

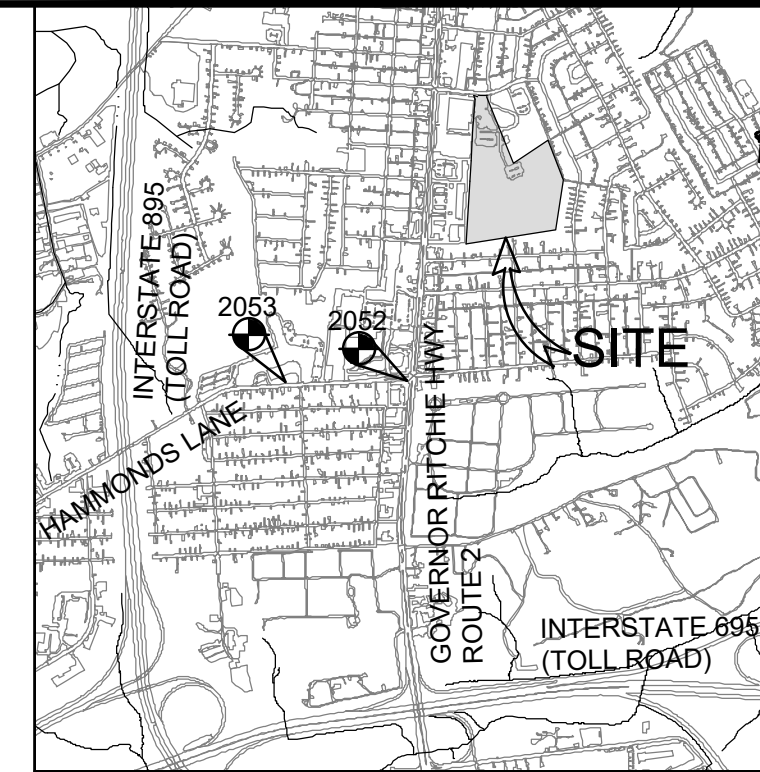
# ANNE ARUNDEL COUNTY

## DEPARTMENT OF PUBLIC WORKS

### BROOKLYN HEIGHTS COMMUNITY CENTER PARK

#### PROJECT NO. 579001

# CONSTRUCTION DOCUMENTS



VICINITY MAP  
SCALE: 1"=2000'

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### SEQUENCE OF CONSTRUCTION (NOTE: CONTRACT DURATION IS ONE YEAR)

- NOTIFY THE DEPARTMENT OF INSPECTIONS AND PERMITS (410-222-7780) AT LEAST 48 HOURS BEFORE COMMENCING WORK. WORK MAY NOT COMMENCE UNTIL THE PERMITTEE OR THE RESPONSIBLE PERSONNEL HAVE MET ON SITE WITH THE SEDIMENT AND EROSION CONTROL INSPECTOR TO REVIEW THE APPROVED PLANS.
- PHASE 1**
- STAKEOUT LIMITS OF DISTURBANCE OF THE ENTIRE PROJECT. CLEAR AND GRUB FOR THE INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCES, INLET PROTECTION, AND PERIMETER CONTROLS. (1 WEEK)
- INSTALL STABILIZED CONSTRUCTION ENTRANCES, INLET PROTECTION, CLEAN WATER DIVERSION FENCE AND EARTH DIKE, AND PERIMETER CONTROLS. (1 WEEK)
- CONTACT COUNTY INSPECTOR FOR INITIAL INSPECTION. (1 WEEK)
- PHASE 2**
- UPON APPROVAL OF INSPECTOR, BEGIN DEMOLITION, AND CLEARING. CONCURRENT WITH CLEARING AND DEMOLITION, BEGIN CONSTRUCTION OF 48" RCP BYPASS STORM DRAIN AND THE ADDITIONAL PROPOSED ON-SITE STORM DRAIN. STORM DRAIN ASSOCIATED WITH OVERFLOWS FROM MICROBIORETENTION FACILITIES MAY BE DEFERRED UNTIL MICROBIORETENTION CONSTRUCTION (STRUCTURES 120, 130, 140, 191, 192, 195, AND 199). DO NOT CONNECT UPSTREAM END OF BYPASS UNTIL ENTIRE BYPASS SECTION IS CONNECTED. CONNECTION TO EXISTING 48" STORM DRAIN AND EXISTING ON-SITE 15" STORM DRAIN SHALL HAPPEN DURING A 3 DAY CLEAR WEATHER PERIOD. AS INLETS ARE INSTALLED, PROVIDE INLET PROTECTION WHERE CALLED FOR ON THE PLANS. WHERE NEW INLETS ARE RECEIVING CLEAR WATER DIVERSION, STABILIZE AREA AROUND INLET WITH STABILIZATION MATTING AND SEED BEFORE DIRECTING CLEAR WATER TO THE INLET (4 WEEKS)
- BEGIN MASS GRADING. INSTALL WATER, SEWER, AND ELECTRIC CONNECTIONS. WATER, SEWER, AND ELECTRIC CONNECTIONS SHALL BE INSTALLED USING SAME DAY STABILIZATION MEASURES. (8 WEEKS)
- WITH THE ESTABLISHMENT OF SUBGRADE, COMPLETE ANY REMAINING STORM DRAIN INSTALLATION AND INSTALL INLET PROTECTION AROUND ALL INLETS. (3 WEEKS)
- PHASE 3**
- BEGIN INSTALLING STONE AND PAVING/SURFACE FOR ADAPTIVE BALL FIELD. INSTALL CONCRETE PADS AND TRAILS. DELAY TRAIL INSTALLATION FOR AREAS WHERE SEDIMENT CONTROLS ARE IN CONFLICT WITH TRAIL. UNTIL SITE IS 95% STABILIZED. WHERE TRAILS ARE OUTSIDE OF SEDIMENT CONTROLS, INSTALL TRAIL USING SAME DAY STABILIZATION MEASURES. STABILIZE DISTURBED AREAS WITH SEED AND STRAW, AND INSTALL SOIL STABILIZATION MATTING IN SWALES AND SLOPES. INSTALL CURBING. INSTALL SIDEWALK DOWN TO LIBRARY/SCHOOL USING SAME DAY STABILIZATION MEASURES. (4 WEEKS)
- ONCE SITE HAS BEEN PRELIMINARY STABILIZED, COMPLETE FINAL GRADING FOR THE INSTALLATION OF STORMWATER MEASURES AND INSTALL ALL STORMWATER FACILITIES. DEFER INSTALLATION OF MB#6 AND MB#7 UNTIL CONSTRUCTION OF FUTURE COMMUNITY CENTER. MAINTAIN POSITIVE DRAINAGE TO INLETS 140 AND 193. AND AVOID ANY PONDING IN THE INTERIM CONDITION. STORMWATER FACILITIES SHALL NOT BE INSTALLED UNTIL CONTRIBUTING DRAINAGE AREAS IS 95% STABILIZED. IF INSPECTOR ALLOWS EARLIER INSTALLATION, PROTECT PERIMETER OF FACILITY WITH RSF, AND COVER WITH FILTER FABRIC UNTIL LANDSCAPING IS INSTALLED. (3 WEEKS)
- INSTALL LANDSCAPING, FENCING, AND GATES. COMPLETE TRAIL INSTALLATION. (4 WEEKS)
- WITH COMPLETION OF WORK AND STABILIZATION OF SITE, CONTACT COUNTY INSPECTOR FOR FINAL INSPECTION. WITH APPROVAL OF INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES. (2 WEEKS)
- EVALUATE TREES ALONG THE LOD AND TO PROVIDE REPLACEMENTS FOR ANY TREES NOT RETAINED IN THESE AREAS. (1 WEEK)

### DAILY STABILIZATION NOTE

THIS NOTE SHOULD BE USED FOR MINIMAL AREAS WITHIN THE LIMITS OF DISTURBANCE THAT DO NOT DRAIN TO A SEDIMENT CONTROL MEASURE AND/OR WHERE THE INSTALLATION OF CONTROLS IS NOT FEASIBLE. (ROAD WIDENING, SIDEWALK INSTALLATION, ETC.) CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORKING DAY. STABILIZATION SHALL BE AS FOLLOWS:

- FOR AREAS TO BE PAVED, THE APPLICATION OF STONE BASE.
- FOR AREAS TO BE VEGETATIVELY STABILIZED:
  - PERMANENT SEED AND SOIL STABILIZATION MATTING OR SOD FOR ALL STEEP SLOPES, CHANNELS OR SWALES.
  - PERMANENT SEED AND MULCH FOR ALL OTHER AREAS.

ANY AREAS WHICH CAN NOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON THE DOWNSLOPE SIDE.

### OUTFALL STATEMENT

THE STORMWATER FLOW FOR THIS PROPERTY WILL DRAIN THROUGH AN EXISTING 48" RCP STORM DRAIN SYSTEM AND OUTFALL INTO AN EXISTING CLOSED STORM DRAIN SYSTEM THAT EXTENDS TO THE NORTHEAST AS IT LEAVES THIS SITE.

THE EXISTING SYSTEM IS A NETWORK THAT BEGINS WITH A BRANCH IN THE COMMERCIAL AREA TO THE WEST OF THE PROPERTY AND A BRANCH LOCATED WITHIN THE RESIDENTIAL AREA TO THE SOUTHWEST OF THE SITE. THESE TWO BRANCHES CONNECT JUST OUTSIDE THE SOUTHWEST CORNER OF THE PROPERTY THEN FLOW THROUGH THE EXISTING 48" PIPE SYSTEM ON SITE. THE EXISTING NETWORK EXITS THIS PROPERTY NEAR THE NORTHEAST CORNER AND ENTERS INTO A RESIDENTIAL NEIGHBORHOOD WHERE THE NETWORK CONTINUES TO ACCEPT TRIBUTARY BRANCHES FROM SURROUNDING RESIDENTIAL AREAS. THE EXISTING PIPES THROUGH THIS AREA TRANSITION TO 54" PIPES, THEN TO 53"x83" ELLIPTICAL PIPES, AND LASTLY THROUGH A 68"x106" ELLIPTICAL PIPE BEFORE ULTIMATELY DISCHARGING AT GRADE INTO A POND LOCATED AT ARUNDEL VILLAGE PARK (ALSO KNOWN AS CROSS STREET PARK).

THE STORMWATER FROM THIS SITE ULTIMATELY FLOWS INTO THE BALTIMORE HARBOR / PATAPSCO RIVER WATERSHED. THE OUTFALLS WERE INVESTIGATED BY PENNONI IN NOVEMBER, 2021. ALL OUTFALLS APPEAR TO BE IN STABLE CONDITION. PHOTOGRAPHS OF THE OUTFALLS ARE INCLUDED IN THE APPENDICES.

### CONSULTANT'S CERTIFICATION

THE DEVELOPER'S PLAN TO CONTROL SILT AND EROSION IS ADEQUATE TO CONTAIN THE SILT AND EROSION ON THE PROPERTY COVERED BY THE PLAN. I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THIS SITE, AND WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASCD PLAN SUBMITTAL GUIDELINES AND THE CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL, EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.

MD P.E. LICENSE # 21774

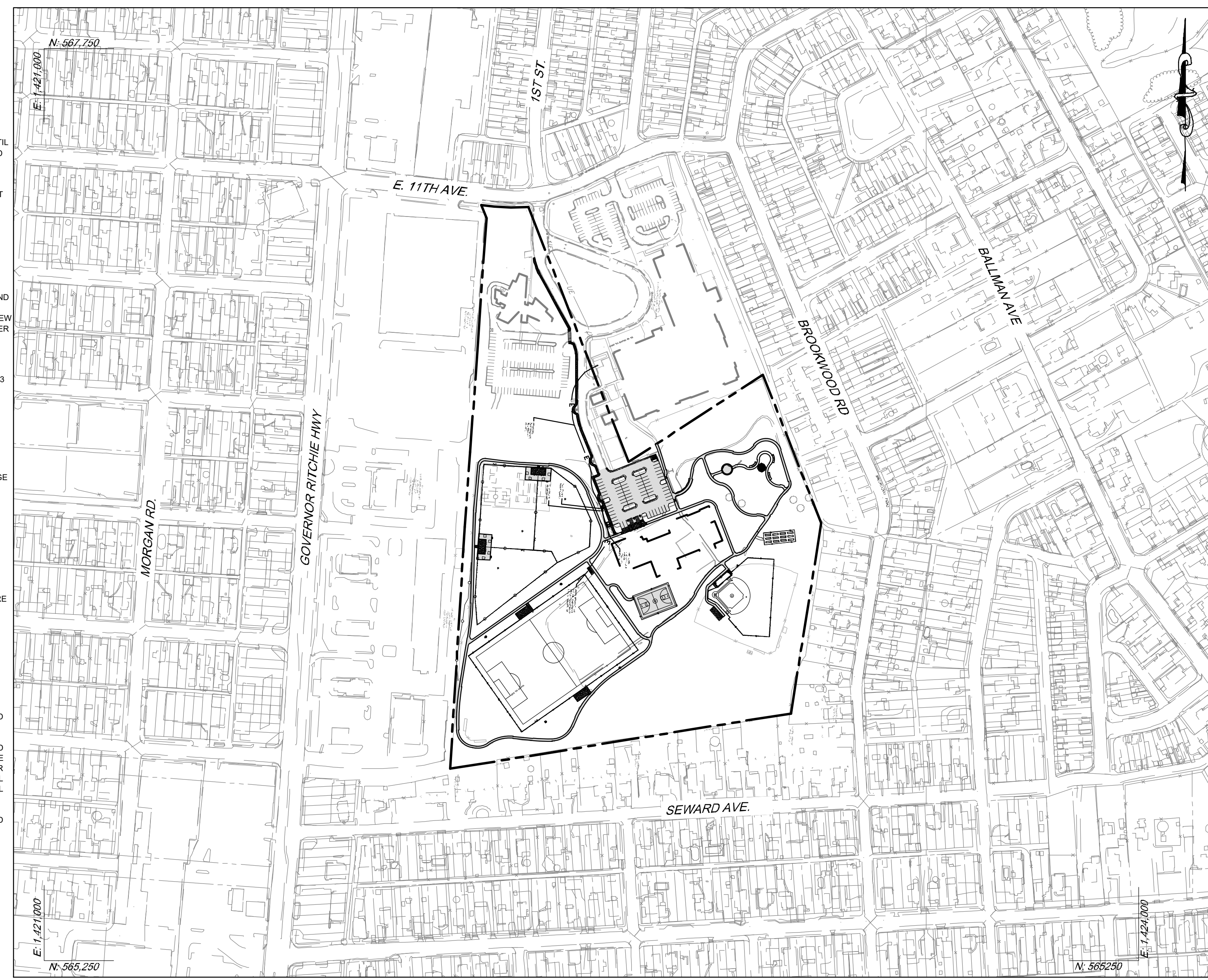
NAME: JAMES A. RUFF, PE

FIRM NAME: PENNONI ASSOCIATES INC.

ADDRESS: 8890 MCGAW RD., SUITE 100

CITY: COLUMBIA STATE: MD ZIP CODE: 21045

SEAL: [Professional Engineer Seal for James A. Ruff, PE, State of Maryland, License No. 21774]



LOCATION PLAN  
SCALE: 1" = 200'

### STATEMENT OF ACCESSIBILITY REVIEW

I HEREBY CERTIFY THAT THESE PLANS HAVE BEEN DESIGNED IN CONFORMANCE WITH THE 2010 STANDARDS FOR ACCESSIBLE DESIGN, COUNTY CODE, MARYLAND ACCESSIBILITY CODE AND ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES - ICC A117.1-2009 STANDARD.

PRINT NAME: JAMES A. RUFF, PE

SIGNATURE: [Signature] DATE: 9/12/2022

CALL "MISS UTILITY" AT LEAST 96 HOURS IN ADVANCE OF CONSTRUCTION AT 1-800-257-7777 OR 811

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774, EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE

APPROVED: [Signature] DATE: 06/09/2022

**Pennoni**  
PENNONI ASSOCIATES INC.  
8890 McGaw Road, Suite 100  
Columbia, MD 21045  
T 410.997.8900 F 410.997.9282

### ENGINEER/LANDSCAPE ARCHITECT:

PENNONI ASSOCIATES, INC.  
8890 MCGAW ROAD,  
SUITE 100  
COLUMBIA MD, 21045

### PROJECT LOCATION:

111 E 11TH AVENUE  
BALTIMORE, MD 21225

### OWNER/DEVELOPER:

ANNE ARUNDEL COUNTY DEPARTMENT OF RECREATION AND PARKS  
AND ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS  
44 CALVERT STREET  
ANNAPOLIS, MD 21401  
(410) 222-7000

### STANDARD RESPONSIBILITY NOTES

- I(We) certify that:
  - All development and construction will be done in accordance with this sediment and erosion control plan, and further, authorize the right of entry for periodic on-site evaluation by the Anne Arundel Soil Conservation District AASCD Board of Supervisors or their authorized agents.
  - Any responsible personnel involved in the construction project will have a certificate of attendance from the Maryland Department of the Environment's approved training program for the control of sediment and erosion before beginning the project.
  - If applicable, the appropriate enclosure will be constructed and maintained on sediment basin(s) included in this plan. Such structure(s) will be in compliance with the Anne Arundel County Code.
- The developer is responsible for the acquisition of all easements, right, and/or rights-of-way that may be required for the sediment and erosion control practices, storm water management practices and the discharge of storm water onto or across adjacent or downstream properties included in the plan.
- For initial soil disturbance or re-disturbance, permanent and/or temporary stabilization per the AASCD Vegetative Establishment shall be completed within three calendar days for the surface of all contours, dikes, swales, ditches, perimeter slopes and all slopes greater than 3 horizontal to 1 vertical (3:1); and seven days for all other disturbed or graded areas on the project site.
- The grading and sediment control approval on this plan extends only to those areas within the limits of disturbance.
- The approval of this plan for sediment and erosion control does not relieve the developer/consultant from complying with Federal, State or County requirements pertaining to environmental issues.
- The developer must request that the sediment and erosion control inspector approve work completed in accordance with the approved erosion and sediment control plan, the grading or building permit, and the ordinance.
- All material shall be taken to a site with an approved sediment and erosion control plan.
- First phase inspection and approval of the sediment and erosion control inspector shall be required upon completion of the installation of erosion and sediment controls prior to proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until the initial approval by the sediment and erosion control inspector is given. Inspection and Permits may also require that an inspection and certification of the installation of sediment control also be performed by a design professional prior to construction commencing.
- Approval from the inspector must be requested on final stabilization of all sites prior to removal of sediment and erosion controls.
- Existing topography must be field verified by responsible personnel to the satisfaction of the sediment control inspector prior to commencing work.

[Signature] 9/12/2022  
DATE

NAME: JAMES A. RUFF  
TITLE: ENGINEER  
FIRM: PENNONI ASSOCIATES INC.  
ADDRESS: 8890 MCGAW ROAD, ANNAPOLIS, MD 21401  
PHONE: 410-222-7000  
EMAIL: jruff@pennoni.org

### SITE ANALYSIS SUMMARY

TOTAL SITE AREA/LOD: 13.19 AC (574,398 SF)  
VOLUME OF CUT: 14,858 CY  
VOLUME OF FILL: 23,104 CY  
VOLUME OF BORROW MATERIAL: 0 CY  
AREA VEGETATIVELY STABILIZED: 11.02 ACRES (479,797 SF)  
EXISTING IMPERVIOUS AREA: 1.85 ACRES (80,449 SF)  
PROPOSED IMPERVIOUS AREA: 3.20 ACRES (139,340 SF)

VOLUMES ARE FOR PERMITTING ONLY AND ARE NOT TO BE USED FOR BID PURPOSES

DATE: 9/12/2022

PROJECT NO.: DD01

ANNE ARUNDEL COUNTY  
DEPARTMENT OF PUBLIC WORKS  
MAY 31, 2023

SCALE: 1" = 200'

DRAWN BY: JSN/SVH

CHECKED BY: PJS/JAR

SHEET 1 OF 51

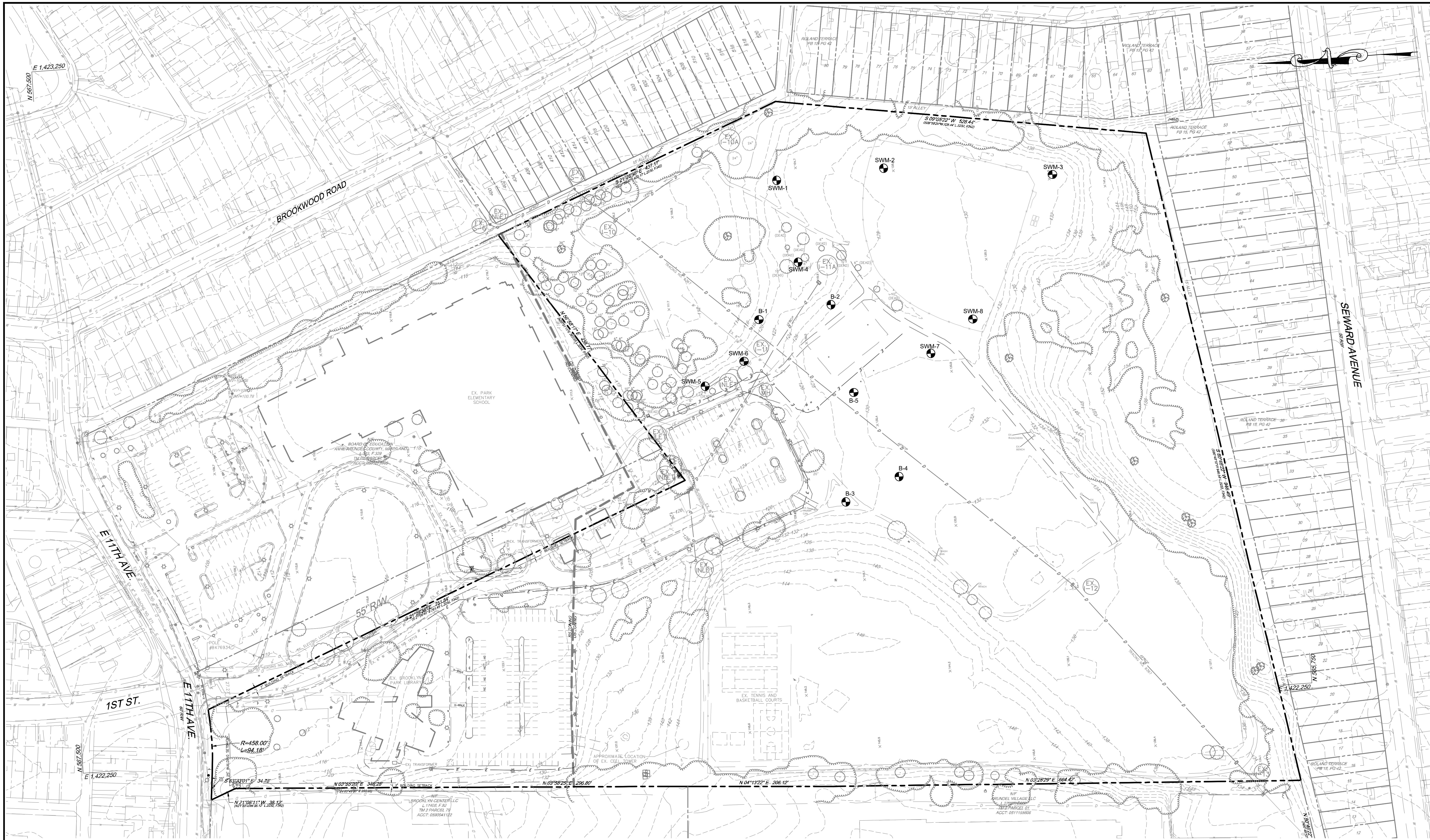
PROJECT #: 579000

PROPOSAL #: 579001

COVER SHEET

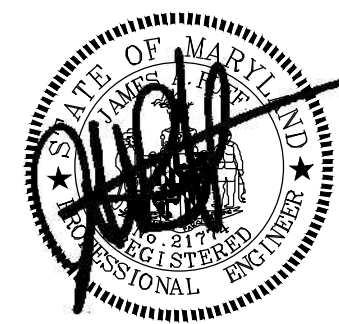
BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS  
TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD



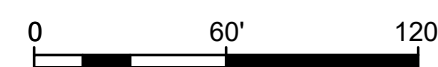


**CERTIFICATION NOTE:**

THE LOCATION OF FEATURES SHOWN ON THIS RESOURCE MAP HAVE BEEN FIELD VERIFIED.



JAMES RUFF, PE



PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

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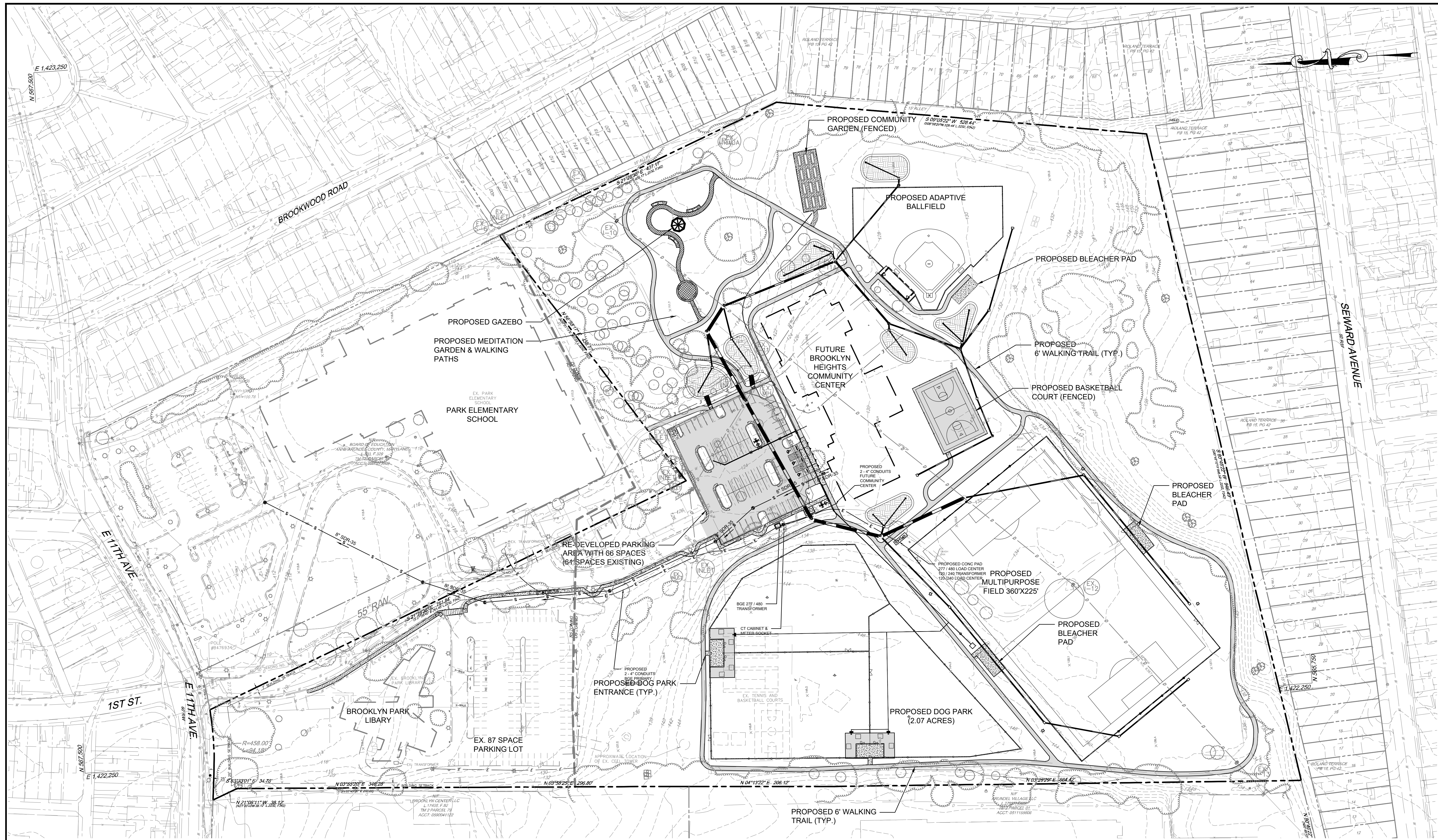


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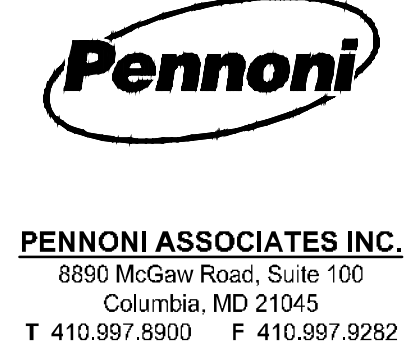
**PENNONI ASSOCIATES INC.**  
8880 McGaw Road, Suite 100  
Columbia, MD 21045  
T 410.997.8900 F 410.997.9282

<b>ANNE ARUNDEL COUNTY</b>		GPH 980219457	DWG NO: DD03
<b>DEPARTMENT OF PUBLIC WORKS</b>			
MAY 31, 2023			
APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		PROJECT MANAGER	
APPROVAL	DATE	APPROVED	DATE
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY SERVICES	
SCALE: 1" = 60'		DRAWN BY: JSN/SVH	
CHECKED BY: PJS/JAR		SHEET 3 of 51	
PROJECT #: 579000		PROPOSAL #: 579001	
OVERALL EXISTING CONDITIONS PLAN			
<b>BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS</b> TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT ANNE ARUNDEL COUNTY, MD			



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#	REVISIONS DESCRIPTION	APPROVED BY	DATE



GPH 980219457      DWG NO: DD04

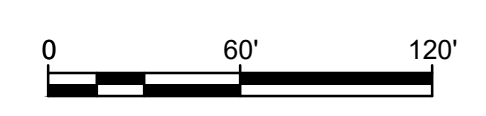
**ANNE ARUNDEL COUNTY**  
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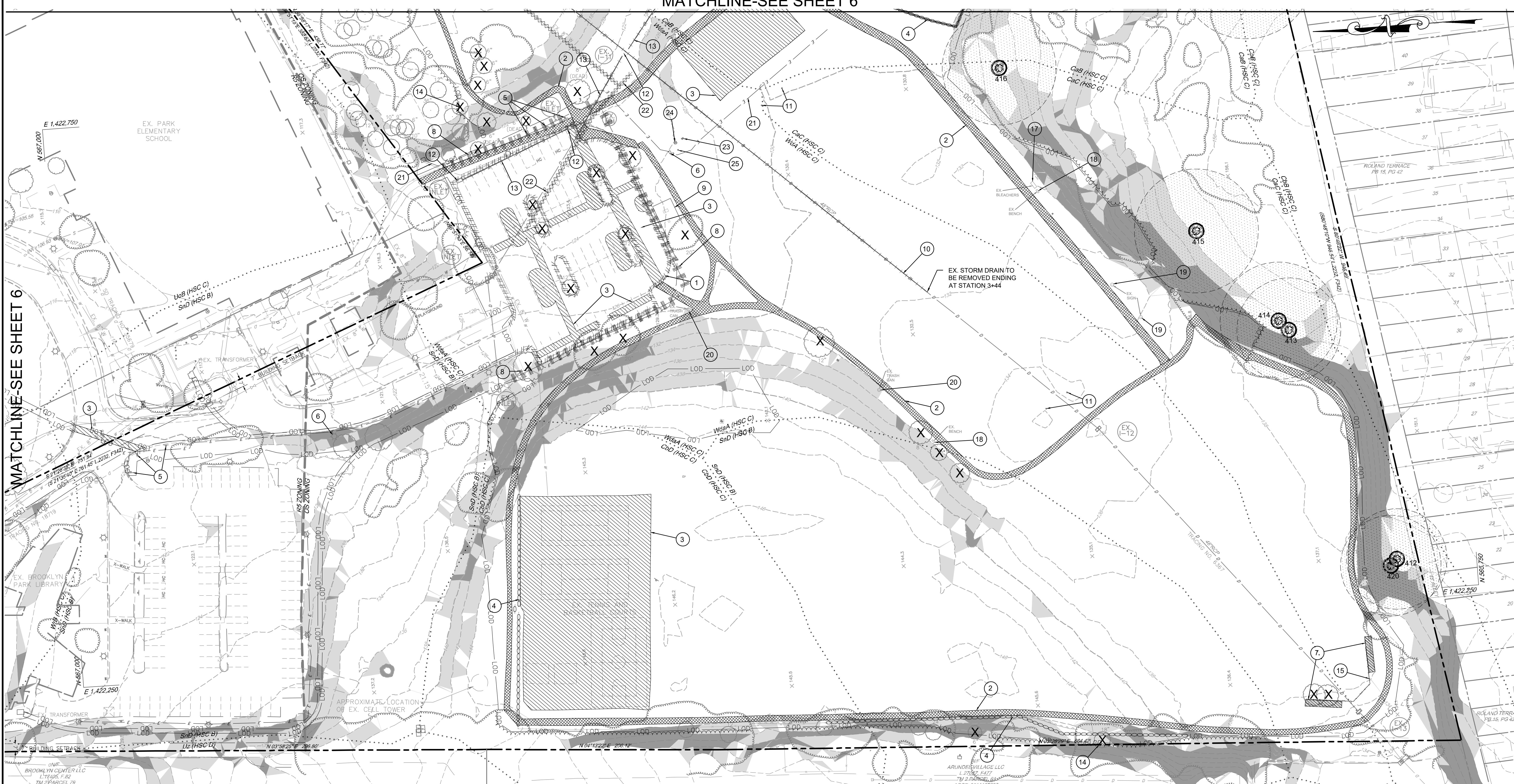
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SCALE: 1" = 60'  
 DRAWN BY: JSN/SVH  
 CHECKED BY: PJS/JAR  
 SHEET 4 of 51  
 PROJECT #: 579000  
 PROPOSAL #: 579001

OVERALL PLAN  
**BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS**  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

MAY 31, 2023





MATCHLINE-SEE SHEET 6

**DEMOLITION KEY**

- 1 REMOVE EXISTING CURB AND GUTTER AND STONE BASE
- 2 REMOVE EXISTING TRAIL PAVING AND STONE BASE
- 3 REMOVE EXISTING ASPHALT PAVING AND STONE BASE
- 4 REMOVE EXISTING FENCE
- 5 REMOVE EXISTING SIGN
- 6 REMOVE EXISTING ELECTRICAL PANEL
- 7 REMOVE EXISTING CONCRETE
- 8 REMOVE EXISTING GUARD RAIL
- 9 REMOVE EXISTING GARDEN AREA
- 10 REMOVE EX. 48" RCP AND BACKFILL TRENCH IN ACCORDANCE WITH EARTHWORK RECOMMENDATIONS IN GEOTECHNICAL REPORT
- 11 REMOVE EXISTING GOAL POSTS
- 12 REMOVE EXISTING STORM DRAIN INLETS
- 13 REMOVE STORM DRAIN PIPES AND BACKFILL TRENCH IN ACCORDANCE WITH EARTHWORK RECOMMENDATIONS IN GEOTECHNICAL REPORT
- 14 REMOVE EXISTING TREE
- 15 REMOVE EXISTING BACKSTOP
- 16 REMOVE EXISTING MOW STRIP
- 17 REMOVE EXISTING BLEACHERS
- 18 REMOVE EXISTING BENCH
- 19 REMOVE EXISTING SIGN
- 20 REMOVE EXISTING TRASH CAN
- 21 REMOVE EXISTING ELECTRIC LINE
- 22 REMOVE EXISTING WATER LINE
- 23 REMOVE IRRIGATION BOX AND ASSOCIATED PIPING
- 24 REMOVE IRRIGATION CONTROLS AND ASSOCIATED PIPING
- 25 ABANDON EX WELL IN ACCORDANCE WITH AACO HEALTH DEPT GUIDELINES

**SITE DEMOLITION NOTES**

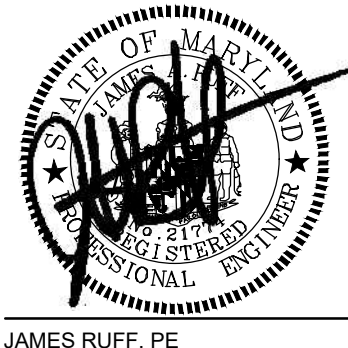
1. ALL CONSTRUCTION DEBRIS (THIS INCLUDES RECYCLABLE AND NON-RECYCLABLE) SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL JURISDICTION.
2. DISPOSE OF ALL DEBRIS OFF-SITE UNLESS INDICATED TO BE SALVAGED.
3. NO SLAB OR LAND DISTURBANCE IS PERMITTED WITHOUT APPROVAL OF SEDIMENT CONTROL, AS SHOWN ON DRAWINGS.
4. CONTRACTOR SHALL COORDINATE WITH APPROPRIATE UTILITY COMPANY PRIOR TO REMOVAL OR RELOCATION OF ANY EXISTING UTILITIES.
5. EXISTING UTILITY LINES HAVE BEEN SHOWN USING THE BEST AVAILABLE RECORDS OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR SHALL ENGAGE A PRIVATE UTILITY LOCATING COMPANY (AT CONTRACTORS EXPENSE) TO ENSURE THAT ALL EXISTING UTILITIES HAVE BEEN MARKED.
6. ONCE DEMOLITION IS COMPLETED, ALL AREAS OF EXPOSED EARTH SHALL BE STABILIZED.
7. FOR ALL UTILITY DEMOLITION, COORDINATE WITH APPLICABLE UTILITY PROVIDER.

**DEMOLITION LEGEND**

- REMOVE EX. CURB & GUTTER
- REMOVE EX. TRAIL PAVING
- REMOVE EX. ASPHALT PAVING
- REMOVE EX. FENCE
- REMOVE EX. WATER LINE
- REMOVE EX. CONCRETE
- REMOVE EX. GUARD RAIL
- REMOVE EX. 48" RCP
- REMOVE EX. BALL BARRIER NETTING
- REMOVE EX. MOW STRIP
- REMOVE EX. TREE

**LEGEND**

- EXISTING 15%-25% SLOPES
- EXISTING 25%+ SLOPES



**CERTIFICATION NOTE:**

THE LOCATION OF FEATURES SHOWN ON THIS RESOURCE MAP HAVE BEEN FIELD VERIFIED.



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**Pennoni**  
 PENNONI ASSOCIATES INC.  
 8890 McGaw Road, Suite 100  
 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

APPROVED	DATE	APPROVED	DATE

9PH 820219457

DD05

ANNE ARUNDEL COUNTY  
 DEPARTMENT OF PUBLIC WORKS

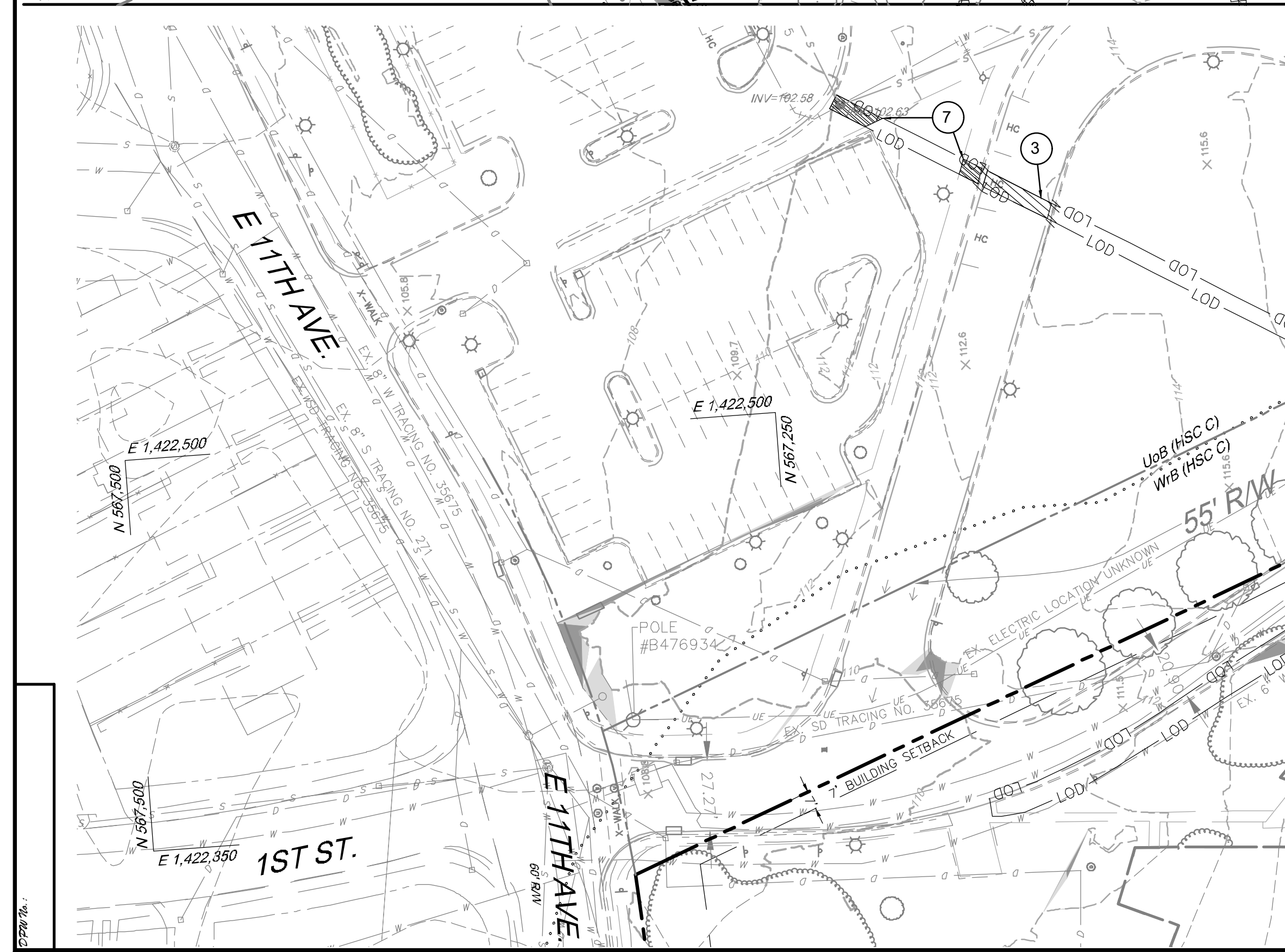
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 CHECKED BY: PJS/JAR  
 SHEET 5 of 51  
 PROJECT #: 579000  
 PROPOSAL #: 579001

EXISTING CONDITIONS AND DEMOLITION PLAN  
**BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS**  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

MAY 31, 2023



MATCHLINE-SEE SHEET 5



MATCHLINE - SEE SHEET 5

**DEMOLITION KEY**

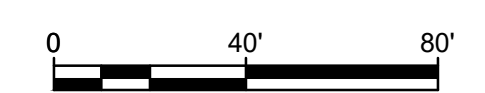
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- 22 REMOVE EXISTING WATER LINE

**DEMOLITION LEGEND**

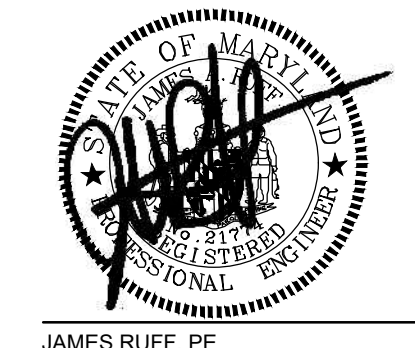
- REMOVE EX. CURB & GUTTER
- REMOVE EX. TRAIL PAVING
- REMOVE EX. ASPHALT PAVING
- REMOVE EX. FENCE
- REMOVE EX. COCNETE
- REMOVE EX. GUARD RAIL
- REMOVE EX. 48" RCP
- REMOVE EX. BALL BARRIER NETTING
- REMOVE EX. MOW STRIP
- REMOVE EX. TREE
- REMOVE EX. WATER LINE

**LEGEND**

- EXISTING 15%-25% SLOPES
- EXISTING 25%+ SLOPES



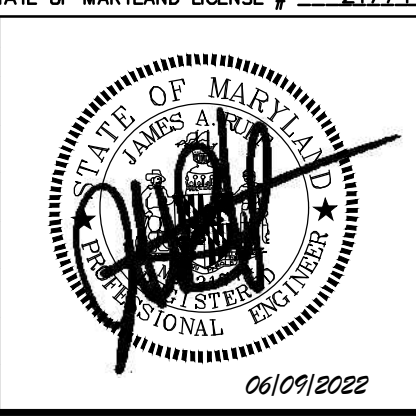
**CERTIFICATION NOTE:**  
THE LOCATION OF FEATURES SHOWN ON THIS RESOURCE MAP HAVE BEEN FIELD VERIFIED.



JAMES RUFF, PE

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



**Pennoni**  
PENNONI ASSOCIATES INC.  
8890 McGaw Road, Suite 100  
Columbia, MD 21045  
T 410.997.8900 F 410.997.9282

APPROVED	DATE	APPROVED	DATE

ANNE ARUNDEL COUNTY  
DEPARTMENT OF PUBLIC WORKS  
MAY 31, 2023

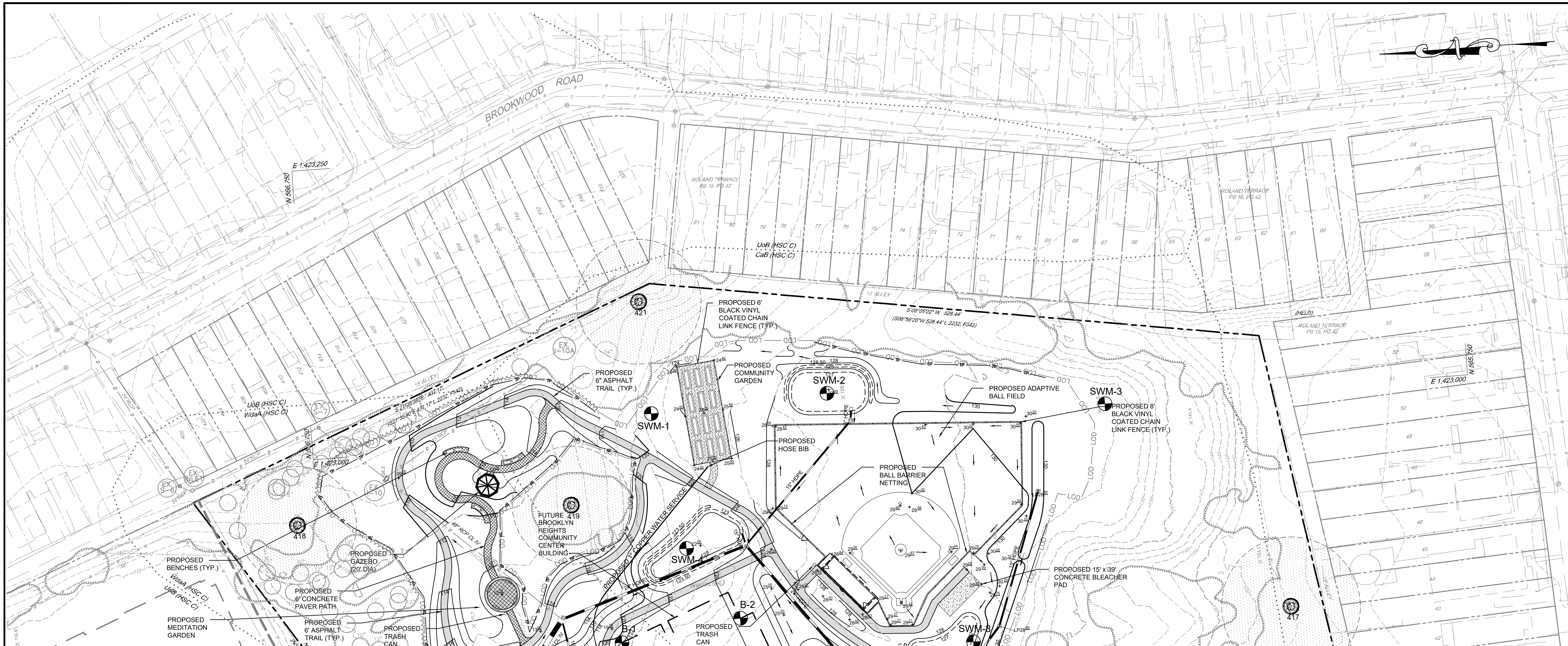
SCALE: 1" = 40'  
DRAWN BY: JSN/SVH  
CHECKED BY: PJS/JAR  
SHEET 6 of 51  
PROJECT #: 579000  
PROPOSAL #: 579001

EXISTING CONDITIONS AND DEMOLITION PLAN  
**BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS**  
TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD

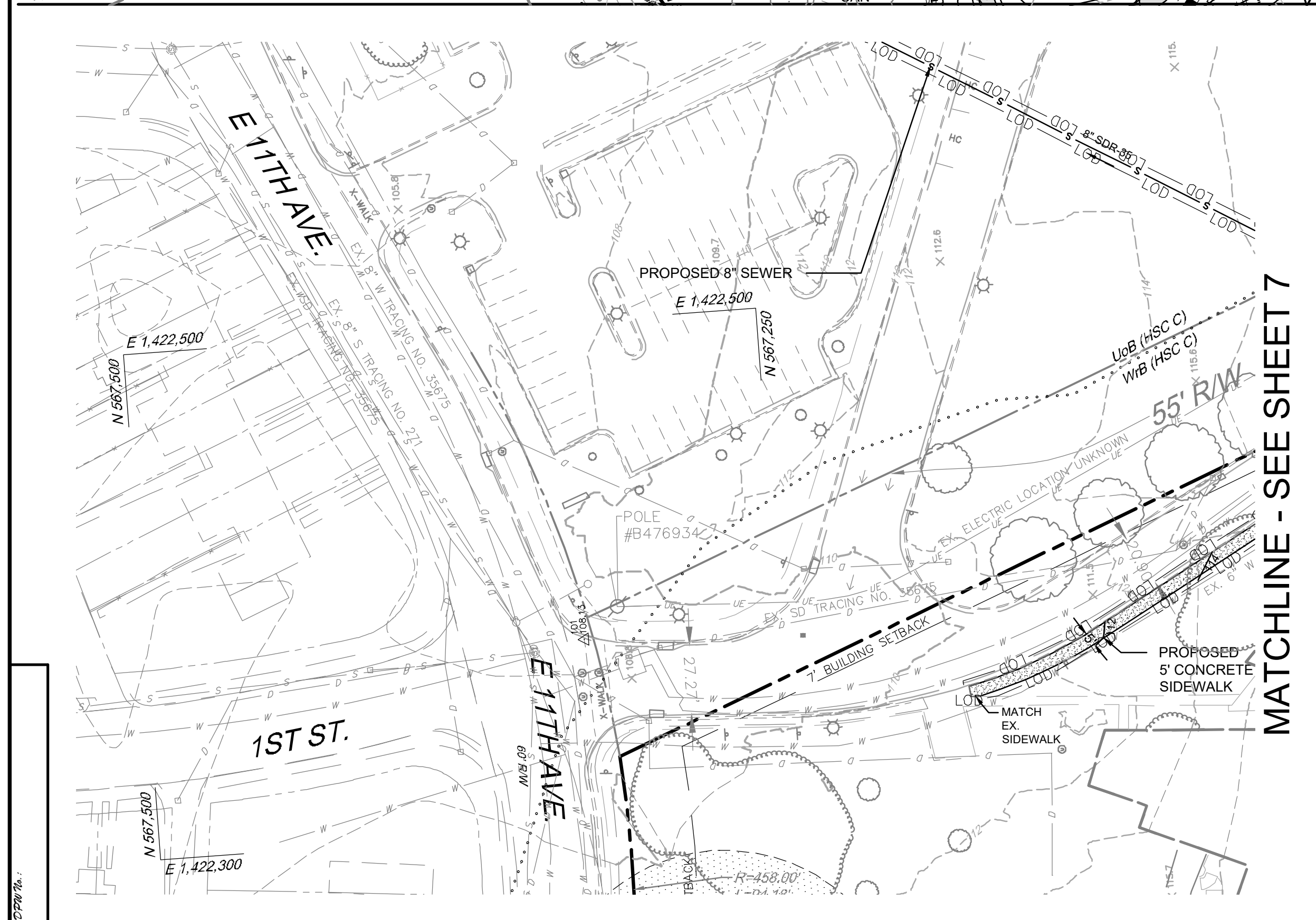
GRAPHIC: GPH 020219457

DWG NO.: DD06





MATCHLINE-SEE SHEET 7



MATCHLINE - SEE SHEET 7

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023.

