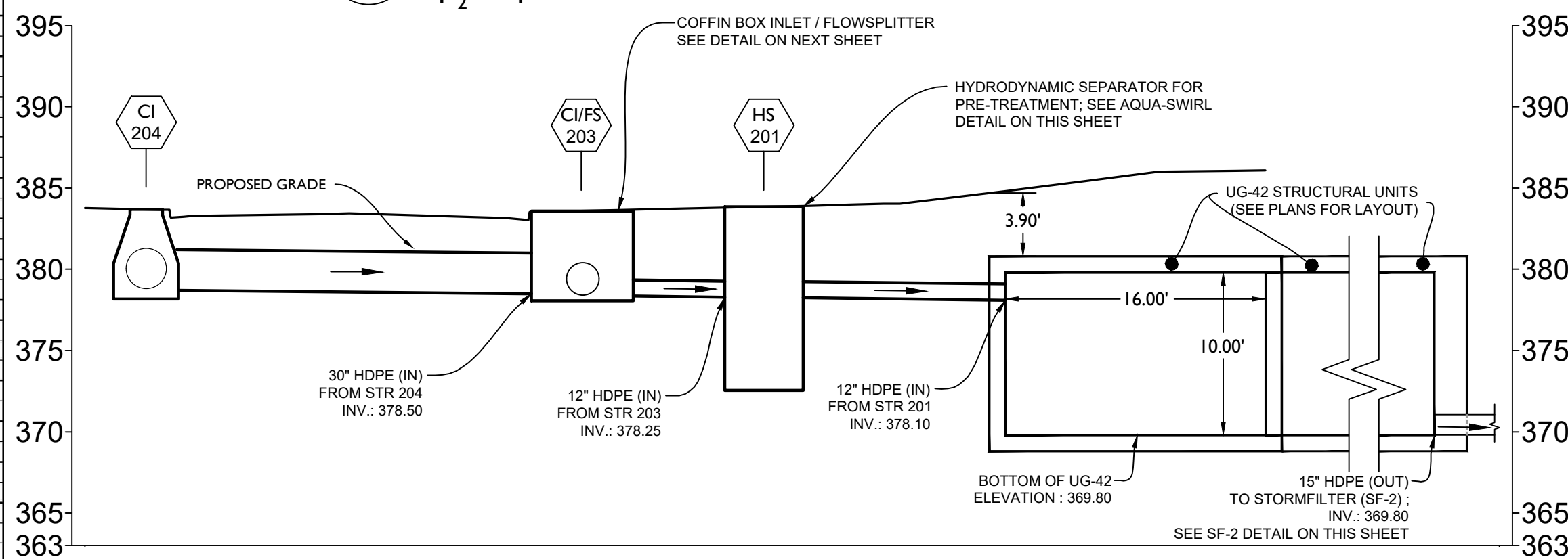
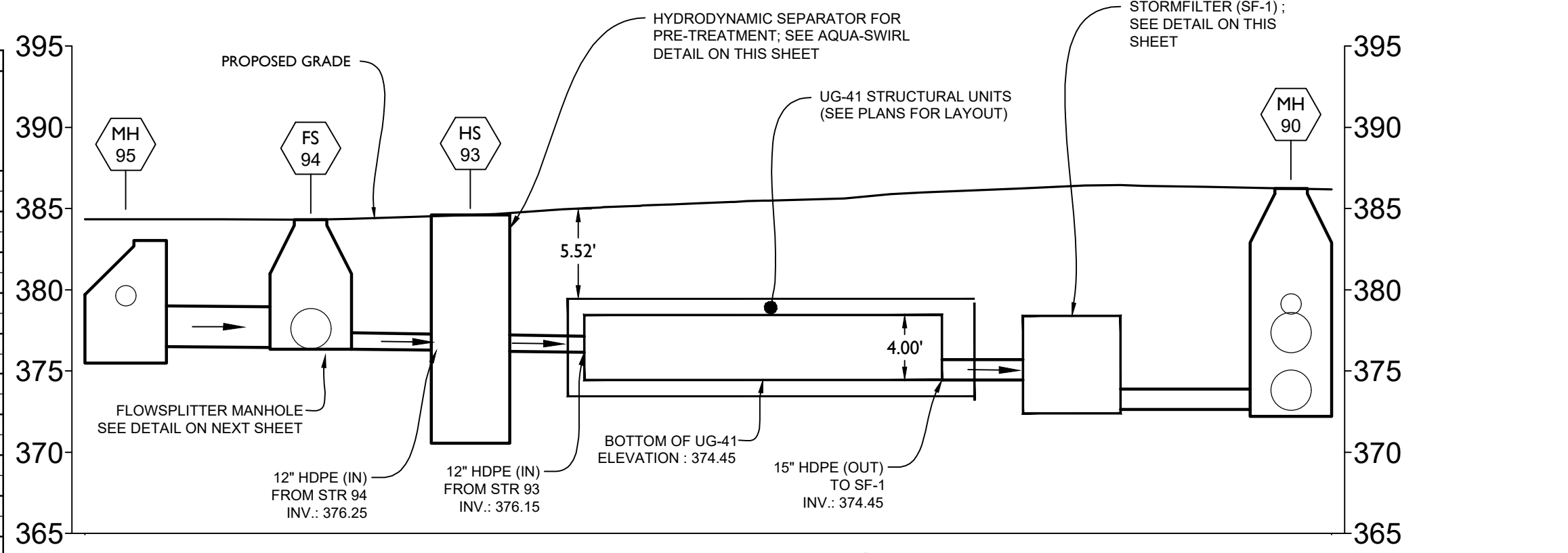
2 GRADED MICRO-BIORETENTION