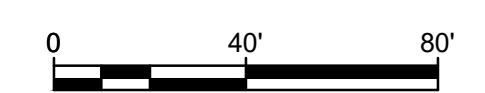
#	REVISIONS DESCRIPTION	APPROVED BY	DATE



**Pennoni**  
 PENNONI ASSOCIATES INC.  
 8890 McGaw Road, Suite 100  
 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

APPROVED _____ DATE _____		APPROVED _____ DATE _____		SCALE: 1" = 40'
CHIEF ENGINEER _____		PROJECT MANAGER _____		
APPROVAL _____ DATE _____		APPROVED _____ DATE _____		CHECKED BY: PJS/JAR SHEET 8 of 51 PROJECT #: 579000 PROPOSAL #: 579001
ASSISTANT CHIEF ENGINEER _____		CHIEF, RIGHT OF WAY SERVICES _____		

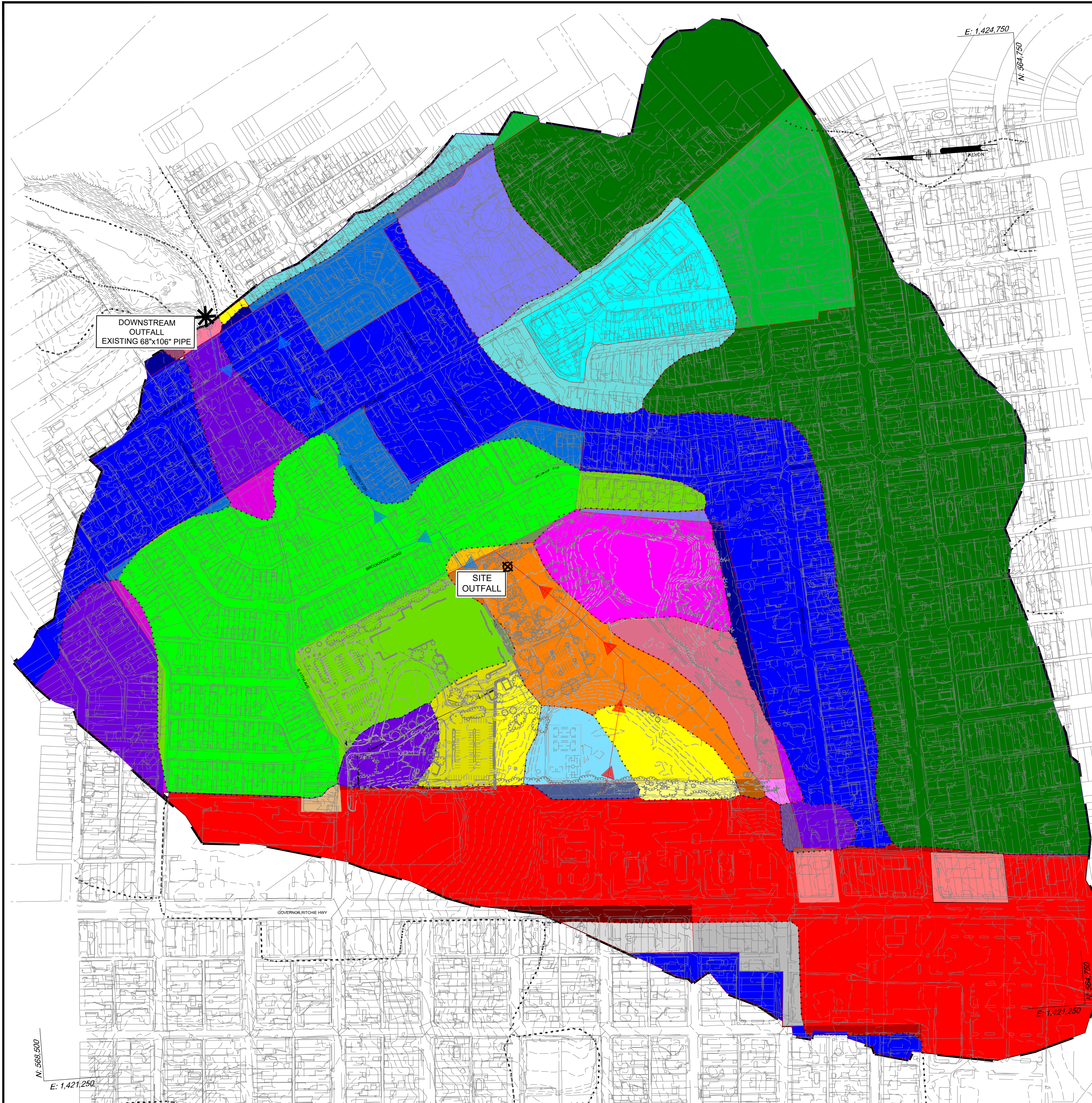
SITE AND GRADING PLAN  
**BROOKLYN HEIGHTS COMMUNITY CENTER PARK**  
 DESIGN DEVELOPMENT PLANS  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD



GPH 580219457 DWG NO. DD08

ANNE ARUNDEL COUNTY  
 DEPARTMENT OF PUBLIC WORKS  
 MAY 31, 2023





### ZONING / SOILS

	SOILS	ZONING	RCN	HYDROLOGIC SOIL GROUP
	CaB	RESIDENTIAL (R5)	87	C
	CaB	RESIDENTIAL (R15)	90	C
	CaB	OPEN SPACE (OS)	71	C
	CaC	RESIDENTIAL (R5)	87	C
	CaC	COMMERCIAL (C3)	94	C
	CaC	OPEN SPACE (OS)	71	C
	CbB	RESIDENTIAL (R5)	87	C
	CbB	RESIDENTIAL (R15)	90	C
	CbB	OPEN SPACE (OS)	71	C
	CbB	COMMERCIAL (C3)	94	C
	CbB	COMMERCIAL (C2)	94	C
	CbD	OPEN SPACE (OS)	71	C
	CbD	COMMERCIAL (C3)	94	C
	MRD	OPEN SPACE (OS)	71	C
	RyB	RESIDENTIAL (R5)	87	C
	RyB	RESIDENTIAL (R15)	90	C
	UoB	RESIDENTIAL (R5)	87	C
	UoB	RESIDENTIAL (R15)	90	C
	UoB	OPEN SPACE (OS)	71	C
	UoD	RESIDENTIAL (R5)	87	C
	UoD	RESIDENTIAL (R15)	90	C
	Uz	COMMERCIAL (C2)	95	D
	Uz	COMMERCIAL (C3)	95	D
	Uz	COMMERCIAL (C4)	95	D
	Uz	RESIDENTIAL (R5)	90	D
	Uz	RESIDENTIAL (R15)	93	D
	WdaA	RESIDENTIAL (R5)	87	C
	WdaA	RESIDENTIAL (R15)	90	C
	WdaA	OPEN SPACE (OS)	71	C
	WdaA	COMMERCIAL (C3)	94	C
	WrB	RESIDENTIAL (R5)	87	C
	WrB	RESIDENTIAL (R15)	90	C
	WrB	OPEN SPACE (OS)	71	C
	WrB	COMMERCIAL (C3)	94	C
	WrB	COMMERCIAL (C4)	94	C
	SnD	OPEN SPACE (OS)	58	B
	SnD	RESIDENTIAL (R5)	81	B
	SnD	COMMERCIAL (C3)	92	B

### SYMBOL LEGEND

PROPERTY LINE AND RIGHT-OF-WAY	---
EXISTING 2' CONTOUR	- - - - -
EXISTING 10' CONTOUR	- - - - -
EXISTING TREE LINE	.....
EXISTING SOILS	.....
EXISTING WATER	W W W
EXISTING SEWER	S S S
EXISTING STORM DRAIN	D D D
EXISTING DOWNSTREAM POI DRAINAGE AREA	---
TC PATH - ON SITE	→ → →
TC PATH - OFF SITE	→ → →
WALKING TOUR PHOTOS	*
POINT OF INTEREST - DOWNSTREAM	*
POINT OF INTEREST - SITE BOUNDARY	⊗

### DOWNSTREAM OUTFALL POI DRAINAGE AREA


PERMIT NUMBER	NOT YET ASSIGNED
PROJECT NUMBER	579001
PROJECT NAME	BROOKLYN HEIGHTS COMMUNITY CENTER
STRUCTURE ADDRESS	111 E 11TH AVE
STRUCTURE CITY	BALTIMORE
STATE	MARYLAND
STRUCTURE ZIP	21225
TOTAL DRAINAGE AREA	208.17 ACRES
RCN - PRECONSTRUCTION	83
RCN - POSTCONSTRUCTION	83
RCN - WOODS	68
TOTAL NUMBER OF BMPs	-
PE REQUIRED (SEE NOTE 1)	1.26
PE ADDRESSED (SEE NOTE 2)	-
MD 8-DIGIT HUC (SEE NOTE 4)	02130903
USGS 12-DIGIT HUC	021309031010

### EXISTING DOWNSTREAM POI DRAINAGE AREA

ZONING - SOILS	TOTAL AREA (ACRES)	Q <sub>10</sub> (CFS)	RCN	T <sub>c</sub>
OS - B	3.12	4.81	58	0.10 HR
OS - C	17.43	54.73	71	0.10 HR
R5 - B	2.14	9.59	81	0.10 HR
R5 - C	120.35	633.73	87	0.10 HR
R15 - C / R5 - D	26.89	151.16	90	0.10 HR
C - B	0.54	3.14	92	0.10 HR
R15 - D	0.23	1.37	93	0.10 HR
C - C	3.44	20.74	94	0.10 HR
C - D	34.03	207.73	95	0.10 HR
<b>DOWNSTREAM POI</b>	<b>208.17 ACRES (9,067,885 SQFT)</b>	<b>1086.08</b>	<b>COMPOSITE RCN 88</b>	<b>0.10 HR</b>

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



**Pennoni**

**PENNONI ASSOCIATES INC.**  
8890 McGaw Road, Suite 100  
Columbia, MD 21045  
T 410.997.8900 F 410.997.9282

APRIL ARUNDEL COUNTY  
DEPARTMENT OF PUBLIC WORKS  
MAY 31, 2023

APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		PROJECT MANAGER	
APPROVAL	DATE	APPROVAL	DATE
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY SERVICES	

SCALE: 1" = 100'

DRAWN BY: JSN/SVH

CHECKED BY: PJS/JAR

SHEET 9 of 51

PROJECT #: 579000

PROPOSAL #: 579001

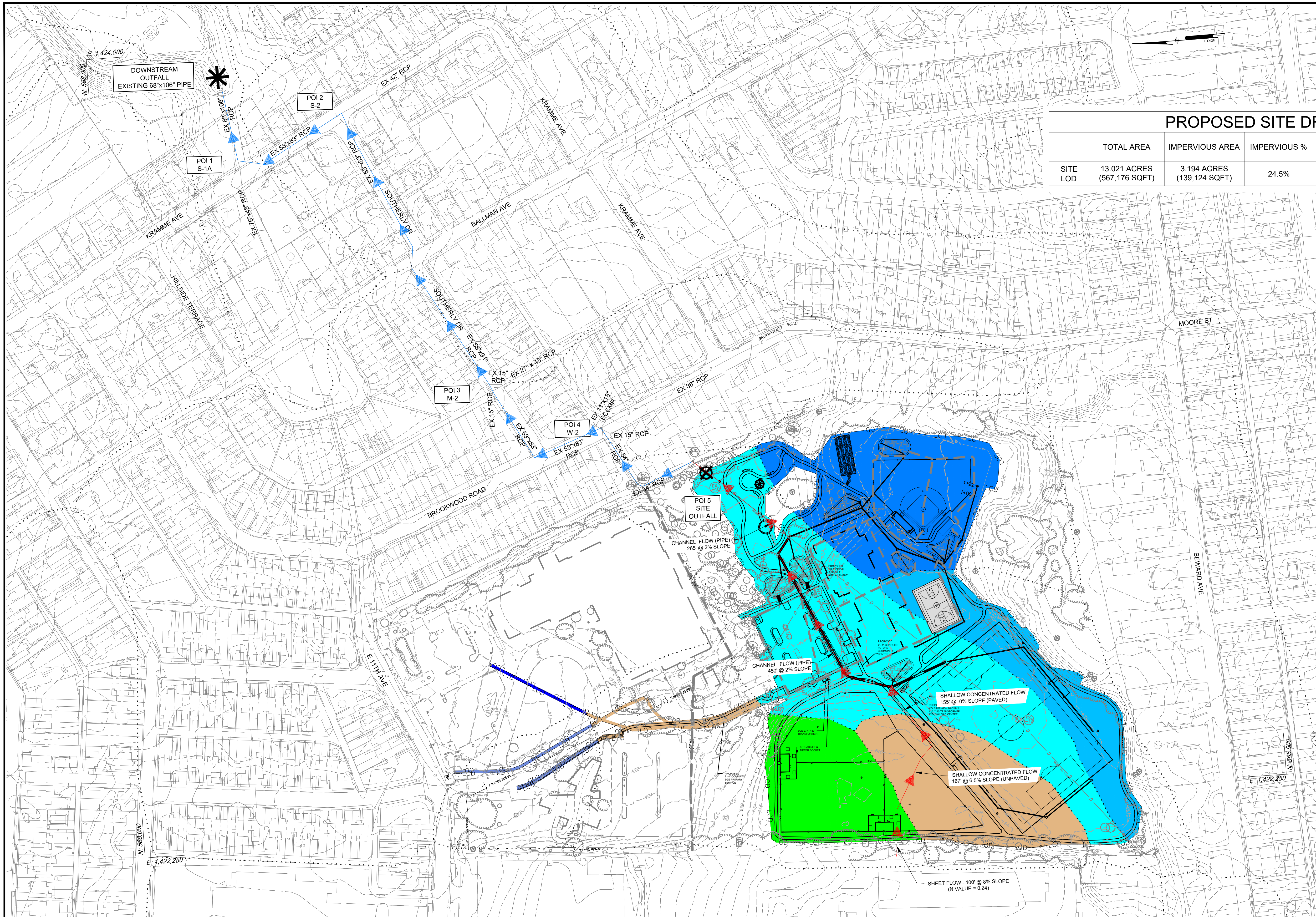
DOWNSTREAM OUTFALL POI DRAINAGE AREA MAP

**BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS**

TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD







PROPOSED SITE DRAINAGE AREA								
	TOTAL AREA	IMPERVIOUS AREA	IMPERVIOUS %	Q <sub>10</sub> PROPOSED	RCN PROPOSED	Q <sub>10</sub> REDUCED	RCN REDUCED	T <sub>c</sub>
SITE LOD	13.021 ACRES (567,176 SQFT)	3.194 ACRES (139,124 SQFT)	24.5%	47.22 CFS	78	38.09 CFS	73	0.175 HR

**SYMBOL LEGEND**

PROPERTY LINE AND RIGHT-OF-WAY	---
EXISTING 2' CONTOUR	-----152-----
EXISTING 10' CONTOUR	-----156-----
EXISTING TREE LINE	-----4&B-----
EXISTING SOILS	-----
EXISTING WATER	---W---W---W---
EXISTING SEWER	---S---S---S---
EXISTING STORM DRAIN	---D---D---D---
PROPOSED DRAINAGE AREA	-----
TC PATH - ON SITE	--->--->---
TC PATH - OFF SITE	--->--->---
POINT OF INTEREST - DOWNSTREAM	✱
POINT OF INTEREST - SITE BOUNDARY	⊗

9PH 920219457 DWG NO: DD11

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE

06/09/2022



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8890 McGaw Road, Suite 100  
Columbia, MD 21045  
T 410.997.8900 F 410.997.9282

**ANNE ARUNDEL COUNTY**  
DEPARTMENT OF PUBLIC WORKS  
MAY 31, 2023

APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		PROJECT MANAGER	
APPROVAL	DATE	APPROVED	DATE
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY SERVICES	

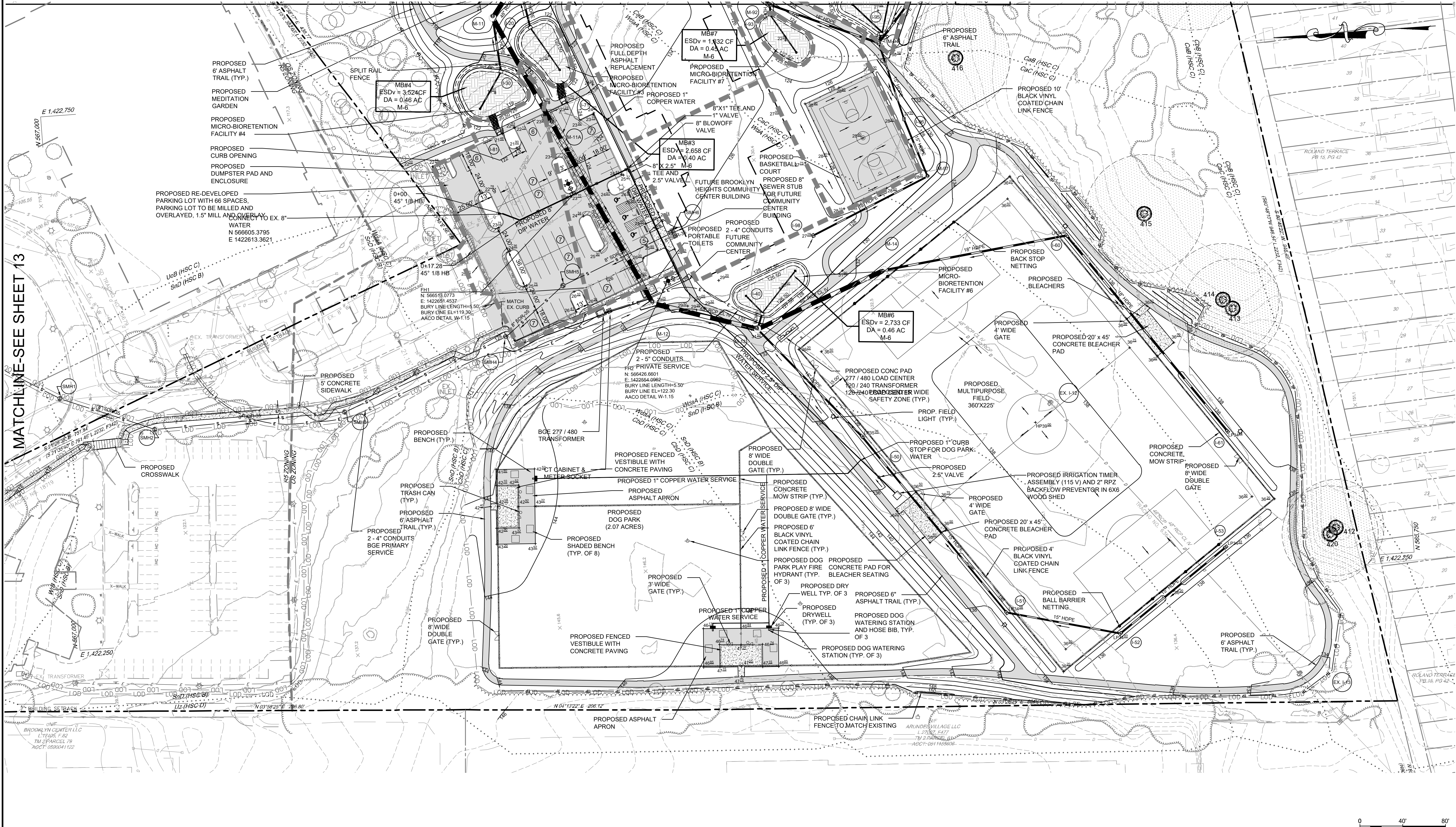
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CHECKED BY: PJS/JAR  
SHEET 11 of 51  
PROJECT #: 579000  
PROPOSAL #: 579001



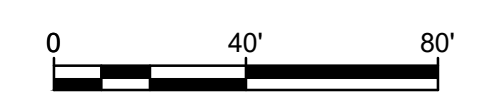
PROPOSED DRAINAGE AREA MAP  
**BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS**  
TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD

U:\Accounts\AARON\AARON\2022\02 - Brooklyn Park Teen Center\DESIGN\SHR\DESIGN DEVELOPMENT PLANS\AARON\02-0211.dwg

MATCHLINE-SEE SHEET 13





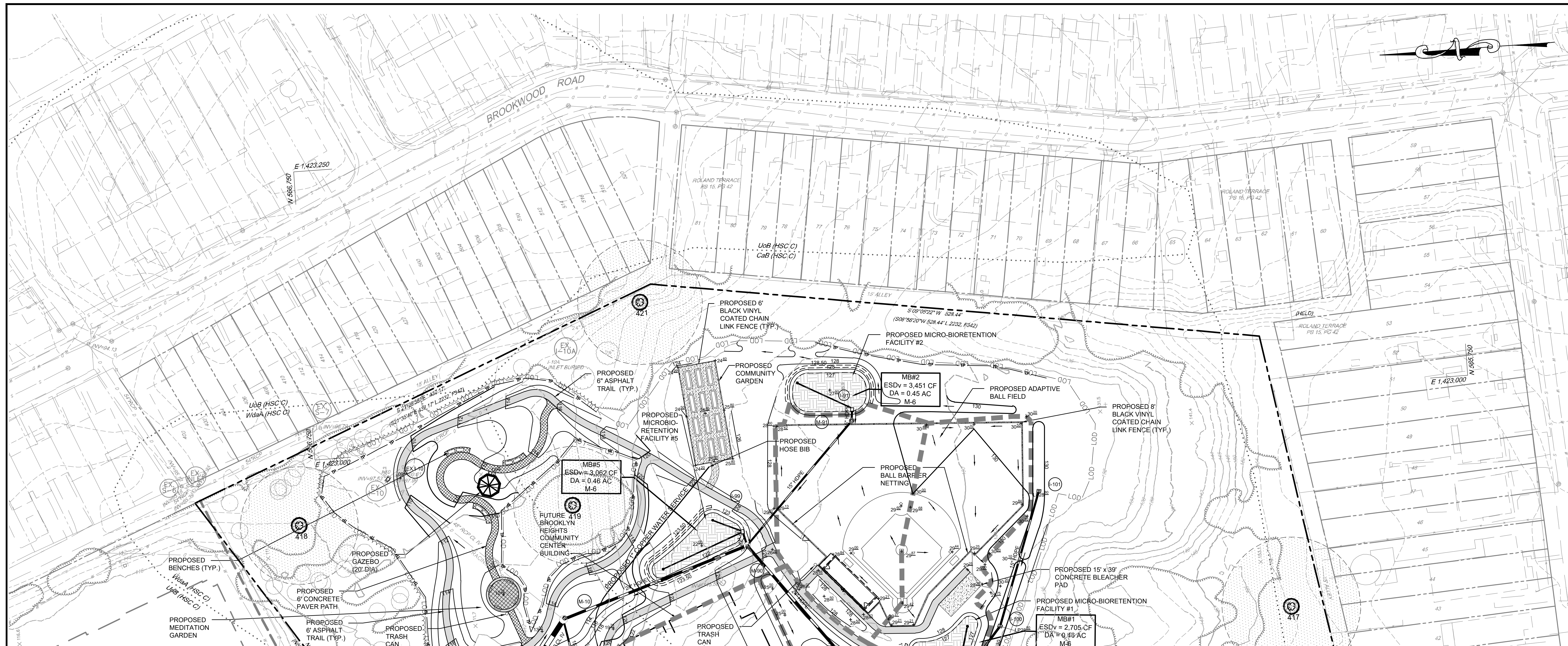
MATCHLINE-SEE SHEET 13



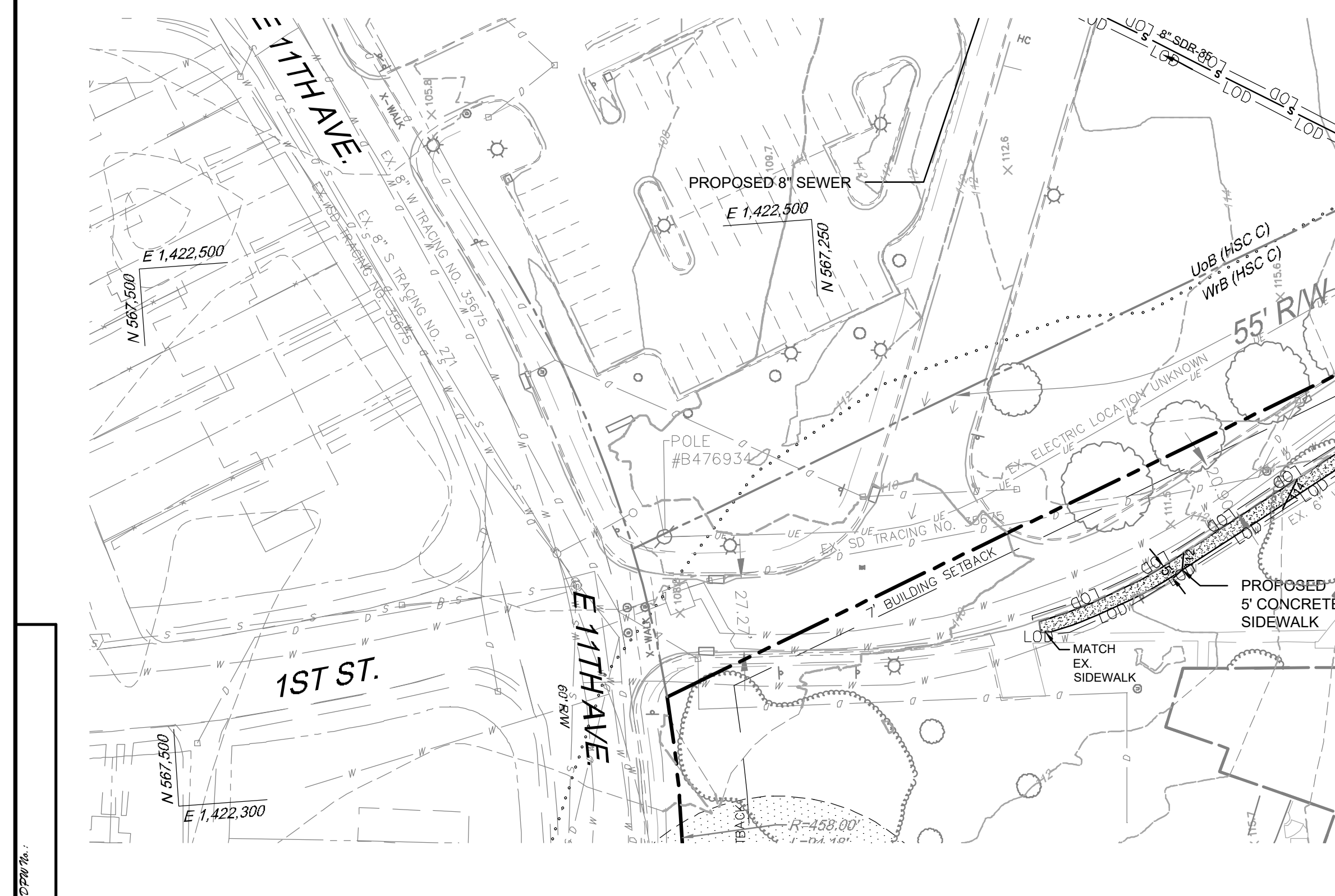
BROOKLYN CENTER LLC  
17146 F. 82  
TM 2 PARCEL 19  
ACCT: 050041122

ROLAND TERRACE  
PB 15, PG 42

PROFESSIONAL CERTIFICATION: I, <u>JAMES A. RUFF, PE</u> , CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # <u>21774</u> EXPIRATION DATE <u>11/10/2023</u>		ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS MAY 31, 2023	
REVISIONS # DESCRIPTION APPROVED BY DATE		APPROVED DATE CHIEF ENGINEER	APPROVED DATE PROJECT MANAGER
		 PENNONI ASSOCIATES INC. 8890 McGaw Road, Suite 100 Columbia, MD 21045 T 410.997.8900 F 410.997.9282	
SCALE: 1" = 40' DRAWN BY: JSN/SVH CHECKED BY: PJS/JAR SHEET 12 of 51 PROJECT #: 579000 PROPOSAL #: 579001		STORMWATER MANAGEMENT PLAN BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS TAX MAP # 2 GRID 19 PARCEL 38 ACCOUNT #00273010 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT ANNE ARUNDEL COUNTY, MD	



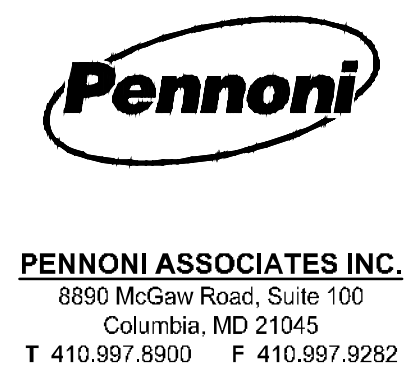
MATCHLINE-SEE SHEET 12



MATCHLINE - SEE SHEET 12

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



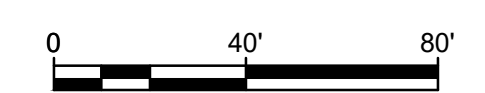
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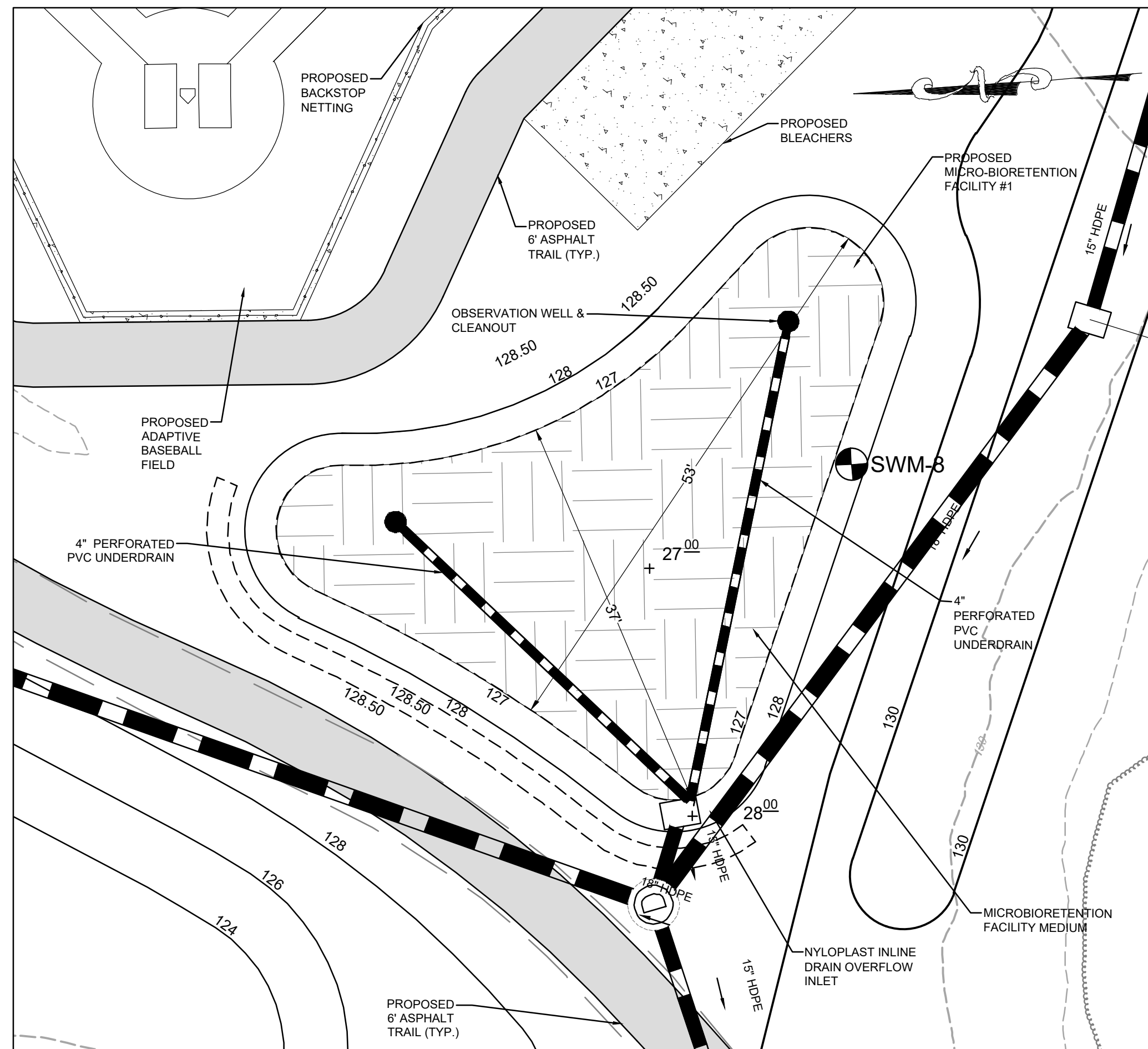
9PH 580219457      DWG NO. DD13

ANNE ARUNDEL COUNTY  
DEPARTMENT OF PUBLIC WORKS  
MAY 31, 2023

SCALE: 1" = 40'  
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CHECKED BY: PJS/JAR  
SHEET 13 of 51  
PROJECT #: 579000  
PROPOSAL #: 579001

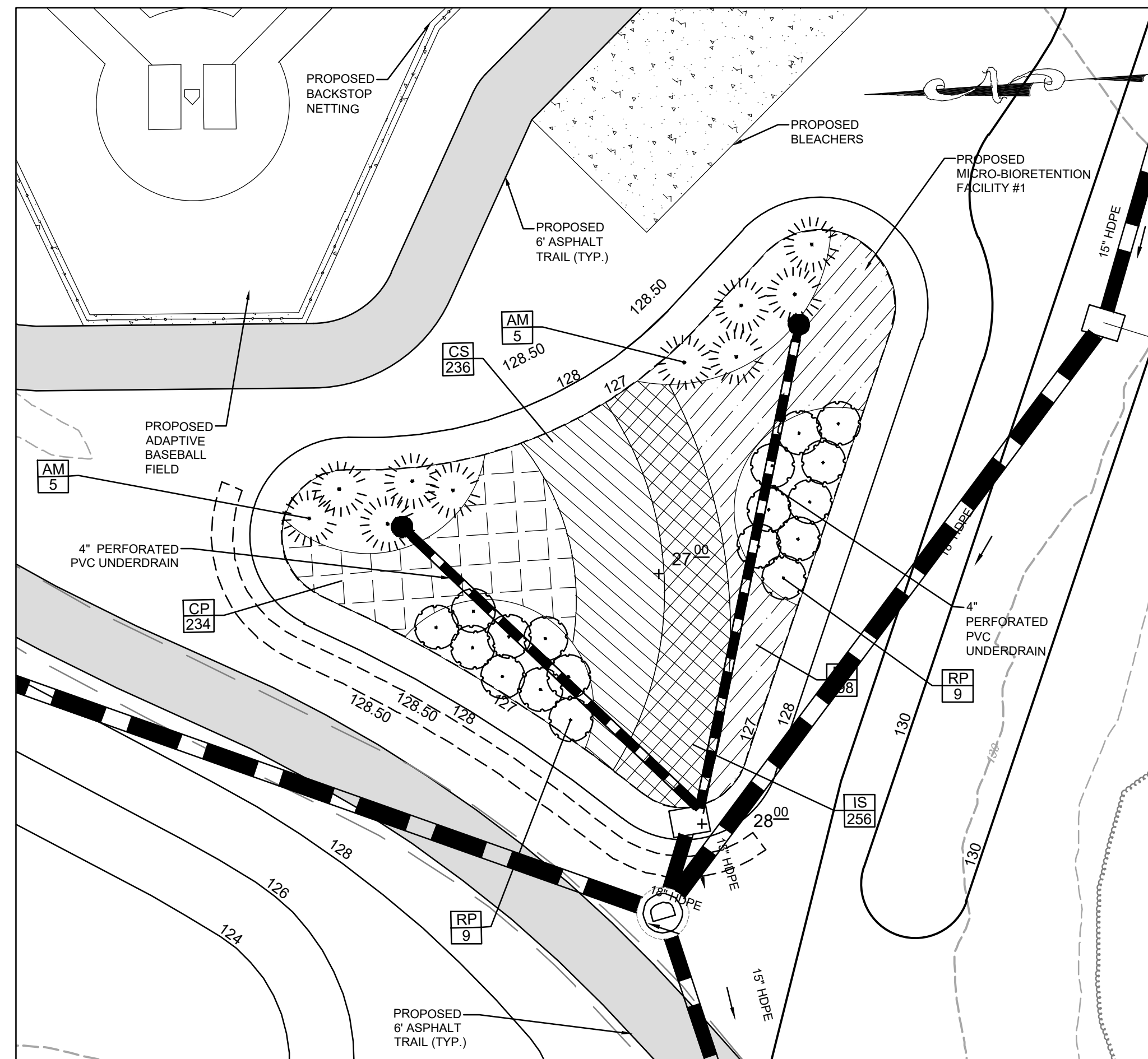
STORMWATER MANAGEMENT PLAN  
BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS  
TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD





MICROBIORETENTION FACILITY #1 DETAIL PLAN

SCALE: 1"=10'

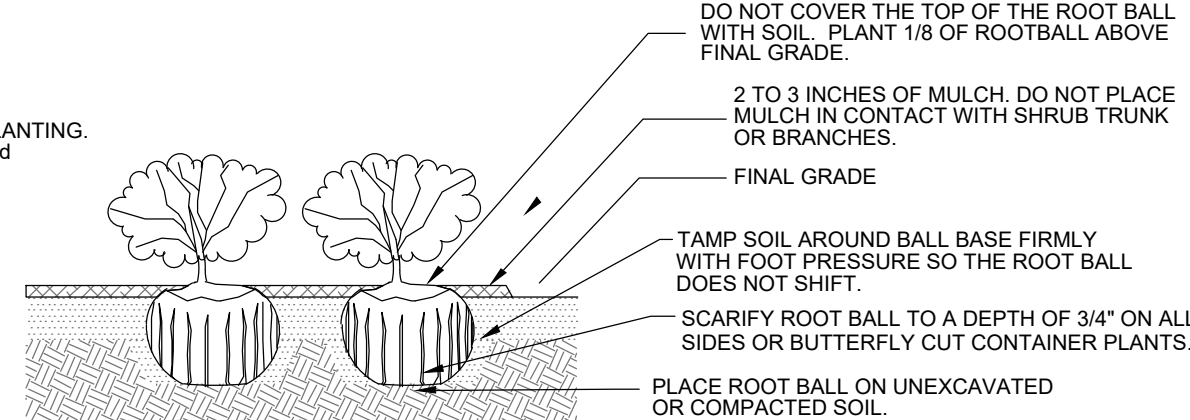


MICROBIORETENTION FACILITY #1 LANDSCAPE PLAN

SCALE: 1"=10'

MICRO-BIORETENTION #1 PLANT SCHEDULE					
SYMBOL	QTY.	SCIENTIFIC/COMMON NAME	SIZE	ROOT	REMARKS
AM	10	ARONIA MELANOCARPA BLACK CHOKEBERRY	3 GAL.	CONT.	AS SHOWN
RP	18	ROSA PALUSTRIS SWAMP ROSE	3 GAL.	CONT.	AS SHOWN
CP	234	CALTHA PALUSTRIS MARSH MARIGOLD	1 QUART	CONT.	12" ON CENTER
CS	236	CAREX STRICTA TUSSOCK SEDGE	1 QUART	CONT.	12" ON CENTER
IS	256	IRIS VERSICOLOR 'BLUE FLAG' BLUE FLAG IRIS	1 QUART	CONT.	12" ON CENTER
PV	298	PANICUM VIRGATUM VIRGINIA SWITCHGRASS	1 QUART	CONT.	12" ON CENTER

- NOTES:
- SEE PLANTING SPECIFICATIONS FOR PREPARATION OF PLANTING BED.
  - DO NOT HEAVILY PRUNE THE SHRUB AT PLANTING. PRUNE ONLY BROKEN, DAMAGED, OR DISEASED BRANCHES.
  - DIG PLANTING PIT 12" WIDER THAN THE DIAMETER OF THE TOP OF THE ROOT BALL WITH A MINIMUM PLANTING PIT DIAMETER OF 18".
  - FOR B&B SHRUBS REMOVE ALL TWINE, ROPE, AND BURLAP FROM TOP OF ROOT BALL.
  - ALL CONTAINERS SHALL BE REMOVED BEFORE INSTALLATION.