- Note:
- Bioretention fence shall be constructed of black aluminum or equal material reflective of fencing material used.
 - Bioretention fence selection to be determined at final engineering, with any drop from top of wall to media elevation of 30 inches or more requiring a 42 inch tall fence.

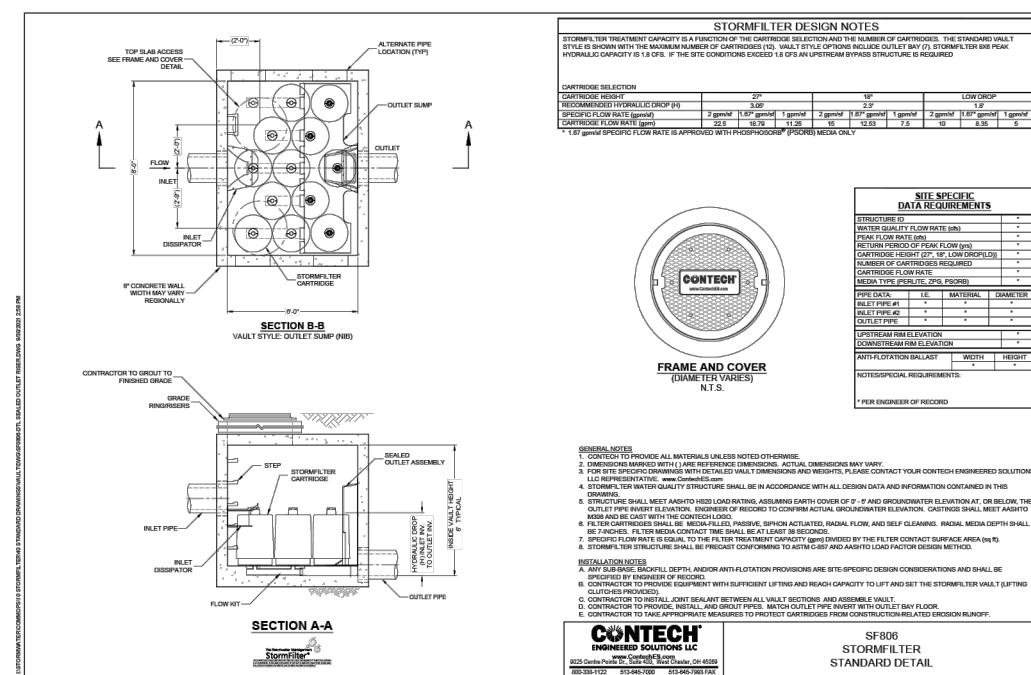


3 BIORETENTION FENCE OPTIONS OR APPROVED EQUAL (N.T.S.)

MICRO BIORETENTION FACILITIES (MB)													
FACILITY	DESIGN FILTER BED AREA (SF)	UNDER-DRAIN PIPE LENGTH (LF)	TOP OF FILTER MEDIA (ft) (A)	DEPTH OF MEDIA & SAND (ft) (B)	DEPTH OF MEDIA (ft) (C)	UNDER-DRAIN PIPE INVERT (ft) (D)	ESDV PONDING DEPTH (ft) (E)	ESDV PROVIDED (ft) (F)	OVERFLOW WEIR ELEVATION (ft) (G)	BOTTOM OF CURB OPENING ELEVATION (ft) (H)	LOWEST TOP OF WALL/BERM ELEVATION (ft) (I1)	HIGHEST TOP OF WALL/BERM ELEVATION (ft) (I2)	MAX. TOP OF WALL TO TOP OF FILTER MEDIA (ft) (J)
MB-1 ROW	357	18	385.10	2.5	2	381.60	0.50	536	385.60	385.60	-	387.30	26
As-Built													
MB-1A ROW	131	7	387.62	4.5	4	382.12	0.75	334	388.37	388.37	-	389.62	24
As-Built													
MB-2	600	30	383.60	4.5	4	378.10	1.00	1,112	384.60	-	385.33	388.49	59
As-Built													
MB-3 ROW	156	8	396.20	4.5	4	390.70	0.50	359	396.70	396.70	-	398.20	24
As-Built													
MB-4 ROW	156	8	397.86	4.5	4	392.36	0.50	359	398.36	398.36	-	399.83	24
As-Built													
MB-5	224	11	396.64	4.5	4	391.14	0.67	553	397.31	397.31	-	398.62	24
As-Built													
MB-6	177	9	412.40	4.5	4	406.90	1.00	480	413.40	-	414.00	414.00	19
As-Built													
MB-7	243	12	402.40	4.5	4	396.90	1.00	665	403.40	-	404.00	404.00	19
As-Built													
MB-8	327	16	412.40	4.5	4	406.90	1.00	914	413.40	-	414.00	414.00	19
As-Built													
MB-9	268	13	401.40	4.5	4	395.90	1.00	750	402.40	-	403.00	403.00	19
As-Built													
MB-10	171	9	412.40	4.5	4	406.90	1.00	467	413.40	-	414.00	414.00	19
As-Built													
MB-11	156	8	396.25	4.5	4	390.75	0.50	280	396.75	397.25	-	398.26	24
As-Built													
MB-11A ROW	253	13	396.80	4.5	4	391.30	1.00	704	397.80	397.80	-	399.18	29
As-Built													
MB-12 ROW	311	16	394.87	4.5	4	389.37	1.00	871	395.87	395.87	-	397.07	26
As-Built													
MB-13 ROW	311	16	394.87	4.5	4	389.37	1.00	871	395.87	395.87	-	397.07	26
As-Built													
MB-14 ROW	457	23	393.30	4.5	4	387.80	0.75	1,165	394.05	394.05	-	395.23	23
As-Built													
MB-15	266	13	393.27	4.5	4	387.77	0.75	635	394.02	394.27	-	395.12	22
As-Built													
MB-16	244	12	398.40	4.5	4	392.90	1.00	665	399.40	-	400.00	400.00	19
As-Built													
MB-17	243	12	398.40	4.5	4	392.90	1.00	680	399.40	-	400.00	400.00	19
As-Built													
MB-18	654	33	401.00	4	3.5	396.00	1.00	1,936	402.00	-	402.75	404.00	36
As-Built													
MB-19	199	10	398.10	4.5	4	392.60	1.00	557	399.10	399.71	-	400.17	25
As-Built													
MB-20	937	47	394.30	4.5	4	388.80	1.00	2,624	395.30	396.10	-	397.56	39
As-Built													
MB-21 ROW	160	8	392.61	4.5	4	387.11	1.00	448	393.61	393.61	-	394.77	26
As-Built													
MB-21A	174	9	394.50	4.5	4	389.00	1.00	487	395.50	396.00	-	396.67	26
As-Built													
MB-22 ROW	155	8	392.20	2.5	2	388.70	0.75	213	392.95	392.95	-	394.02	22
As-Built													
MB-23 ROW	107	5	389.99	4.5	4	384.49	0.75	273	390.74	390.74	-	392.07	25
As-Built													
MB-24 ROW	107	5	387.99	3	2.5	383.99	0.50	182	388.49	388.49	-	389.99	24
As-Built													
MB-25 ROW	107	5	385.12	3.9	3.4	380.22	0.50	220	385.62	385.62	-	387.13	24
As-Built													
MB-26 ROW	107	5	382.86	2.5	2	379.36	0.50	161	383.36	383.36	-	384.74	23
As-Built													
MB-27 ROW	165	8	379.29	4.5	4	373.79	0.50	380	379.79	379.79	-	381.55	27
As-Built													
MB-28	1,301	65	382.15	2.5	2	378.65	1.00	2,602	383.15	383.90	-	386.47	52
As-Built													
MB-29	67	3	386.90	4	3.5	381.90	1.00	155	387.90	-	388.50	388.5	19
As-Built													
MB-30	72	4	386.40	4	3.5	381.40	1.00	155	387.40	-	388.00	388	19
As-Built													
MB-31	60	3	388.40	4	3.5	383.40	1.00	155	389.40	-	390.00	390	19
As-Built													
MB-32	60	3	388.40	4	3.5	383.40	1.00	155	389.40	-	390.00	390	19
As-Built													
MB-33	38	2	392.20	4.5	4	386.70	1.00	106	393.20	-	393.80	393.8	19
As-Built													
MB-34	60	3	390.50	4	3.5	385.50	1.00	155	391.50	-	392.10	392.1	19
As-Built													
MB-35	48	2	392.40	4.5	4	386.90	1.00	134	393.40	-	394.00	394	19
As-Built													
MB-36	60	3	391.40	4	3.5	386.40	1.00	155	392.40	-	393.00	393	19
As-Built													
MB-37	48	2	396.90	4.5	4	391.40	1.00	134	397.90	-	398.50	398.5	19
As-Built													
MB-38	60	3	396.40	4	3.5	391.40	1.00	155	397.40	-	398.00	398	19
As-Built													
MB-39 ROW	382	19	379.29	4.5	4	373.79	0.50	879	379.79	379.79	-	381.69	29
As-Built													