1 SHRUB BED PLANTING DETAIL - B&B AND CONTAINER SHRUBS  
14 NOT TO SCALE



9PH 820219457

DWG NO: DD14

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE

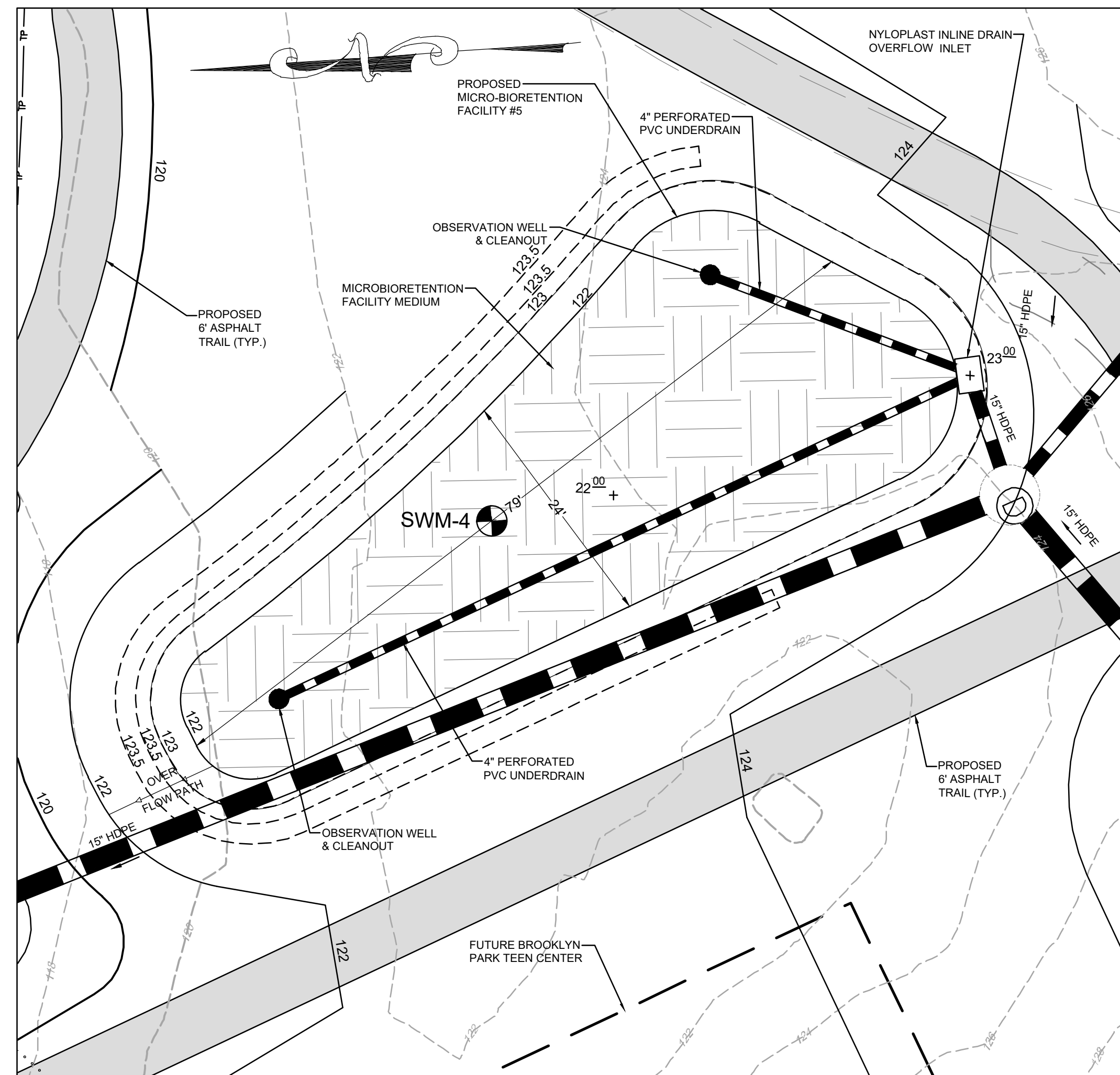


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**ANNE ARUNDEL COUNTY**  
**DEPARTMENT OF PUBLIC WORKS**

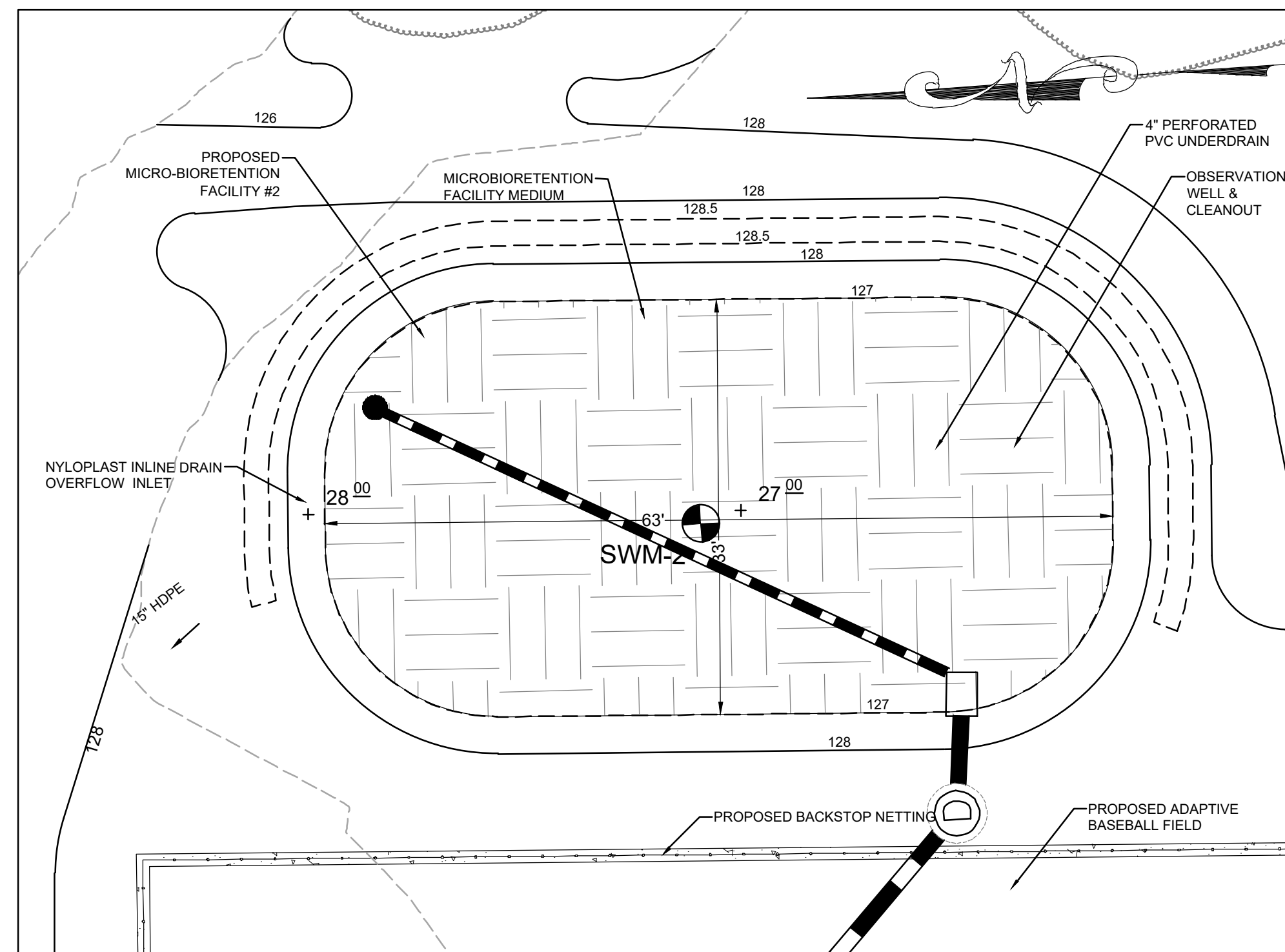
APPROVED _____ DATE _____	APPROVED _____ DATE _____	SCALE: AS SHOWN	<b>BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS</b> <small>TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT ANNE ARUNDEL COUNTY, MD</small>
CHIEF ENGINEER _____	PROJECT MANAGER _____	CHECKED BY: PJS/JAR	
APPROVAL _____ DATE _____	APPROVED _____ DATE _____	SHEET <u>14</u> of <u>51</u>	
ASSISTANT CHIEF ENGINEER _____	CHIEF, RIGHT OF WAY SERVICES _____	PROJECT #: 579000 PROPOSAL #: 579001	

MAY 31, 2023



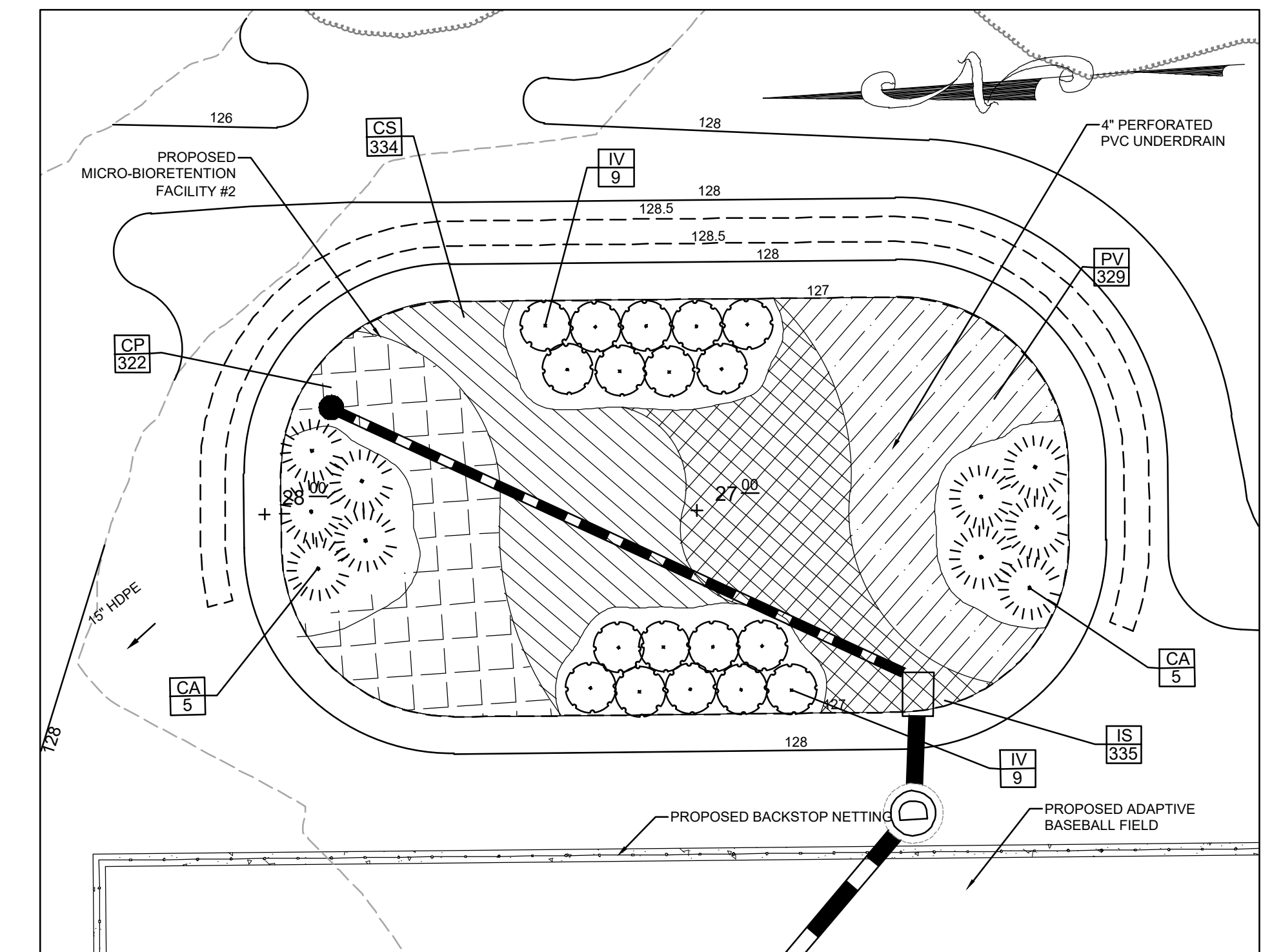
MICROBIORETENTION FACILITY #5 DETAIL PLAN

SCALE: 1"=10'



MICROBIORETENTION FACILITY #2 DETAIL PLAN

SCALE: 1"=10'



MICROBIORETENTION FACILITY #2 LANDSCAPE PLAN

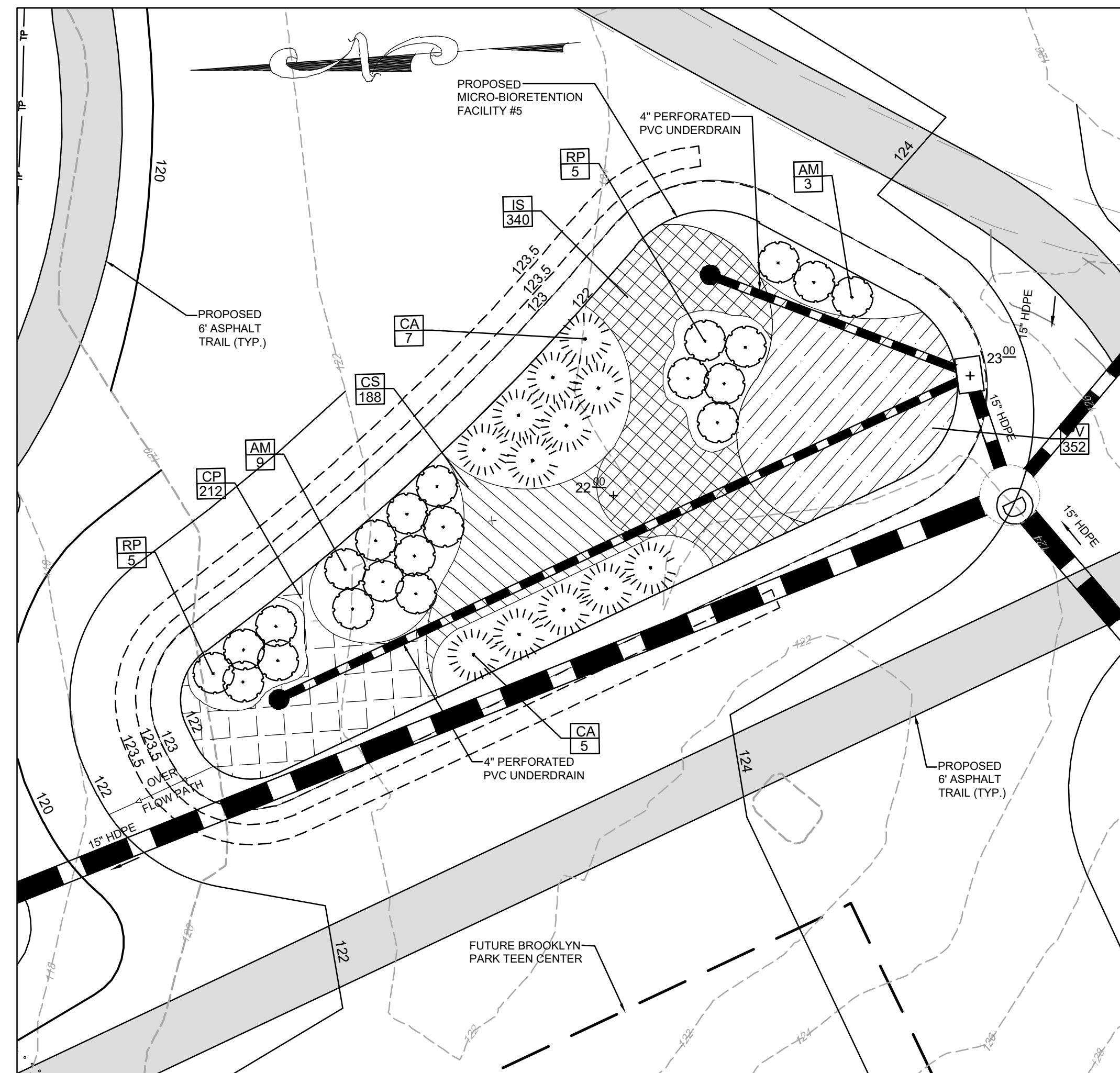
SCALE: 1"=10'

MICRO-BIORETENTION #2 PLANT SCHEDULE

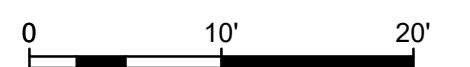
SYMBOL	QTY.	SCIENTIFIC/ COMMON NAME	SIZE	ROOT	REMARKS
IV	18	ILEX VERTICULATA WINTERBERRY	3 GAL.	CONT.	AS SHOWN
CA	10	CALLICARPA AMERICANA AMERICAN BEAUTYBERRY	3 GAL.	CONT.	AS SHOWN
CP	322	CALTHA PALUSTRIS MARSH MARIGOLD	1 QUART	CONT.	12" ON CENTER
CS	334	CAREX STRICTA TUSSOCK SEDGE	1 QUART	CONT.	12" ON CENTER
IS	335	IRIS VERSICOLOR "BLUE FLAG" BLUE FLAG IRIS	1 QUART	CONT.	12" ON CENTER
PV	329	PANICUM VIRGATUM VIRGINIA SWITCHGRASS	1 QUART	CONT.	12" ON CENTER

MICRO-BIORETENTION #5 PLANT SCHEDULE

SYMBOL	QTY.	SCIENTIFIC/ COMMON NAME	SIZE	ROOT	REMARKS
AM	12	ARONIA MELANOCARPA BLACK CHOKEBERRY	3 GAL.	CONT.	AS SHOWN
RP	10	ROSA PALUSTRIS SWAMP ROSE	3 GAL.	CONT.	AS SHOWN
CA	13	CALLICARPA AMERICANA AMERICAN BEAUTYBERRY	3 GAL.	CONT.	AS SHOWN
CP	212	CALTHA PALUSTRIS MARSH MARIGOLD	1 QUART	CONT.	12" ON CENTER
CS	188	CAREX STRICTA TUSSOCK SEDGE	1 QUART	CONT.	12" ON CENTER
IS	340	IRIS VERSICOLOR "BLUE FLAG" BLUE FLAG IRIS	1 QUART	CONT.	12" ON CENTER
PV	352	PANICUM VIRGATUM VIRGINIA SWITCHGRASS	1 QUART	CONT.	12" ON CENTER



MICROBIORETENTION FACILITY #5 LANDSCAPE PLAN



9PH 80219457

DWG NO. DD15

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774, EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY DATE

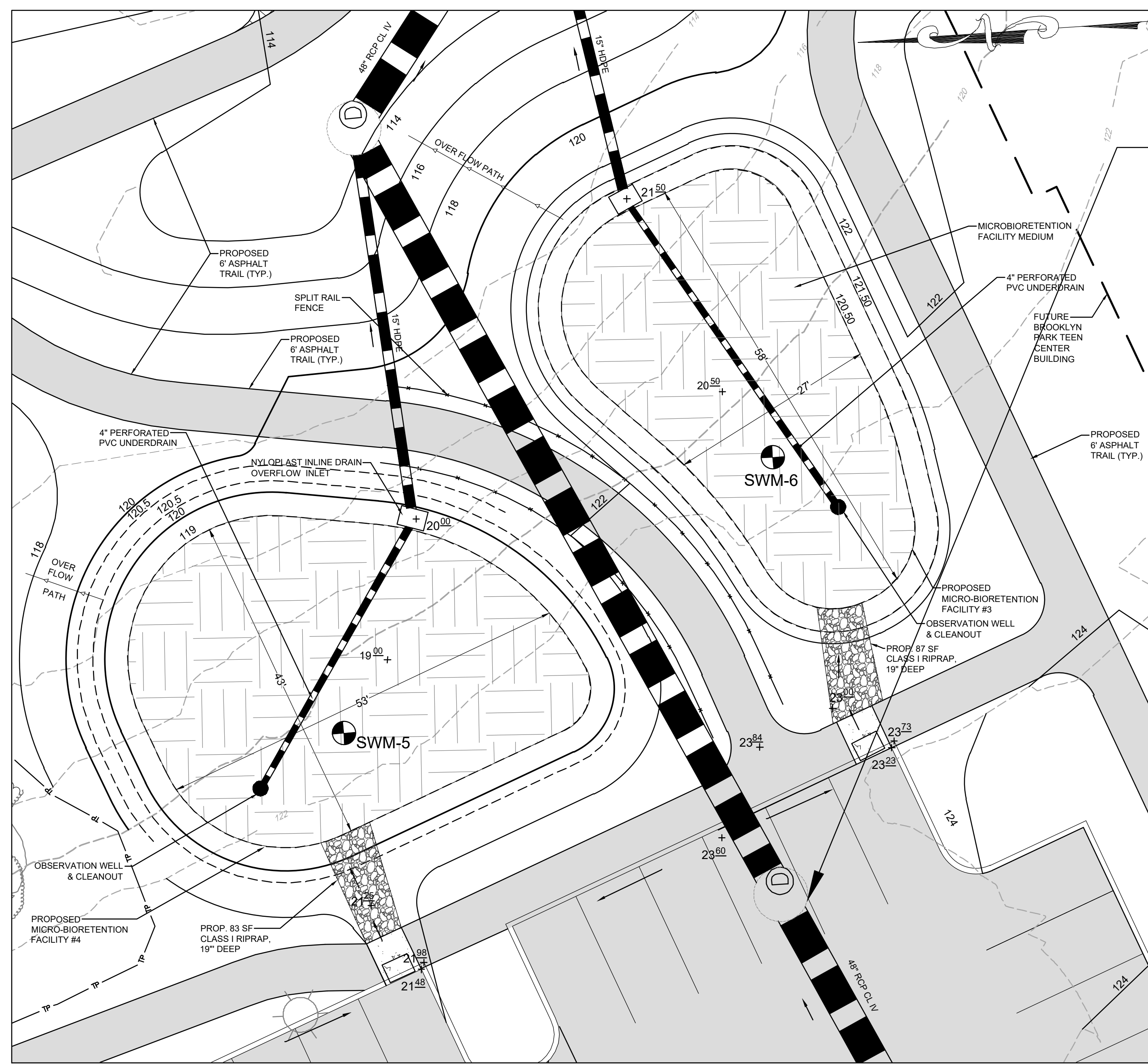


**PENNONI ASSOCIATES INC.**  
8890 McGaw Road, Suite 100  
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T 410.997.8900 F 410.997.9282

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**DEPARTMENT OF PUBLIC WORKS**

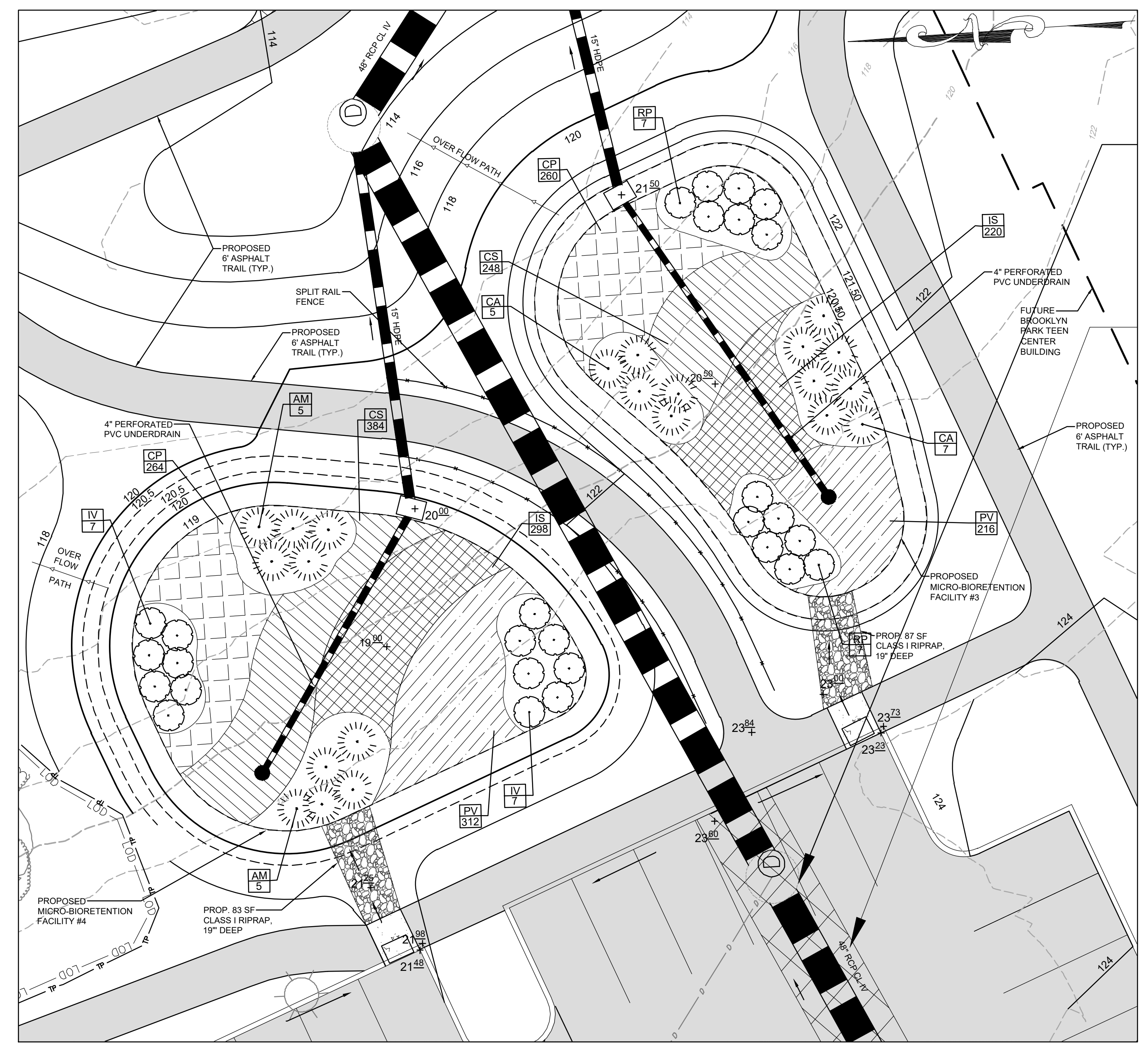
APPROVED _____ DATE _____	APPROVED _____ DATE _____	SCALE: AS SHOWN	STORMWATER MANAGEMENT DETAILS <b>BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS</b> TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT ANNE ARUNDEL COUNTY, MD
CHIEF ENGINEER _____	PROJECT MANAGER _____	CHECKED BY: PJS/JAR	
APPROVAL _____ DATE _____	APPROVED _____ DATE _____	SHEET <u>15</u> of <u>51</u>	
ASSISTANT CHIEF ENGINEER _____	CHIEF, RIGHT OF WAY SERVICES _____	PROJECT #: 579000	
		PROPOSAL #: 5790001	

MAY 31, 2023



MICROBIORETENTION FACILITY #3 & 4 DETAIL PLAN

SCALE: 1"=10'

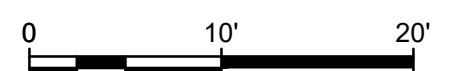


MICROBIORETENTION FACILITY #3 & 4 LANDSCAPE PLAN

SCALE: 1"=10'

MICRO-BIORETENTION #3 PLANT SCHEDULE					
SYMBOL	QTY.	SCIENTIFIC/ COMMON NAME	SIZE	ROOT	REMARKS
RP	14	ROSA PALUSTRIS SWAMP ROSE	3 GAL.	CONT.	AS SHOWN
CA	12	CALLICARPA AMERICANA AMERICAN BEAUTYBERRY	3 GAL.	CONT.	AS SHOWN
CP	248	CALTHA PALUSTRIS MARSH MARIGOLD	1 QUART	CONT.	12" ON CENTER
CS	260	CAREX STRICTA TUSSOCK SEDGE	1 QUART	CONT.	12" ON CENTER
IS	216	IRIS VERSICOLOR 'BLUE FLAG' BLUE FLAG IRIS	1 QUART	CONT.	12" ON CENTER
PV	220	PANICUM VIRGATUM VIRGINIA SWITCHGRASS	1 QUART	CONT.	12" ON CENTER

MICRO-BIORETENTION #4 PLANT SCHEDULE					
SYMBOL	QTY.	SCIENTIFIC/ COMMON NAME	SIZE	ROOT	REMARKS
AM	10	ARONIA MELANOCARPA BLACK CHOKEBERRY	3 GAL.	CONT.	AS SHOWN
IV	14	ILEX VERTICILLATA WINTERBERRY	3 GAL.	CONT.	AS SHOWN
CP	264	CALTHA PALUSTRIS MARSH MARIGOLD	1 QUART	CONT.	12" ON CENTER
CS	384	CAREX STRICTA TUSSOCK SEDGE	1 QUART	CONT.	12" ON CENTER
IS	298	IRIS VERSICOLOR 'BLUE FLAG' BLUE FLAG IRIS	1 QUART	CONT.	12" ON CENTER
PV	312	PANICUM VIRGATUM VIRGINIA SWITCHGRASS	1 QUART	CONT.	12" ON CENTER



9PH 920219457 DWG NO: DD16

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY DATE



**Pennoni**  
 PENNONI ASSOCIATES INC.  
 8890 McGaw Road, Suite 100  
 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

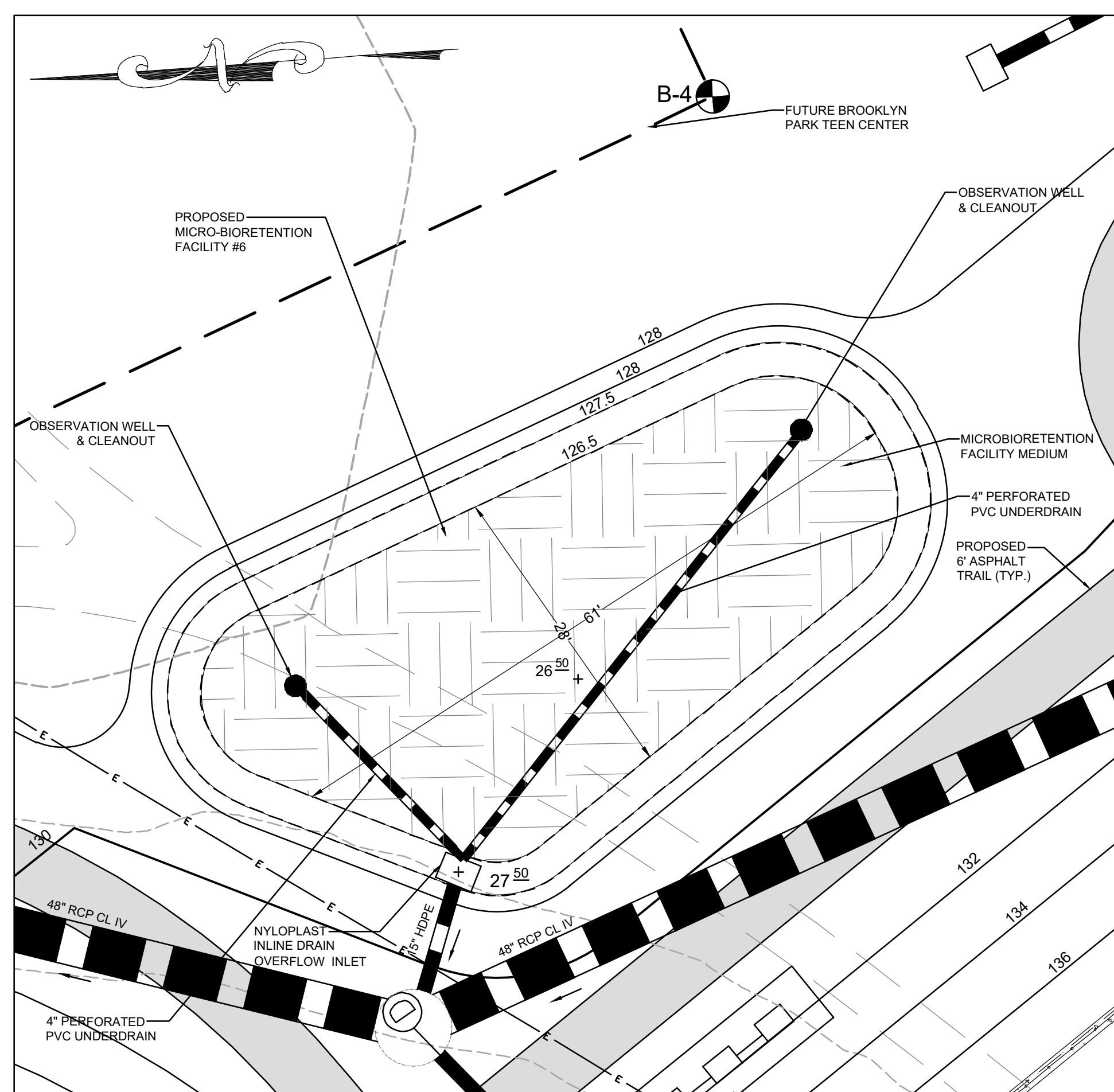
**ANNE ARUNDEL COUNTY**  
**DEPARTMENT OF PUBLIC WORKS**

MAY 31, 2023

APPROVED _____ DATE _____	APPROVED _____ DATE _____	SCALE: AS SHOWN	<b>BROOKLYN HEIGHTS          COMMUNITY CENTER PARK          DESIGN DEVELOPMENT PLANS</b> <small>TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010          BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT          ANNE ARUNDEL COUNTY, MD</small>
CHIEF ENGINEER _____	PROJECT MANAGER _____	DRAWN BY: JSN/SVH	
APPROVAL _____ DATE _____	APPROVED _____ DATE _____	CHECKED BY: PJS/JAR	
ASSISTANT CHIEF ENGINEER _____	CHIEF, RIGHT OF WAY SERVICES _____	SHEET <u>16</u> of <u>51</u>	

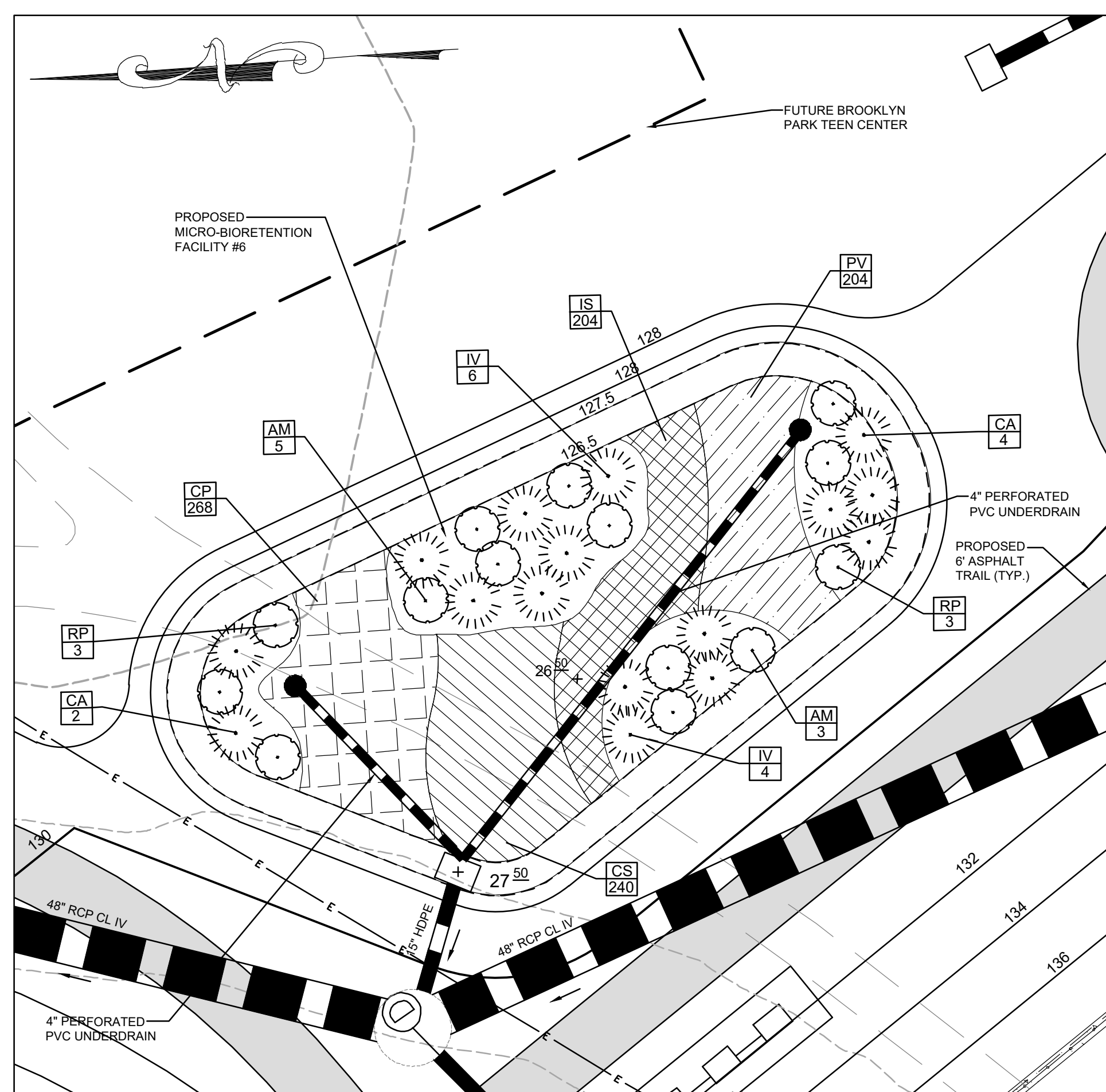
PROJECT #: 579000  
 PROPOSAL #: 579001





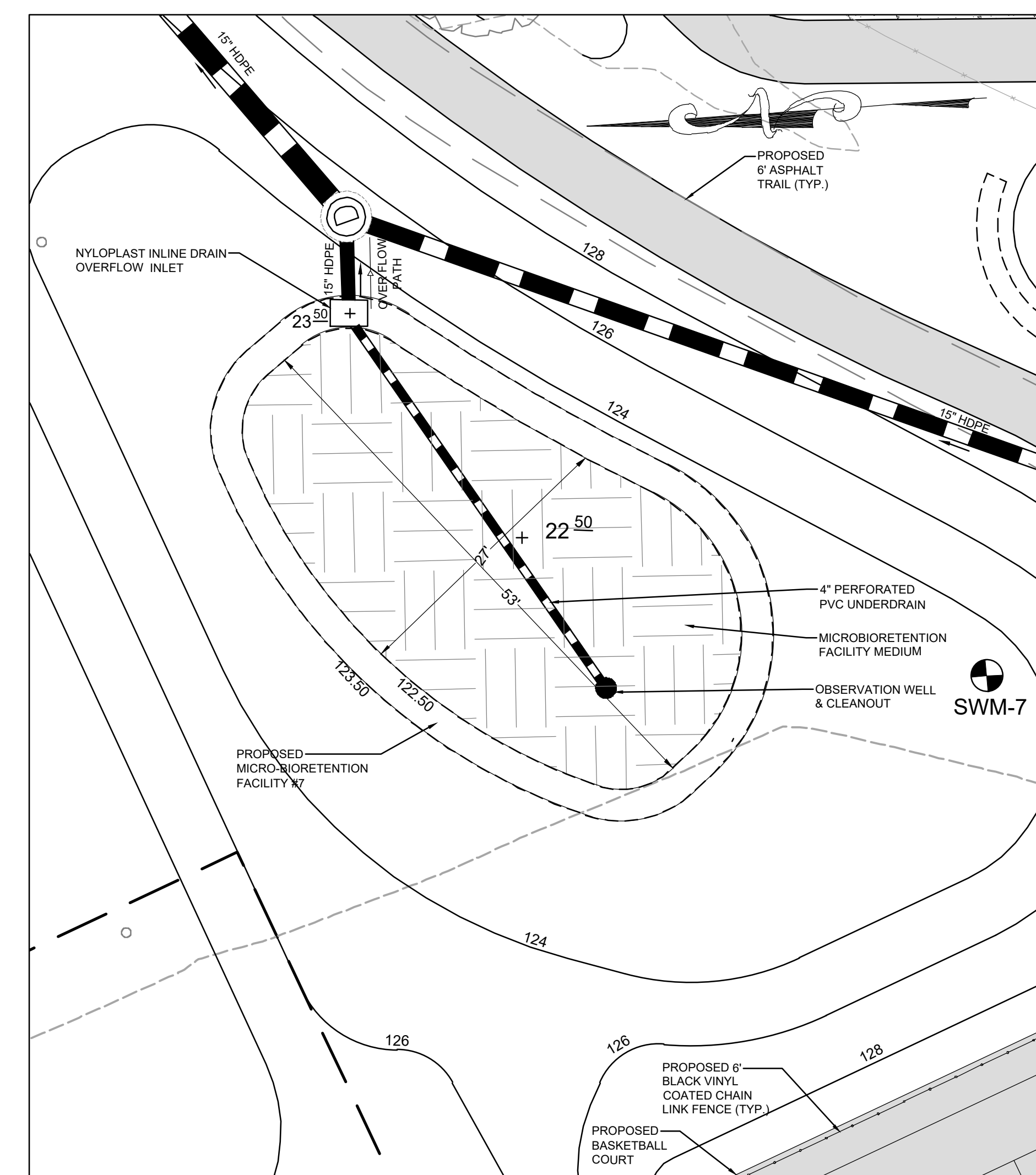
MICROBIORETENTION FACILITY #6 DETAIL PLAN

SCALE: 1"=10'



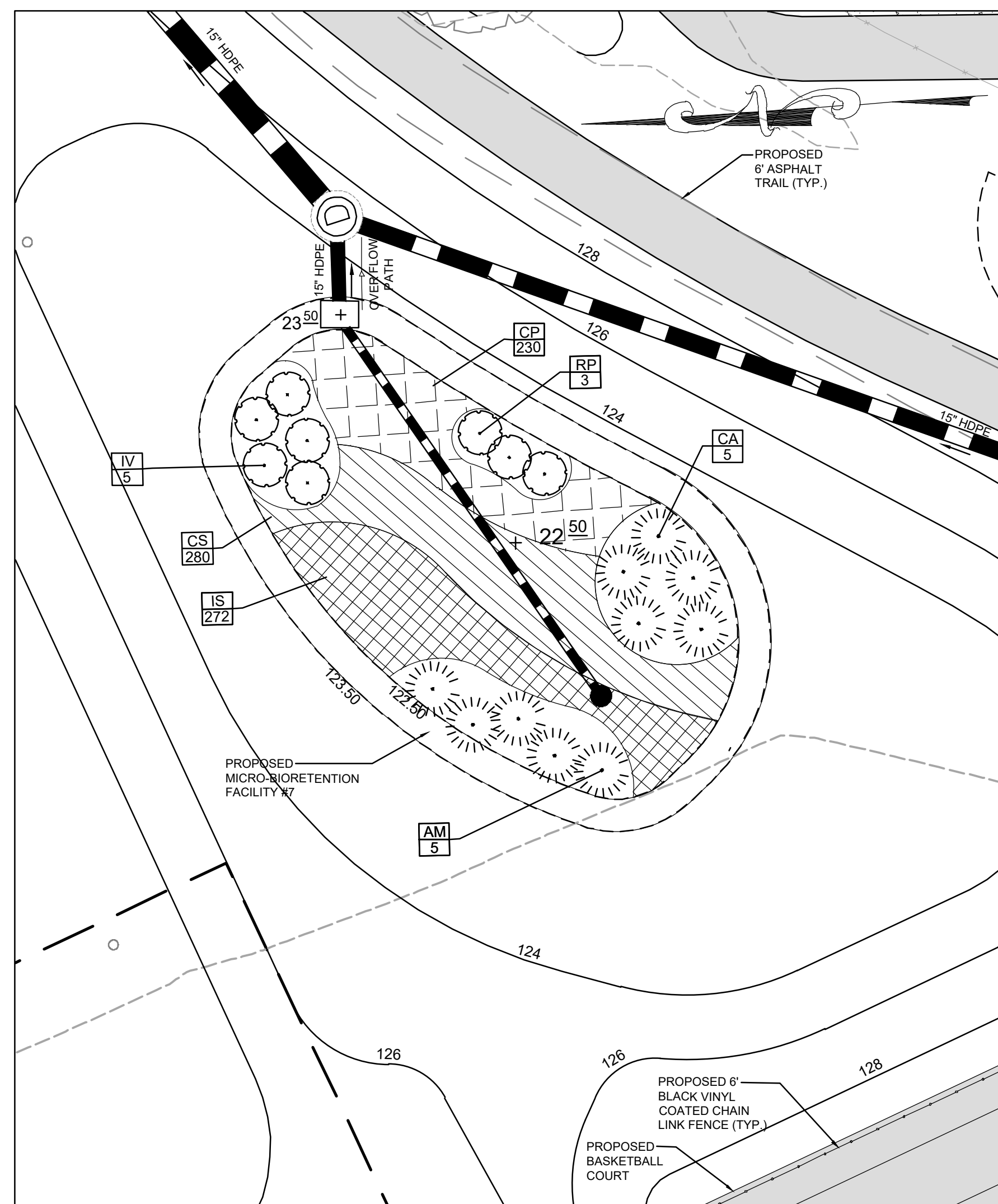
MICROBIORETENTION FACILITY #6 LANDSCAPE PLAN

SCALE: 1"=10'



MICROBIORETENTION FACILITY #7 DETAIL PLAN

SCALE: 1"=10'



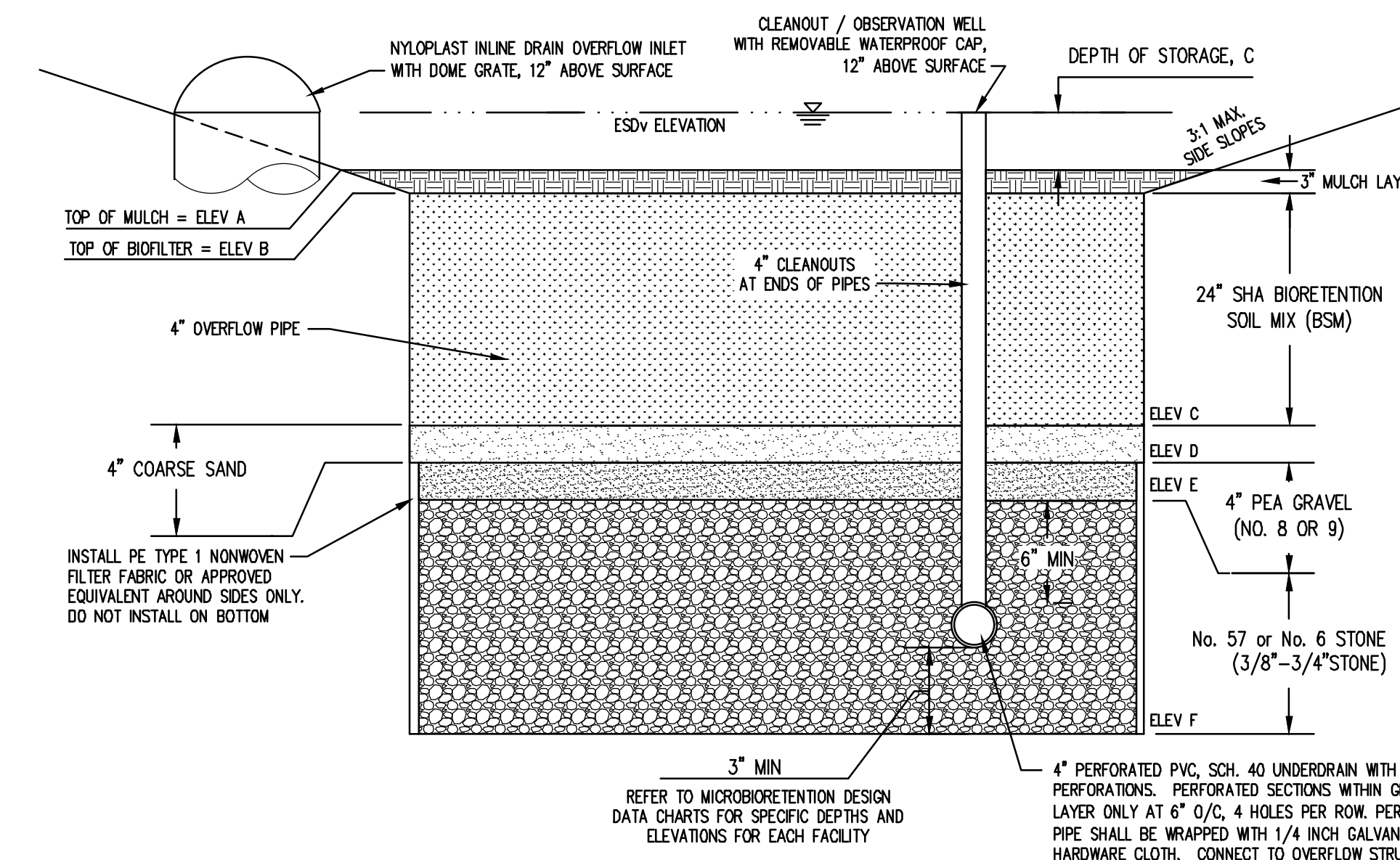
MICROBIORETENTION FACILITY #7 LANDSCAPE PLAN

SCALE: 1"=10'

MICRO-BIORETENTION #6 PLANT SCHEDULE					
SYMBOL	QTY.	SCIENTIFIC / COMMON NAME	SIZE	ROOT	REMARKS
AM	8	ARONIA MELANOCARPA BLACK CHOKEBERRY	3 GAL.	CONT.	AS SHOWN
IV	10	ILEX VERTICULATA WINTERBERRY	3 GAL.	CONT.	AS SHOWN
RP	6	ROSA PALUSTRIS SWAMP ROSE	3 GAL.	CONT.	AS SHOWN
CA	6	CALICARPA AMERICANA AMERICAN BEAUTYBERRY	3 GAL.	CONT.	AS SHOWN
CP	268	CALTHA PALUSTRIS MARSH MARIGOLD	1 QUART	CONT.	12" ON CENTER
CS	240	CAREX STRICTA TUSSOCK SEDGE	1 QUART	CONT.	12" ON CENTER
IS	204	IRIS VERSICOLOR 'BLUE FLAG' BLUE FLAG IRIS	1 QUART	CONT.	12" ON CENTER
PV	204	PANICUM VIRGATUM VIRGINIA SWITCHGRASS	1 QUART	CONT.	12" ON CENTER

MICRO-BIORETENTION #7 PLANT SCHEDULE					
SYMBOL	QTY.	SCIENTIFIC / COMMON NAME	SIZE	ROOT	REMARKS
AM	5	ARONIA MELANOCARPA BLACK CHOKEBERRY	3 GAL.	CONT.	AS SHOWN
IV	5	ILEX VERTICULATA WINTERBERRY	3 GAL.	CONT.	AS SHOWN
RP	3	ROSA PALUSTRIS SWAMP ROSE	3 GAL.	CONT.	AS SHOWN
CA	5	CALICARPA AMERICANA AMERICAN BEAUTYBERRY	3 GAL.	CONT.	AS SHOWN
CP	230	CALTHA PALUSTRIS MARSH MARIGOLD	1 QUART	CONT.	12" ON CENTER
CS	280	CAREX STRICTA TUSSOCK SEDGE	1 QUART	CONT.	12" ON CENTER
IS	272	IRIS VERSICOLOR 'BLUE FLAG' BLUE FLAG IRIS	1 QUART	CONT.	12" ON CENTER

**NOTE: THE CONSTRUCTION OF MICROBIORETENTION FACILITIES #6 & #7 WILL BE DEFERRED UNTIL THE FUTURE COMMUNITY CENTER BUILDING IS CONSTRUCTED.**



17 MICROBIORETENTION TYPICAL SECTION  
NOT TO SCALE

0 10' 20'

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APPROVED DATE \_\_\_\_\_ APPROVED DATE \_\_\_\_\_  
 CHIEF ENGINEER PROJECT MANAGER  
 APPROVAL DATE \_\_\_\_\_ APPROVED DATE \_\_\_\_\_  
 ASSISTANT CHIEF ENGINEER CHIEF, RIGHT OF WAY SERVICES

ANNE ARUNDEL COUNTY  
DEPARTMENT OF PUBLIC WORKS  
MAY 31, 2023

SCALE: AS SHOWN  
 DRAWN BY: JSN/SVH  
 CHECKED BY: PJS/JAR  
 SHEET 17 of 51  
 PROJECT #: 579000  
 PROPOSAL #: 579001

STORMWATER MANAGEMENT DETAILS  
**BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS**  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

9PH 80219457 DWG NO. DD17

**MICROBIORETENTION FACILITY AND SPECIFICATIONS**

- WHERE REQUIRED, THE UNDERDRAIN PIPE MUST BE 4-INCH DIAMETER SCHEDULE 40 OR STRONGER PERFORATED PVC PIPE AT 0.00% SLOPE. THREE INCHES OF GRAVEL MUST BE PLACED UNDER THE PIPE, WITH A MINIMUM OF 6 INCHES OF GRAVEL OVER THE PIPE. PERFORATIONS MUST BE 3/8 INCH IN DIAMETER AND MUST BE LOCATED 4 INCHES ON CENTER, EVERY 90 DEGREES AROUND THE PIPE. PERFORATED PIPE MUST BEGIN AT LEAST 5FT. INSIDE THE FILTER MEDIA. FILTER FABRIC MUST NOT BE WRAPPED AROUND THE UNDERDRAIN PIPE.
- WHERE REQUIRED FOR UNDERDRAINS, 4" INCH CLEAN-OUTS SHOULD BE USED. CLEANOUTS FOR EACH PIPE SHOULD EXTEND 6 INCHES ABOVE THE TOP OF THE PLANTING MEDIA AND HAVE A REMOVABLE CAP.
- THE GRAVEL LAYER SURROUNDING THE UNDERDRAIN PIPES MUST MEET MSHA SIZE #7 (TABLE 901A), AND MUST PROVIDE A MINIMUM OF 6 INCHES COVER OVER THE PIPE, AND MINIMUM 3 INCHES UNDER THE PIPE. NO GEOTEXTILE OR FILTER FABRIC IS ALLOWED ANYWHERE WITHIN THE FILTER MEDIA (STONE OR SAND).
- A MINIMUM 6-INCH FINE AGGREGATE SAND LAYER SHALL BE PROVIDED BELOW THE SOIL FILTER/PLANTING MEDIA. THE SAND MUST MEET GRADATION REQUIREMENTS FOR WASHED ASTM C33 FINE AGGREGATE CONCRETE SAND. AASHTO M-6 GRADATION IS ALSO ACCEPTABLE. SAND MUST BE SILICA BASED. NO LIMESTONE BASED PRODUCTS MAY BE USED. IF MATERIAL IS WHITE OR GREY IN COLOR, IT IS PROBABLY NOT ACCEPTABLE. SAND MUST BE CLEAN, NATURAL, UNWASHED SAND DEPOSITS MAY NOT BE USED. LIKEWISE, SAND THAT HAS BECOME CONTAMINATED BY IMPROPER STORAGE OR INSTALLATION PRACTICES WILL BE REJECTED. MANUFACTURED SAND OR STONE DUST IS NOT ACCEPTABLE.
- A MINIMUM 4-INCH PEA GRAVEL LAYER SHALL BE PROVIDED BETWEEN THE SAND AND THE STONE.
- THE PLANTING MEDIA MIX SHALL MEET SHA BIORETENTION SOIL MIX STANDARDS. THE SOIL SHALL MEET THE FOLLOWING MINIMUM CRITERIA: A HOMOGENEOUS MIXTURE COMPOSED OF 5 PARTS COARSE SAND, 3 PARTS BASE SOIL, AND 2 PARTS FINE BARK. THE SOIL SHALL BE FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN 2 INCHES. THE PLANTING MATERIAL SHALL BE FLOODED AFTER PLACEMENT. ANY SETTLEMENT THAT OCCURS SHALL BE FILLED BACK TO THE DESIGN ELEVATION.
- THE SURFACE MULCH LAYER WILL CONSIST OF STANDARD FINE SHREDDED AGED HARDWOOD MULCH. THE MULCH SHOULD BE UNIFORMLY TO A DEPTH OF 2 TO 3 INCHES. YEARLY REPLENISHING MAY BE NECESSARY. PINE BARK IS NOT ACCEPTABLE.

**OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)**

- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

**SAND SPECIFICATIONS**

WASHED ASTM C-33 FINE AGGREGATE CONCRETE SAND IS UTILIZED FOR STORMWATER MANAGEMENT APPLICATIONS. IN ADDITION TO THE ASTM C-33 SPECIFICATION, SAND MUST MEET ALL OF THE FOLLOWING CONDITIONS:

- SAND MUST MEET GRADATION REQUIREMENTS FOR ASTM C-33 FINE AGGREGATE CONCRETE SAND. AASHTO M-8 GRADATION IS ALSO ACCEPTABLE.
- SAND MUST BE SILICA BASED. NO LIMESTONE BASED PRODUCTIONS MAY BE USED. IF THE MATERIAL IS WHITE OR GRAY IN COLOR, IT IS PROBABLY NOT ACCEPTABLE.
- SAND MUST BE CLEAN AND NATURAL. UNWASHED SAND DEPOSITS MAY NOT BE USED. LIKEWISE, SAND THAT HAS BECOME CONTAMINATED BY IMPROPER STORAGE OR INSTALLATION PRACTICES WILL BE REJECTED.
- MANUFACTURED SAND OR STONE DUST IS NOT ACCEPTABLE UNDER ANY CIRCUMSTANCE.

**MICROBIORETENTION FACILITY SEQUENCE OF CONSTRUCTION**

- DO NOT BEGIN MICROBIORETENTION FACILITY INSTALLATION UNTIL SITE UPSTREAM OF THE FACILITY IS STABILIZED AND FINE GRADING HAS BEEN COMPLETED.
- STAKEOUT LIMITS OF THE FACILITY. COORDINATE WITH THE ENGINEER TO VERIFY DIMENSIONS AND ENSURE THAT ENOUGH STAKEOUT INFORMATION IS PROVIDED TO ACCURATELY CONSTRUCT FACILITY. (1 DAY)
- EXCAVATE MICROBIORETENTION FACILITY. CONSTRUCTION SHALL BE PERFORMED WITH LIGHTWEIGHT, WIDE-TRACKED EQUIPMENT TO MINIMIZE DISTURBANCE AND COMPACTION. IT IS RECOMMENDED THAT THE ENGINEER BE CONTACTED TO VERIFY AND SURVEY LIMITS OF EXCAVATION UPON COMPLETION OF EXCAVATION, PRIOR TO PIPE AND UNDERDRAIN CONSTRUCTION AND MATERIAL BACKFILL. EXCAVATED MATERIALS SHALL BE PLACED IN A CONTAINED AREA. (1 DAY)
- PLACE STONE AND UNDERDRAINS. (1 DAY)
- PLACE SAND LAYER IN LIFTS OF THREE INCHES. (0.5 DAY)
- PLACE PLANTING SOIL AND OBSERVATION WELLS. (1 DAY)
- PLACE MULCH. (0.5 DAY)
- INSTALL PLANT MATERIAL. (1 DAY)
- STABILIZE MICROBIORETENTION FACILITY AREA. (0.5 DAY)
- PREPARE AND SUBMIT AS-BUILTS TO COUNTY.

**CONSTRUCTION CRITERIA FOR MICRO BIORETENTION (M-6)**

- EROSION AND SEDIMENT CONTROL: MICRO BIORETENTION PRACTICES SHOULD NOT BE CONSTRUCTED UNTIL THE CONTRIBUTING DRAINAGE AREA IS STABILIZED. IF THIS IS IMPRACTICAL, RUNOFF FROM DISTURBED AREAS SHALL BE DIVERTED AWAY AND NO SEDIMENT CONTROL PRACTICES SHALL BE USED NEAR THE PROPOSED LOCATION.
- SOIL COMPACTION: EXCAVATION SHOULD BE CONDUCTED IN DRY CONDITIONS WITH EQUIPMENT LOCATED OUTSIDE OF THE PRACTICE TO MINIMIZE BOTTOM AND SIDEWALL COMPACTION. ONLY LIGHTWEIGHT, LOW GRADE-CONTACT EQUIPMENT SHOULD BE USED WITHIN MICRO BIORETENTION PRACTICES AND THE BOTTOM SCARIFIED A MINIMUM OF 6" BEFORE INSTALLING UNDERDRAINS AND FILTERING MEDIA.
- UNDERDRAIN INSTALLATION: GRAVEL FOR THE UNDERDRAIN SYSTEM SHALL BE CLEAN, WASHED, AND FREE OF FINES. UNDERDRAIN PIPES SHOULD BE CHECKED TO ENSURE THAT BOTH THE MATERIAL AND PERFORATIONS MEET SPECIFICATIONS. THE UPSTREAM ENDS OF THE UNDERDRAIN PIPE SHOULD BE CAPPED PRIOR TO INSTALLATION.
- FILTER MEDIA INSTALLATION: MICRO BIORETENTION SOILS MAY BE MIXED ON-SITE BEFORE PLACEMENT. HOWEVER, SOILS SHOULD NOT BE PLACED UNDER SATURATED CONDITIONS. THE FILTER MEDIA SHOULD BE PLACED AND GRADDED USING EXCAVATORS OR BACKHOES OPERATING ADJACENT TO THE PRACTICE AND BE PLACED IN HORIZONTAL LAYERS (12 INCHES PER LIFT MAXIMUM). PROPER COMPACTION OF THE MEDIA WILL OCCUR NATURALLY. SPRAYING OR SPRINKLING WATER ON EACH LIFT UNTIL SATURATED MAY QUICKEN SETTLING TIMES.
- LANDSCAPE INSTALLATION: THE OPTIMUM PLANTING TIME IS DURING THE FALL. SPRING PLANTING IS ALSO ACCEPTABLE BUT MAY REQUIRE ADDITIONAL WATERING.

**For Each Practice in the Drainage Area**

STORM ID	STRU_NAME	MDE BMP CLASS	MDE BMP TYPE	CONSTRUCTION PURPOSE	ON or OFF SITE	LAND USE	DEVICE DRAINAGE AREA (acres)	IMPERVIOUS AREA DRAINING TO DEVICE (Square feet)	IMPERVIOUS ACRES RESTORED (See Note 3)	MD NORTH COORD (NAD83 - FT)	MD EAST COORD (NAD83 - FT)	WQ <sub>v</sub> (ft3) (See Note 5)	New Maintenance Responsibility	New Comments
<b>Blank - County Use</b>														
	Microbioretention #1	E	MMBR	NEWD	ON	16	20,000 SF (0.46 AC)	12,761 SF (0.29 AC)	0	566,216.7525	1,422,779.3631	2,809	Owner	
	Microbioretention #2	E	MMBR	NEWD	ON	16	19,758 SF (0.45 AC)	16,598 SF (0.38 AC)	0	566,331.7326	1,423,012.7684	3,583	Owner	
	Microbioretention #3	E	MMBR	NEWD	ON	16	17,321 SF (0.40 AC)	12,668 SF (0.29 AC)	0	566,537.6844	1,422,799.8099	2,760	Owner	
	Microbioretention #4	E	MMBR	NEWD	ON	16	19,987 SF (0.46 AC)	16,962 SF (0.39 AC)	0	566,567.9693	1,422,760.7562	3,595	Owner	
	Microbioretention #5	E	MMBR	NEWD	ON	16	19,878 SF (0.46 AC)	14,598 SF (0.36 AC)	0	566,385.5936	1,422,911.0310	3,180	Owner	
	Microbioretention #6	E	MMBR	NEWD	ON	16	20,000 SF (0.46 AC)	12,903 SF (0.30 AC)	0	566,336.8139	1,422,522.6203	2,838	Owner	
	Microbioretention #7	E	MMBR	NEWD	ON	16	19,636 SF (0.45 AC)	8,305 SF (0.19 AC)	0	566,313.1480	1,422,795.4386	1,903	Owner	

**NOTES**

- Rainfall target (from Table 5.3, Design Manual pp.5.21-22) used to determine ESD goals and size practices (for new development or redevelopment). If practice is for restoration, then PE\_REQ is 1 inch.
- Rainfall addressed (using both ESD techniques and practices, and structural practices) by the BMPs within the drainage area
- Equals Impervious Area Draining to Device when PE\_ADR = 1 inch (for restoration only)
- Maryland 8-Digit HUC (Hydrologic Unit Code) can be found by using the map at: <https://mde.state.md.us/programs/Water/TMDL/DataCenter/Pages/8DigitWatershed.aspx>
- Water Quality volume, the smaller of the volume of the actual storage volume in the device or the volume from the 1-year 24-hour storm for the drainage area to the device ((2.7 \* Rv x A)/12)
- If other is selected for maintenance responsibility, please explain the comments column.

**Project Table for Drainage Area 1**

Permit Number	
Project Number	579001
Project Name	Brooklyn Heights Community Center
Structure Address	111 E 11th Ave
Structure City	Baltimore
State	Maryland
Structure Zip	21225
Total Drainage Area (Acres)	13.021 Acres
RCN - Pre Construction	74
RCN - Post Construction	78
RCN - Woods	68
Total Number of BMPs	7
PE Required (see Note 1)	1.26
PE Addressed (see Note 2)	1.62
MD 8-Digit HUC (see Note 4)	02130903
USGS 12-Digit HUC	Blank - County Use

SITE IMPERVIOUSNESS AND ESD VOLUME	
SITE AREA/LOAD (ACRES)	13.19
EXISTING IMPERVIOUS SURFACE AREA (ACRES)	1.85
PROPOSED IMPERVIOUS SURFACE AREA (ACRES)	3.20
RAINFALL DEPTH (IN)	1.0
EXISTING IMPERVIOUSNESS	14.0%
PROPOSED IMPERVIOUSNESS	24.3%
ESDV CALCULATION FOR NEW DEVELOPMENT	
ESDV VOLUME REQUIRED (CF)	16,124
ESDV VOLUME PROVIDED (CF)	20,668

MICRO-BIORETENTION SUMMARY TABLE											
FACILITY #	DRAINAGE AREA (SF)	IMPERVIOUS AREA (SF)	% IMPERVIOUS AREA	SOIL TYPE	PE REQUIRED (REDEVELOPMENT)	ESDV REQUIRED (CF)	ESDV PROVIDED (CF)	FILTER SURFACE AREA (SF)	PONDING DEPTH (IN)	MEDIA DEPTH (FT)	MAINTENANCE
1	20,000	12,761	64%	C	2.6	16,124 **	2,809	1,486	12"	2	PRIVATE
2	19,758	16,598	84%	C	2.6		3,583	1,965	12"	2	PRIVATE
3	17,321	12,668	73%	C	2.6		2,760	1,526	12"	2	PRIVATE
4	19,987	16,962	85%	C	2.6		3,595	1,856	12"	2	PRIVATE
5	19,878	14,598	73%	C	2.6		3,180	1,887	12"	2	PRIVATE
6	20,000	12,903	65%	C	2.6		2,838	1,553	12"	2	PRIVATE
7	19,636	8,305	42%	C	2.6		1,903	1,219	12"	2	PRIVATE

**MICRO-BIORETENTION DESIGN DATA**

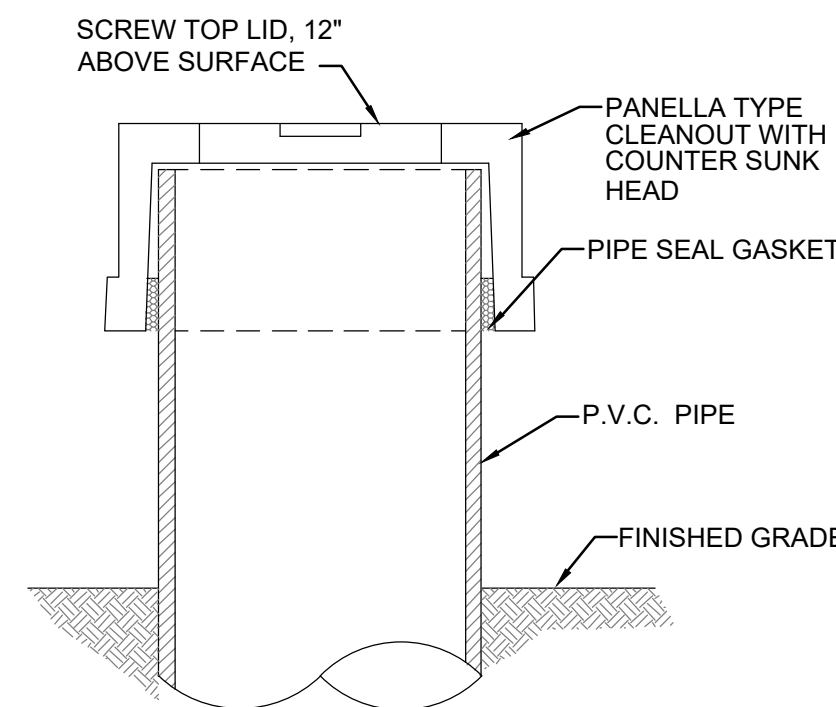
	#1	#1 AS-BUILT	#2	#2 AS-BUILT	#3	#3 AS-BUILT	#4	#4 AS-BUILT	#5	#5 AS-BUILT	#6	#6 AS-BUILT	#7	#7 AS-BUILT
ESDV ELEV & OVERFLOW STRUCTURE RIM	128.00		128.00		121.50		120.00		123.00		127.50		123.50	
FACILITY TOP ELEV A	127.00		127.00		120.50		119.00		122.00		126.50		122.50	
MULCH BOTTOM ELEV B	126.75		126.75		120.25		118.75		121.75		126.25		122.25	
BSM SOIL BOTTOM ELEV C	124.75		124.75		118.25		116.75		119.75		124.25		120.25	
SAND BOTTOM ELEV D	124.42		124.42		117.92		116.42		119.42		123.92		119.92	
PEA GRAVEL BOTTOM ELEV E	124.09		124.09		117.59		116.09		119.09		123.59		119.59	
FACILITY BOTTOM ELEV F	122.76		122.76		116.26		114.76		117.76		122.26		118.26	
SURFACE AREA AT 'F' (SF)	1,486 SF		1,965 SF		1,526 SF		1,856 SF		1,887 SF		1,553 SF		1,219 SF	
UNDERDRAIN INVERT ELEV AT CLEANOUT	123.26		123.26		116.76		115.26		118.26		122.76		118.76	
DEPTH OF STONE BELOW UNDERDRAIN	6"		6"		6"		6"		6"		6"		6"	

**NOTES:**

EACH OBSERVATION WELL / CLEANOUT SHALL INCLUDE THE FOLLOWING:

- FOR AN UNDERGROUND FLUSH MOUNTED OBSERVATION WELL / CLEANOUT, PROVIDE A TUBE MADE OF NON-CORROSIVE MATERIAL, SCHEDULE 40 OR EQUAL, AT LEAST THREE FEET LONG WITH AN INSIDE DIAMETER OF AT LEAST 4" INCHES.
- THE TUBE SHALL HAVE A FACTORY ATTACHED CAST IRON OR HIGH IMPACT PLASTIC COLLAR WITH RIBS TO PREVENT ROTATION WHEN REMOVING SCREW TOP LID. THE SCREW TOP LID SHALL BE CAST IRON OR HIGH IMPACT PLASTIC THAT WILL WITHSTAND ULTRA-VIOLET RAYS.
- ON THE CAP OF THE OBSERVATION WELL MARK THE DEPTH TO THE BOTTOM OF THE SHA BIORETENTION SOIL MIX WITH AN INDELIBLE PEN.

**2** CLEAN-OUT / OBSERVATION WELL CAP  
18 NOT TO SCALE



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06/01/2022

**ANNE ARUNDEL COUNTY**  
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MAY 31, 2023

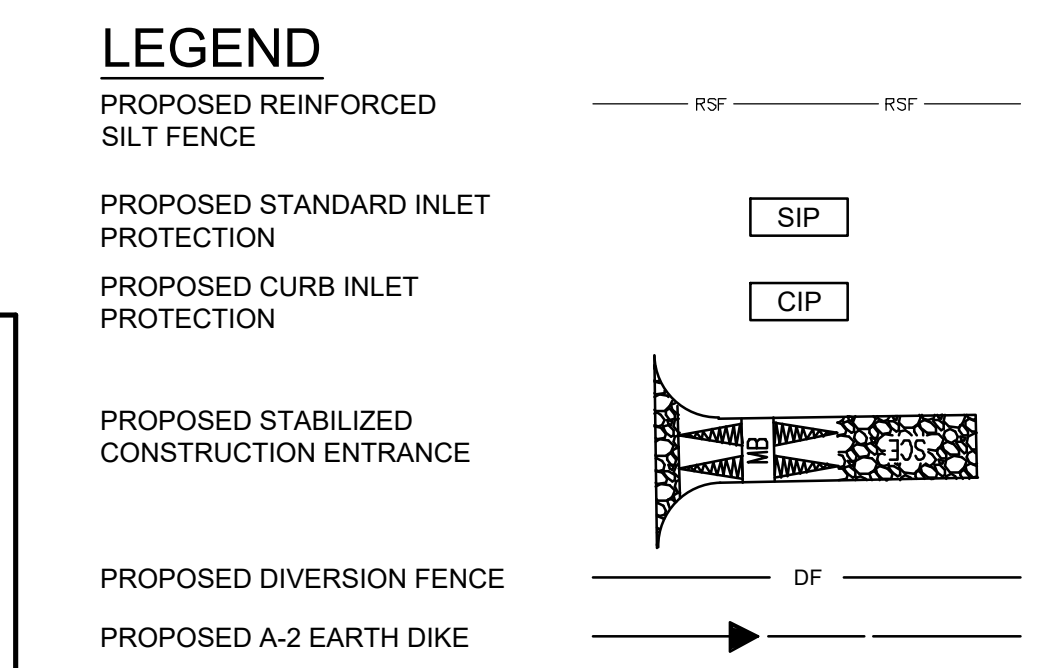
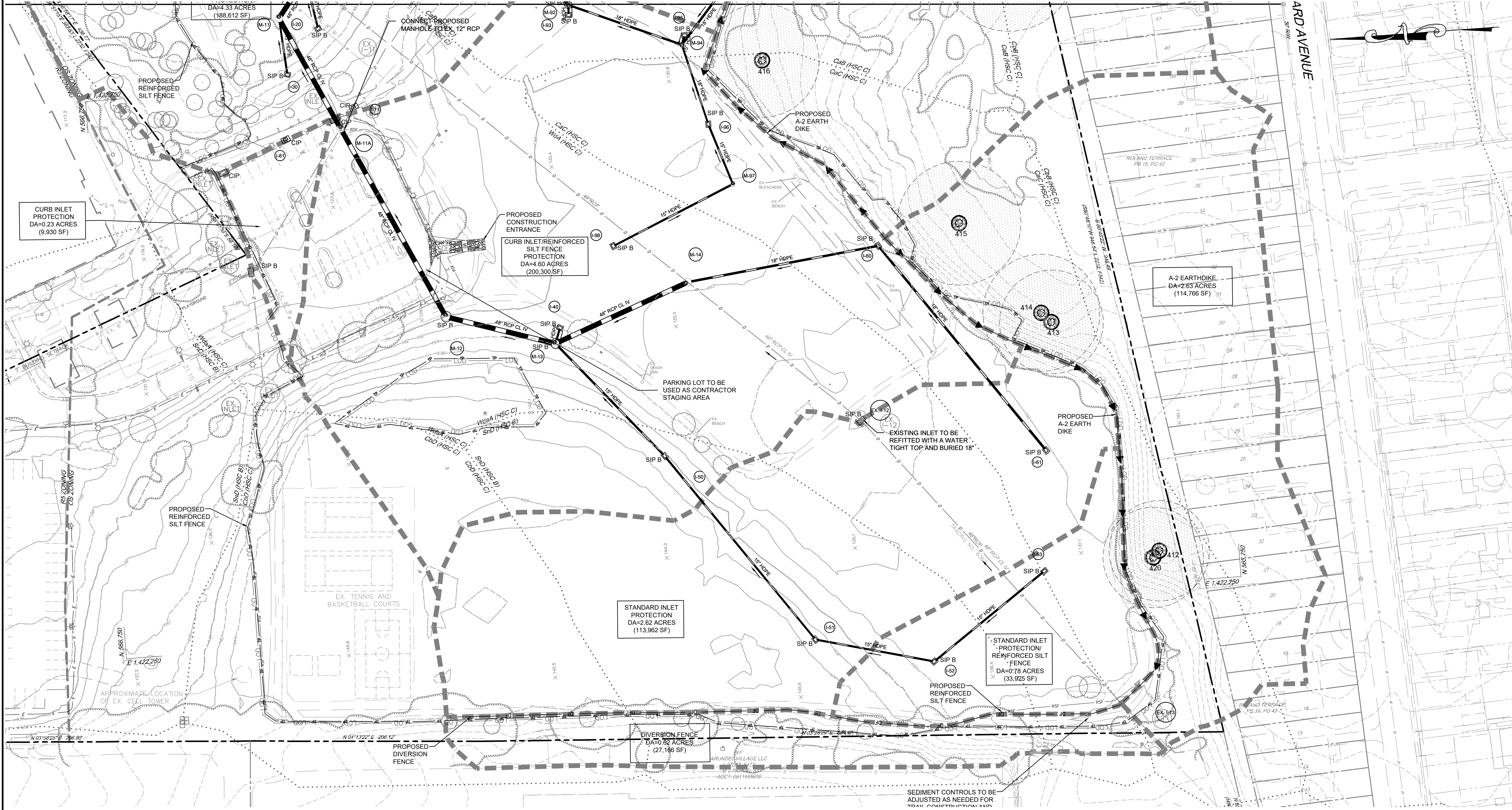
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SHEET 18 of 51  
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TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD

APPROVED DATE: \_\_\_\_\_  
CHIEF ENGINEER: \_\_\_\_\_  
APPROVED DATE: \_\_\_\_\_  
PROJECT MANAGER: \_\_\_\_\_  
APPROVED DATE: \_\_\_\_\_  
ASSISTANT CHIEF ENGINEER: \_\_\_\_\_  
CHIEF, RIGHT OF WAY SERVICES: \_\_\_\_\_

9PH 80219457 DWG NO: DD18

MATCHLINE-SEE SHEET 20



PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



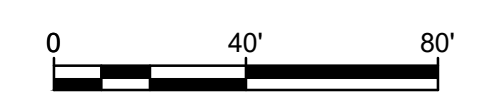
**Pennoni**  
 PENNONI ASSOCIATES INC.  
 8890 McGaw Road, Suite 100  
 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

ANNE ARUNDEL COUNTY  
 DEPARTMENT OF PUBLIC WORKS

APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		PROJECT MANAGER	
APPROVAL	DATE	APPROVED	DATE
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY SERVICES	

SCALE: 1" = 40'  
 DRAWN BY: JSN/SVH  
 CHECKED BY: PJS/JAR  
 SHEET 19 of 51  
 PROJECT #: 579000  
 PROPOSAL #: 579001

PHASE 1 SEDIMENT CONTROL PLAN  
**BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS**  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

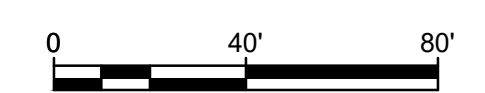


9PH 580219457 DWG NO. DD19



MATCHLINE-SEE SHEET 19

- LEGEND**
- PROPOSED REINFORCED SILT FENCE
  - PROPOSED STANDARD INLET PROTECTION
  - PROPOSED CURB INLET PROTECTION
  - PROPOSED STABILIZED CONSTRUCTION ENTRANCE
  - PROPOSED DIVERSION FENCE
  - PROPOSED A-2 EARTH DIKE



GPH 980219457 DWG NO: DD20

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



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 Columbia, MD 21045  
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**ANNE ARUNDEL COUNTY**  
 DEPARTMENT OF PUBLIC WORKS

APPROVED _____ DATE _____	APPROVED _____ DATE _____	SCALE: 1" = 40'
CHIEF ENGINEER _____	PROJECT MANAGER _____	DRAWN BY: JSN/SVH
APPROVAL _____ DATE _____	APPROVED _____ DATE _____	CHECKED BY: PJS/JAR
ASSISTANT CHIEF ENGINEER _____	CHIEF, RIGHT OF WAY SERVICES _____	SHEET <u>20</u> of <u>51</u>
		PROJECT #: 579000
		PROPOSAL #: 579001

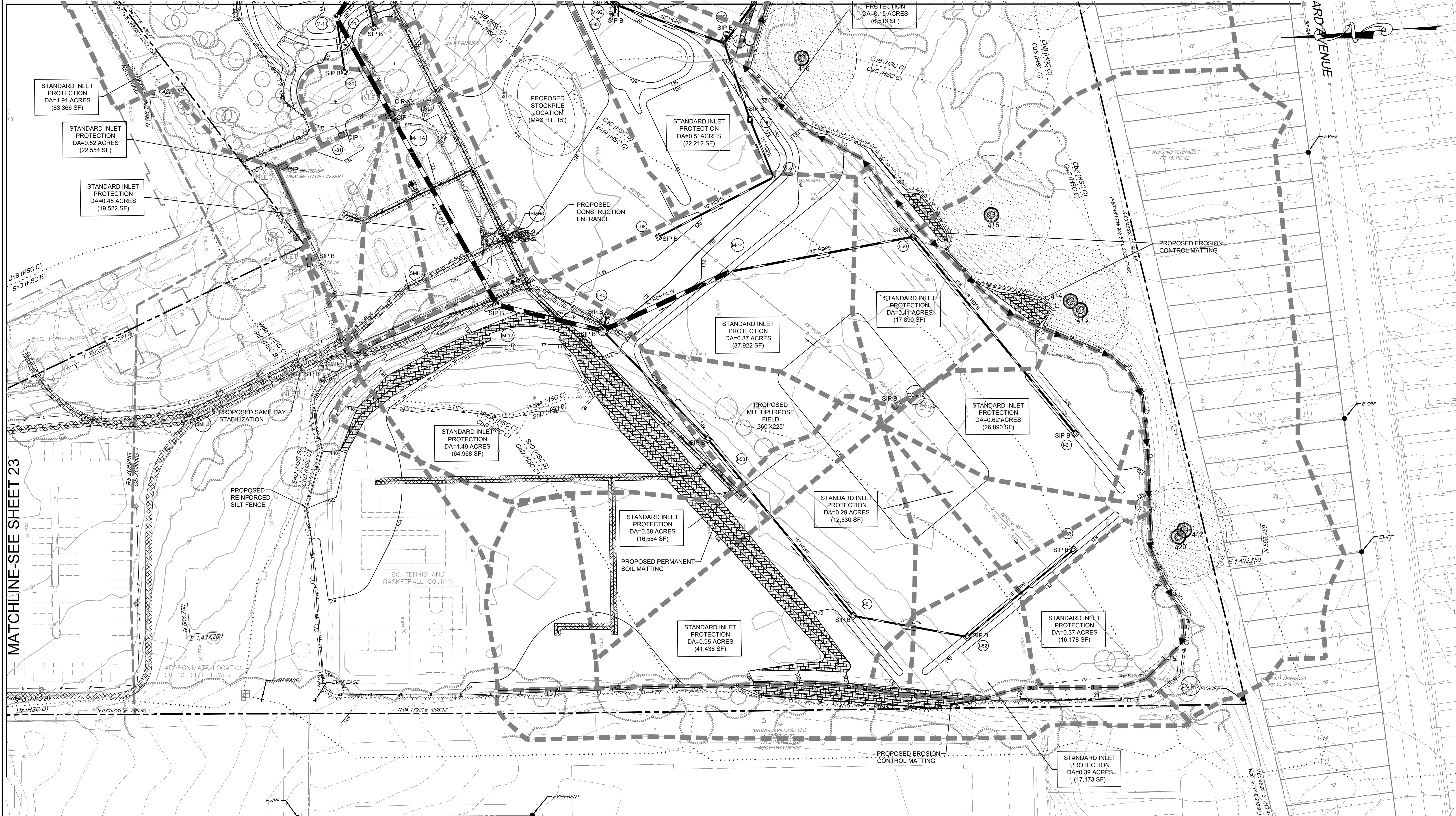
PHASE I SEDIMENT CONTROL PLAN

**BROOKLYN HEIGHTS COMMUNITY CENTER PARK**  
 DESIGN DEVELOPMENT PLANS  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

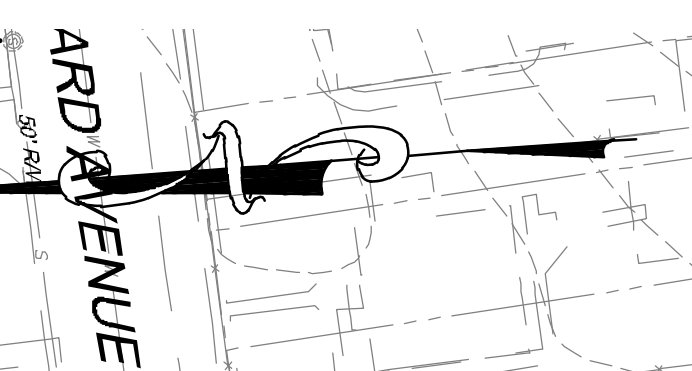
MAY 31, 2023

U:\accounts\AA\020\AA02021002 - Brooklyn Park Teen Center\DESIGN\_SHEETS\DESIGN DEVELOPMENT PLANS\AA02021002-0000

MATCHLINE-SEE SHEET 22



MATCHLINE-SEE SHEET 23



**LEGEND**

- PROPOSED REINFORCED SILT FENCE
- PROPOSED SOIL STABILIZATION MATTING
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED SAME DAY STABILIZATION
- PROPOSED DIVERSION FENCE  DF
- PROPOSED A-2 EARTH DIKE
- PROPOSED STANDARD INLET PROTECTION  SIP
- PROPOSED CURB INLET PROTECTION  CIP

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



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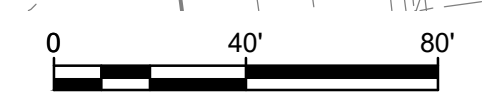
GPH 820219457 DWG NO.: DD21

**ANNE ARUNDEL COUNTY**  
 DEPARTMENT OF PUBLIC WORKS

APPROVED _____ DATE _____	APPROVED _____ DATE _____	SCALE: 1" = 40'
CHIEF ENGINEER _____	PROJECT MANAGER _____	DRAWN BY: JSN/SVH
APPROVAL _____ DATE _____	APPROVED _____ DATE _____	CHECKED BY: PJS/JAR
ASSISTANT CHIEF ENGINEER _____	CHIEF, RIGHT OF WAY SERVICES _____	SHEET 21 of 51
		PROJECT #: 579000
		PROPOSAL #: 579001

PHASE II SEDIMENT CONTROL PLAN  
**BROOKLYN HEIGHTS COMMUNITY CENTER PARK**  
 DESIGN DEVELOPMENT PLANS  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

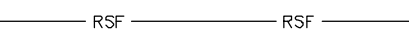
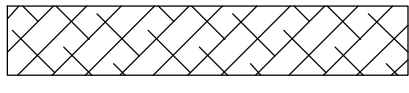
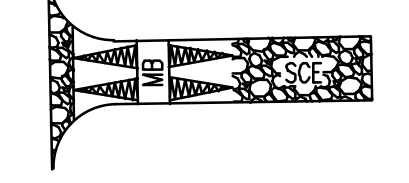

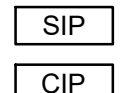

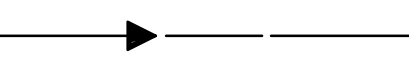

MAY 31, 2023

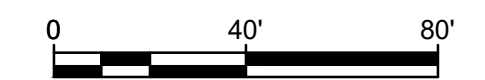




MATCHLINE-SEE SHEET 21

**LEGEND**


- PROPOSED REINFORCED SILT FENCE 
- PROPOSED SOIL STABILIZATION MATTING 
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE 
- PROPOSED SAME DAY STABILIZATION 
- PROPOSED STANDARD INLET PROTECTION 
- PROPOSED CURB INLET PROTECTION 
- PROPOSED DIVERSION FENCE 
- PROPOSED A-2 EARTH DIKE 



9PH 80219457 DWG NO: DD22

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



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8890 McGaw Road, Suite 100  
Columbia, MD 21045  
T 410.997.8900 F 410.997.9282

**ANNE ARUNDEL COUNTY**  
**DEPARTMENT OF PUBLIC WORKS**

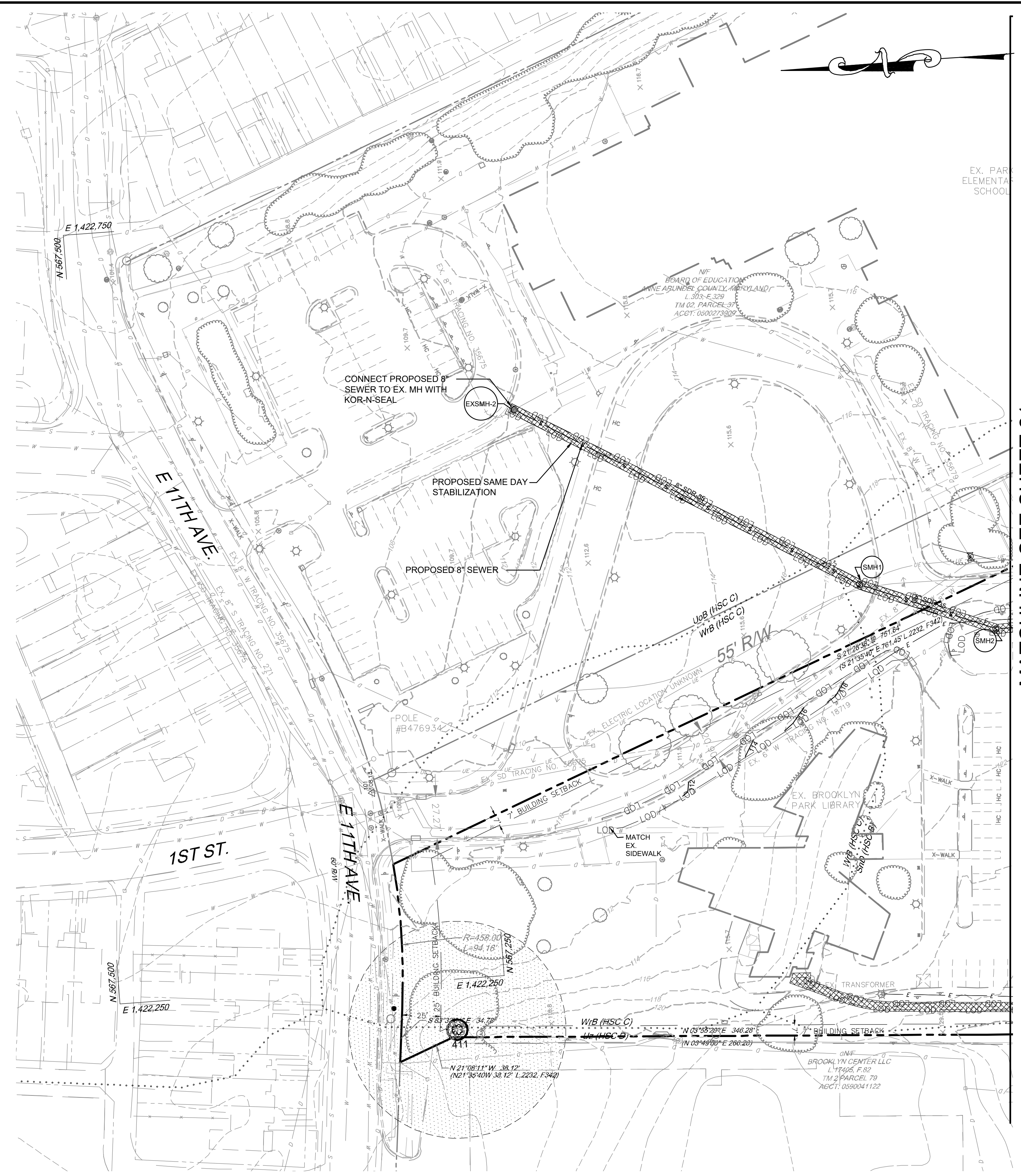
MAY 31, 2023

APPROVED _____ DATE _____	APPROVED _____ DATE _____	SCALE: 1" = 40'
CHIEF ENGINEER _____	PROJECT MANAGER _____	DRAWN BY: JSN/SVH
APPROVAL _____ DATE _____	APPROVED _____ DATE _____	CHECKED BY: PJS/JAR
ASSISTANT CHIEF ENGINEER _____	CHIEF, RIGHT OF WAY SERVICES _____	SHEET <u>22</u> of <u>51</u>
		PROJECT #: 579000
		PROPOSAL #: 579001

PHASE II SEDIMENT CONTROL PLAN

**BROOKLYN HEIGHTS COMMUNITY CENTER PARK**  
DESIGN DEVELOPMENT PLANS

TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD



MATCHLINE-SEE SHEET 21

**LEGEND**

PROPOSED SAME DAY STABILIZATION

9PH 020219457 DWG NO: DD23

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



**Pennoni**  
**PENNONI ASSOCIATES INC.**  
 8890 McGaw Road, Suite 100  
 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

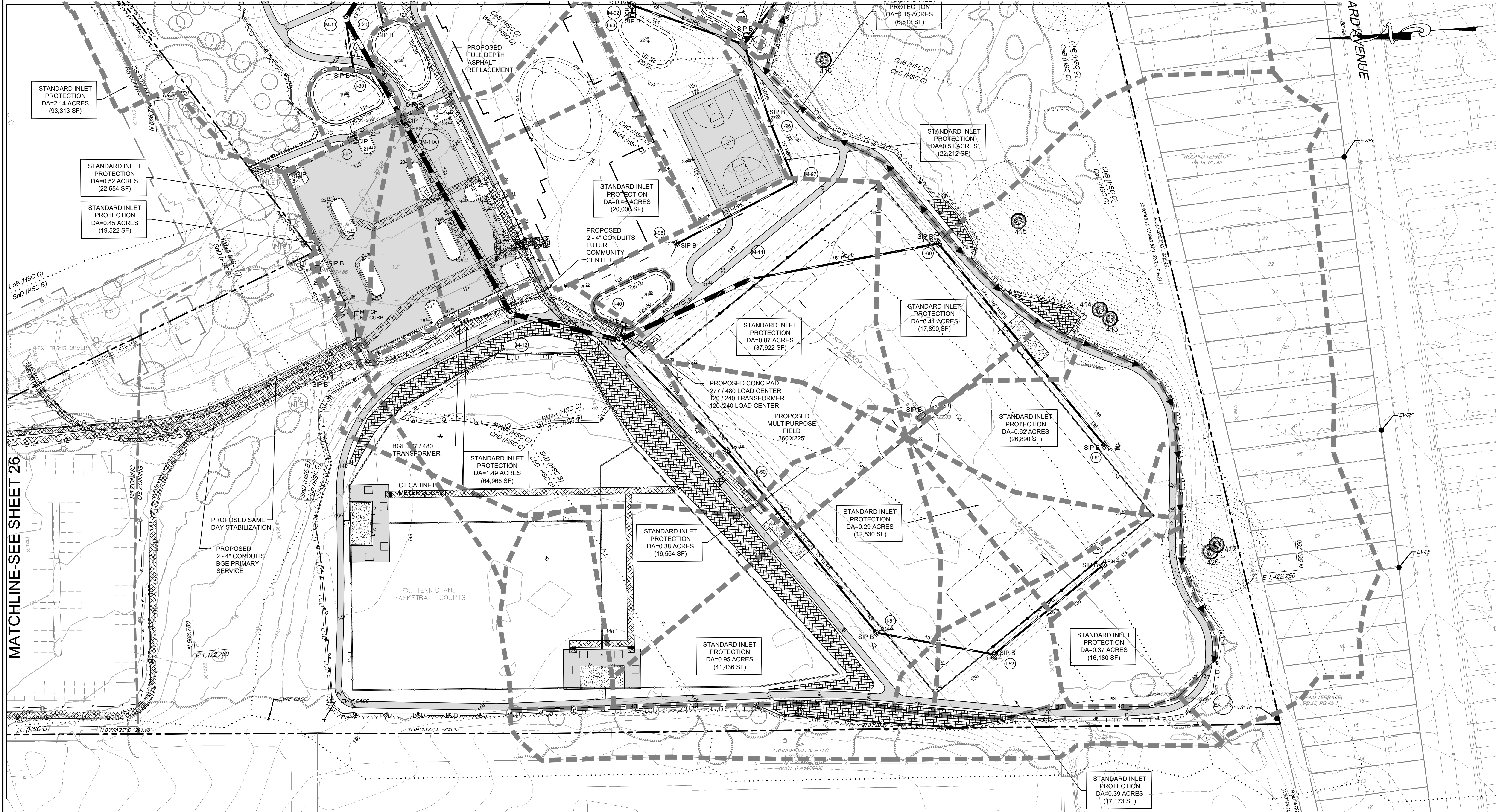
**ANNE ARUNDEL COUNTY**  
**DEPARTMENT OF PUBLIC WORKS**

APPROVED _____ DATE _____	APPROVED _____ DATE _____	SCALE: 1" = 40'
CHIEF ENGINEER _____	PROJECT MANAGER _____	DRAWN BY: JSN/SVH
APPROVAL _____ DATE _____	APPROVED _____ DATE _____	CHECKED BY: PJS/JAR
ASSISTANT CHIEF ENGINEER _____	CHIEF, RIGHT OF WAY SERVICES _____	SHEET <u>23</u> of <u>51</u>
		PROJECT #: 579000
		PROPOSAL #: 579001

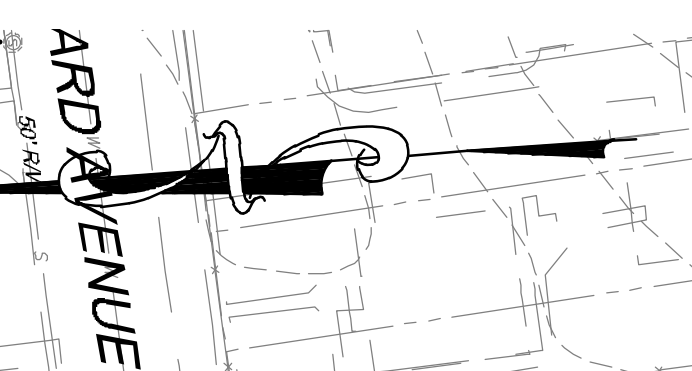
PHASE II SEDIMENT CONTROL PLAN  
**BROOKLYN HEIGHTS COMMUNITY CENTER PARK**  
 DESIGN DEVELOPMENT PLANS  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

SPP/PA

MATCHLINE-SEE SHEET 25

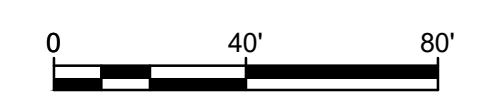


MATCHLINE-SEE SHEET 26



**LEGEND**

- PROPOSED REINFORCED SILT FENCE
- PROPOSED SOIL STABILIZATION MATTING
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED SAME DAY STABILIZATION
- PROPOSED STANDARD INLET PROTECTION
- PROPOSED CURB INLET PROTECTION
- PROPOSED DIVERSION FENCE
- PROPOSED A-2 EARTH DIKE



PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



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 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

APPROVED		DATE	APPROVED		DATE

SCALE: 1" = 40'  
 DRAWN BY: JSN/SVH  
 CHECKED BY: PJS/JAR  
 SHEET 24 of 51  
 PROJECT #: 579000  
 PROPOSAL #: 579001

PHASE III SEDIMENT CONTROL PLAN  
**BROOKLYN HEIGHTS COMMUNITY CENTER PARK**  
 DESIGN DEVELOPMENT PLANS  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

9PH 920219457 DWG NO: DD24

ANNE ARUNDEL COUNTY  
 DEPARTMENT OF PUBLIC WORKS  
 MAY 31, 2023

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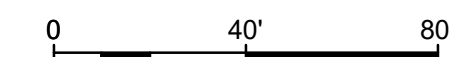




MATCHLINE-SEE SHEET 24

**LEGEND**

- PROPOSED REINFORCED SILT FENCE
- PROPOSED SOIL STABILIZATION MATTING
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED SAME DAY STABILIZATION
- PROPOSED STANDARD INLET PROTECTION
- PROPOSED CURB INLET PROTECTION
- PROPOSED DIVERSION FENCE
- PROPOSED A-2 EARTH DIKE



9PH 80219457 DWG NO: DD25

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



**Pennoni**  
 PENNONI ASSOCIATES INC.  
 8890 McGaw Road, Suite 100  
 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