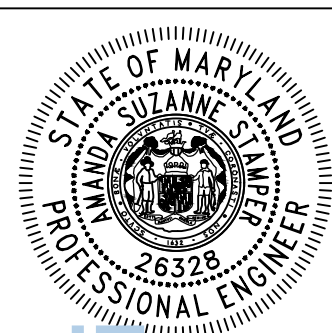


6 HYDRODYNAMIC SEPARATOR (AQUA-SWIRL AS-4) OR APPROVED EQUAL



7 STORMFILTER OR APPROVED EQUAL

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.26328, Expiration Date: 1/15/28."



Digitally signed by Amanda Stalper, P.E.
Date: 2026.04.28 15:44:32-04'00'

NO.	DESCRIPTION OF REVISION	P.E. INITIAL	DATE	DPW	DATE

APPROVAL OF REVISIONS AFTER INTIAL PLAN APPROVAL

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DEPARTMENT OF PUBLIC WORKS
CITY OF
ROCKVILLE
111 MARYLAND AVE. ROCKVILLE, MARYLAND

DESIGN PLAN APPROVAL

PWK# _____ SCP# _____
SMP# _____ REVIEWED BY _____

DIRECTOR OF PUBLIC WORKS APPROVAL DATE _____

AS BUILT PLAN APPROVAL

CHIEF, CONSTRUCTION MANAGEMENT APPROVAL DATE _____

STORMWATER MANAGEMENT
CONCEPT PLAN
SWM Details

1455 RESEARCH BLVD
ROCKVILLE, PARCEL 1

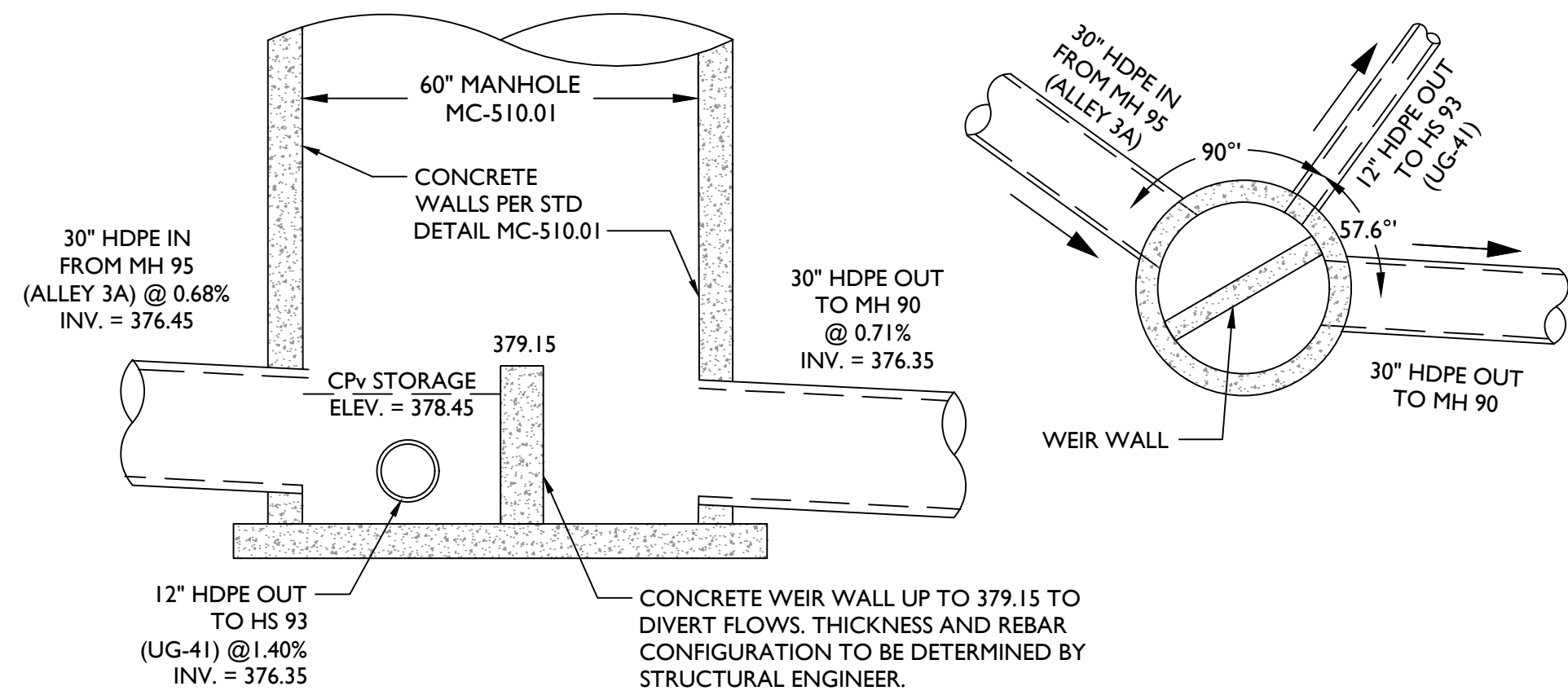
Election District No. 4 City of Rockville, Maryland