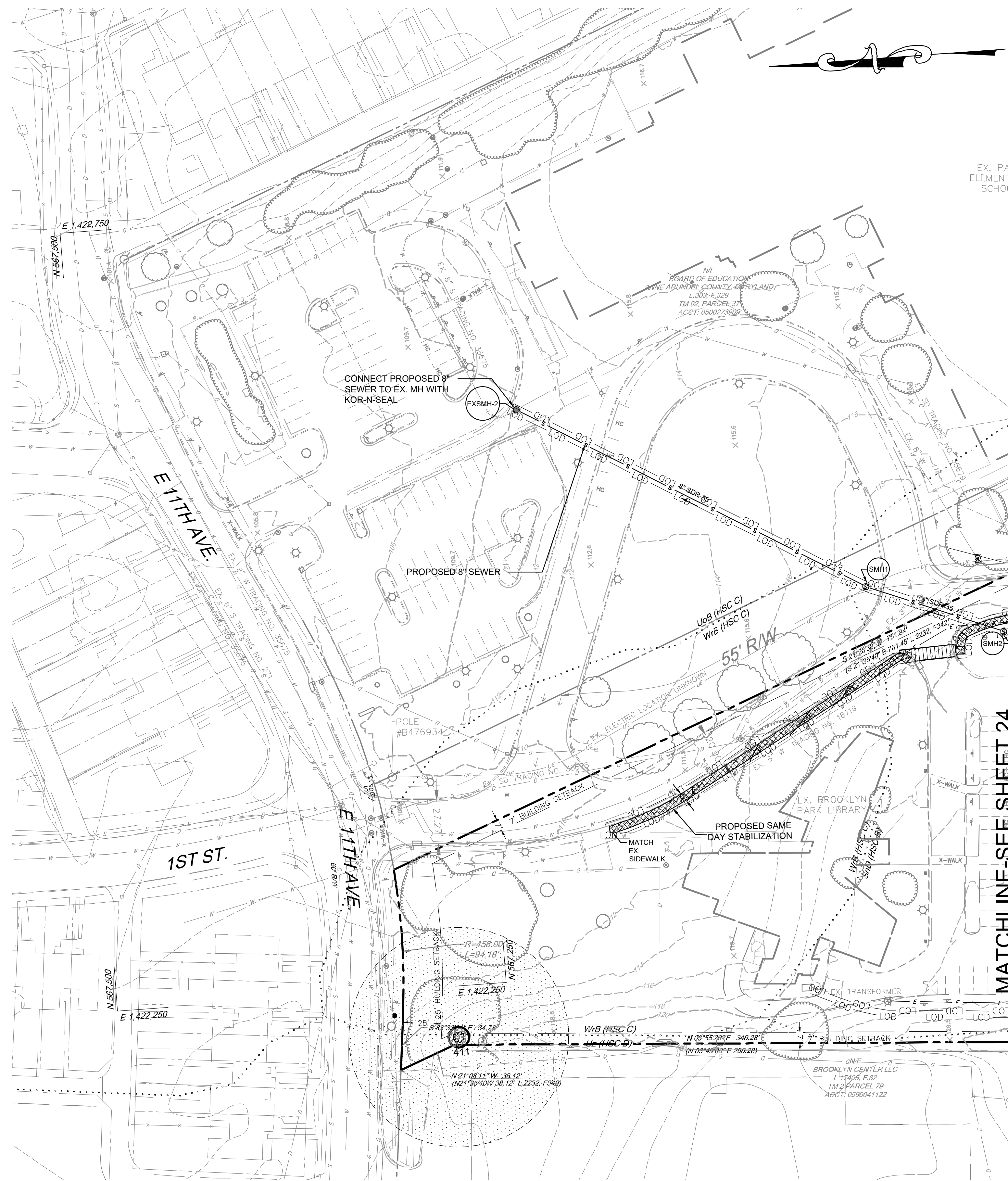
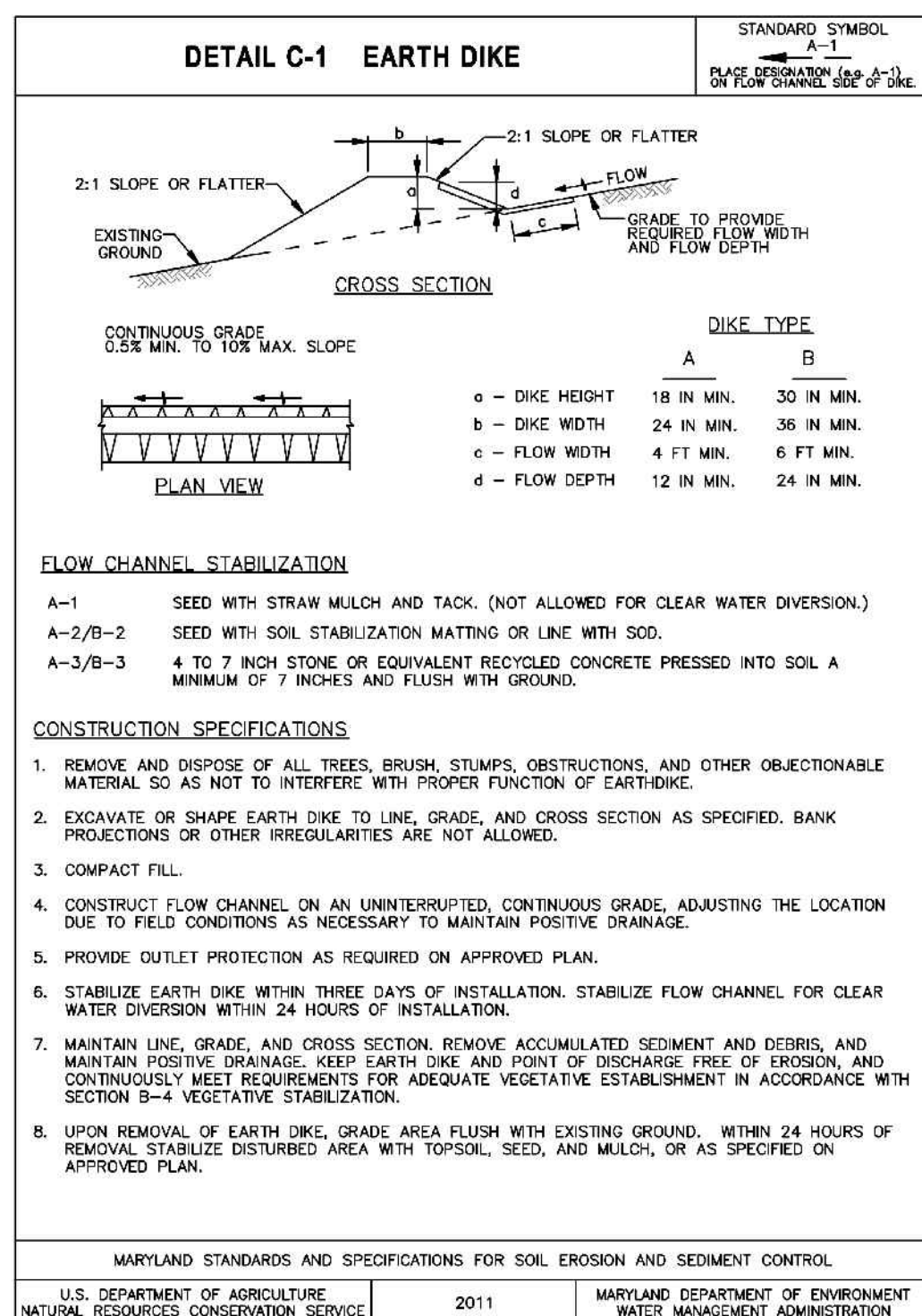
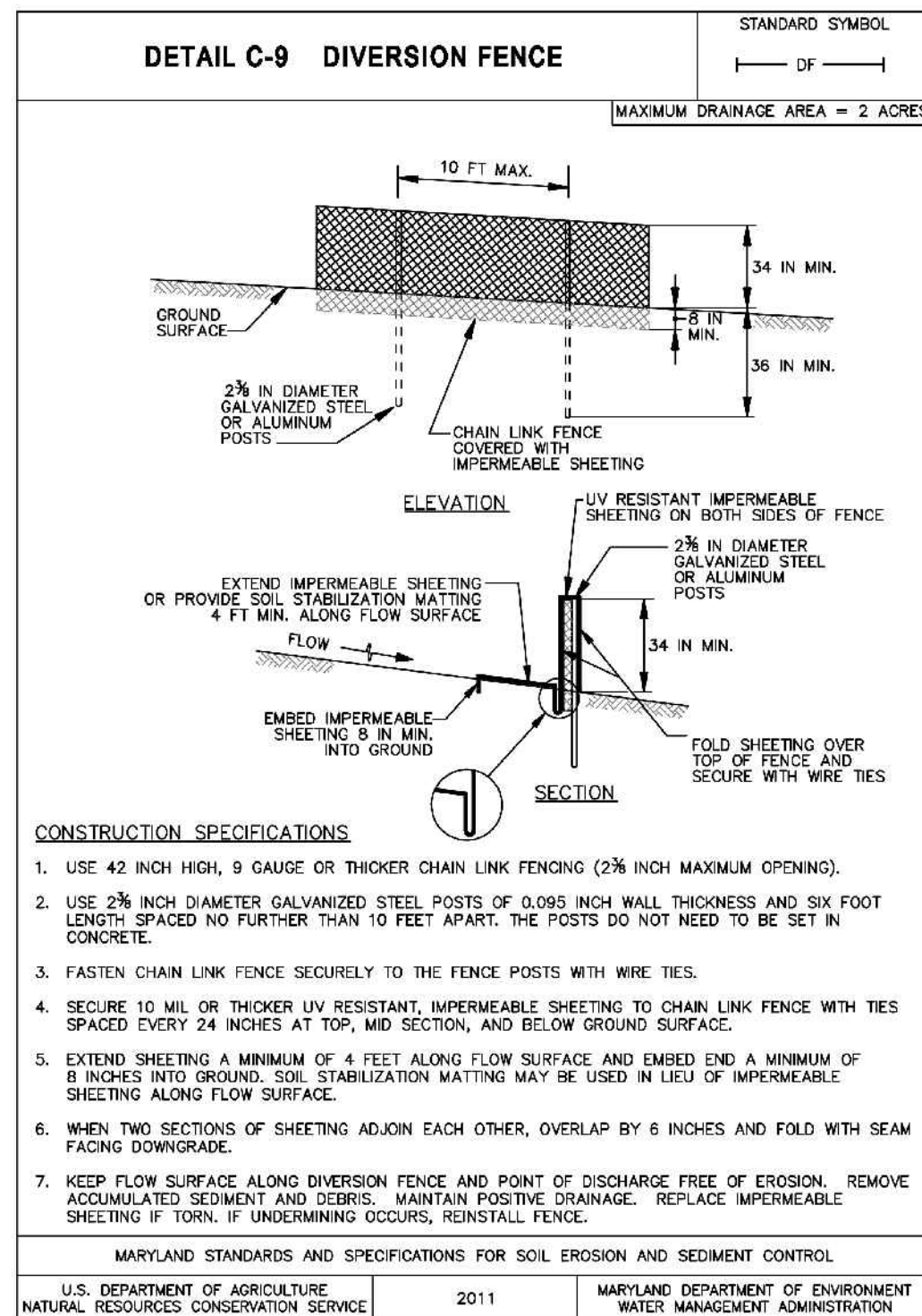
**ANNE ARUNDEL COUNTY**  
 DEPARTMENT OF PUBLIC WORKS

APPROVED _____ DATE _____	APPROVED _____ DATE _____	SCALE: 1" = 40'
CHIEF ENGINEER _____	PROJECT MANAGER _____	CHECKED BY: PJS/JAR
APPROVAL _____ DATE _____	APPROVED _____ DATE _____	SHEET 25 of 51
ASSISTANT CHIEF ENGINEER _____	CHIEF, RIGHT OF WAY SERVICES _____	PROJECT #: 579000
		PROPOSAL #: 579001

PHASE III SEDIMENT CONTROL PLAN  
 BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

MAY 31, 2023

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EX. PAR  
ELEMENTARY  
SCHOOL

MATCHLINE-SEE SHEET 24

### LEGEND

PROPOSED SAME DAY STABILIZATION

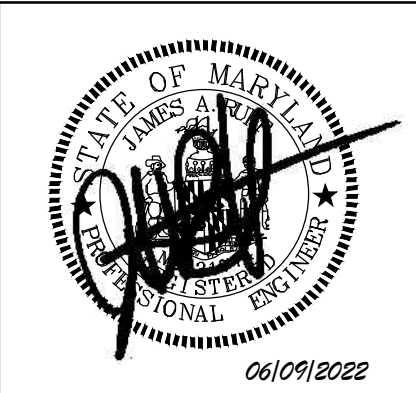


0 40' 80'

9PH 020219457 DWG NO.: DD26

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774. EXPIRATION DATE 11/10/2023.

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



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8890 McGaw Road, Suite 100  
Columbia, MD 21045  
T 410.997.8900 F 410.997.9282

ANNE ARUNDEL COUNTY  
DEPARTMENT OF PUBLIC WORKS  
MAY 31, 2023

APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		PROJECT MANAGER	
APPROVAL	DATE	APPROVED	DATE
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY SERVICES	

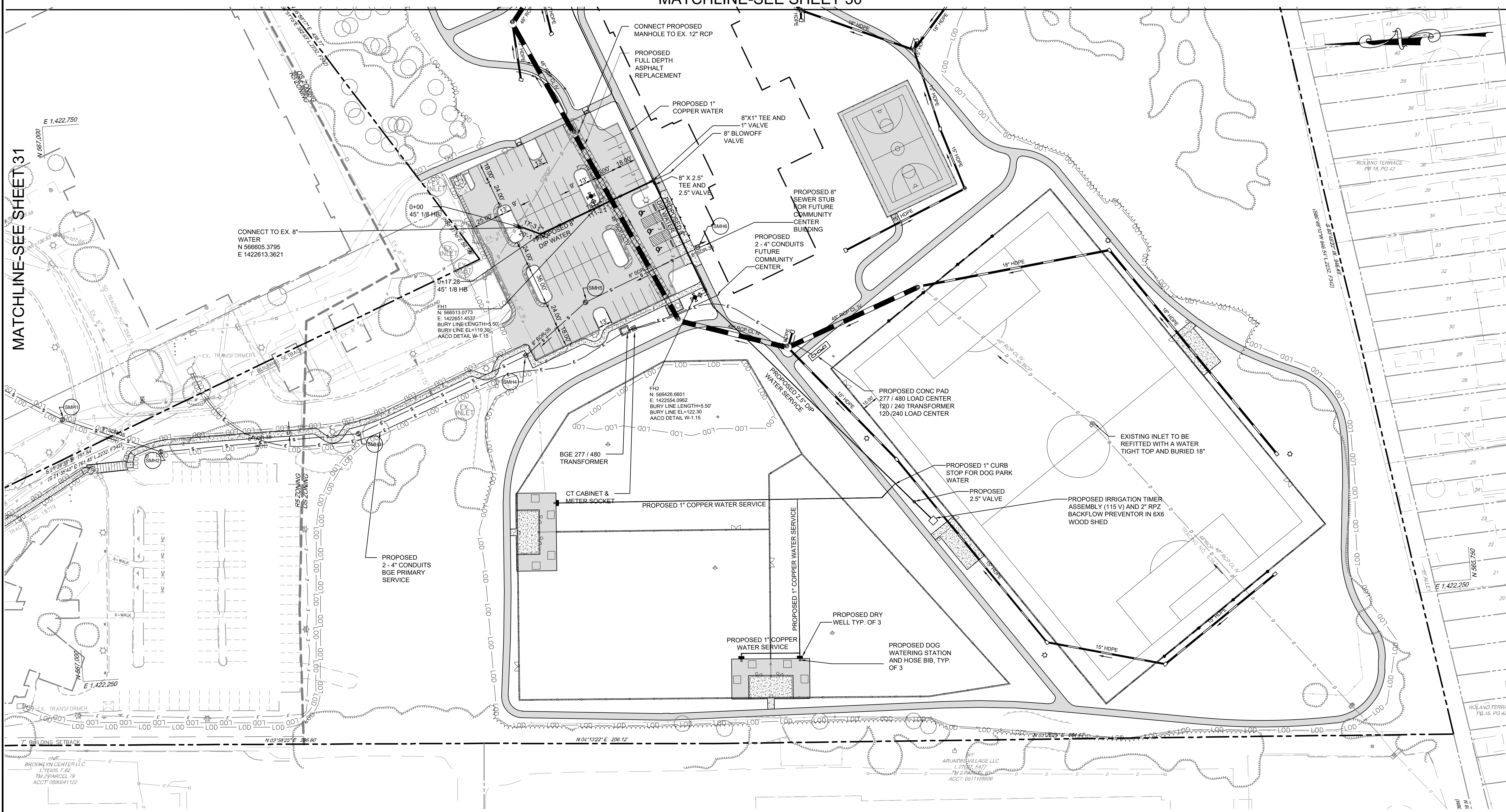
SCALE: 1" = 40'  
DRAWN BY: JSN/SVH  
CHECKED BY: PJS/JAR  
SHEET 26 of 51  
PROJECT #: 579000  
PROPOSAL #: 579001

PHASE III SEDIMENT CONTROL PLAN  
BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS  
TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD





MATCHLINE-SEE SHEET 30



MATCHLINE-SEE SHEET 31

CONNECT TO EX. 8" WATER  
N 566605.3795  
E 1422613.3621

FH1  
N: 566513.0773  
E: 1422651.4537  
BURY LINE LENGTH=5.50'  
BURY LINE EL=119.30  
AACO DETAIL W-1.15

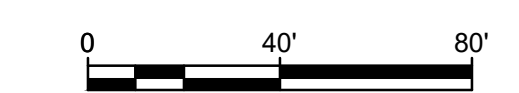
FH2  
N: 566426.6601  
E: 1422554.0962  
BURY LINE LENGTH=5.50'  
BURY LINE EL=122.30  
AACO DETAIL W-1.15

PROPOSED  
2 - 4" CONDUITS  
BGE PRIMARY  
SERVICE

- NOTES:**
- EXISTING PARKING LOT LIGHTS SHALL BE MAINTAINED. REFEED SERVICE TO EXISTING LIGHTS FROM NEW TRANSFORMER.
  - DESIGN OF SERVICE FROM EXISTING BGE TRANSFORMER TO NEW BGE TRANSFORMER SHALL BE BY BGE. CONTRACTOR SHALL COORDINATE WITH BGE FOR INSTALLATION OF TRANSFORMER, PADS, AND CONDUIT.
  - SEE PROJECT MANUAL FOR FIELD LIGHTING DESIGN AND IRRIGATION DESIGN.


BROOKLYN CENTER LLC  
L71405, F.82  
TM 21 PARCEL 19  
ACCT: 059041122

ARUNDEL VILLAGE LLC  
L 27562, F.117  
TM 2 PARCEL 15  
ACCT: 0511155606



PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



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Columbia, MD 21045  
T 410.997.8900 F 410.997.9282

ANNE ARUNDEL COUNTY  
DEPARTMENT OF PUBLIC WORKS  
MAY 31, 2023

APPROVED _____ DATE _____	APPROVED _____ DATE _____	SCALE: 1" = 40'
CHIEF ENGINEER _____	PROJECT MANAGER _____	CHECKED BY: PJS/JAR
APPROVAL _____ DATE _____	APPROVED _____ DATE _____	SHEET <u>29</u> of <u>51</u>
ASSISTANT CHIEF ENGINEER _____	CHIEF, RIGHT OF WAY SERVICES _____	PROJECT #: 579000
		PROPOSAL #: 579001

UTILITY PLAN

**BROOKLYN HEIGHTS  
COMMUNITY CENTER PARK  
DESIGN DEVELOPMENT PLANS**

TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD

9PH 020219457 DWG NO: DD29



MATCHLINE-SEE SHEET 29



9PH 020219457 DWG NO: DD30

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE

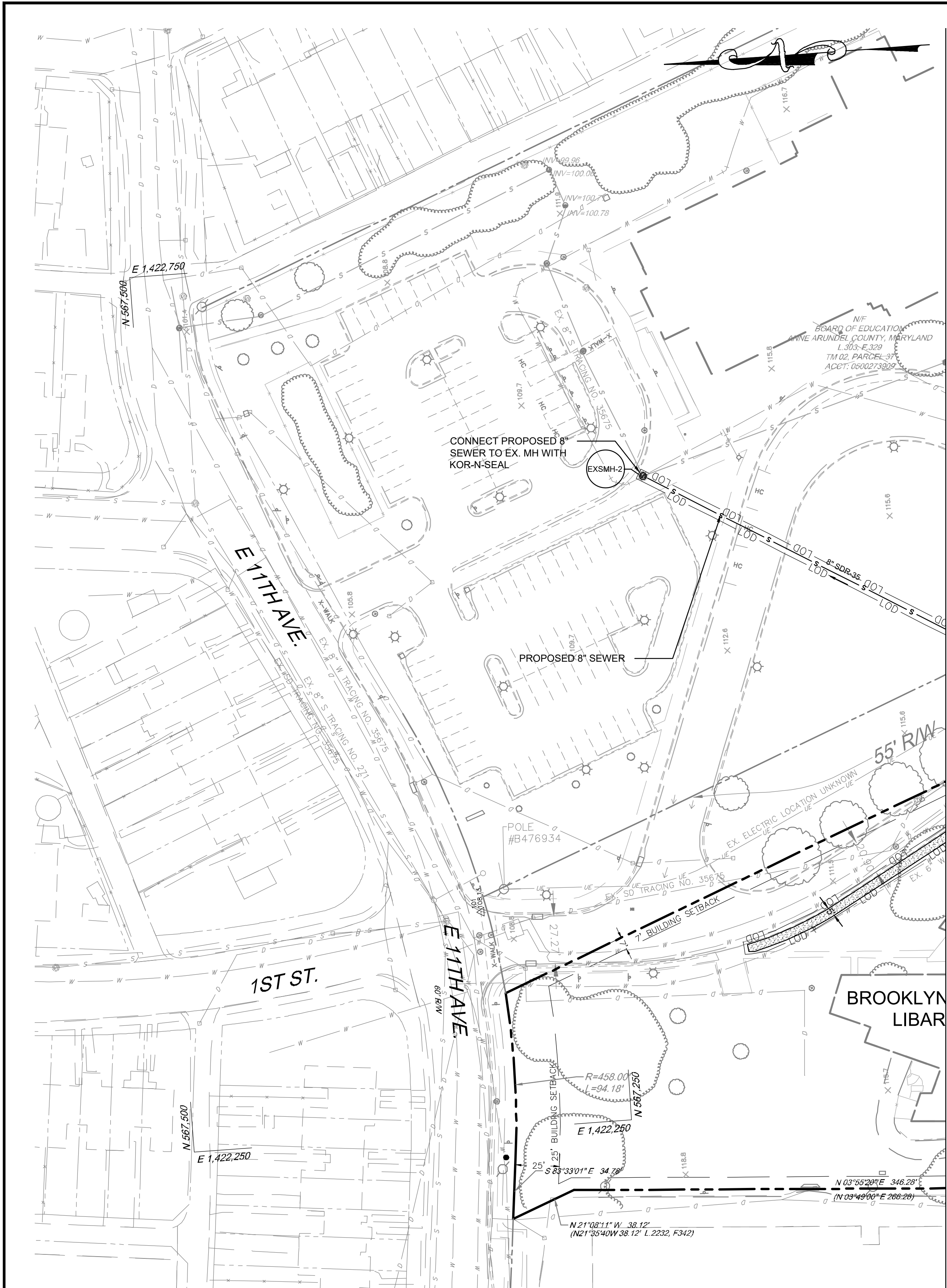
**Pennoni**  
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 8890 McGaw Road, Suite 100  
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ANNE ARUNDEL COUNTY  
 DEPARTMENT OF PUBLIC WORKS  
 MAY 31, 2023

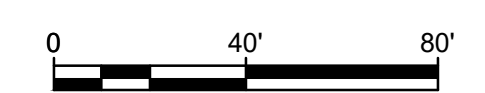
APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		PROJECT MANAGER	
APPROVAL	DATE	APPROVED	DATE
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY SERVICES	

SCALE: 1" = 40'  
 DRAWN BY: JSN/SVH  
 CHECKED BY: PJS/JAR  
 SHEET 30 of 51  
 PROJECT #: 579000  
 PROPOSAL #: 579001

UTILITY PLAN  
**BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS**  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD




MATCHLINE-SEE SHEET 29



GPH 020219457 DWG NO: DD31

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



**Pennoni**

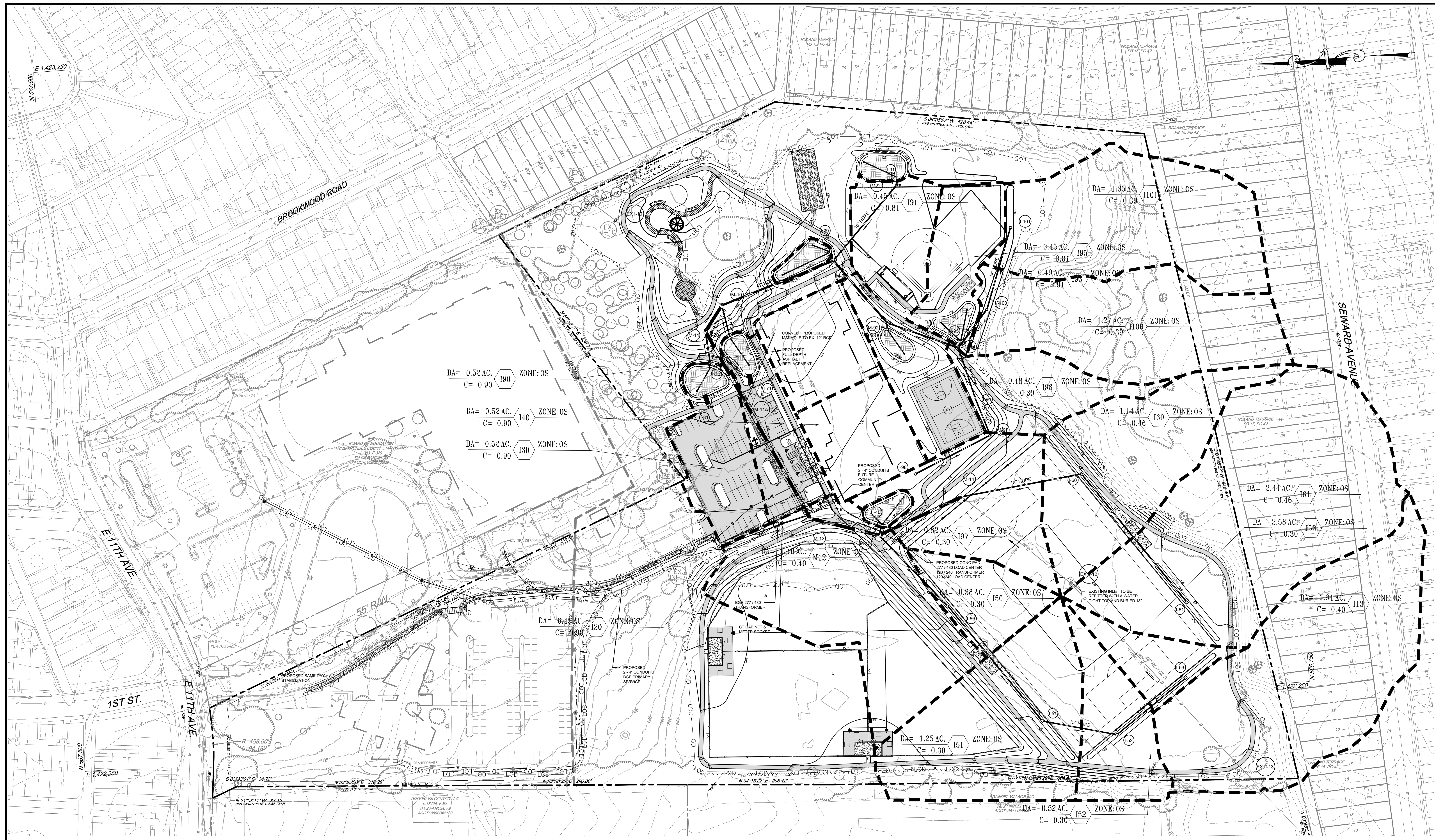
**PENNONI ASSOCIATES INC.**  
 8890 McGaw Road, Suite 100  
 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

**ANNE ARUNDEL COUNTY**  
**DEPARTMENT OF PUBLIC WORKS**

APPROVED _____ DATE _____	APPROVED _____ DATE _____	SCALE: 1" = 40'	
CHIEF ENGINEER	PROJECT MANAGER	DRAWN BY: JSN/SVH	UTILITY PLAN  <b>BROOKLYN HEIGHTS          COMMUNITY CENTER PARK          DESIGN DEVELOPMENT PLANS</b> <small>TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010          BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT          ANNE ARUNDEL COUNTY, MD</small>
APPROVAL _____ DATE _____	APPROVED _____ DATE _____	CHECKED BY: PJS/JAR	
ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY SERVICES	SHEET <u>31</u> of <u>51</u>	
		PROJECT #: 579000	
		PROPOSAL #: 579001	

MAY 31, 2023

SPP/PL



DA= 0.52 AC. 190 ZONE: OS  
C= 0.90

DA= 0.52 AC. 140 ZONE: OS  
C= 0.90

DA= 0.52 AC. 130 ZONE: OS  
C= 0.90

DA= 0.45 AC. 120 ZONE: OS  
C= 0.90

DA= 1.25 AC. 151 ZONE: OS  
C= 0.30

DA= 0.52 AC. 152 ZONE: OS  
C= 0.30

DA= 2.44 AC. 161 ZONE: OS  
C= 0.46

DA= 2.58 AC. 160 ZONE: OS  
C= 0.30

DA= 1.94 AC. 113 ZONE: OS  
C= 0.40

9PH 920219457 DWG NO: DD32

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774. EXPIRATION DATE 11/10/2023.

#	REVISIONS DESCRIPTION	APPROVED BY	DATE

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Columbia, MD 21045  
T 410.997.8900 F 410.997.9282

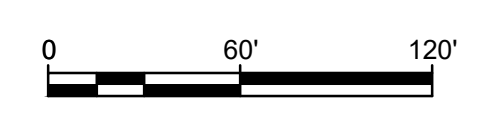
06/01/2022

ANNE ARUNDEL COUNTY  
DEPARTMENT OF PUBLIC WORKS  
MAY 31, 2023

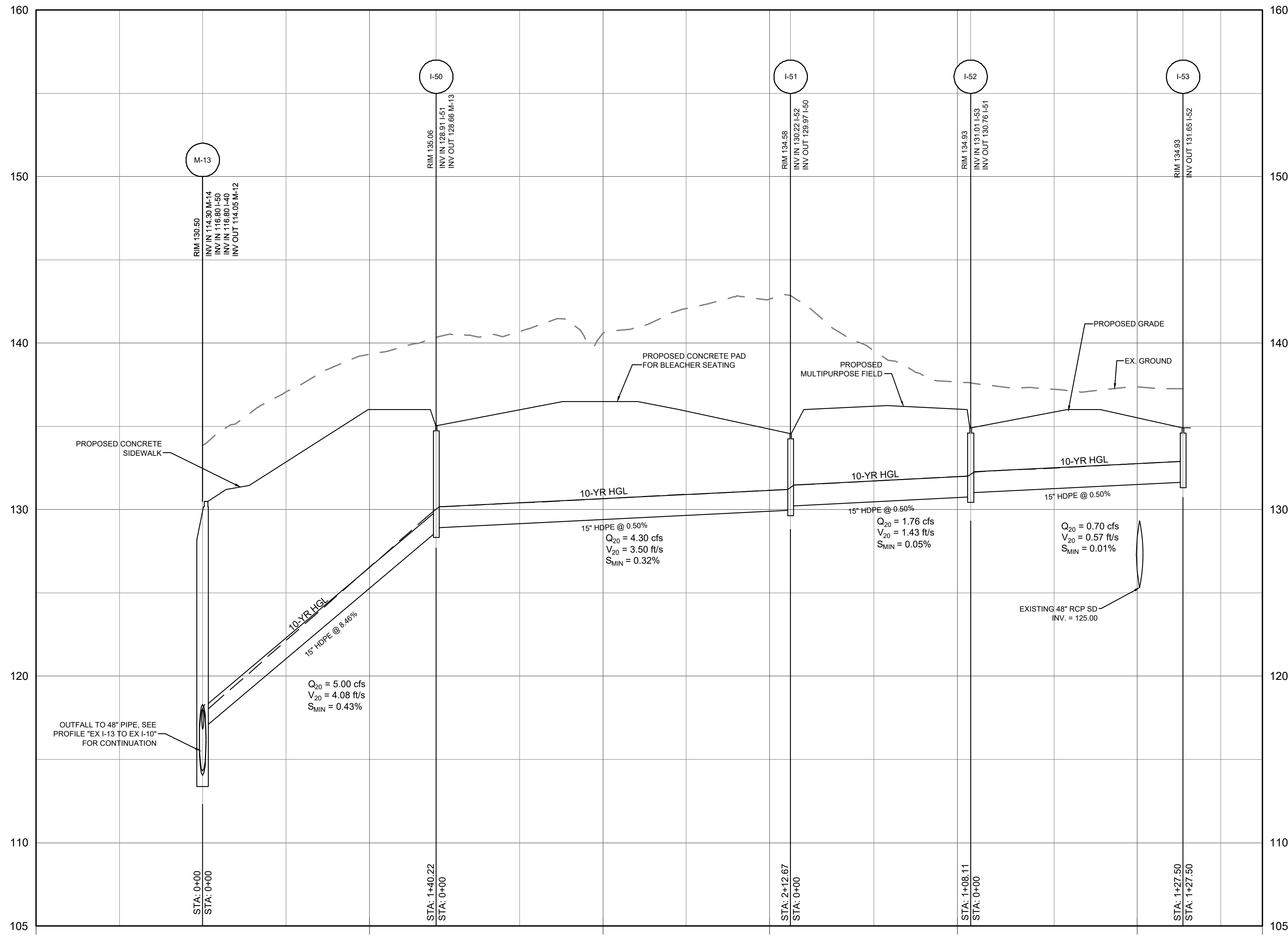
APPROVED	DATE	APPROVED	DATE

SCALE: 1" = 60'  
DRAWN BY: JSN/SVH  
CHECKED BY: PJS/JAR  
SHEET 32 of 51  
PROJECT #: 579000  
PROPOSAL #: 579001

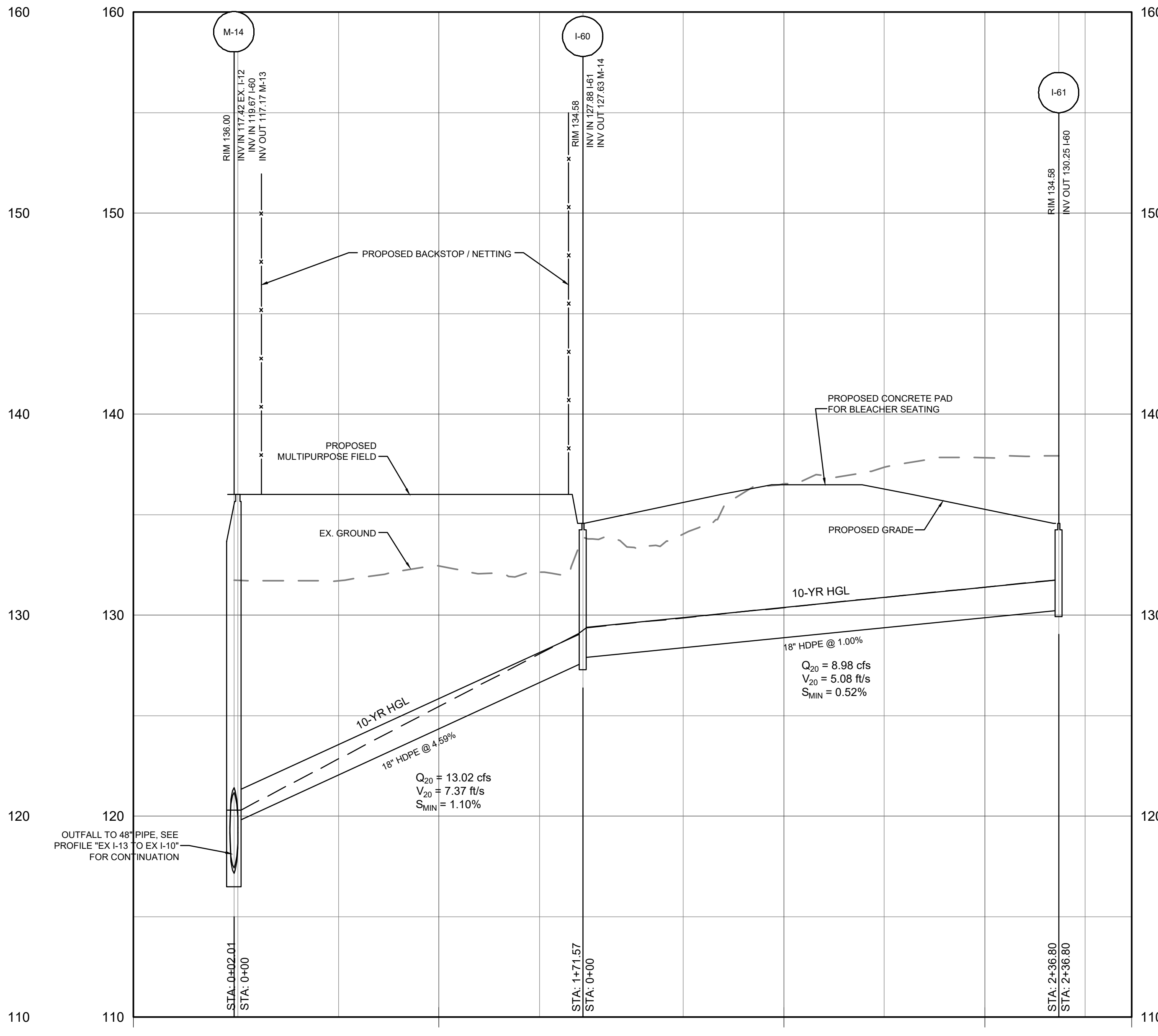
STORM DRAIN DRAINAGE AREA MAP  
BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS  
TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD







STORM DRAIN PROFILE - I-53 TO M-13  
 HORIZONTAL SCALE: 1" = 40'  
 VERTICAL SCALE: 1" = 4'



STORM DRAIN PROFILE - I-61 TO M-14  
 HORIZONTAL SCALE: 1" = 40'  
 VERTICAL SCALE: 1" = 4'

NOTE:  
 PRIOR TO ANY UTILITY INSTALLATION, STORM DRAIN CONSTRUCTION OR EXCAVATION,  
 ALL UTILITY CROSSINGS AND STRUCTURE CONNECTIONS SHALL REQUIRE HAND DUG TEST  
 PIT PROCEDURES TO CONFIRM DEPTH AND LOCATION OF ANY EXISTING UTILITIES ON SITE.

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APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
 CHIEF ENGINEER

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
 ASSISTANT CHIEF ENGINEER

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
 PROJECT MANAGER

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
 CHIEF, RIGHT OF WAY SERVICES

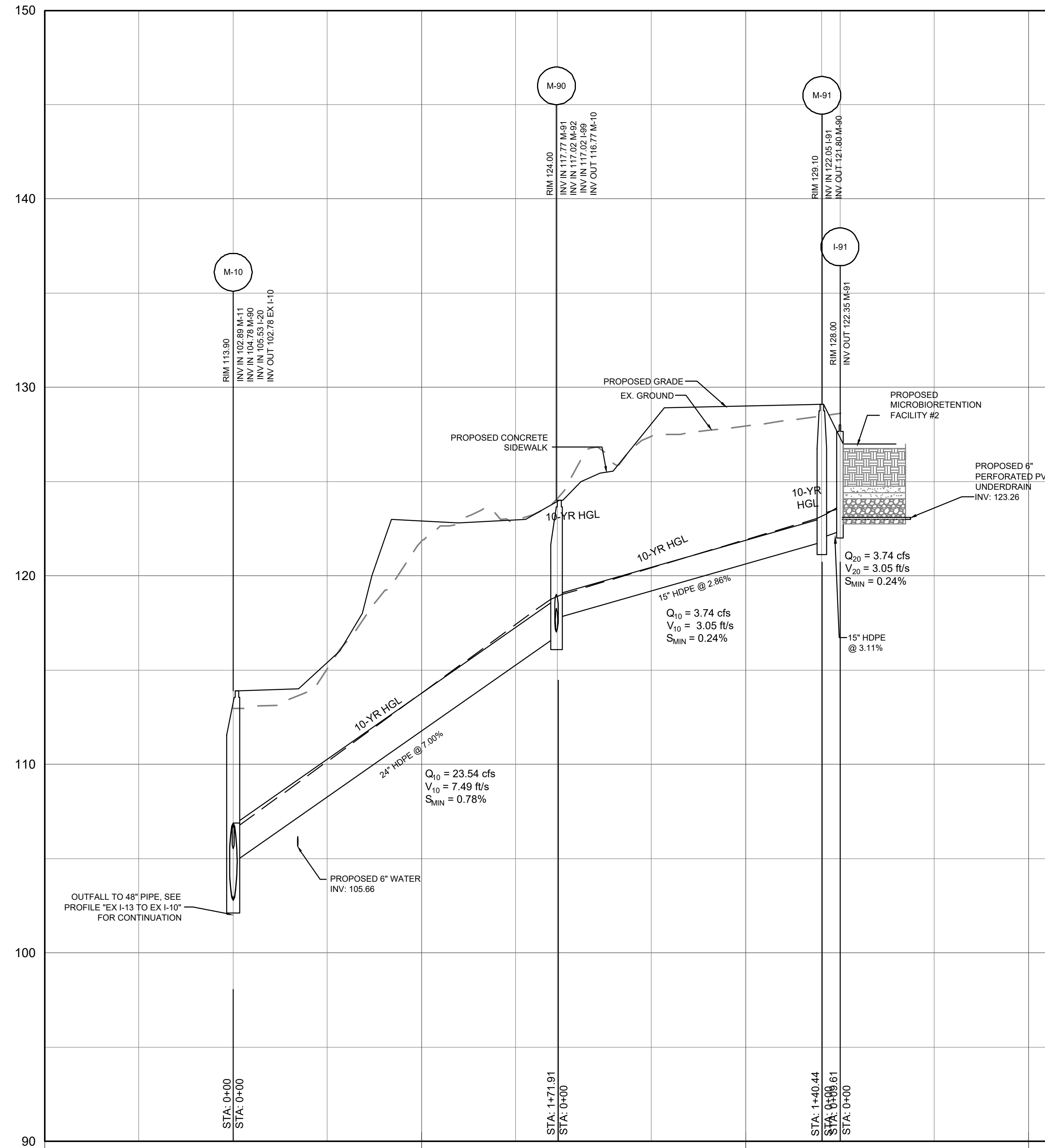
SCALE: 1" = 40'  
 DRAWN BY: JSN/SVH  
 CHECKED BY: PJS/JAR  
 SHEET 33 of 51  
 PROJECT #: 579000  
 PROPOSAL #: 579001

STORM DRAIN PROFILES  
**BROOKLYN HEIGHTS  
 COMMUNITY CENTER PARK  
 DESIGN DEVELOPMENT PLANS**  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

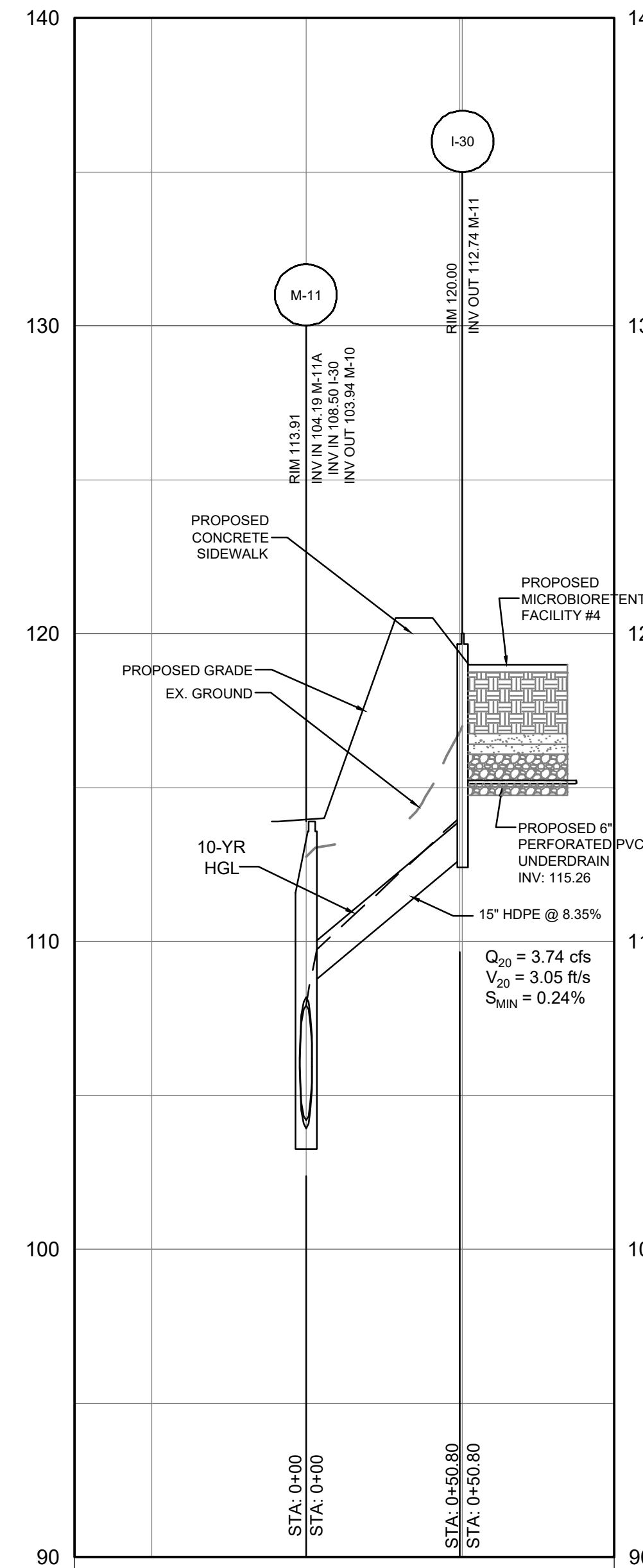
DATE: MAY 31, 2023



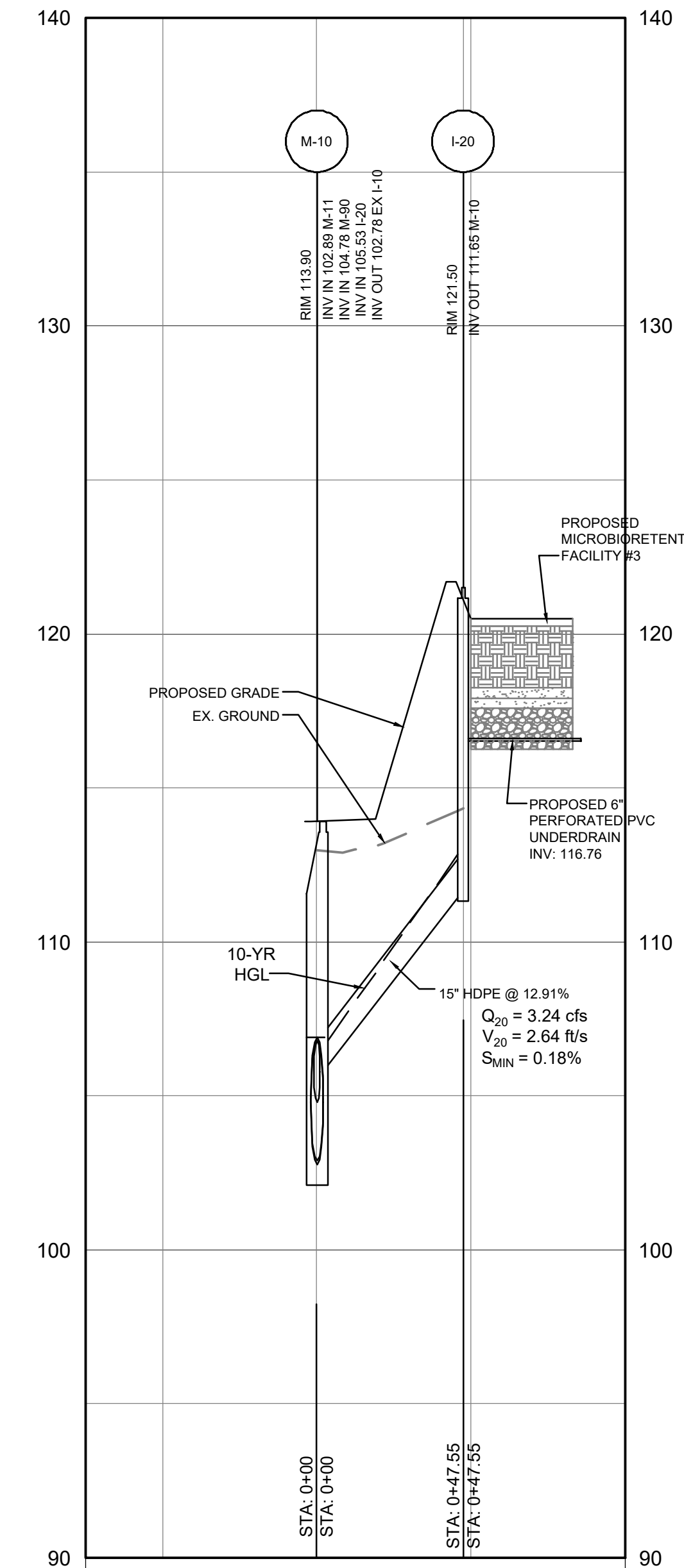
GPH 920219457 DWG NO: DD33



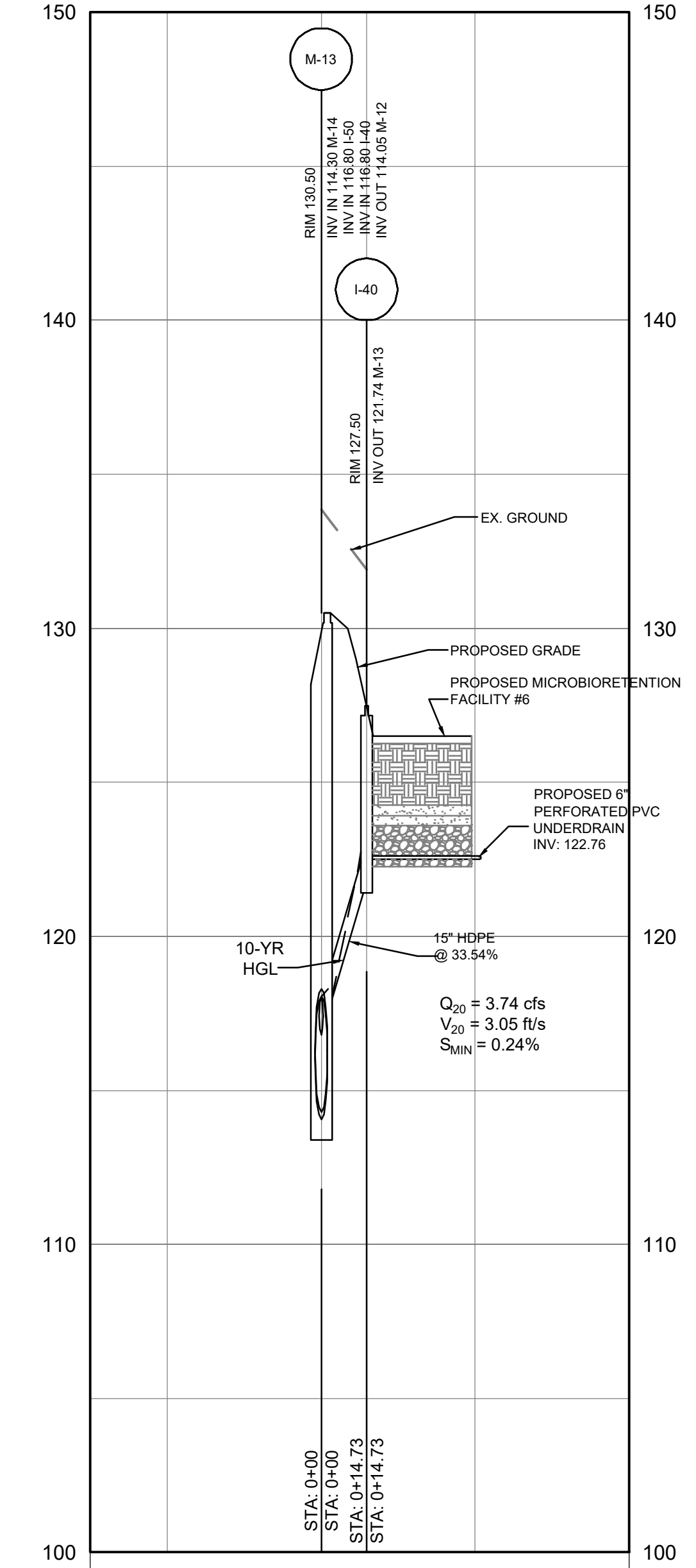
STORM DRAIN PROFILE - I-91 TO M-10  
 HORIZONTAL SCALE: 1" = 40'  
 VERTICAL SCALE: 1" = 4'



STORM DRAIN PROFILE - I-30 TO M-11  
 HORIZONTAL SCALE: 1" = 40'  
 VERTICAL SCALE: 1" = 4'



STORM DRAIN PROFILE - I-20 TO M-10  
 HORIZONTAL SCALE: 1" = 40'  
 VERTICAL SCALE: 1" = 4'



STORM DRAIN PROFILE - I-40 TO M-14  
 HORIZONTAL SCALE: 1" = 40'  
 VERTICAL SCALE: 1" = 4'

NOTE:  
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 ALL UTILITY CROSSINGS AND STRUCTURE CONNECTIONS SHALL REQUIRE HAND DUG TEST  
 PIT PROCEDURES TO CONFIRM DEPTH AND LOCATION OF ANY EXISTING UTILITIES ON SITE.

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



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 DEPARTMENT OF PUBLIC WORKS  
 MAY 31, 2023

APPROVED _____ DATE _____	APPROVED _____ DATE _____	SCALE: 1" = 40'
CHIEF ENGINEER _____	PROJECT MANAGER _____	DRAWN BY: JSN/SVH
APPROVAL _____ DATE _____	APPROVED _____ DATE _____	CHECKED BY: PJS/JAR
ASSISTANT CHIEF ENGINEER _____	CHIEF, RIGHT OF WAY SERVICES _____	SHEET <u>34</u> of <u>51</u>
		PROJECT #: 579000
		PROPOSAL #: 579001

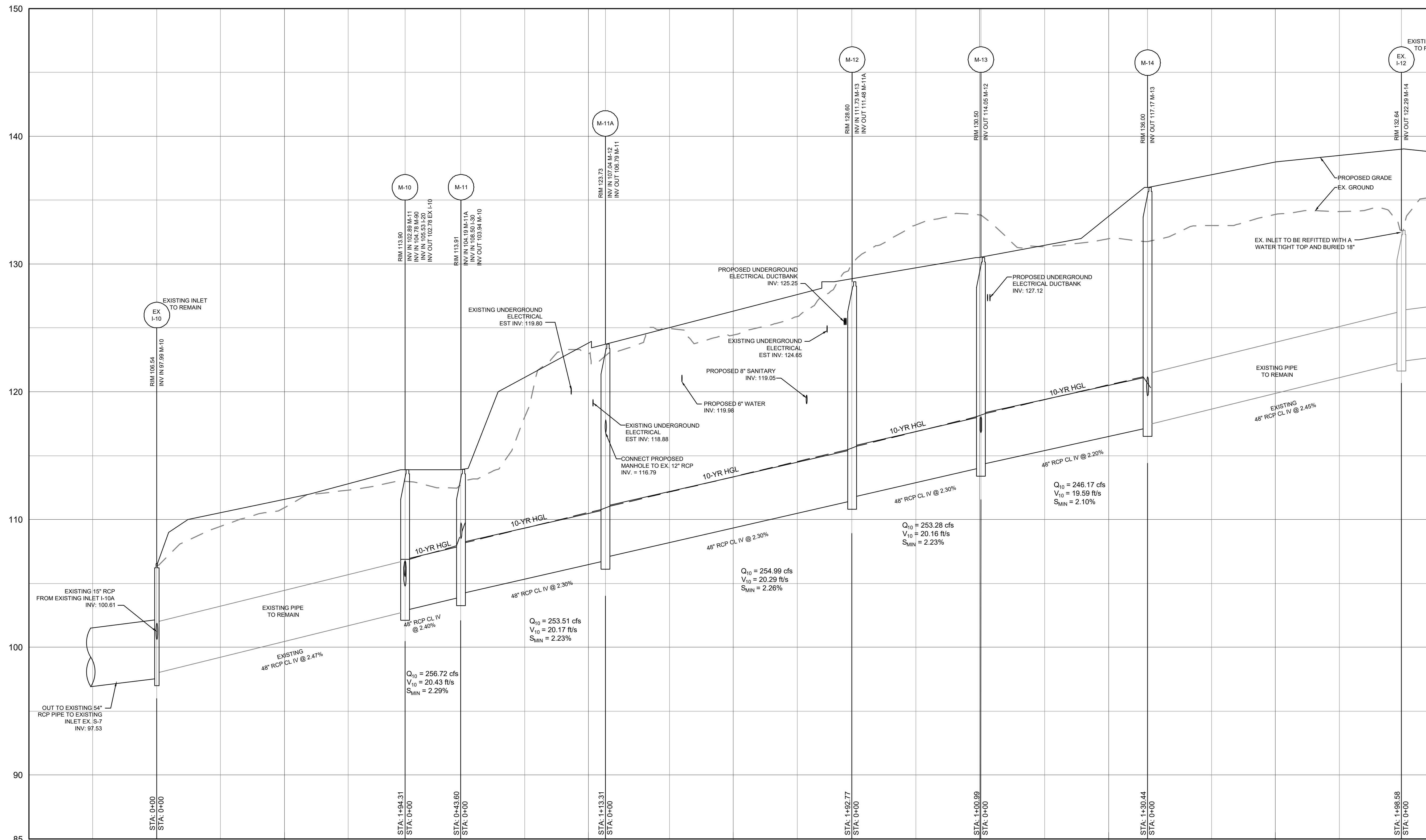
STORM DRAIN PROFILES

**BROOKLYN HEIGHTS  
 COMMUNITY CENTER PARK  
 DESIGN DEVELOPMENT PLANS**

TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD



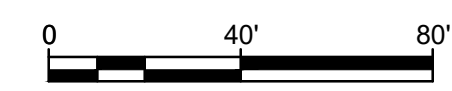
GPH 820219457 DWG NO: DD34



MATCHLINE-SEE SHEET 36 FOR CONTINUATION FROM "EX I-12"

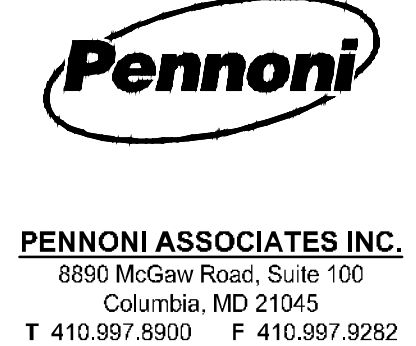
STORM DRAIN PROFILE - EX. I-13 TO EX. I-10  
 HORIZONTAL SCALE: 1" = 40'  
 VERTICAL SCALE: 1" = 4'

NOTE:  
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#	REVISIONS DESCRIPTION	APPROVED BY	DATE



GPH 820219457      DWG NO: DD35

**ANNE ARUNDEL COUNTY**  
 DEPARTMENT OF PUBLIC WORKS

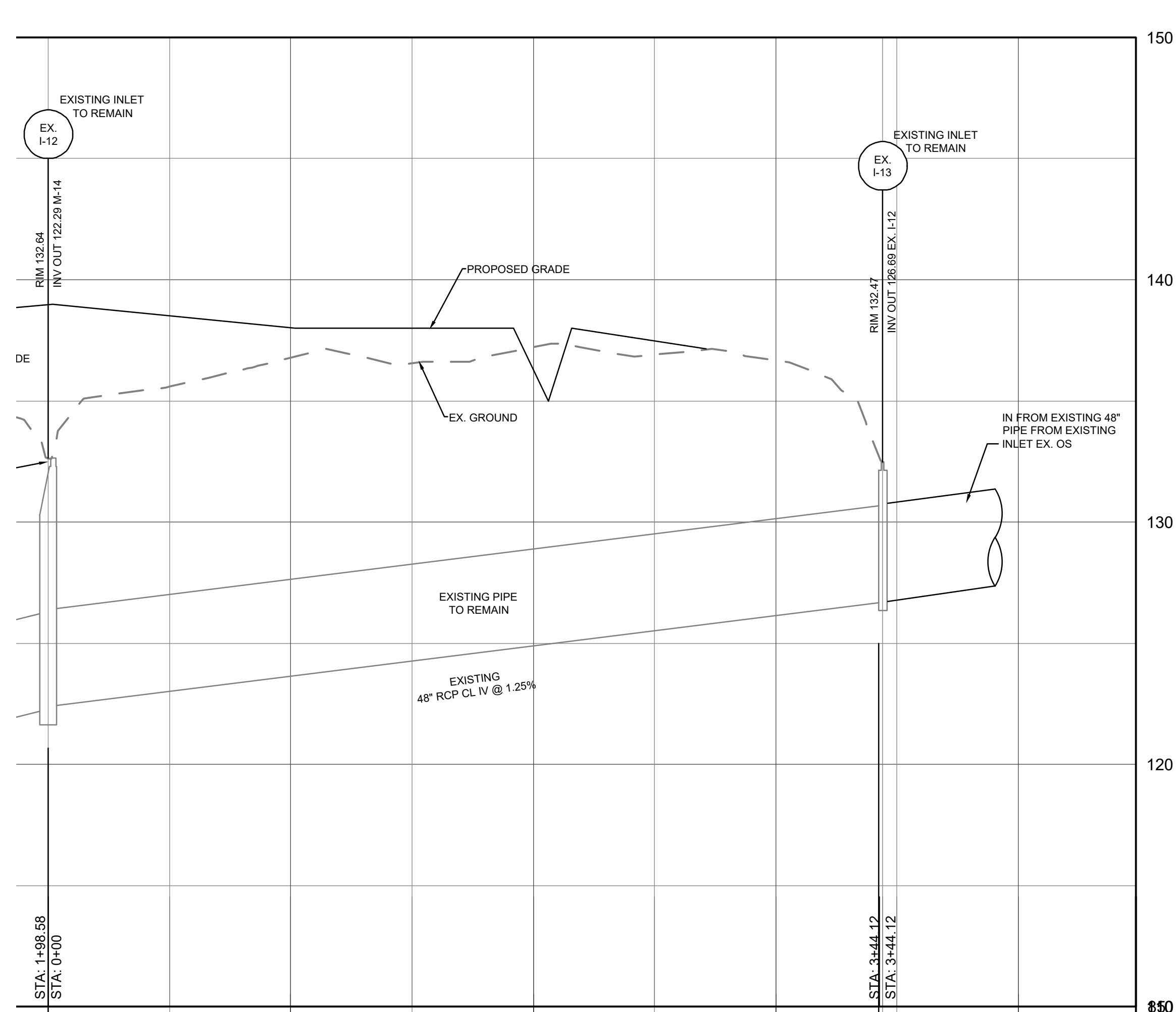
APPROVED _____ DATE _____	APPROVED _____ DATE _____	SCALE: 1" = 40'
CHIEF ENGINEER _____	PROJECT MANAGER _____	DRAWN BY: JSN/SVH
APPROVAL _____ DATE _____	APPROVED _____ DATE _____	CHECKED BY: PJS/JAR
ASSISTANT CHIEF ENGINEER _____	CHIEF, RIGHT OF WAY SERVICES _____	SHEET 35 of 51
		PROJECT #: 579000
		PROPOSAL #: 579001

STORM DRAIN PROFILES

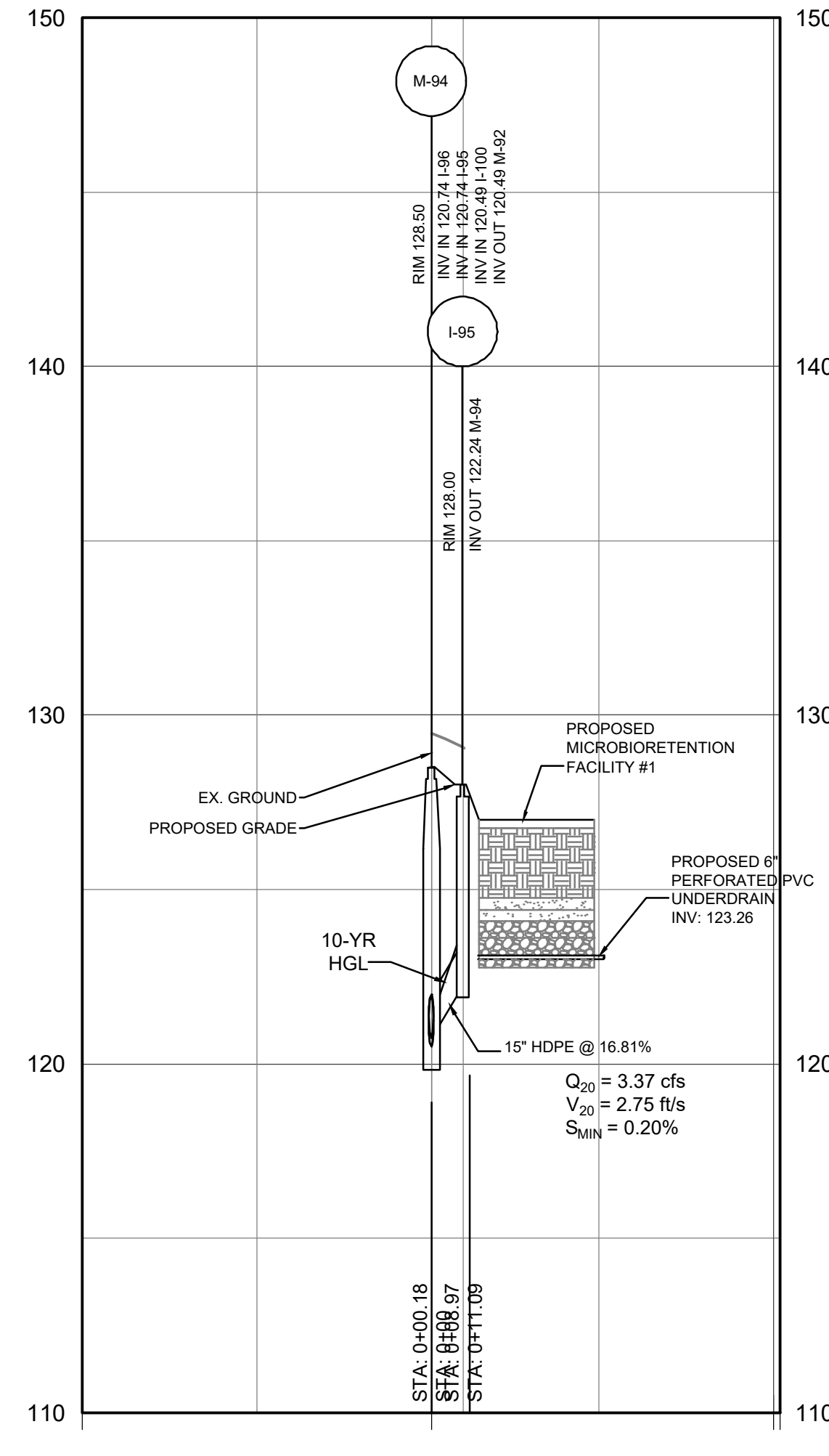
**BROOKLYN HEIGHTS  
 COMMUNITY CENTER PARK  
 DESIGN DEVELOPMENT PLANS**  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

MAY 31, 2023

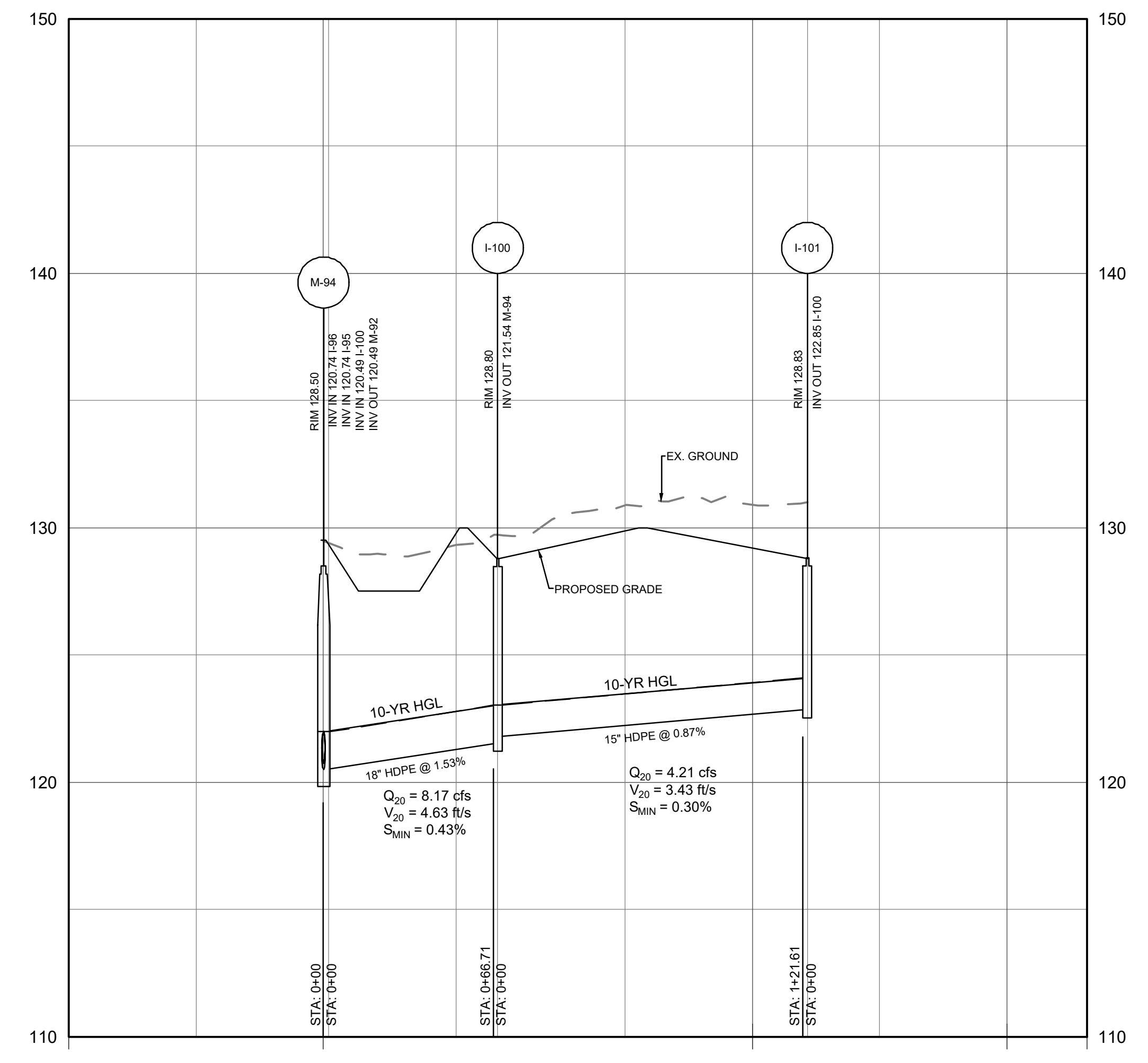
MATCHLINE-SEE SHEET 35  
FOR CONTINUATION FROM "EX I-12"



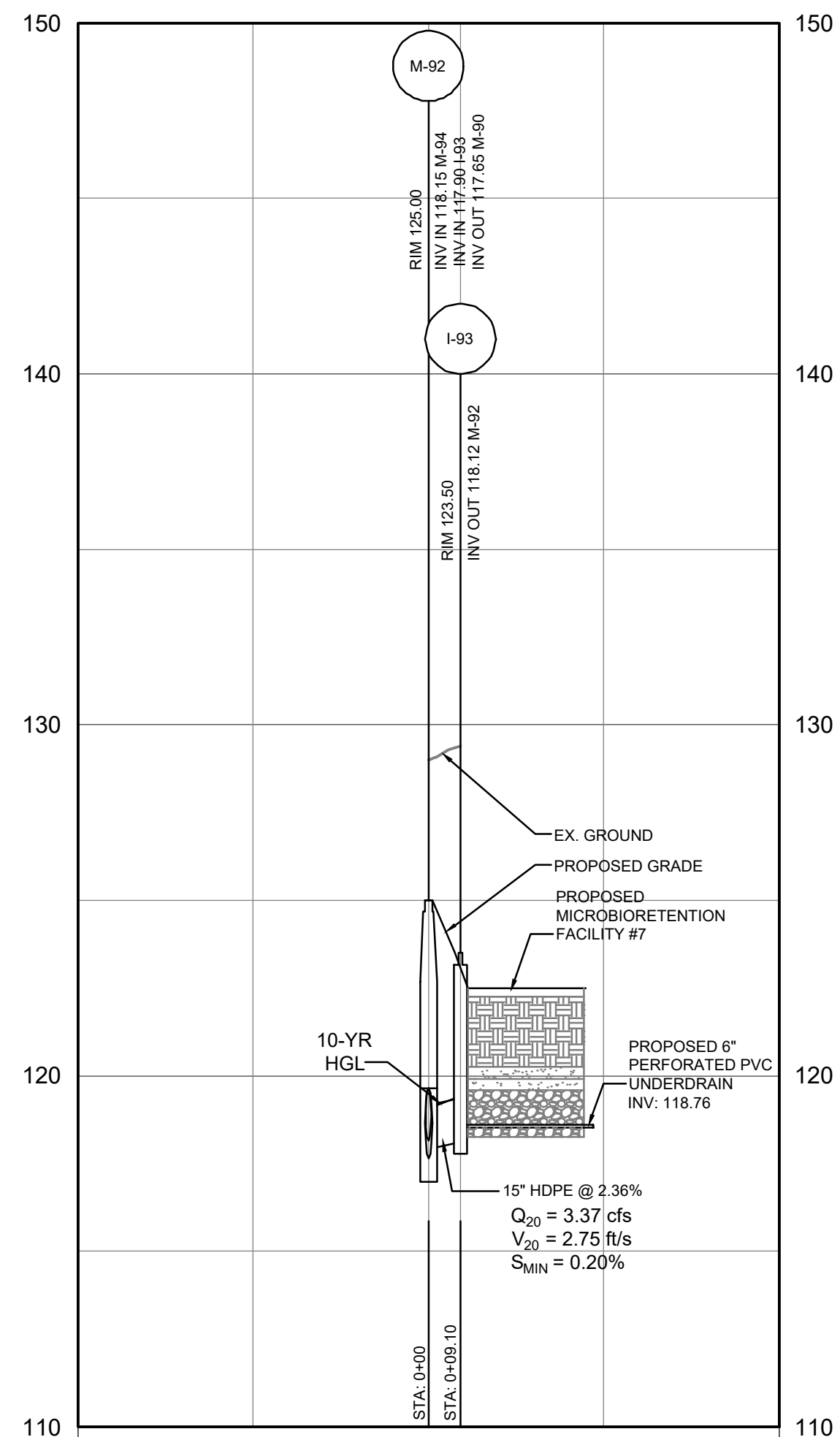
**STORM DRAIN PROFILE - EX. I-13 TO EX. I-10 (CONTINUED)**  
HORIZONTAL SCALE: 1" = 40'  
VERTICAL SCALE: 1" = 4'



**STORM DRAIN PROFILE - I-95 TO M-94**  
HORIZONTAL SCALE: 1" = 40'  
VERTICAL SCALE: 1" = 4'

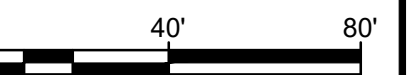


**I-101 TO M-94**  
HORIZONTAL SCALE: 1" = 40'  
VERTICAL SCALE: 1" = 4'



**STORM DRAIN PROFILE - I-93 TO M-92**  
HORIZONTAL SCALE: 1" = 40'  
VERTICAL SCALE: 1" = 4'

NOTE:  
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GPH 820219457

DWG NO.: DD36

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

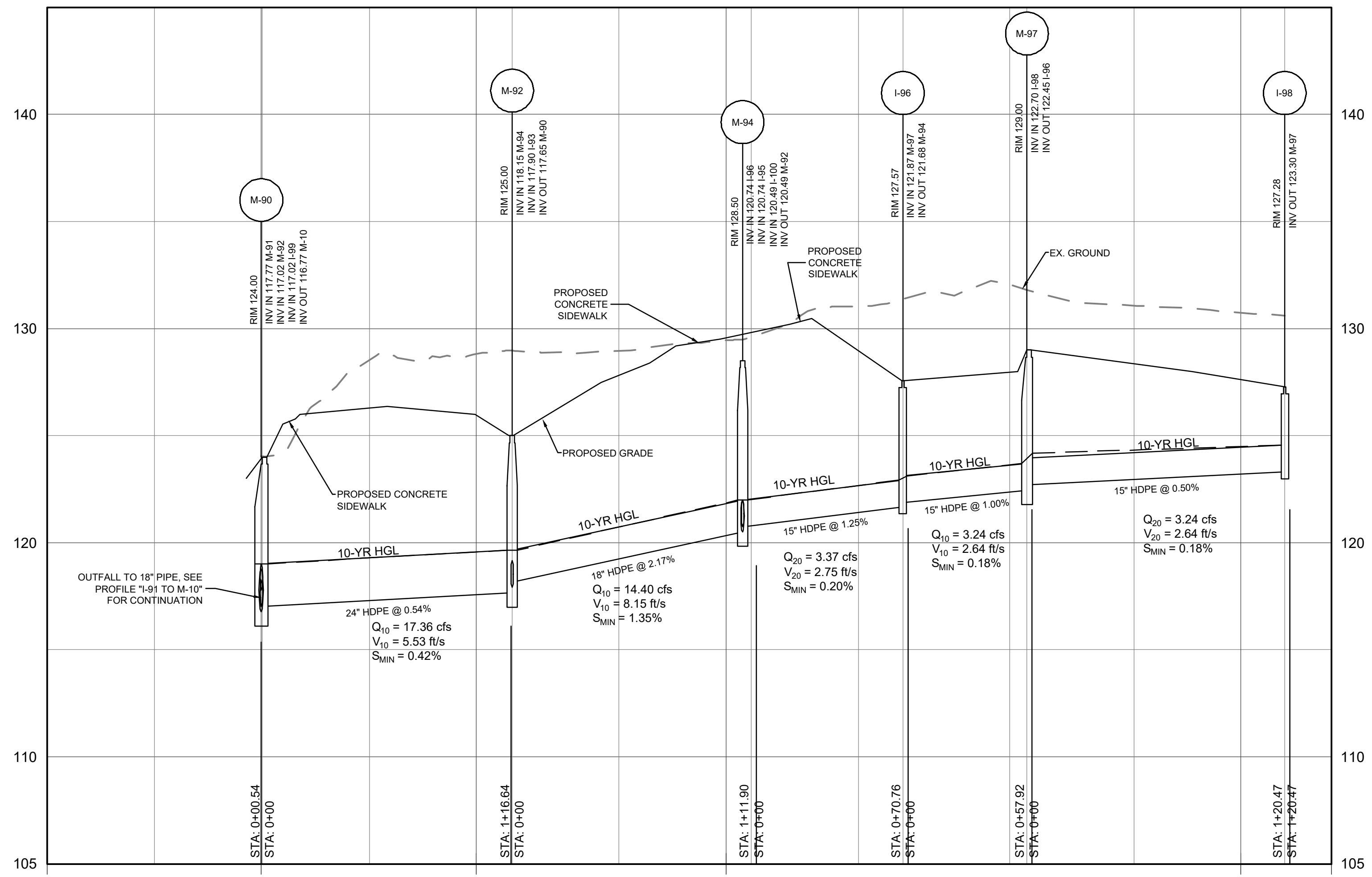
#	REVISIONS DESCRIPTION	APPROVED BY	DATE



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<b>ANNE ARUNDEL COUNTY</b> DEPARTMENT OF PUBLIC WORKS		MAY 31, 2023
APPROVED _____ DATE _____	APPROVED _____ DATE _____	SCALE: 1" = 40'
CHIEF ENGINEER	PROJECT MANAGER	DRAWN BY: JSN/SVH
APPROVAL _____ DATE _____	APPROVED _____ DATE _____	CHECKED BY: PJS/JAR
ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY SERVICES	SHEET <u>36</u> of <u>51</u>
		PROJECT #: 579000
		PROPOSAL #: 579001

STORM DRAIN PROFILES  
**BROOKLYN HEIGHTS  
COMMUNITY CENTER PARK  
DESIGN DEVELOPMENT PLANS**  
TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD



STORM DRAIN PROFILE - I-97 TO M-90  
 HORIZONTAL SCALE: 1" = 40'  
 VERTICAL SCALE: 1" = 4'

ID	RIM ELEVATION	AS-BUILT	INV IN (FROM)	AS-BUILT	INV OUT (TO)	AS-BUILT	TYPE	NORTHING	EASTING	PUBLIC PRIVATE
EX I-10	106.54		97.99 (48" RCP CL IV @ 2.47%) M-10		97.53 (EX 45" RCP) EX S-7		EXISTING INLET	56688.1857	1422978.6943	PUBLIC
EX I-12	132.64		122.29 (48" RCP CL IV @ 1.25%) EX I-13		122.29 (48" RCP CL IV) M-14		EXISTING 72" MH	566078.6750	1422414.3667	PUBLIC
EX I-13	132.47		126.76 (EX 48" RCP) EX OS		126.69 (48" RCP CL IV) EX I-12		EXISTING INLET	565865.0069	1422144.6490	PUBLIC
I-20	121.50		MICROBIORETENTION #3		111.65 (15" HDPE) M-10		24" NYLOPLAST DRAIN BASIN - DOME GRATE	566573.6844	1422799.8099	PUBLIC
I-30	120.00		MICROBIORETENTION #4		112.74 (15" HDPE) M-11		24" NYLOPLAST DRAIN BASIN - DOME GRATE	566567.9693	1422760.7562	PUBLIC
I-40	127.50		MICROBIORETENTION #6		121.74 (15" HDPE) M-13		24" NYLOPLAST DRAIN BASIN - DOME GRATE	566341.3922	1422516.8572	PUBLIC
I-50	135.06		128.91 (15" HDPE @ 0.50%) I-51		128.66 (15" HDPE) M-13		TYPE S INLET (D-40)	566256.3931	1422395.5691	PUBLIC
I-51	134.58		130.22 (15" HDPE @ 0.50%) I-52		129.97 (15" HDPE) I-50		TYPE S INLET (D-40)	566133.8957	1422221.7201	PUBLIC
I-52	134.93		131.01 (15" HDPE @ 0.50%) I-53		130.76 (15" HDPE) I-51		TYPE S INLET (D-40)	566029.3011	1422194.3739	PUBLIC
I-53	134.93		GRADE - MULTIPURPOSE FIELD		131.65 (15" HDPE) I-52		TYPE S INLET (D-40)	565925.0757	1422267.8131	PUBLIC
I-60	134.58		127.88 (18" HDPE @ 1.00%) I-61		127.63 (18" HDPE) M-14		TYPE S INLET (D-40)	566052.0308	1422569.0834	PUBLIC
I-61	134.58		GRADE - MULTIPURPOSE FIELD		130.25 (18" HDPE) I-60		TYPE S INLET (D-40)	565915.6355	1422375.5104	PUBLIC
I-71	123.32		GRADE - PARKING LOT		MICROBIORETENTION #3		TYPE A-1 INLET (D-23) MODIFIED FOR PASS THRU OUTLET	566511.4616	1422727.3612	PUBLIC
I-81	121.12		GRADE - PARKING LOT		MICROBIORETENTION #4		TYPE A-1 INLET (D-23) MODIFIED FOR PASS THRU OUTLET	566573.8706	1422703.1210	PUBLIC
I-91	128.00		MICROBIORETENTION #2		122.35 (15" HDPE) M-91		24" NYLOPLAST DRAIN BASIN - DOME GRATE	566283.2932	1423009.3885	PUBLIC
I-93	123.50		MICROBIORETENTION #7		118.12 (15" HDPE) M-92		24" NYLOPLAST DRAIN BASIN - DOME GRATE	566313.1480	1422795.4386	PUBLIC
I-95	128.00		MICROBIORETENTION #1		122.24 (15" HDPE) M-94		24" NYLOPLAST DRAIN BASIN - DOME GRATE	566210.9701	1422769.8194	PUBLIC
I-96	127.57		121.87 (15" HDPE @ 1.00%) M-97		121.68 (15" HDPE) M-94		TYPE S INLET (D-40)	566195.6023	1422688.8414	PUBLIC
I-98	127.28		GRADE		123.30 (15" HDPE) M-97		TYPE S INLET (D-40)	566288.3669	1422586.3379	PUBLIC
I-99	123.00		MICROBIORETENTION #5		117.53 (15" HDPE) M-90		24" NYLOPLAST DRAIN BASIN - DOME GRATE	566385.5936	1422911.0310	PUBLIC
I-100	128.80		121.79 (15" HDPE @ 0.87%) I-101		121.54 (18" HDPE) M-94		TYPE S INLET (D-40)	566169.3613	1422813.2331	PUBLIC
I-101	128.83		GRADE		122.85 (15" HDPE) I-100		TYPE S INLET (D-40)	566127.3028	1422927.3318	PUBLIC
M-10	113.90		102.89 (48" RCP CL IV @ 2.40%) M-11 104.78 (24" HDPE @ 7.00%) M-90 105.53 (15" HDPE @ 12.91%) I-20		102.78 (48" RCP CL IV) EX I-10		72" TYPE C MANHOLE (D-14) WITH OPEN GRATE TOP	566545.7044	1422846.5678	PUBLIC
M-11	113.91		104.19 (48" RCP CL IV @ 2.30%) M-11A 108.50 (15" HDPE @ 8.35%) I-30		103.94 (48" RCP CL IV) M-10		72" TYPE C MANHOLE (D-14)	566571.9184	1422811.3975	PUBLIC
M-11A	123.73		107.04 (48" RCP CL IV @ 2.30%) M-12		106.79 (48" RCP CL IV) M-11		72" TYPE C MANHOLE (D-14)	566524.0580	1422709.0737	PUBLIC
M-12	128.60		111.73 (48" RCP CL IV @ 2.30%) M-13		111.48 (48" RCP CL IV) M-11A		72" TYPE C MANHOLE (D-14) WITH OPEN GRATE TOP	566442.4052	1422534.1049	PUBLIC
M-13	130.50		114.30 (48" RCP CL IV @ 2.20%) M-14 116.80 (15" HDPE @ 8.46%) I-50 116.80 (15" HDPE @ 33.54%) I-40		114.05 (48" RCP CL IV) M-12		72" TYPE C MANHOLE (D-14) WITH OPEN GRATE TOP	566346.4660	1422503.0293	PUBLIC
M-14	136.00		117.42 (48" RCP CL IV @ 2.45%) EX I-12 119.67 (18" HDPE @ 4.59%) I-60		117.17 (48" RCP CL IV) M-13		72" TYPE C MANHOLE (D-14)	566224.4710	1422549.2122	PUBLIC
M-90	124.00		117.77 (15" HDPE @ 2.86%) M-91 117.02 (24" HDPE @ 0.54%) M-92 117.02 (15" HDPE @ 4.04%) I-99		116.77 (24" HDPE) M-10		60" TYPE C MANHOLE (D-14)	566382.4593	1422898.8174	PUBLIC
M-91	129.10		122.05 (15" HDPE @ 3.11%) I-91		121.80 (15" HDPE) M-90		48" TYPE A-1 MANHOLE (D-11)	566284.3608	1422999.8432	PUBLIC
M-92	125.00		118.15 (18" HDPE @ 2.17%) M-94 117.90 (15" HDPE @ 2.36%) I-93		117.65 (24" HDPE) M-90		48" TYPE A-1 MANHOLE (D-11) WITH OPEN GRATE TOP	566312.7584	1422804.5350	PUBLIC
M-94	128.50		120.74 (15" HDPE @ 1.25%) I-96 120.74 (15" HDPE @ 16.81%) I-95 120.49 (18" HDPE @ 1.53%) I-100		120.49 (18" HDPE) M-92		48" TYPE A-1 MANHOLE (D-11)	566214.0665	1422761.4535	PUBLIC
M-97	129.00		122.70 (15" HDPE @ 0.50%) I-98		122.45 (15" HDPE) I-96		48" TYPE A-1 MANHOLE (D-11)	566177.6328	1422633.7788	PUBLIC

FROM STRUCTURE	INV OUT	AS BUILT	TO STRUCTURE	INV IN	AS BUILT	DIAMETER (in)	MATERIAL	LENGTH (ft)	SLOPE	PUBLIC PRIVATE
EX I-12	122.29		M-14	117.42		48"	RCP CL IV	199'	2.45%	PUBLIC
EX I-13	126.69		EX I-12	122.39		48"	RCP CL IV	344'	1.25%	PUBLIC
I-20	111.65		M-10	105.53		15"	HDPE	47'	12.91%	PUBLIC
I-30	112.74		M-11	108.50		15"	HDPE	51'	8.35%	PUBLIC
I-40	121.74		M-13	116.80		15"	HDPE	15'	33.54%	PUBLIC
I-50	128.66		M-13	116.80		15"	HDPE	140'	8.46%	PUBLIC
I-51	129.97		I-50	128.91		15"	HDPE	213'	0.50%	PUBLIC
I-52	130.76		I-51	130.22		15"	HDPE	108'	0.50%	PUBLIC
I-53	131.65		I-52	131.01		15"	HDPE	127'	0.50%	PUBLIC
I-60	127.63		M-14	119.67		18"	HDPE	174'	4.59%	PUBLIC
I-61	130.25		I-60	127.88		18"	HDPE	237'	1.00%	PUBLIC
I-91	122.35		M-91	122.05		15"	HDPE	10'	3.11%	PUBLIC
I-96	121.68		M-94	120.74		15"	HDPE	75'	1.25%	PUBLIC
I-99	117.53		M-90	117.02		15"	HDPE	13'	4.04%	PUBLIC
I-101	122.85		I-100	121.79		15"	HDPE	122'	0.87%	PUBLIC
M-10	102.78		EX I-10	97.99		48"	RCP CL IV	194'	2.47%	PUBLIC
M-11	103.94		M-10	102.89		48"	RCP CL IV	44'	2.40%	PUBLIC
M-11A	106.79		M-11	104.19		48"	RCP CL IV	113'	2.30%	PUBLIC
M-11A	107.04		M-12	111.48		48"	RCP CL IV	193'	2.30%	PUBLIC
M-13	114.05		M-12	111.73		48"	RCP CL IV	101'	2.30%	PUBLIC
M-14	117.17		M-13	114.30		48"	RCP CL IV	130'	2.20%	PUBLIC
M-90	116.77		M-10	104.78		24"	HDPE	171'	7.00%	PUBLIC
M-91	121.80		M-90	117.77		15"	HDPE	141'	2.86%	PUBLIC
M-92	117.90		I-93	118.12		15"	HDPE	9'	2.36%	PUBLIC
M-92	117.65		M-90	117.02		24"	HDPE	117'	0.54%	PUBLIC
M-94	120.49		I-100	121.54		18"	HDPE	68'	1.53%	PUBLIC
M-94	120.74		I-95	122.24		15"	HDPE	9'	16.81%	PUBLIC
M-94	120.49		M-92	118.15		18"	HDPE	108'	2.17%	PUBLIC
M-97	122.45		I-96	121.87		15"	HDPE	58'	1.00%	PUBLIC
M-97	122.70		I-98	123.30		15"	HDPE	120'	0.50%	PUBLIC

USE	TYPE	SIZE	LENGTH
STORM DRAIN	HDPE	15"	2,203 LF
STORM DRAIN	HDPE	18"	592 LF
STORM DRAIN	HDPE	24"	290 LF
UNDERDRAIN	RCP CL IV	48"	775 LF
UNDERDRAIN	PVC	4"	440 LF

NOTE:  
 PRIOR TO ANY UTILITY INSTALLATION OF EXCAVATION, ALL UTILITY CROSSINGS SHALL REQUIRE HAND DUG TEST PIT PROCEDURES TO CONFIRM DEPTH AND LOCATION OF ANY EXISTING UTILITIES ON SITE.

- GENERAL NOTES
- ALL MANHOLE PIPING, AND TENCHING DETAILS ARE IN THE ACO DESIGN STANDARDS LOCATED HERE: <https://www.aacounty.org/departments/public-works/engineering/design-manual/>
  - THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FROM THE PRECASTER FOR REVIEW PRIOR TO FABRICATION.
  - INLETS I-71 AND I-81 ARE TO SPAN THE ENTIRE WIDTH OF THE PROPOSED WALKWAY

NOTE:  
 PRIOR TO ANY UTILITY INSTALLATION, STORM DRAIN CONSTRUCTION OR EXCAVATION, ALL UTILITY CROSSINGS AND STRUCTURE CONNECTIONS SHALL REQUIRE HAND DUG TEST PIT PROCEDURES TO CONFIRM DEPTH AND LOCATION OF ANY EXISTING UTILITIES ON SITE.

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE

**Pennoni**  
 PENNONI ASSOCIATES INC.  
 8890 McGaw Road, Suite 100  
 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
 CHIEF ENGINEER

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
 PROJECT MANAGER

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
 ASSISTANT CHIEF ENGINEER

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_  
 CHIEF, RIGHT OF WAY SERVICES

SCALE: 1" = 40'  
 DRAWN BY: JSN/SVH  
 CHECKED BY: PJS/JAR  
 SHEET 37 of 51  
 PROJECT #: 579000  
 PROPOSAL #: 579001

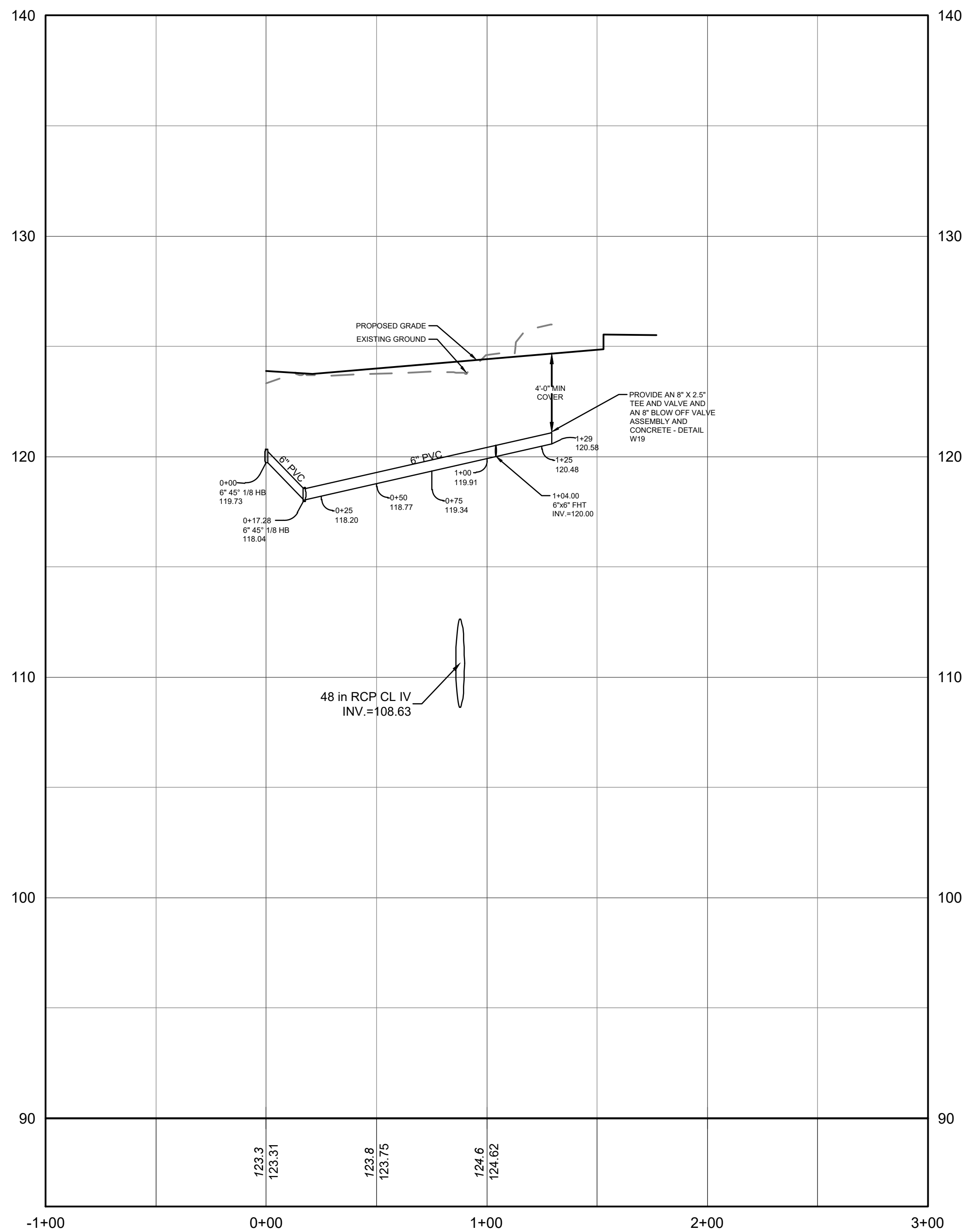
STORM DRAIN PROFILES  
 BROOKLYN HEIGHTS COMMUNITY CENTER PARK  
 DESIGN DEVELOPMENT PLANS  
 TAX MAP # 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

DATE: MAY 31, 2023



GP# 820219457 DWG NO: DD37

ANNE ARUNDEL COUNTY  
 DEPARTMENT OF PUBLIC WORKS  
 MAY 31, 2023



PROPOSED 6 IN. WATER  
 HORIZONTAL SCALE: 1" = 40'  
 VERTICAL SCALE: 1" = 4'

**WATER NOTES**

1. ALL WATER MAIN SHALL BE INSTALLED IN ACCORDANCE WITH ANNE ARUNDEL COUNTY SPECIFICATIONS AND DETAILS, AND THE CURRENT DPW DESIGN MANUAL.
2. ALL WATER PIPE SHALL BE PVC.

NOTE:  
 PRIOR TO ANY UTILITY INSTALLATION, WATER CONSTRUCTION OR EXCAVATION,  
 ALL UTILITY CROSSINGS AND STRUCTURE CONNECTIONS SHALL REQUIRE HAND DUG TEST  
 PIT PROCEDURES TO CONFIRM DEPTH AND LOCATION OF ANY EXISTING UTILITIES ON SITE.