DATE SUBMITTED:
2026/04/29

SCALE AS SHOWN

SHEET NO. 6
OF 8

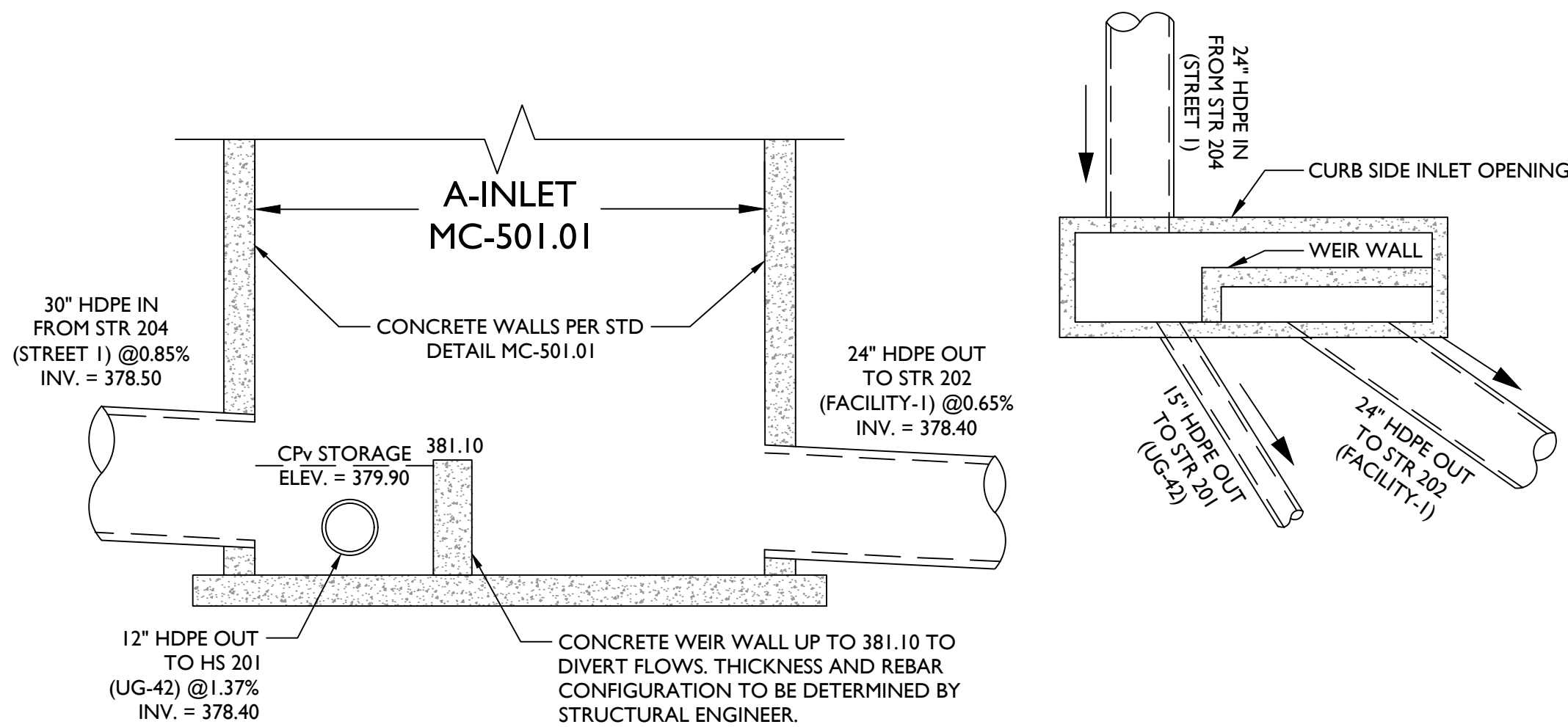
FILE # _____



SECTION VIEW
N.T.S.

PLAN VIEW
N.T.S.

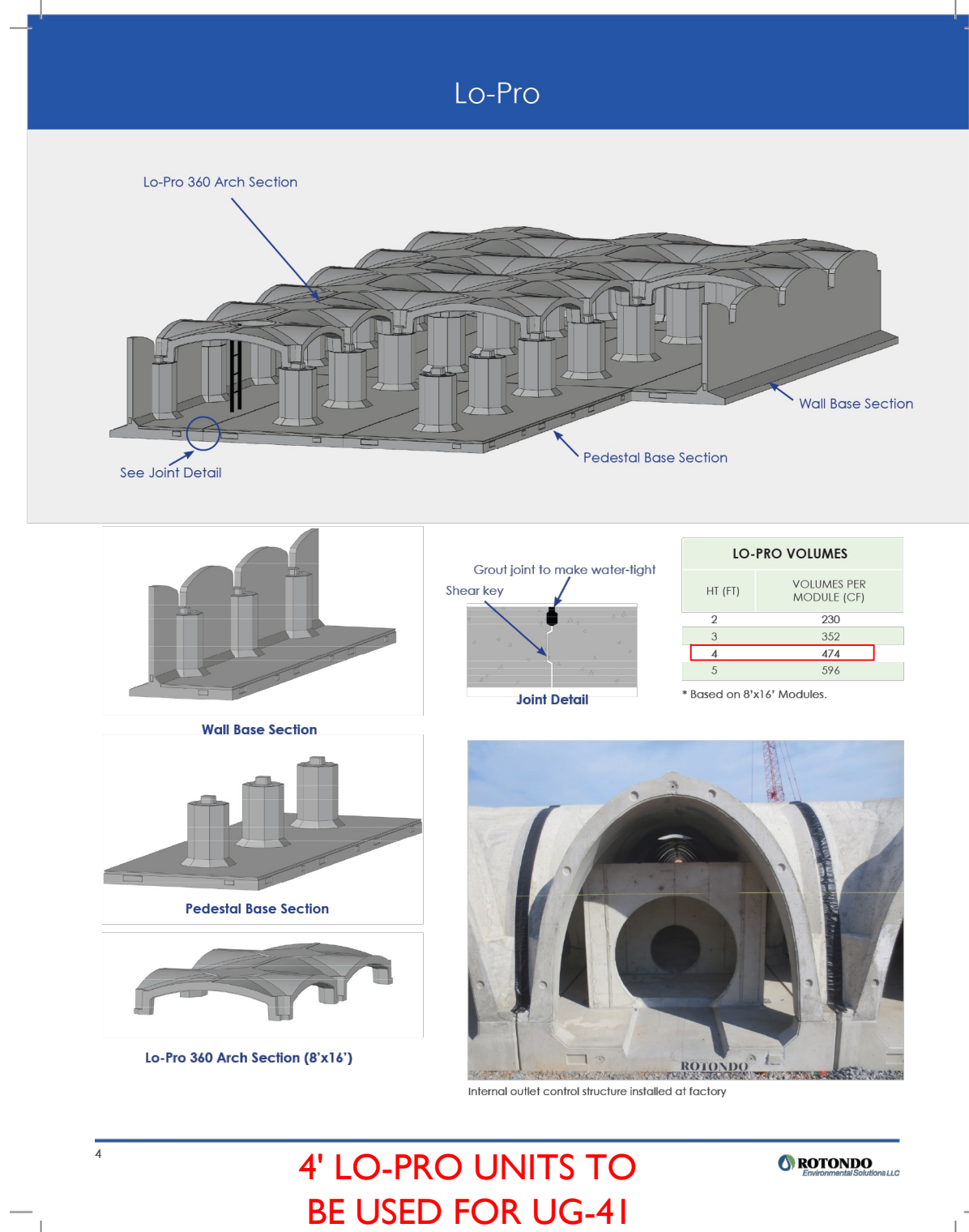
1 CUSTOM FLOWSPLITTER DETAIL : FS-94
TO UNDERGROUND FACILITY- 4I



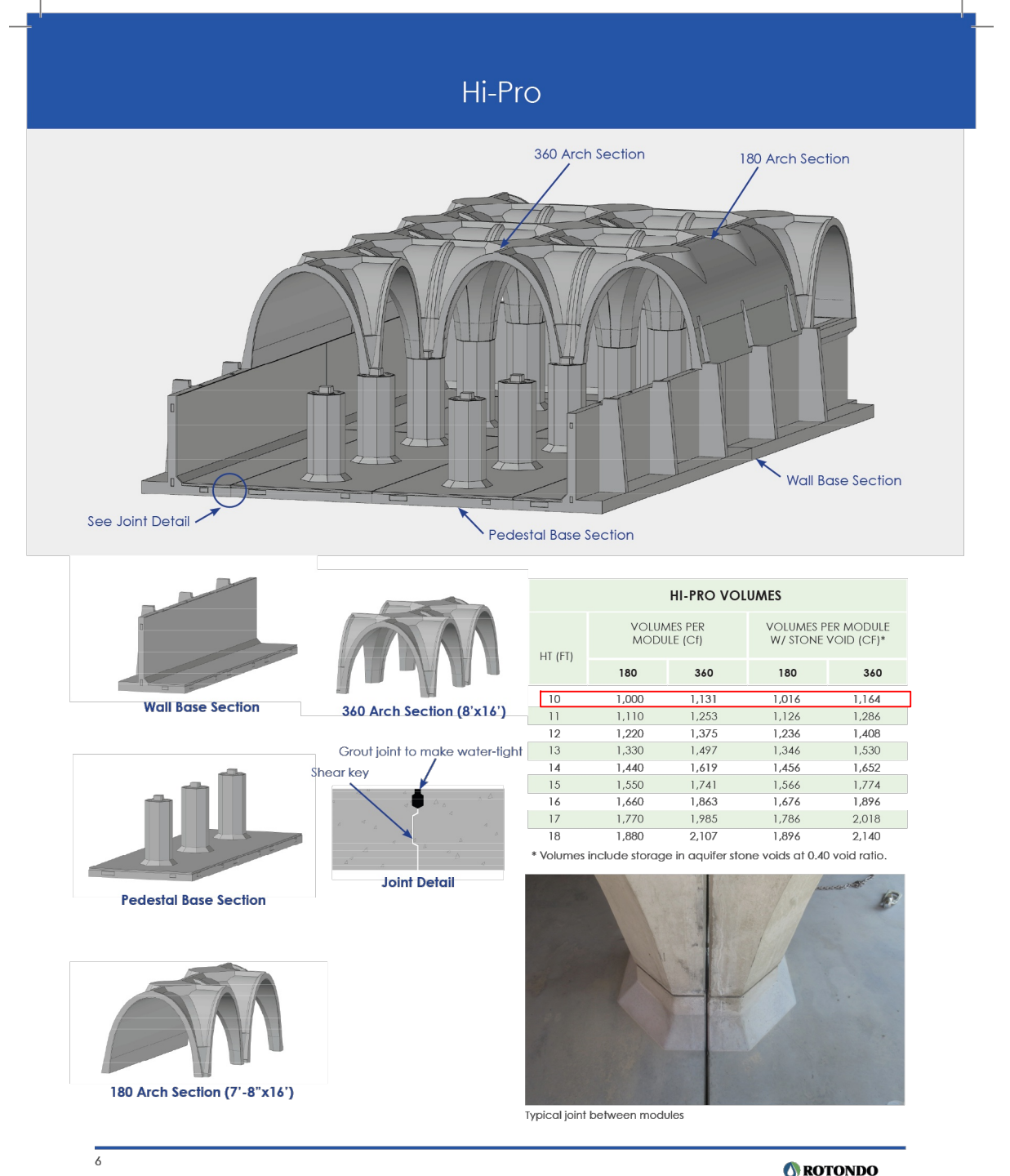
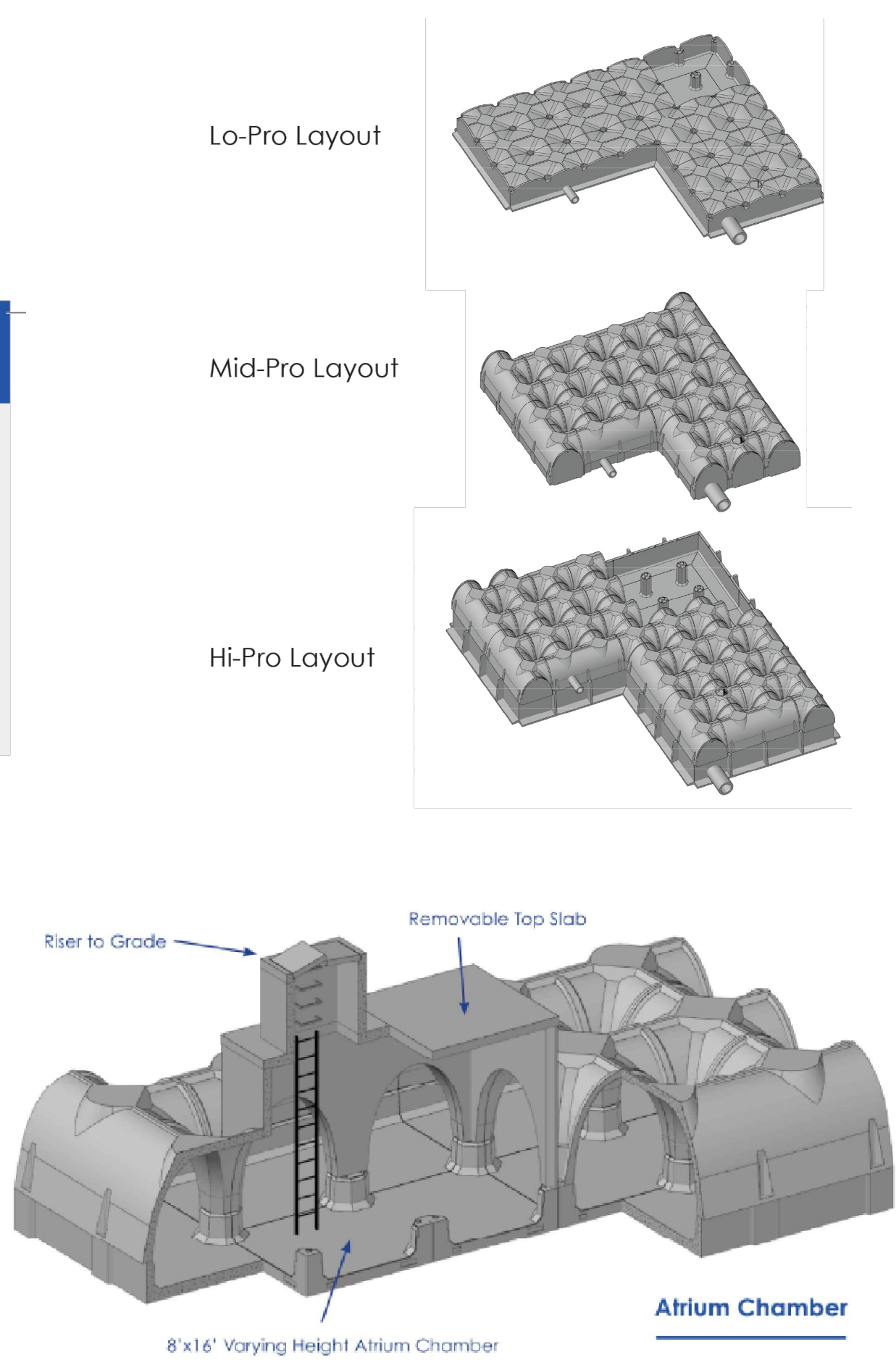
SECTION VIEW
N.T.S.

PLAN VIEW
N.T.S.

2 CUSTOM FLOWSPLITTER DETAIL : FS-203
TO UNDERGROUND FACILITY-I



4' LO-PRO UNITS TO BE USED FOR UG-4I



10' HI-PRO UNITS TO BE USED FOR STRUCTURE-I & UG-42

3 STRUCTURAL STORAGE VAULT DETAILS
OR APPROVED EQUAL (N.T.S.)

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OR
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CITY OF
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111 MARYLAND AVE. ROCKVILLE, MARYLAND

DESIGN PLAN APPROVAL

PWK# _____ SCP# _____
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DIRECTOR OF PUBLIC WORKS APPROVAL DATE _____

AS BUILT PLAN APPROVAL

CHIEF, CONSTRUCTION MANAGEMENT APPROVAL DATE _____

STORMWATER MANAGEMENT
CONCEPT PLAN
SWM Details

1455 RESEARCH BLVD
ROCKVILLE, PARCEL 1
Election District No. 4 City of Rockville, Maryland

DATE SUBMITTED:
2026/04/29

SCALE
AS SHOWN

SHEET
NO. 7
OF 8

FILE #

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