GPH 820219457 DWG NO: DD38

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774 EXPIRATION DATE 11/10/2023

REVISIONS	APPROVED		
#	DESCRIPTION	BY	DATE

**Pennoni**  
 PENNONI ASSOCIATES INC.  
 8890 McGaw Road, Suite 100  
 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

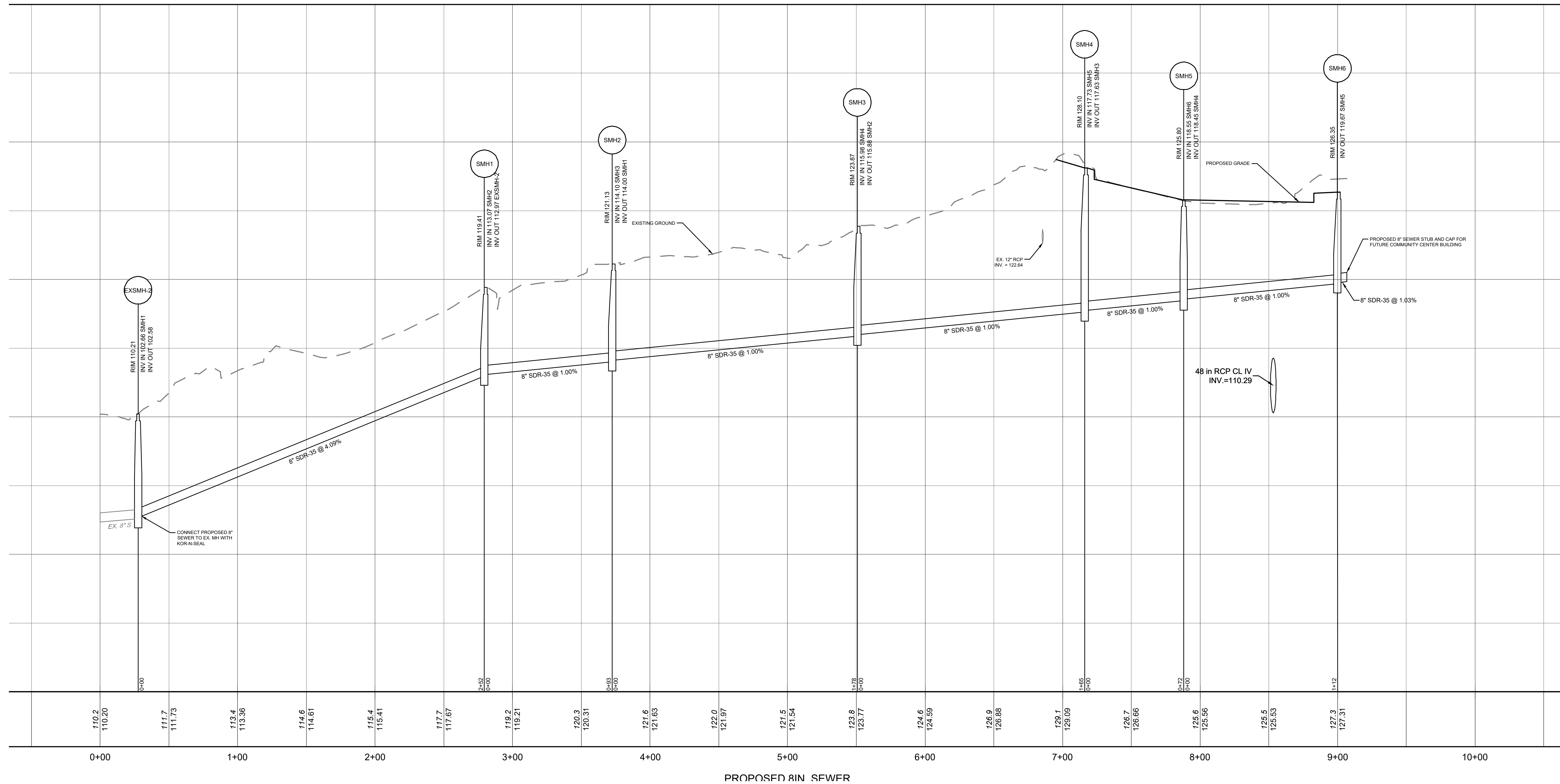
06/09/2022

ANNE ARUNDEL COUNTY  
 DEPARTMENT OF PUBLIC WORKS  
 MAY 31, 2023

APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		PROJECT MANAGER	
APPROVAL	DATE	APPROVED	DATE
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY SERVICES	

SCALE: 1" = 40'  
 DRAWN BY: JSN/SVH  
 CHECKED BY: PJS/JAR  
 SHEET 38 of 51  
 PROJECT #: 579000  
 PROPOSAL #: 579001

WATER PROFILE  
 BROOKLYN HEIGHTS  
 COMMUNITY CENTER PARK  
 DESIGN DEVELOPMENT PLANS  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD



SANITARY SEWER STRUCTURE SCHEDULE							
ID	RIM ELEVATION	INV IN (FROM)	AS-BUILT	INV OUT (TO)	AS-BUILT	TYPE	NORTHING-EASTING
EXSMH-2	110.21	102.66 (8" SDR-35 @ 4.09%) SMH1		102.58 (8" SDR-35)		48" MH (EXISTING)	567216.5918, 1422615.7031
I-24	120.57			119.84 (8" SDR-35) SMH6		NULL STRUCTURE	566414.6068, 1422600.6473
SMH1	119.41	113.07 (8" SDR-35 @ 1.00%) SMH2		112.97 (8" SDR-35) EXSMH-2		48" MH (PUBLIC), S-14	567000.7801, 1422485.8596
SMH2	121.13	114.10 (8" SDR-35 @ 1.00%) SMH3		114.00 (8" SDR-35) SMH1		48" MH (PUBLIC), S-14	566914.6454, 1422450.8153
SMH3	123.87	115.98 (8" SDR-35 @ 1.00%) SMH4		115.88 (8" SDR-35) SMH2		48" MH (PUBLIC), S-14	566736.3976, 1422454.2692
SMH4	128.10	117.73 (8" SDR-35 @ 1.00%) SMH5		117.63 (8" SDR-35) SMH3		48" MH (PUBLIC), S-14	566581.7942, 1422512.7918
SMH5	125.80	118.55 (8" SDR-35 @ 1.00%) SMH6		118.45 (8" SDR-35) SMH4		48" MH (PUBLIC), S-14	566524.7877, 1422556.9842
SMH6	126.35	119.77 (8" SDR-35 @ 1.03%) I-24		119.67 (8" SDR-35) SMH5		48" MH (PUBLIC), S-14	566420.8879, 1422598.0428

WATER/SEWER PIPE SCHEDULE			
USE	TYPE	SIZE	LENGTH
WATER	PVC	6"	177 LF
SEWER	SDR-35	8"	900 LF

**GENERAL NOTES**

- ALL MANHOLE, PIPING, AND TENCHING DETAILS ARE IN THE AACO DESIGN STANDARDS LOCATED HERE: <https://www.aacounty.org/departments/public-works/engineering/design-manual/>
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FROM THE PRECASTER FOR REVIEW PRIOR TO FABRICATION.

NOTE:  
PRIOR TO ANY UTILITY INSTALLATION, SEWER CONSTRUCTION OR EXCAVATION,  
ALL UTILITY CROSSINGS AND STRUCTURE CONNECTIONS SHALL REQUIRE HAND DUG TEST  
PIT PROCEDURES TO CONFIRM DEPTH AND LOCATION OF ANY EXISTING UTILITIES ON SITE.

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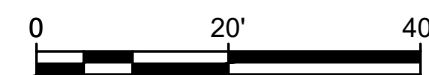
**Pennoni**  
PENNONI ASSOCIATES INC.  
8890 McGaw Road, Suite 100  
Columbia, MD 21045  
T 410.997.8900 F 410.997.9282

ANNE ARUNDEL COUNTY  
DEPARTMENT OF PUBLIC WORKS  
MAY 31, 2023

APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		PROJECT MANAGER	
APPROVAL	DATE	APPROVED	DATE
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY SERVICES	

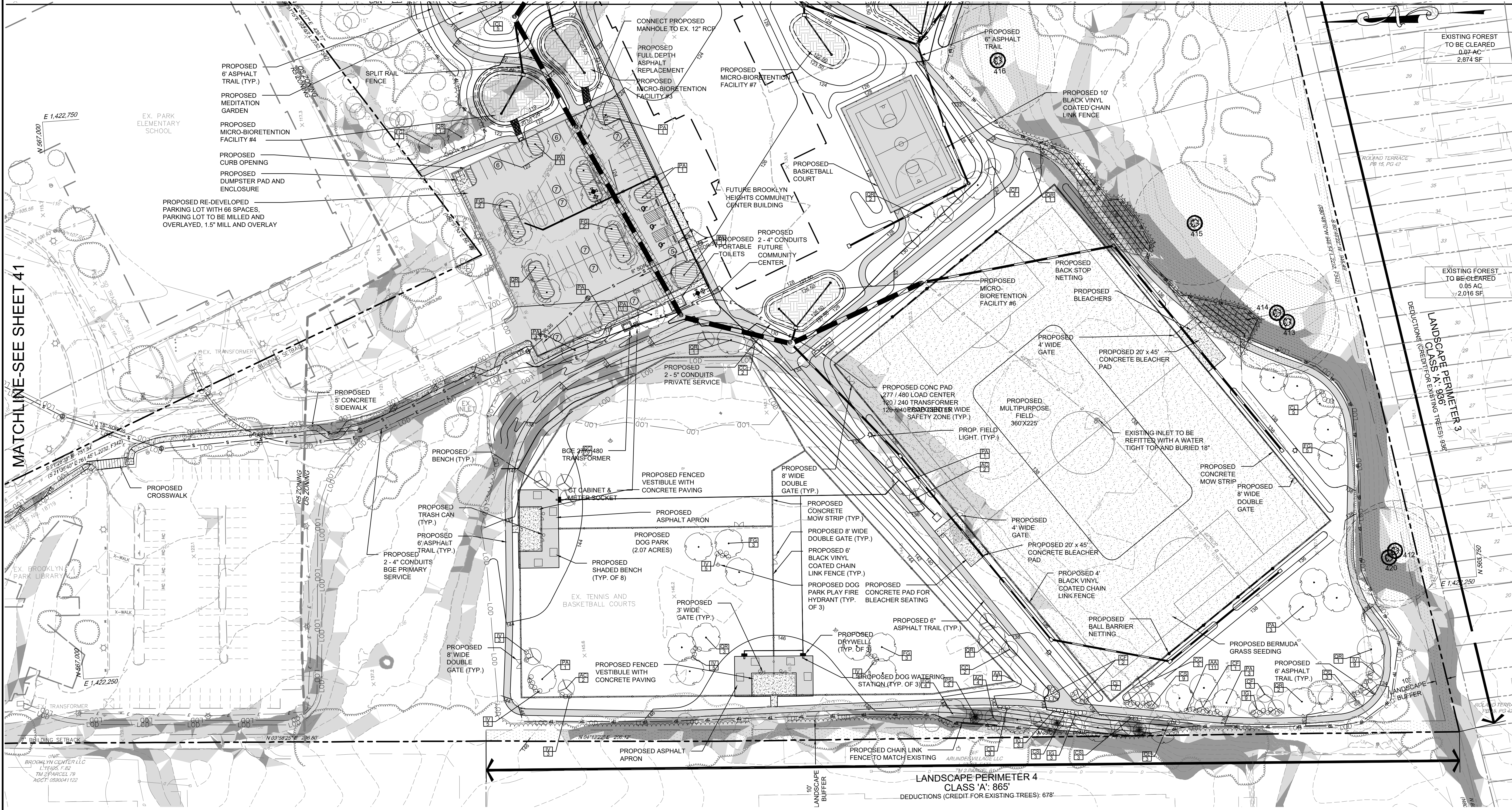
SCALE: 1" = 40'  
DRAWN BY: JSN/SVH  
CHECKED BY: PJS/JAR  
SHEET 39 of 51  
PROJECT #: 579000  
PROPOSAL #: 579001

SEWER PROFILE  
**BROOKLYN HEIGHTS  
COMMUNITY CENTER PARK  
DESIGN DEVELOPMENT PLANS**  
TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD



9PH 602819457 DWG NO: DD39

MATCHLINE-SEE SHEET 41



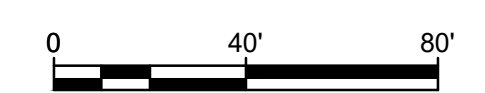
MATCHLINE-SEE SHEET 41

LANDSCAPE PERIMETER 3  
CLASS 'A': 936  
DEDUCTIONS (CREDIT FOR EXISTING TREES) 936

LANDSCAPE PERIMETER 4  
CLASS 'A': 865'  
DEDUCTIONS (CREDIT FOR EXISTING TREES): 678'

**LEGEND**

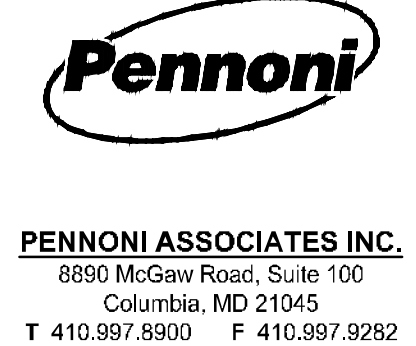
- PROPOSED SHADE TREE
- PROPOSED FLOWERING TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SHRUBS
- PROPOSED GREEN AREA
- EXISTING FOREST TO BE CLEARED
- PROPOSED BERMUDA GRASS SEEDING



DWG NO: DD40

PROFESSIONAL CERTIFICATION: I, JONATHAN S. NORMAN, R.L.A., CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 4114. EXPIRATION DATE 05/09/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



APPROVED		DATE		APPROVED		DATE		SCALE: 1" = 40'	
CHIEF ENGINEER				PROJECT MANAGER				DRAWN BY: JSN/SVH	
APPROVAL		DATE		APPROVED		DATE		CHECKED BY: PJS/JAR	
ASSISTANT CHIEF ENGINEER				CHIEF, RIGHT OF WAY SERVICES				SHEET 40 of 51	
								PROJECT #: 579000	
								PROPOSAL #: 579001	

ANNE ARUNDEL COUNTY  
DEPARTMENT OF PUBLIC WORKS

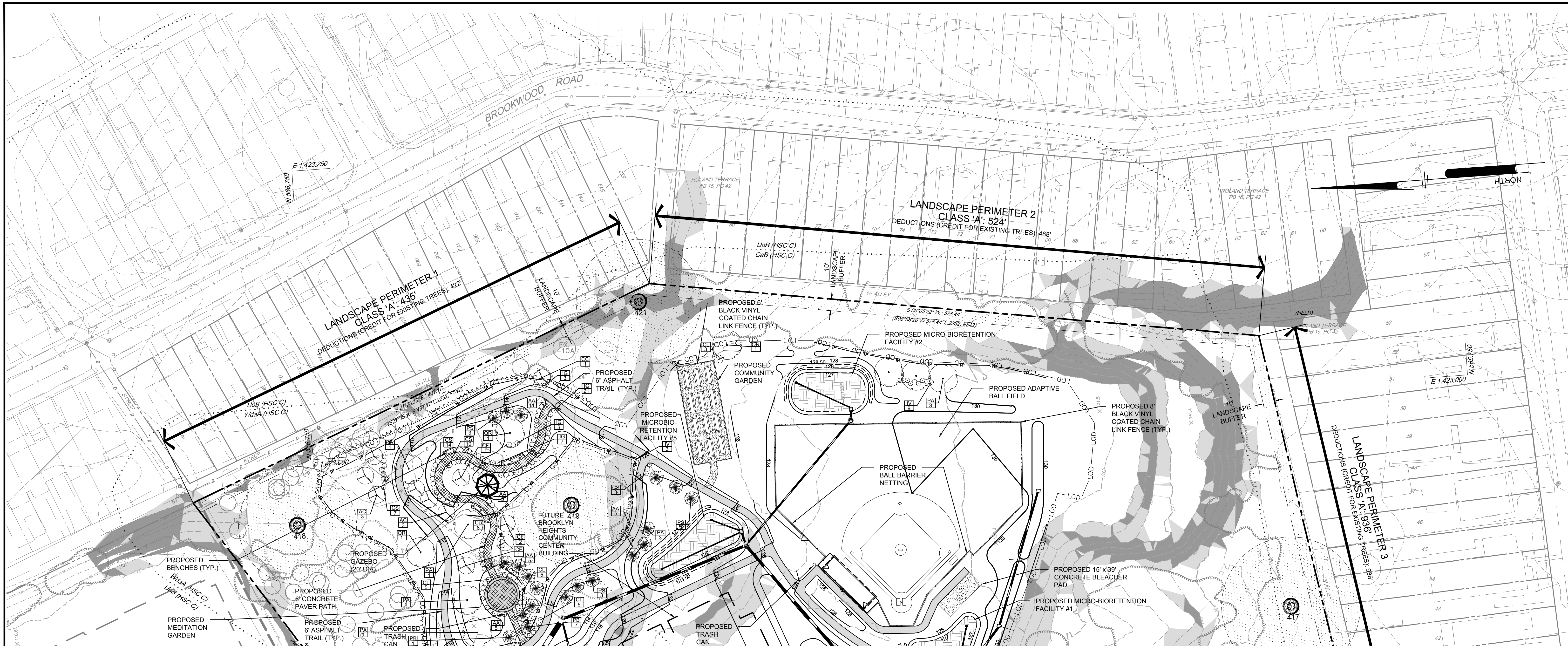
LANDSCAPE PLAN  
BROOKLYN HEIGHTS  
COMMUNITY CENTER  
DESIGN DEVELOPMENT PLANS  
TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD

GP# \_\_\_\_\_ DWG NO: DD40

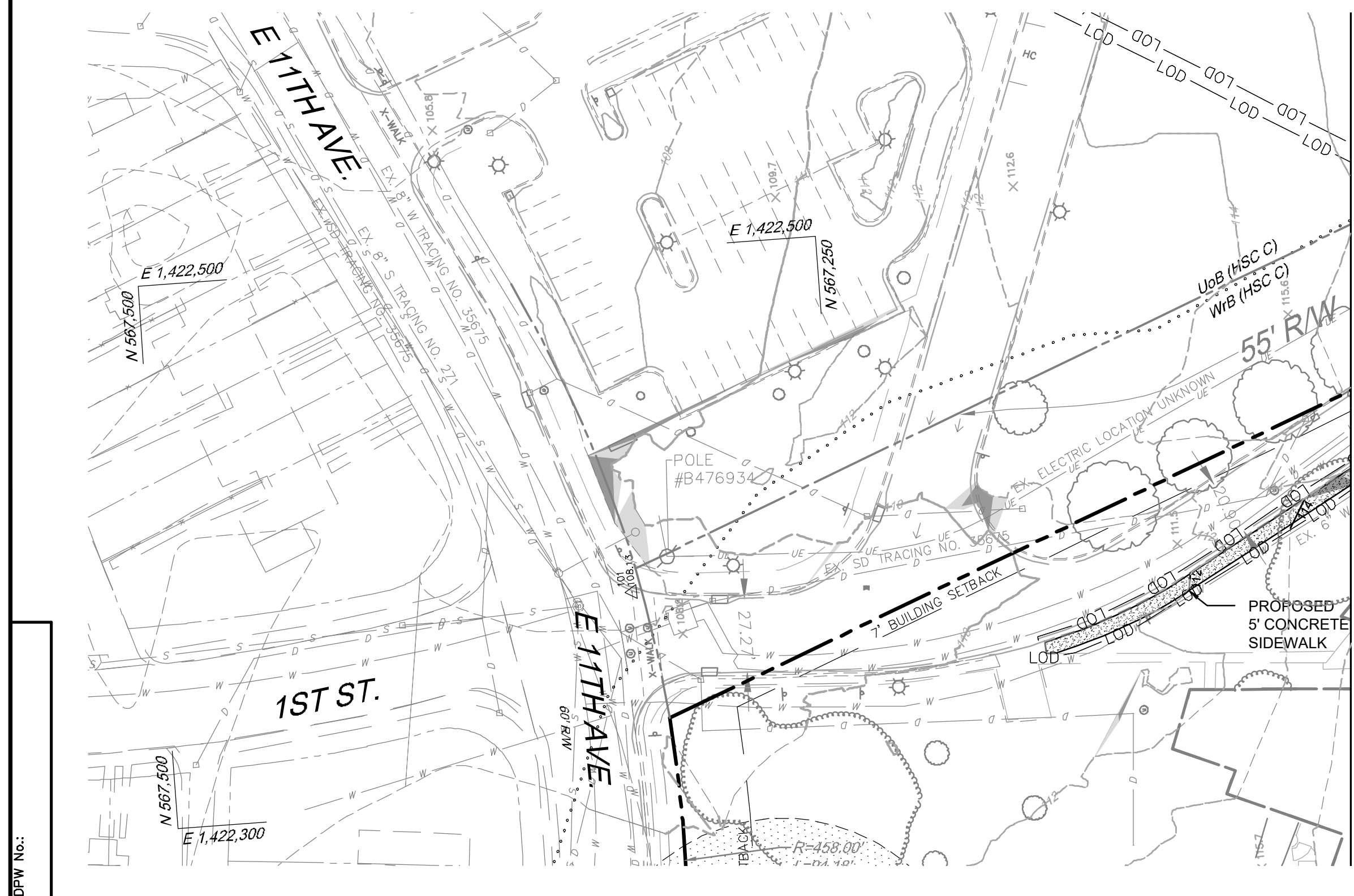
SEPTEMBER 14, 2022

U:\Accounts\VA020\VA02021022 - Brooklyn Park Ten-Cent\DESIGN\_SHEETS\DESIGN DEVELOPMENT PLANS\VA02021022-0240.dwg





MATCHLINE-SEE SHEET 40



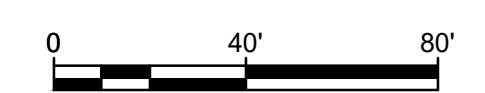
MATCHLINE-SEE SHEET 40

**PLANTING SPECIFICATIONS**

- PLANTS, RELATED MATERIAL, AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION, AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN, WHERE DISCREPANCIES EXIST BETWEEN STANDARDS & GUIDELINES REFERENCED WITHIN THESE SPECIFICATIONS AND THE ANNE ARUNDEL COUNTY SPECIFICATIONS, THE LATTER TAKES PRECEDENCE.
- ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, THAT IS NOT NURSERY GROWN, UNIFORMLY BRANCHED, DOES NOT HAVE A VIGOROUS ROOT SYSTEM, AND DOES NOT CONFORM TO THE MOST RECENT EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS WILL BE REJECTED. PLANT MATERIAL THAT IS NOT HEALTHY, VIGOROUS, FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUNSCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BORERS AND ALL FORMS OF INSECT INFESTATIONS OR DIRECTIONABLE DISBURSEMENTS WILL BE REJECTED. PLANT MATERIAL THAT IS HEAVY OR WHICH HAS BEEN CUT BACK FROM LARGER BRANDES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. ALL B & S PLANTS SHALL BE FRESHLY DUG; NO HEALED-IN PLANTS OR PLANTS FROM COLD STORAGE WILL BE ACCEPTED.
- UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATIONS SHALL CONFORM TO THE MOST RECENT EDITION OF THE "LANDSCAPE SPECIFICATION GUIDELINES BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF MD, DC, & VA," (HEREINAFTER "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON, THE POTOMAC CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, AND THE ANNE ARUNDEL COUNTY STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE IN ACCORDANCE WITH THE APPROPRIATE SECTION ON THE LANDSCAPE GUIDELINES. CONTRACTORS ATTENTION IS DIRECTED TO THE MAINTENANCE REQUIREMENTS FOUND WITHIN THE ONE-YEAR SPECIFICATIONS INCLUDING WATERING AND REPLACEMENT OF SPECIFIED PLANT MATERIAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL RELEVANT AND APPROPRIATE UTILITY COMPANIES, UTILITY CONTRACTORS, AND "MISS UTILITY" A MINIMUM OF 48 HOURS PRIOR TO THE BEGINNING OF ANY WORK. CONTRACTOR MAY MAKE MINOR ADJUSTMENTS IN SPACING AND LOCATION OF PLANT MATERIAL TO AVOID CONFLICTS WITH UTILITIES. MAJOR CHANGES WILL REQUIRE THE APPROVAL OF THE LANDSCAPE ARCHITECT. DAMAGE TO EXISTING STRUCTURE AND UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
- CONTRACTOR TO REGRADE, FINE GRADE, HYDROSEED OR SOG, AND STRAW MULCH ALL AREAS DISTURBED BY THEIR WORK.
- PLANT QUANTITIES ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF DISCREPANCIES EXIST BETWEEN QUANTITIES SHOWN ON PLAN AND THOSE SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE PLAN TAKE PRECEDENCE, WHERE DISCREPANCIES ON THE PLAN EXIST BETWEEN THE SYMBOLS AND THE CALLOUT LEADER, THE NUMBER OF SYMBOLS TAKE PRECEDENCE.
- PLANTING MIX: FOR TREES NOT IN A PREPARED BED, MIX 50% COMPRO OR LEAFGRO WITH 50% SOIL FROM TREE HOLE TO USE AS BACKFILL. SEE TREE PLANTING DETAIL.
- WEED & INSECT CONTROL: INCORPORATE A PRE-EMERGENT HERBICIDE INTO THE PLANTING BED FOLLOWING RECOMMENDED RATES ON THE LABEL. FOR TREE PLANTING, APPLY A PRE-EMERGENT ON TOP OF SOIL AND ROOT BALL BEFORE MULCHING. MAINTAIN THE MULCH WEED-FREE FOR THE EXTENT OF THE WARRANTY PERIOD. UNDER NO CIRCUMSTANCES IS A PESTICIDE CONTAINING CHLORPYRIFOS TO BE USED AS A MEANS OF PEST CONTROL.
- WATER: ALL PLANT MATERIAL PLANTED SHALL BE WATERED THOROUGHLY THE DAY OF PLANTING. ALL PLANT MATERIAL NOT YET PLANTED SHALL BE PROPERLY PROTECTED FROM DRYING OUT UNTIL PLANTED, AT A MINIMUM, WATER UNPLANTED PLANT MATERIAL DAILY AND AS NECESSARY TO AVOID DESICCATION.
- PRUNING: DO NOT HEAVILY PRUNE TREES AND SHRUBS AT PLANTING. PRUNE ONLY BROKEN, DEAD, OR DISEASED BRANCHES.
- NO SUBSTITUTIONS OR RELOCATION OF PLANTS MAY BE MADE WITHOUT PRIOR APPROVAL FROM THE DEPARTMENT OF PUBLIC WORKS OF ANNE ARUNDEL COUNTY.

**LEGEND**

- PROPOSED SHADE TREE
- PROPOSED FLOWERING TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SHRUBS
- PROPOSED GREEN AREA



GP# DWG NO: DD41

PROFESSIONAL CERTIFICATION: I, JONATHAN S. NORMAN, R.L.A., CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 4114. EXPIRATION DATE 05/09/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



**Pennoni**  
 PENNONI ASSOCIATES INC.  
 8890 McGaw Road, Suite 100  
 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

**ANNE ARUNDEL COUNTY**  
 DEPARTMENT OF PUBLIC WORKS

SEPTEMBER 14, 2022

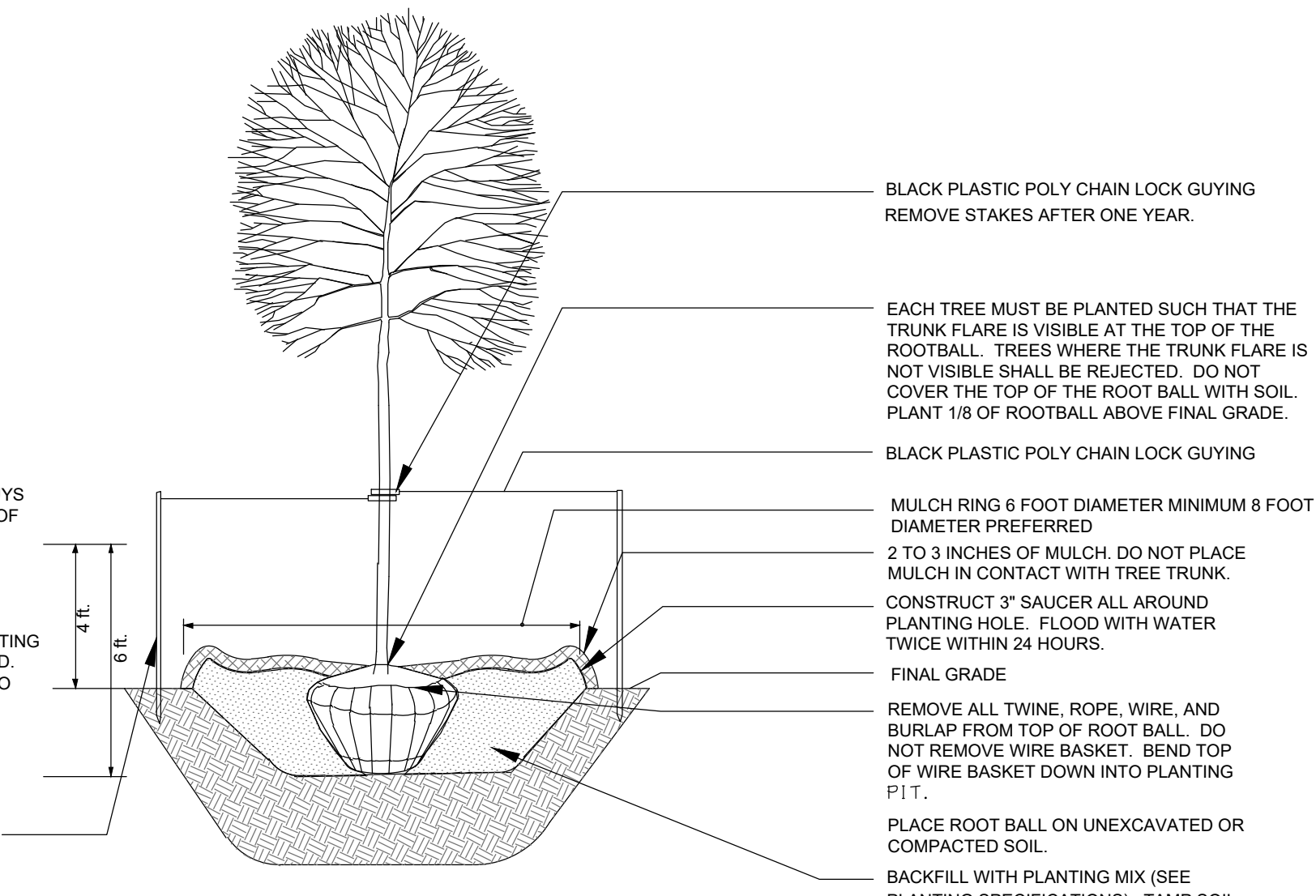
APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		PROJECT MANAGER	
APPROVAL	DATE	APPROVED	DATE
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY SERVICES	

SCALE: 1" = 40'  
 DRAWN BY: JSN/SVH  
 CHECKED BY: PJS/JAR  
 SHEET 41 of 51  
 PROJECT #: 579000  
 PROPOSAL #: 579001

**LANDSCAPE PLAN**  
**BROOKLYN HEIGHTS**  
**COMMUNITY CENTER**  
 DESIGN DEVELOPMENT PLANS  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

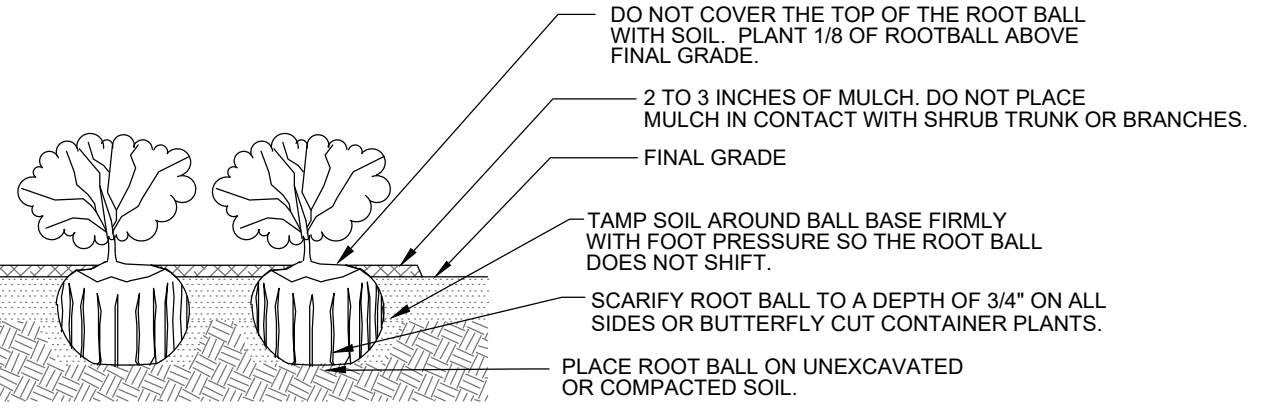
DWP No:

- NOTES:
- DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
  - STAKE TREES AS SHOWN.
  - DIG PLANTING PIT TWICE AS WIDE AS THE DIAMETER OF THE TOP OF THE ROOT BALL WITH A MINIMUM PLANTING PIT DIAMETER OF 5'.
  - TIGHTEN GUYS ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. GUYS SHALL BE LONG ENOUGH TO ACCOMMODATE 1.5 IN. OF GROWTH AND BUFFER ALL BRANCHES.
  - TUCK ANY LOOSE ENDS OF THE GUY SO THAT NO LOOSE ENDS ARE EXPOSED.
  - CONTRACTOR TO REMOVE AND GRADE OUT PLANTING SAUCER AT END OF ONE YEAR MAINTENANCE PERIOD. AREA AROUND TREES SHALL BE GRADED SMOOTH TO ELIMINATE MOUNDING. CONTRACTOR TO REMULCH AREA AROUND TREE WHEN GRADING IS COMPLETE.
- INSTALL TWO STAKES ON OPPOSITE SIDES OF TREE, PARALLEL TO THE DIRECTION OF THE PREVAILING WINTER WINDS, UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCHITECT. ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOT BALL INTO PREFERABLY UNEXCAVATED SOIL.



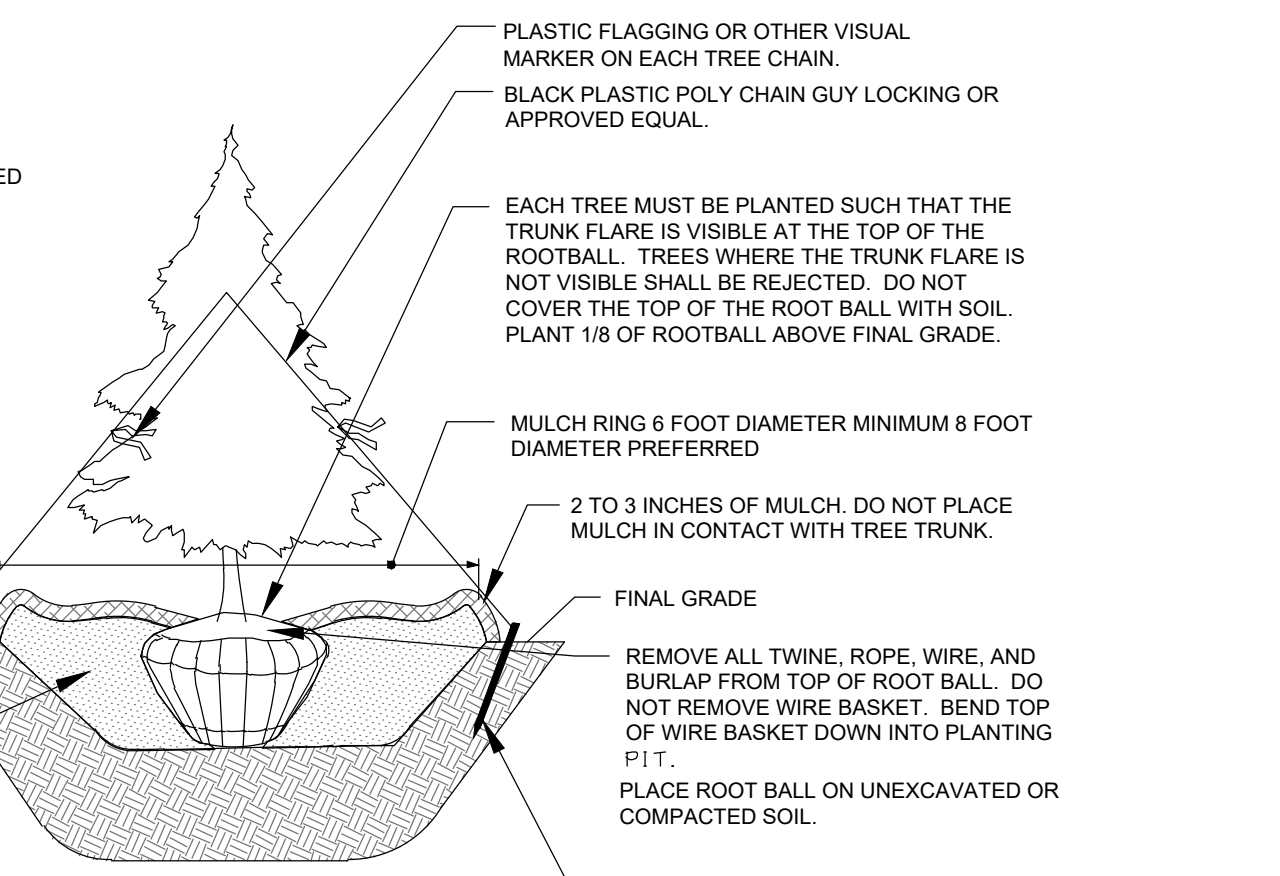
**1** DECIDUOUS B&B TREE PLANTING DETAIL (TREES 3" CAL. OR SMALLER)  
**42** NOT TO SCALE

- NOTES:
- SEE PLANTING SPECIFICATIONS FOR PREPARATION OF PLANTING BED.
  - DO NOT HEAVILY PRUNE THE SHRUB AT PLANTING. PRUNE ONLY BROKEN, DAMAGED, OR DISEASED BRANCHES.
  - DIG PLANTING PIT 12" WIDER THAN THE DIAMETER OF THE TOP OF THE ROOT BALL WITH A MINIMUM PLANTING PIT DIAMETER OF 18".
  - FOR B&B SHRUBS: REMOVE ALL TWINE, ROPE, AND BURLAP FROM TOP OF ROOT BALL.
  - ALL CONTAINERS SHALL BE REMOVED BEFORE INSTALLATION.



**2** SHRUB BED PLANTING DETAIL - B&B AND CONTAINER SHRUBS  
**42** NOT TO SCALE

- NOTES:
- SELECT ONLY NURSERY STOCK WITH A SINGLE LEADER UNLESS OTHERWISE SPECIFIED ON PLAN. PLANTS WITH CO-DOMINANT, MISSING, OR DAMAGED LEADERS SHALL BE REJECTED.
  - STAKE TREES AS SHOWN.
  - DIG PLANTING PIT TWICE AS WIDE AS THE DIAMETER OF THE TOP OF THE ROOT BALL WITH A MINIMUM PLANTING PIT DIAMETER OF 5'.
  - CONTRACTOR TO REMOVE AND GRADE OUT PLANTING SAUCER AT END OF ONE YEAR MAINTENANCE PERIOD. AREA AROUND TREES SHALL BE GRADED SMOOTH TO ELIMINATE MOUNDING. CONTRACTOR TO REMULCH AREA AROUND TREE WHEN GRADING IS COMPLETE.
- CONSTRUCT 3" SAUCER ALL AROUND PLANTING HOLE. FLOOD WITH WATER TWICE WITHIN 24 HOURS.
- BACKFILL WITH PLANTING MIX (SEE PLANTING SPECIFICATIONS). TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT ROOT BALL DOES NOT SHIFT.



**3** EVERGREEN B&B PLANTING DETAIL  
**42** NOT TO SCALE

**TABLE 1:**  
**PARKING LOT LANDSCAPE REQUIREMENTS**

NO. OF PARKING SPACES	66 SPACES
NO. OF ISLANDS REQUIRED (1/12 SPACES) (82 SP/12 = 7)	6 ISLANDS
NO. OF ISLANDS PROVIDED	8 ISLANDS
AREA OF PARKING LOT (INCLUDING DRIVE AISLES)	25,070 SF±
GREEN AREA FACTOR (10%)	x 0.10
GREEN AREA REQUIRED	2,507 SF±
GREEN AREA PROVIDED	3,808 SF±
NUMBER OF PU'S REQUIRED (±2,507 S.F. / 250 S.F.)	11 PU
NUMBER OF TREES PROVIDED	
SHADE TREES	13
MINOR DECIDUOUS TREES	0
EVERGREEN TREES	0
SHRUBS	0
TOTAL NUMBER OF PU'S PROVIDED	13 PU

**PLANTING UNIT:**  
 ONE PLANTING UNIT (PU) EQUALS:  
 -ONE MAJOR DECIDUOUS SHADE TREE 2-2.5 INCHES IN CALIPER AT INSTALLATION AND 3 SHRUBS OR;  
 -TWO MINOR DECIDUOUS TREES 1.5-1.75 INCHES IN CALIPER AT INSTALLATION AND 5 SHRUBS OR;  
 -THREE EVERGREEN TREES, 6 FEET IN HEIGHT AT INSTALLATION

**PLANT SCHEDULE**

SYMBOL	QTY.	SCIENTIFIC/ COMMON NAME	SIZE	ROOT	REMARKS
<b>SHADE TREES</b>					
FG	20	FAGUS GRANDIFOLIA AMERICAN BEECH	2" CAL	B&B	PLANT AS SHOWN
PA	20	PLATANUS X ACERFOLIA 'COLUMBIA' COLUMBIA LONDON PLANE TREE	2.5-3" CAL.	B&B	PLANT AS SHOWN
QR	20	QUERCUS RUBRA NORTHERN RED OAK	2" CAL.	B&B	PLANT AS SHOWN
<b>FLOWERING TREES</b>					
AC	14	AMELANCHIER CANADENSIS CANADIAN SERVICEBERRY	2" CAL	B&B	PLANT AS SHOWN
CC	14	CERCIS CANADENSIS EASTERN REDBUD	2.5-3" CAL.	B&B	PLANT AS SHOWN
CF	14	CORNUS FLORIDA FLOWERING DOGWOOD	2" CAL.	B&B	PLANT AS SHOWN
<b>EVERGREEN TREES</b>					
PS	12	PINUS STROBUS WHITE PINE	6'-8" HT.	B&B	PLANT AS SHOWN
PB	11	PICEA ABIES NORWAY SPRUCE	6'-8" HT.	B&B	PLANT AS SHOWN
<b>SHRUBS</b>					
AA	49	ARONIA ARBUTIFOLIA CHOKECHERRY	24-30"	CONT.	PLANT AS SHOWN
CL	49	CLETHRA ALNIFOLIA SWEET PEPPERBUSH	24-30"	CONT.	PLANT AS SHOWN
CS	49	CORNUS SERICEA 'FLAVIRAMEA' RED TWIG DOGWOOD	24-30"	CONT.	PLANT AS SHOWN
IG	49	ILEX GLABRA INBERRY HOLLY	24-30"	CONT.	PLANT AS SHOWN
IV**	49	ILEX VERTICILLATA WINTERBERRY HOLLY	24-30"	CONT.	PLANT AS SHOWN

NOTE:  
 1. \*\*CONTRACTOR TO PLANT 1 MALE WINTERBERRY PER EVERY 6 WINTERBERRIES, AND ENSURE THAT 1 MALE WINTERBERRY IS LOCATED IN EVERY GROUPING OF PLANTINGS.

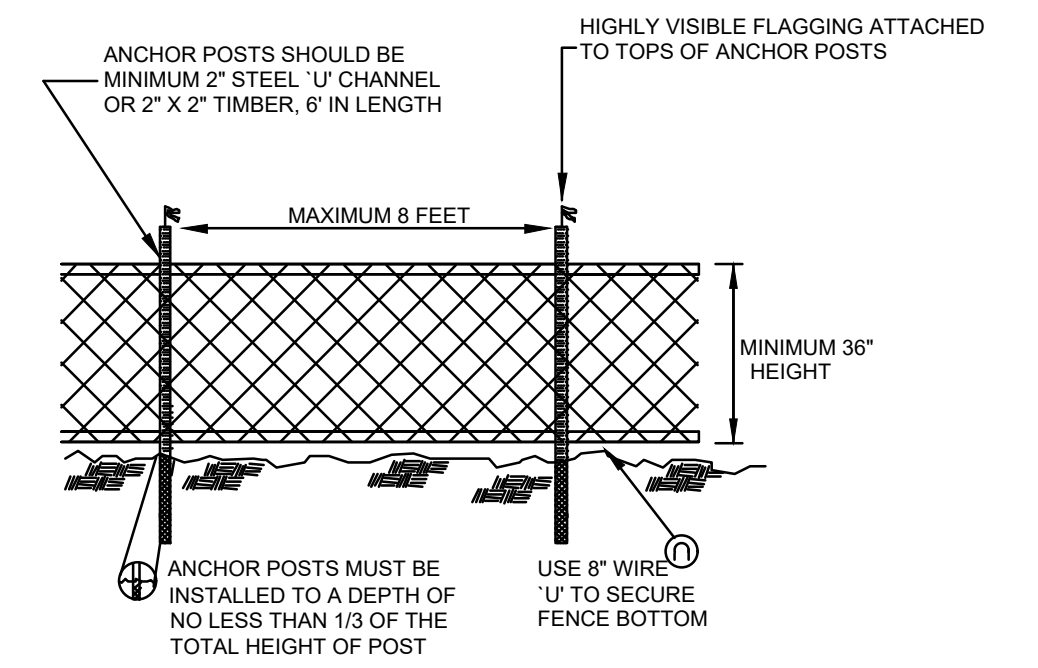
**ANNE ARUNDEL COUNTY FOREST CONSERVATION WORKSHEET (In Acres)**

Variables	Unique Tract 1	Unique Tract 2	Unique Tract 3	Unique Tract 4	Unique Tract 5	Total Net Tract Area
<b>Site Information</b>	Priority Funding Area	Targeted Growth Area	0	0	0	0
A. Growth Management Area	0	0	0	0	0	0
B. Land Use Type	Residential	0	0	0	0	0
C. Total Unique Tract Area	33.1	0.0	0.0	0.0	0.0	33.1
D. Unincorporated Deductions (Critical Area or 100-ft Floodplain)	0.0	0.0	0.0	0.0	0.0	0.0
E. Inconsistent Surface Deductions for Targeted Growth and Priority Funding Areas	0.8	2.7	0.0	0.0	0.0	3.5
F. Existing Forest Cover within Net Unique Tract Area	1.2	0.8	0.0	0.0	0.0	2.0
G. Proposed Forest Clearing within Net Unique Tract Area	0.0	0.1	0.0	0.0	0.0	0.1
H. Net Unique Tract Area (C-D-E-F+G)	31.5	30.4	0.0	0.0	0.0	61.9
I. Total Net Tract Area less than or equal to 5 Acres?	No	No	No	No	No	No
<b>Key for lookup table</b>	Priority Funding Area/Institutional	Targeted Growth Area	No	No	No	No
J. Conservation Threshold	20%	20%	0%	0%	0%	0%
K. Afforestation Threshold	15%	15%	0%	0%	0%	0%
<b>Forest Conservation</b>						
L. Conservation Threshold Area = (H) X (J)	1.2	2.1	0.0	0.0	0.0	3.3
M. Breakeven Point (Amount of forest that must be retained so that no mitigation is required)	0.0	0.0	0.0	0.0	0.0	0.0
N. Forest Clearing Permitted without Mitigation = (F) - (M)	0.0	0.0	0.0	0.0	0.0	0.0
O. Proposed Forest Retention = (F) - (G)	1.2	0.7	0.0	0.0	0.0	1.9
P. Reafforestation for Retention Above the Threshold	0.0	0.0	0.0	0.0	0.0	0.0
Q. Proposed Forest Clearing (G) > Area of Forest Above Conservation Threshold (L), then (R) = (G) X (0.5). If not, then (R) = (G) X (0.5).	0.0	0.0	0.0	0.0	0.0	0.0
R. Credit for Retention Above the Threshold	0.0	0.0	0.0	0.0	0.0	0.0
S. Proposed Forest Clearing (G) > Area of Forest Above Conservation Threshold (L), then (R) = 0. If not, then (R) = (L) - (G).	0.0	0.0	0.0	0.0	0.0	0.0
T. Reafforestation for Retention Below the Threshold	0.0	0.2	0.0	0.0	0.0	0.2
U. Proposed Forest Clearing (G) < Area of Forest Above Conservation Threshold (L), then (R) = 0. If not, then (R) = (G) - (L) X 2.	0.0	0.2	0.0	0.0	0.0	0.2
V. Total Afforestation Required = (R) + (S) + (T)	0.0	1.6	0.0	0.0	0.0	1.6
W. Afforestation Threshold Area = (H) X (K)	1.3	1.6	0.0	0.0	0.0	2.9
X. Total Afforestation Required	0.0	0.8	0.0	0.0	0.0	0.8
Y. Existing Forest Cover (F) < Afforestation Threshold Area (W), then (U) = (U) - (F). If not, then (U) = 0.	0.0	0.0	0.0	0.0	0.0	0.0
Z. Total Mitigation Required by Tract = (S) + (U)	0.1	1.0	0.0	0.0	0.0	1.1

NOTE:  
 THE AMOUNT OF CLEARING FOR THIS PROJECT IS LESS THAN 20,000 SF. THEREFORE, THIS PROJECT IS EXEMPT FROM FOREST CONSERVATION REQUIREMENTS ACCORDING TO ARTICLE 17-6-301(B)(7) OF THE ANNE ARUNDEL COUNTY CODE.

**TABLE 2:**  
**PERMETER/R.O.W. BUFFER REQUIREMENTS**

PERMETER	1	2	3	4
TOTAL PERMETER/R.O.W.	435 LF±	524 LF±	936 LF±	865 LF±
DEDUCTIONS (ENTRANCES, CREDIT FOR EXISTING TREES)	422 LF±	488 LF±	936 LF±	678 LF±
NET TOTAL	13 LF±	36 LF±	0 LF±	187 LF±
CLASS REQUIRED (A, B, C, D OR E)	A (1 PU/10 LF)	A (1 PU/10 LF)	A (1 PU/10 LF)	A (1 PU/10 LF)
NUMBER OF SHADE TREES REQUIRED	2 MAJOR SHADE TREES AND 6 SHRUBS	4 MAJOR SHADE TREES AND 12 SHRUBS	0 MAJOR SHADE TREES AND 0 SHRUBS	19 MAJOR SHADE TREES AND 57 SHRUBS
-OR-	4 MINOR DECIDUOUS TREES AND 10 SHRUBS	8 MINOR DECIDUOUS TREES AND 20 SHRUBS	0 MINOR DECIDUOUS TREES AND 0 SHRUBS	38 MINOR DECIDUOUS TREES AND 95 SHRUBS
NUMBER OF EVERGREEN/ORNAMENTAL TREES REQUIRED	6 EVERGREEN TREES	12 EVERGREEN TREES	0 EVERGREEN TREES	57 EVERGREEN TREES
NUMBER OF TREES PROVIDED				
SHADE TREES	0	4	0	10
FLOWERING TREES	0	0	0	16
EVERGREEN TREES	0	0	0	3
SHRUBS	10	12	0	70
TOTAL NUMBER OF PLANTING UNITS (PU) PROVIDED	2	4	0	19



- NOTES:
- BLAZE ORANGE OR BLUE PLASTIC MESH FENCE FOR FOREST PROTECTION DEVICE. ONLY.
  - SUPER SILT FENCE MAY BE SUBSTITUTED FOR TREE PROTECTION FENCING.
  - BOUNDARIES OF RETENTION AREA WILL BE ESTABLISHED AS PART OF THE FOREST CONSERVATION PLAN REVIEW PROCESS.
  - BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
  - AVOID DAMAGE TO CRITICAL ROOT ZONE. DO NOT DAMAGE OR SEVERE LARGE ROOTS WHEN INSTALLING POSTS.
  - PROTECTION SIGNS ARE REQUIRED. SEE SIGN DETAIL.
  - FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

**4** TREE PROTECTION FENCING  
**42** NOT TO SCALE

PROFESSIONAL CERTIFICATION: I, **JONATHAN S. NORMAN, R.L.A.**, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULLY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # **4114**, EXPIRATION DATE **05/09/2023**

**REVISIONS**

#	DESCRIPTION	APPROVED BY	DATE

**ANNAPOLIS, MARYLAND**  
**NO. 4114**  
**LANDSCAPE ARCHITECT**

**Pennoni**  
 PENNONI ASSOCIATES INC.  
 8890 McGaw Road, Suite 100  
 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

**ANNE ARUNDEL COUNTY**  
**DEPARTMENT OF PUBLIC WORKS**  
 SEPTEMBER 14, 2022

APPROVED DATE \_\_\_\_\_ APPROVED DATE \_\_\_\_\_  
 CHIEF ENGINEER PROJECT MANAGER  
 APPROVAL DATE \_\_\_\_\_ APPROVED DATE \_\_\_\_\_  
 ASSISTANT CHIEF ENGINEER CHIEF, RIGHT OF WAY SERVICES

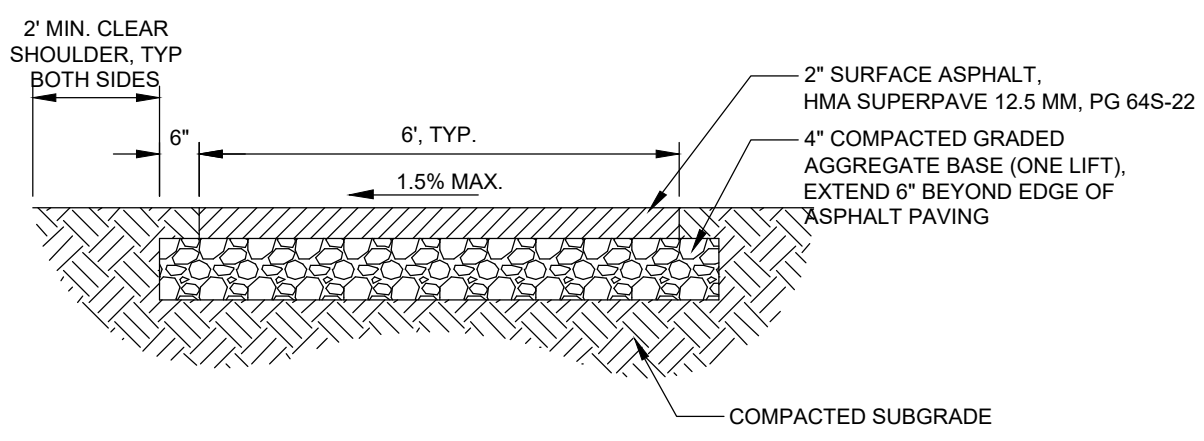
SCALE: 1" = 40'  
 DRAWN BY: JSN/SVH  
 CHECKED BY: PJS/JAR  
 SHEET **42** of **51**  
 PROJECT # 579000  
 PROPOSAL # 579001

LANDSCAPE NOTES AND DETAILS  
**BROOKLYN HEIGHTS COMMUNITY CENTER**  
 DESIGN DEVELOPMENT PLANS  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

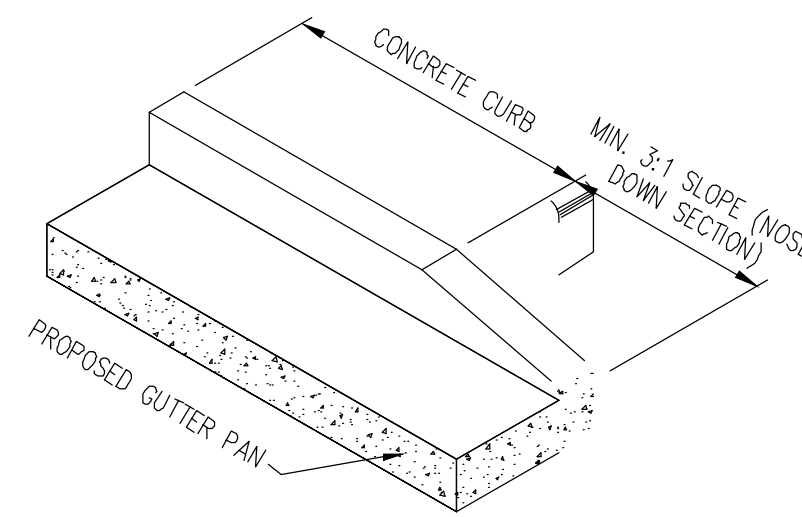
DPW NO:

**TRAIL SECTION NOTES:**

1. 2' SHOULDERS WITH MAXIMUM SLOPE OF 1:6 SLOPE SHALL BE PROVIDED ON EACH SIDE OF THE TRAIL.
2. MAXIMUM SLOPE ABOVE OR BELOW THE TRAIL: 3:1 (IN SPECIFIC SITUATIONS ALONG THE PROJECT 2:1 SLOPES ARE UTILIZED - THESE HAVE BEEN NOTED ON THE PLAN).
3. MINIMUM SLOPE AWAY FROM THE TRAIL: 2%
4. SEE PLAN VIEWS FOR SPECIFIC GRADING ALONG TRAIL.
5. CROSS SLOPE OF TRAIL SHALL BE 1.5%. SEE PLAN VIEWS FOR DIRECTION OF SLOPE.

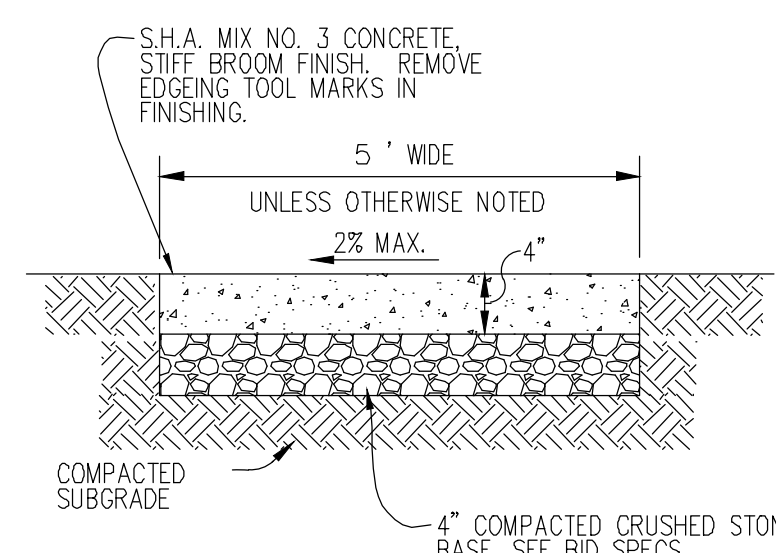


**1 ASPHALT TRAIL PAVING SECTION**  
43 NOT TO SCALE



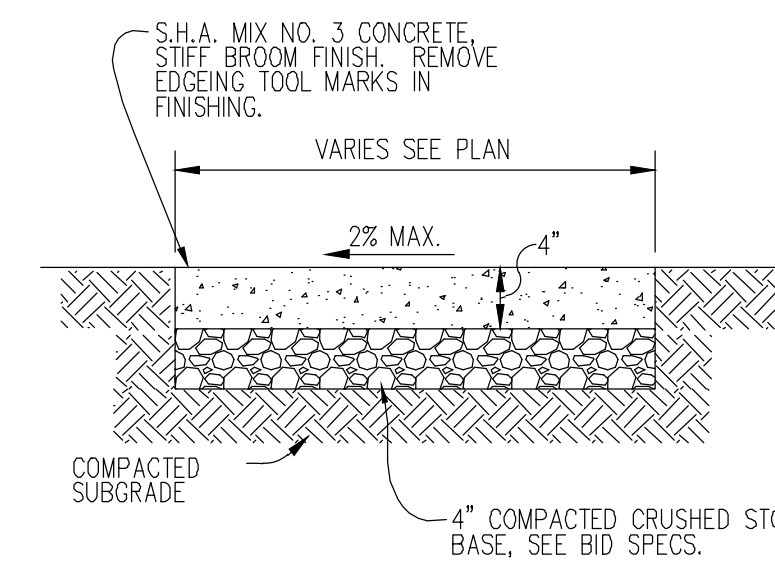
- NOTE:**
1. WHERE THE CURB IS TO BE CONSTRUCTED AS PART OF AN ACCESSIBLE CURB RAMP, THE MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD CURB RAMP DETAILS SHALL GOVERN.
  2. CURB SHALL USE SHA MIX NO. 3 CONCRETE.

**2 NOSE DOWN CURB**  
43 NOT TO SCALE



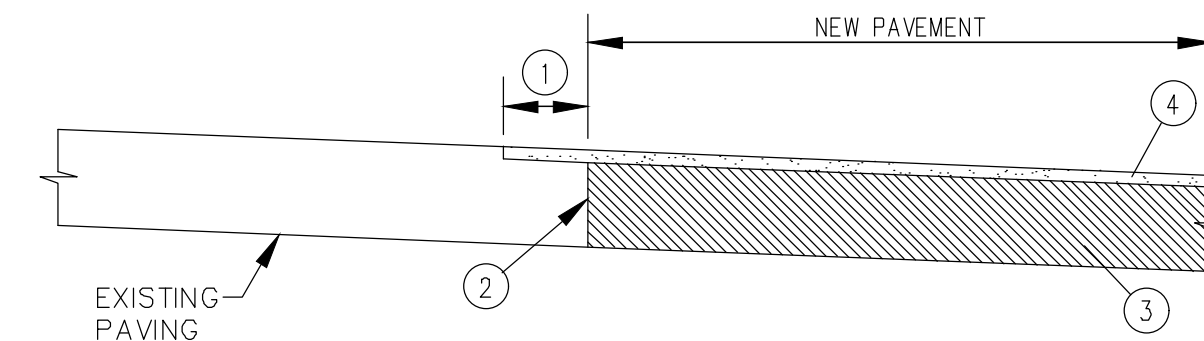
- NOTES:**
1. PROVIDE LATITUDINAL EXPANSION JOINTS AT 15' O.C. (MAX.)
  2. PROVIDE CONTRACTION (DUMMY) JOINT AT 5' O.C. INTERVALS BETWEEN EXPANSION JOINTS. SIDEWALK TO BE SCRIBED IN 5' MAX. SQUARES. CONTRACTOR TO AVOID THE CREATION OF SMALL SCORED AREAS THAT WILL CRACK AND BREAK OFF FROM SIDEWALK.
  3. SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%
  4. CONCRETE SHALL BE 3,000 PSI
  5. WHERE CONCRETE SIDEWALK IS PLACED BEHIND EXISTING OR PROPOSED CURB, EXPANSION JOINTS SHALL BE PROVIDED BETWEEN SIDEWALK AND CURB

**3 CONCRETE SIDEWALK**  
43 NOT TO SCALE



- NOTES:**
1. PROVIDE LATITUDINAL EXPANSION JOINTS AT 15' O.C. (MAX.)
  2. PROVIDE CONTRACTION (DUMMY) JOINT AT 5' O.C. INTERVALS BETWEEN EXPANSION JOINTS. SIDEWALK TO BE SCRIBED IN 5' MAX. SQUARES. CONTRACTOR TO AVOID THE CREATION OF SMALL SCORED AREAS THAT WILL CRACK AND BREAK OFF FROM SIDEWALK.
  3. SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%
  4. CONCRETE SHALL BE 3,000 PSI

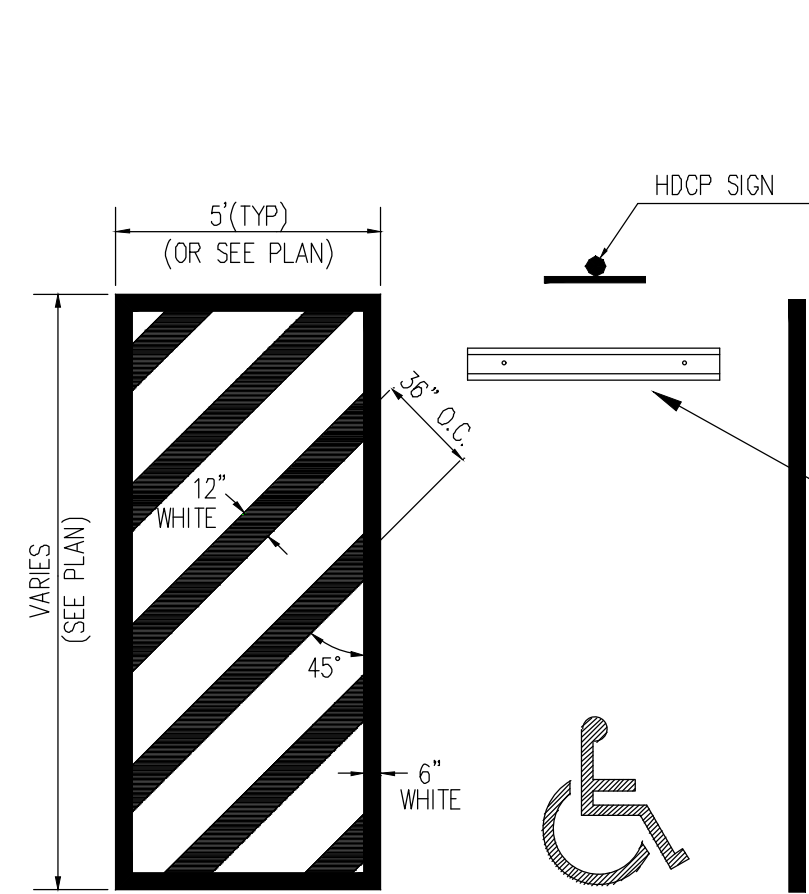
**4 CONCRETE PAVING AT DOG PARK**  
43 NOT TO SCALE



1. MILL A 1' WIDE X 1-1/2" DEEP STRIP
2. SAW-CUT THROUGH FULL DEPTH PAVING
3. INSTALL SUB BASE GRAVEL AND BASIC PAVEMENT PER THE TYPICAL PAVEMENT SECTION.
4. PROVIDE 1 1/2" TOP SURFACE COARSE (HMA SUPERPAVE 9.5 MM, PG645-22 LEVEL 2)\*

\*NOTE: LONGITUDINAL JOINTS FOR THE TOP SURFACE COARSE MUST NOT COINCIDE WITH THE FULL-DEPTH SAW-CUT JOINT

**5 PAVEMENT CONNECTION**  
43 NOT TO SCALE

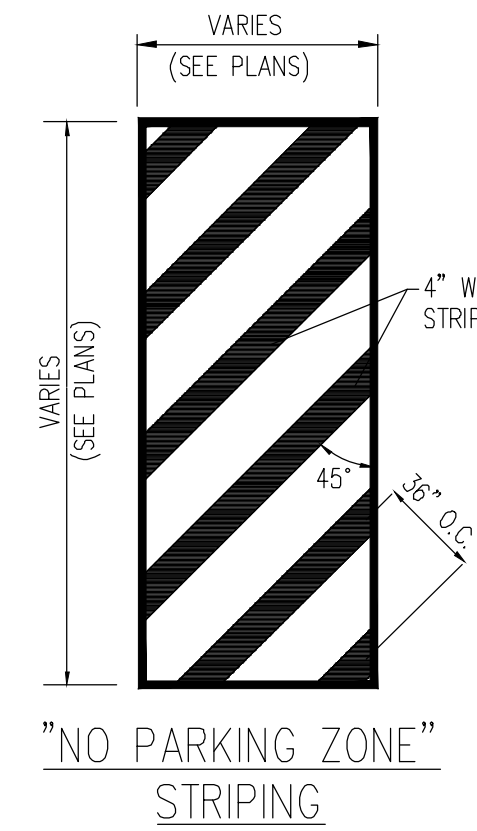


HDCP SPACE

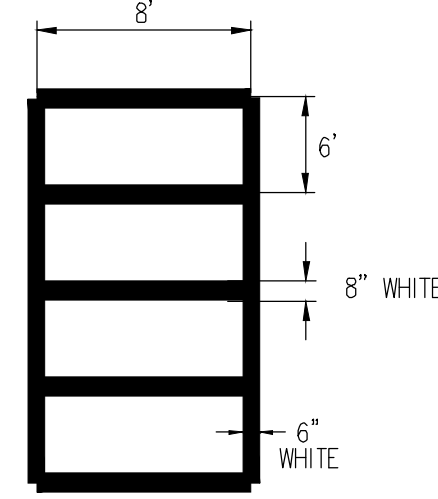


LINE SPECIFICATIONS

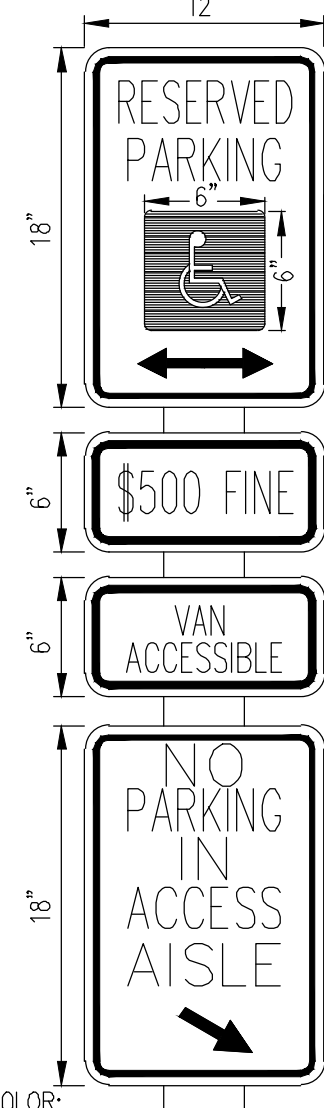
**7 STRIPING STANDARDS**  
43 NOT TO SCALE



"NO PARKING ZONE" STRIPING

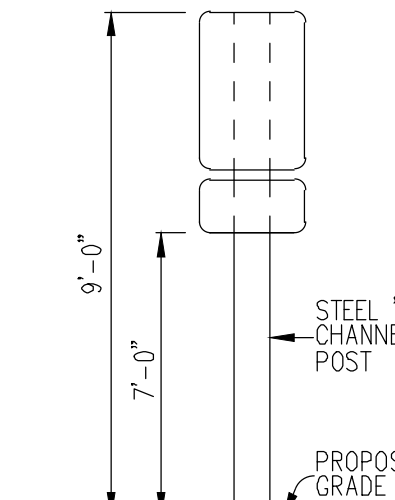


CROSSWALK



**8 ACCESSIBLE PARKING SIGN**  
43 NOT TO SCALE

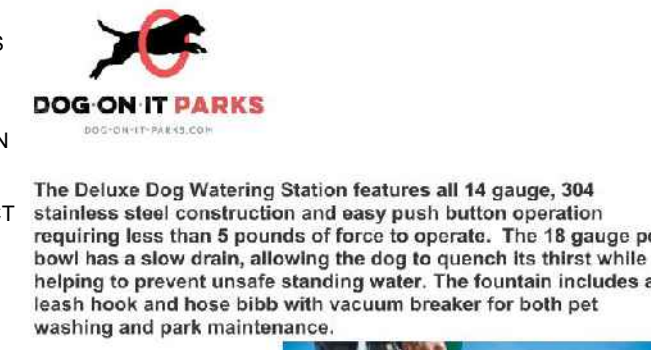
- \* FOR VAN ACCESSIBLE SPACES ONLY. SEE PLAN FOR LOCATION.
- \*\* FOR A SPACE NEXT TO AN ACCESS AISLE ONLY



- NOTES:**
1. DISTANCE FROM GROUND TO BOTTOM OF SIGN TO BE 7".
  2. CONTRACTOR TO VERIFY FINE AMOUNT PRIOR TO SIGN INSTALLATION

**9 LIGHT DUTY PAVING**  
43 NOT TO SCALE

- NOTES:**
1. PROVIDE FOUNDATIONS PER MANUFACTURER RECOMMENDATIONS.
  2. SUBMIT SELECTION AND SHOP DRAWING FOR STRUCTURES FOR REVIEW PRIOR TO PROCUREMENT.
  3. INSTALL STRUCTURES PER MANUFACTURER RECOMMENDATIONS.
  4. COLORS TO BE SELECTED BY OWNER. PROVIDE SELECTION OPTIONS PRIOR TO PROCUREMENT.
  5. USE SHA MIX NO 3 FOR ALL CONCRETE.
  6. PROVIDE WATER CONNECTION PER UTILITY PLAN. CONNECT TO WATER LINE PER MANUFACTURER'S RECOMMENDATIONS.



The Deluxe Dog Watering Station features all 14 gauge, 304 stainless steel construction and easy push button operation requiring less than 5 pounds of force to operate. The 18 gauge pet bowl has a slow drain, allowing the dog to quench its thirst while helping to prevent unsafe standing water. The fountain includes a leash hook and hose bibb with vacuum breaker for both pet washing and park maintenance.



**10 DOG WATERING STATION**  
43 NOT TO SCALE

**7214 DELUXE DOG WATERING STATION**

Heavy 14 gauge, 304 stainless steel pedestal with welded 18 gauge dog bowl

15 different powder coat color options available

ADA Accessible button height

DOG-ON-IT-PARKS  
4818 Evergreen Way  
Snohomish, WA 98296  
P: 877-368-3647  
www.dog-on-it-parks.com  
Refer to installation manual for more detailed specifications.  
Copyright 2016

**DOG ON IT PARKS**

The one piece no dog park is complete without! Cast and rotationally molded from an authentic fire hydrant, we use durable reinforced resin and a UV clear coat to ensure years of fun. The hydrant's base is factory drilled to accommodate four anchor bolts for the many installation options. Standard color is red, but custom colors and logos are available.

**Side Views:**

**7260 FIRE HYDRANT**

Glass fiber reinforced resin and UV clear coat

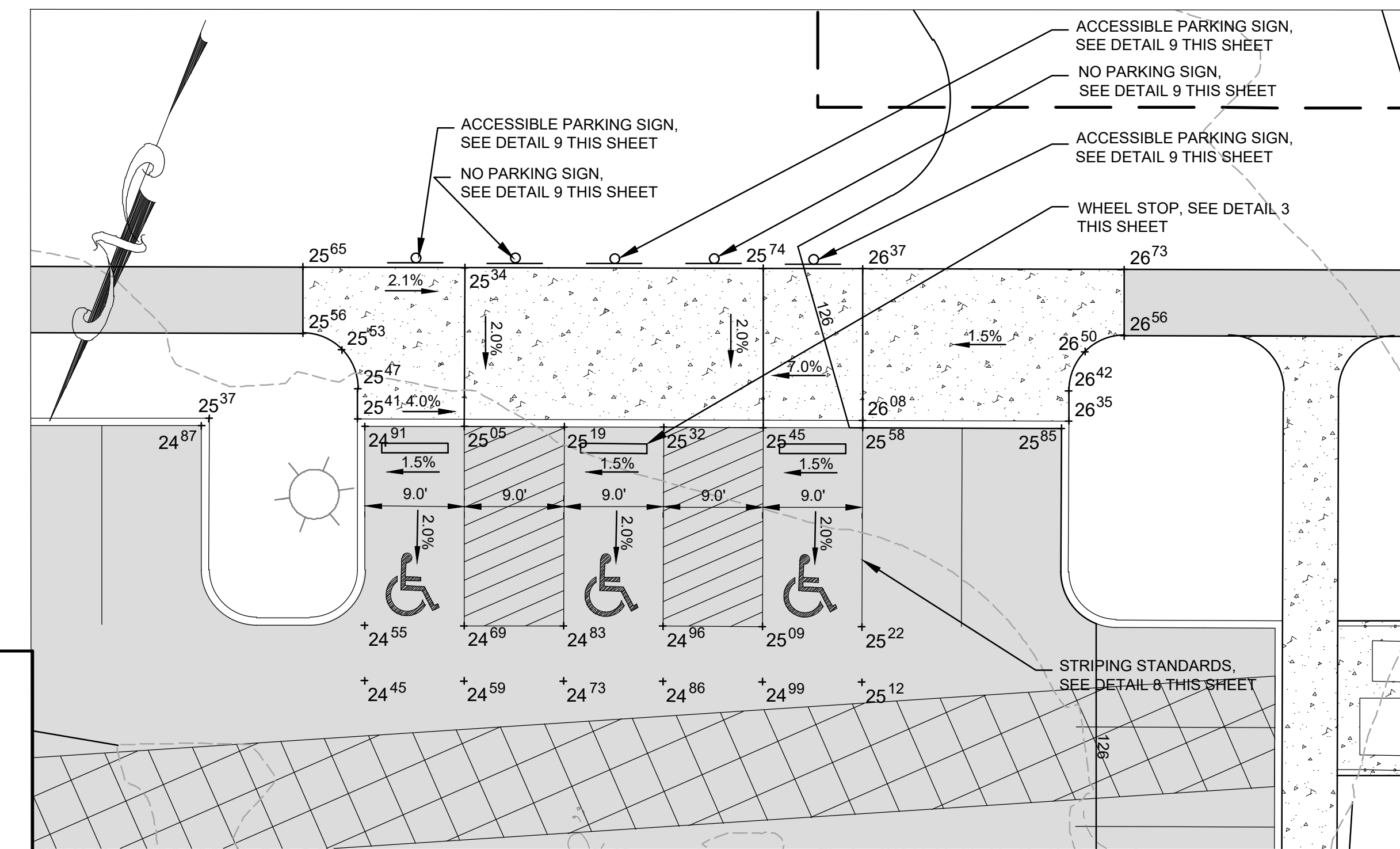
Durable acrylic paint, hand finished details

Custom colors and logos available

Dimensions: 32" H x 12" D

DOG-ON-IT-PARKS  
4818 Evergreen Way  
Snohomish, WA 98296  
P: 877-368-3647  
www.dog-on-it-parks.com  
Refer to installation manual for more detailed specifications.  
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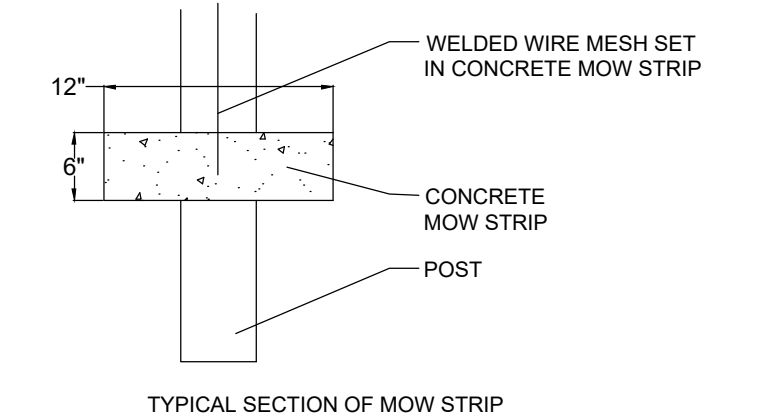
**11 DOG PARK PLAY FIRE HYDRANT**  
43 NOT TO SCALE



**12 ACCESSIBLE PARKING SPACES**  
43 1"=10'

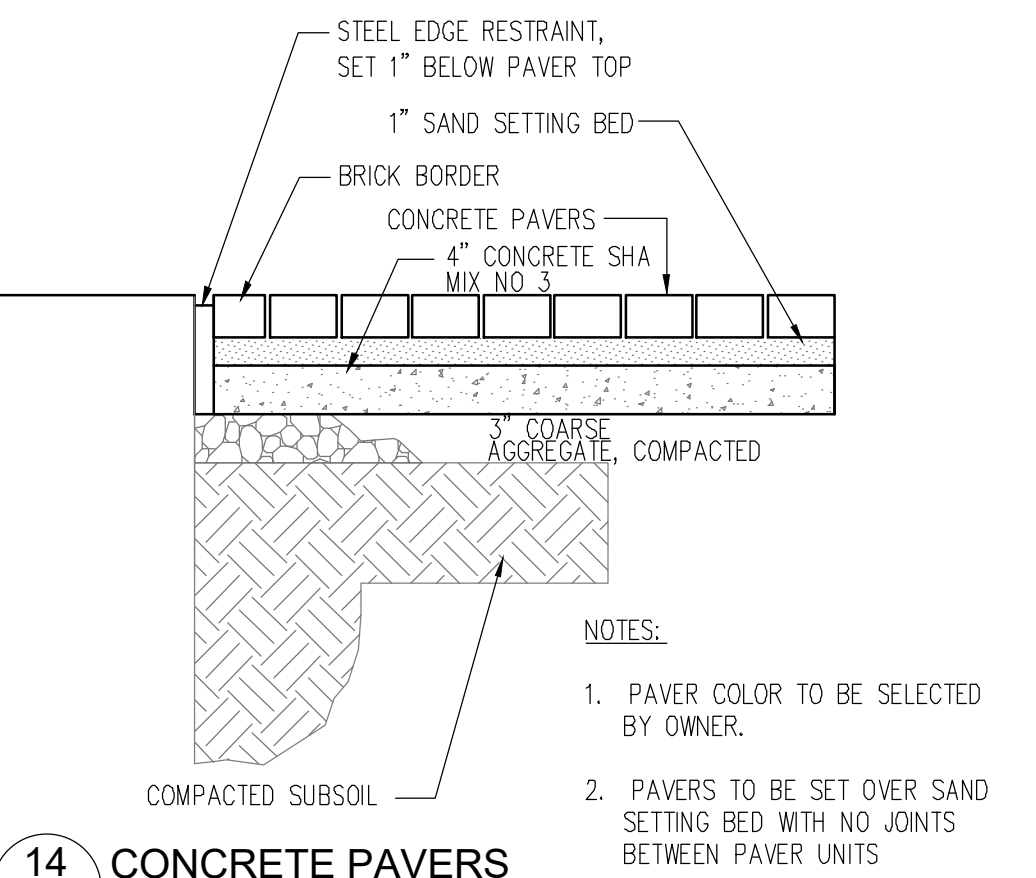
**ACCESSIBILITY NOTES:**

1. ACCESSIBLE ROUTE SHALL BE PROVIDED BETWEEN HANDICAPPED PARKING OR PUBLIC RIGHT OF WAYS TO THE MAIN BUILDING ENTRANCE IN ACCORDANCE WITH CURRENT ADA AND LOCAL STANDARDS. ALL HANDICAPPED RAMPS SHALL BE CONSTRUCTED ACCORDING TO CURRENT ADA AND LOCAL STANDARDS. EXCEPT AS SUPERSEDED IN CURRENT ADA AND LOCAL STANDARDS THE FOLLOWING SHALL APPLY:
  - A) MAXIMUM SIDEWALK CROSS SLOPES SHALL BE 2%.
  - B) A MINIMUM 5' X 5' LANDING AREA WITH A MAXIMUM SLOPE IN ANY DIRECTION OF 2% SHALL BE PROVIDED AT ALL CHANGES IN DIRECTION, TOPS AND BOTTOMS OF RAMPS, AND BUILDING EGRESS POINTS.
  - C) ALL HANDICAPPED PARKING SHALL BE SLOPED NO GREATER THAN 2% IN ANY DIRECTION, INCLUDING A 5' WIDE AREA BEHIND THE PARKING SPACES.
  - D) AN ACCESS ROUTE FROM THE PARKING SPACES TO THE MAIN BUILDING ENTRANCE SHALL BE PROVIDED. ALL SLOPES ALONG THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:20 UNLESS THEY FALL UNDER CONDITION B) ABOVE. SLOPES IN EXCESS OF 1:20 EXCEPT FOR CURB RAMPS, REQUIRE A HANDRAIL MEETING ADA REQUIREMENTS.



**13 CONCRETE MOW STRIP**  
43 NOT TO SCALE

SITE FURNITURE SCHEDULE				
SYMBOL	QTY.	DESCRIPTION	MANUFACTURER	REMARKS
[Symbol]	10	BENCH	VICTOR STANLEY	WWW.VICTORSTANLEY.COM
[Symbol]	3	BLEACHERS		
[Symbol]	3	DOG PARK PLAY FIRE HYDRANT	DOG-ON-IT PARKS	https://www.dog-on-it-parks.com/fire-hydrant.html



**14 CONCRETE PAVERS**  
43 NOT TO SCALE

**VICTOR STANLEY**

Create a lifetime memory!

**MODEL 8**

DETAILS

1. PAVER COLOR TO BE SELECTED BY OWNER.

2. PAVERS TO BE SET OVER SAND SETTING BED WITH NO JOINTS BETWEEN PAVER UNITS.

**15 BENCH DETAIL**  
43 NOT TO SCALE

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774, EXPIRATION DATE 11/10/2023

REVISIONS

#	DESCRIPTION	APPROVED BY	DATE

**Pennoni**

PENNONI ASSOCIATES INC.  
8890 McGaw Road, Suite 100  
Columbia, MD 21045  
T 410.997.8900 F 410.997.9282

APPROVED DATE

CHIEF ENGINEER

APPROVAL DATE

ASSISTANT CHIEF ENGINEER

APPROVED DATE

PROJECT MANAGER

APPROVED DATE

CHIEF, RIGHT OF WAY SERVICES

SCALE: 1" = 40'

DRAWN BY: JSN/SVH

CHECKED BY: PJS/JAR

SHEET 43 of 51

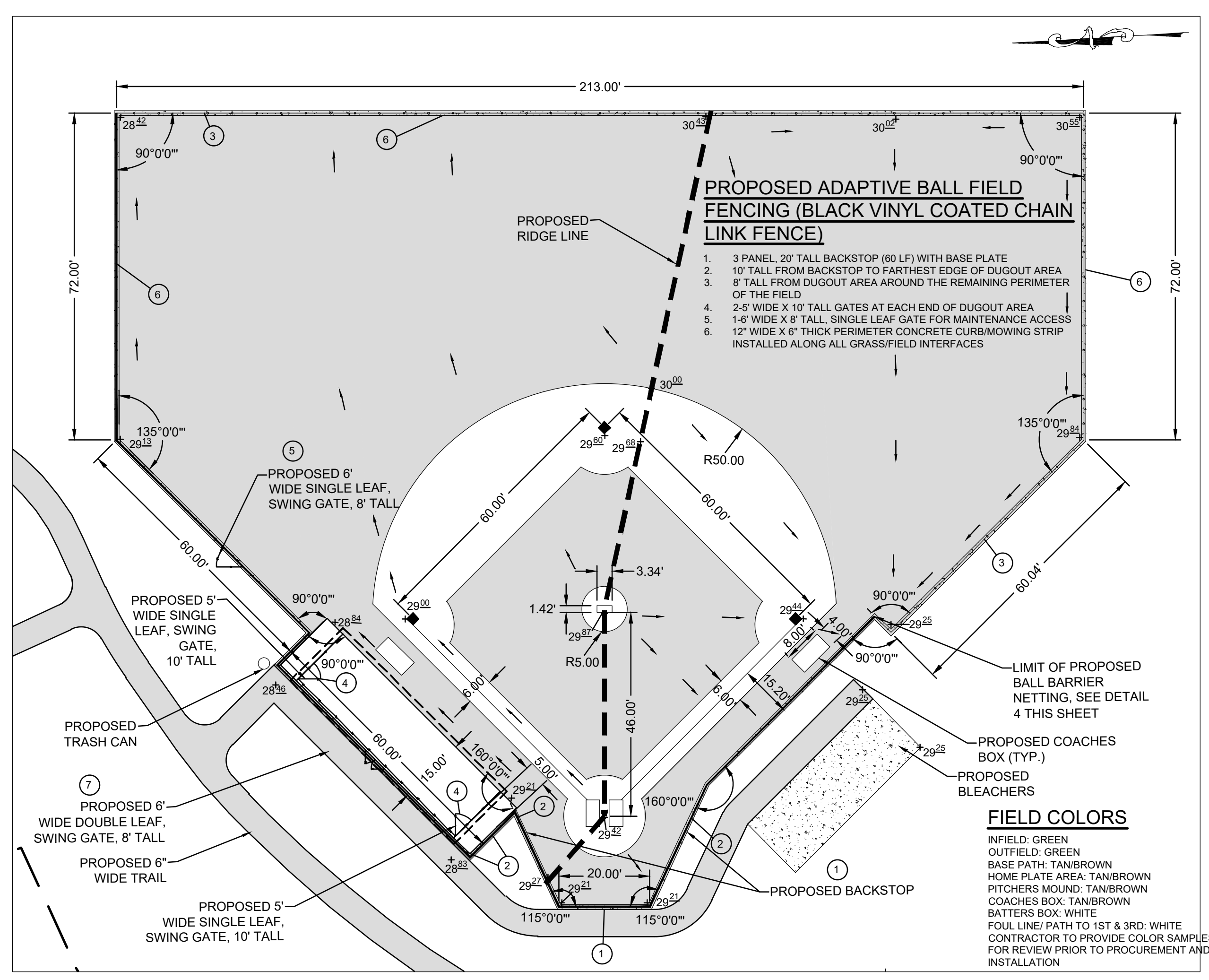
PROJECT #: 579000

PROPOSAL #: 579001

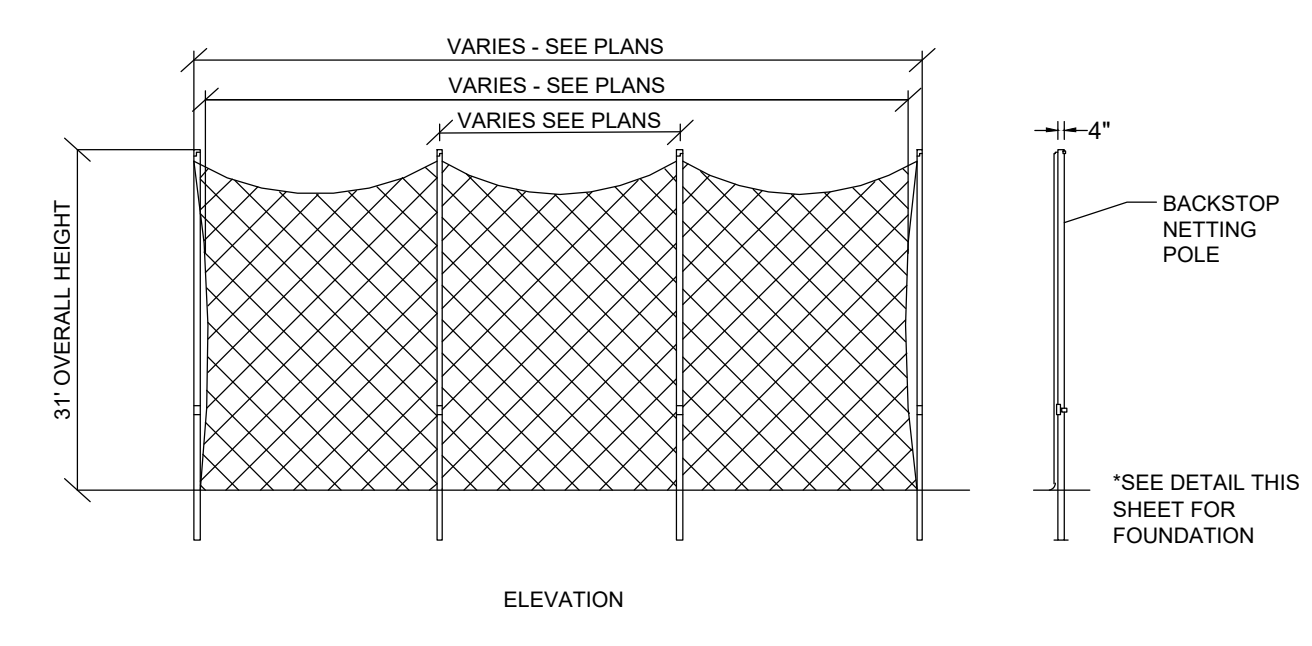
ANNE ARUNDEL COUNTY  
DEPARTMENT OF PUBLIC WORKS  
MAY 31, 2023

SITE DETAILS

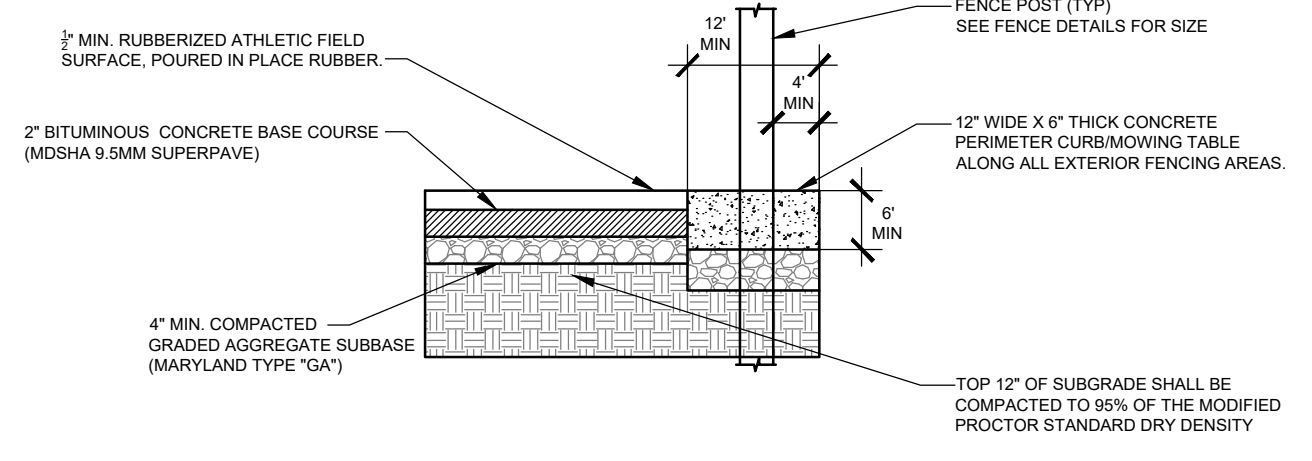
BROOKLYN HEIGHTS COMMUNITY CENTER PARK  
DESIGN DEVELOPMENT PLANS  
TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD



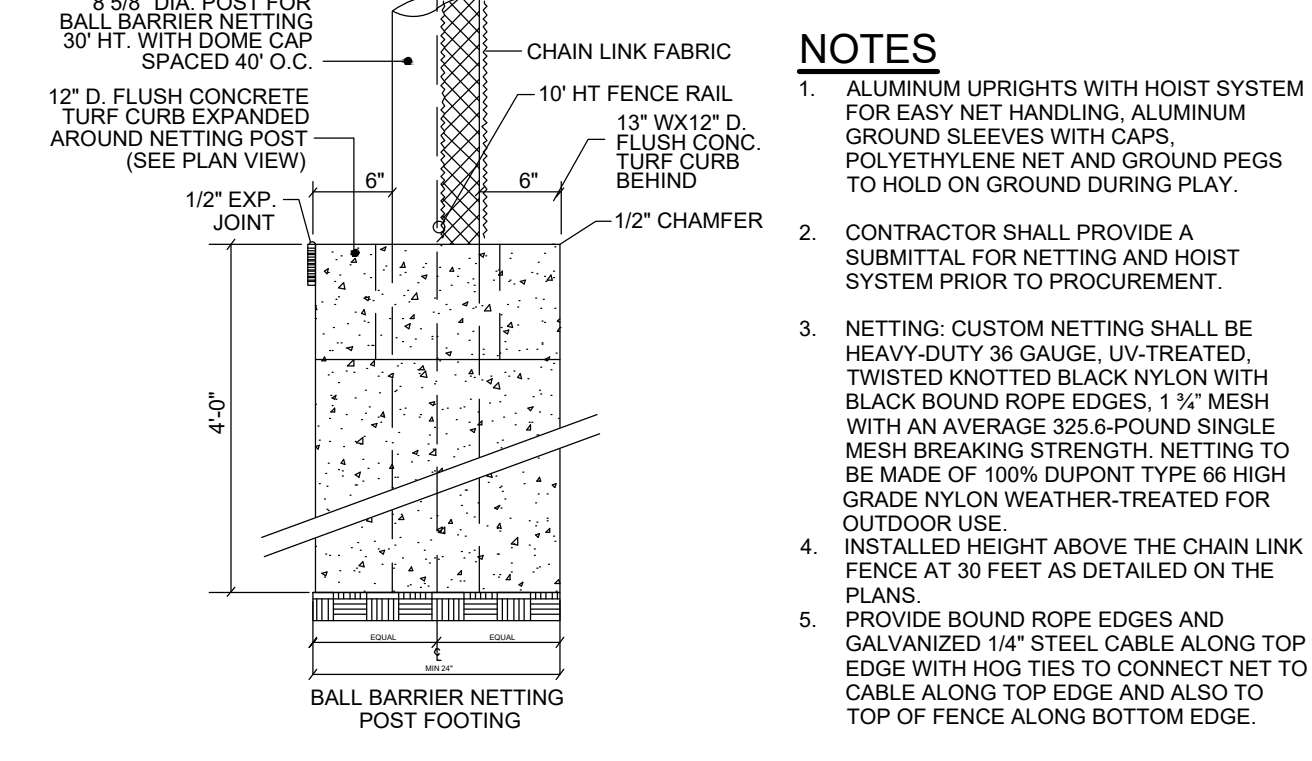
**1 ADAPTIVE BALL FIELD DETAIL PLAN**  
44 NOT TO SCALE



**2 BALL BARRIER NETTING**  
44 NOT TO SCALE



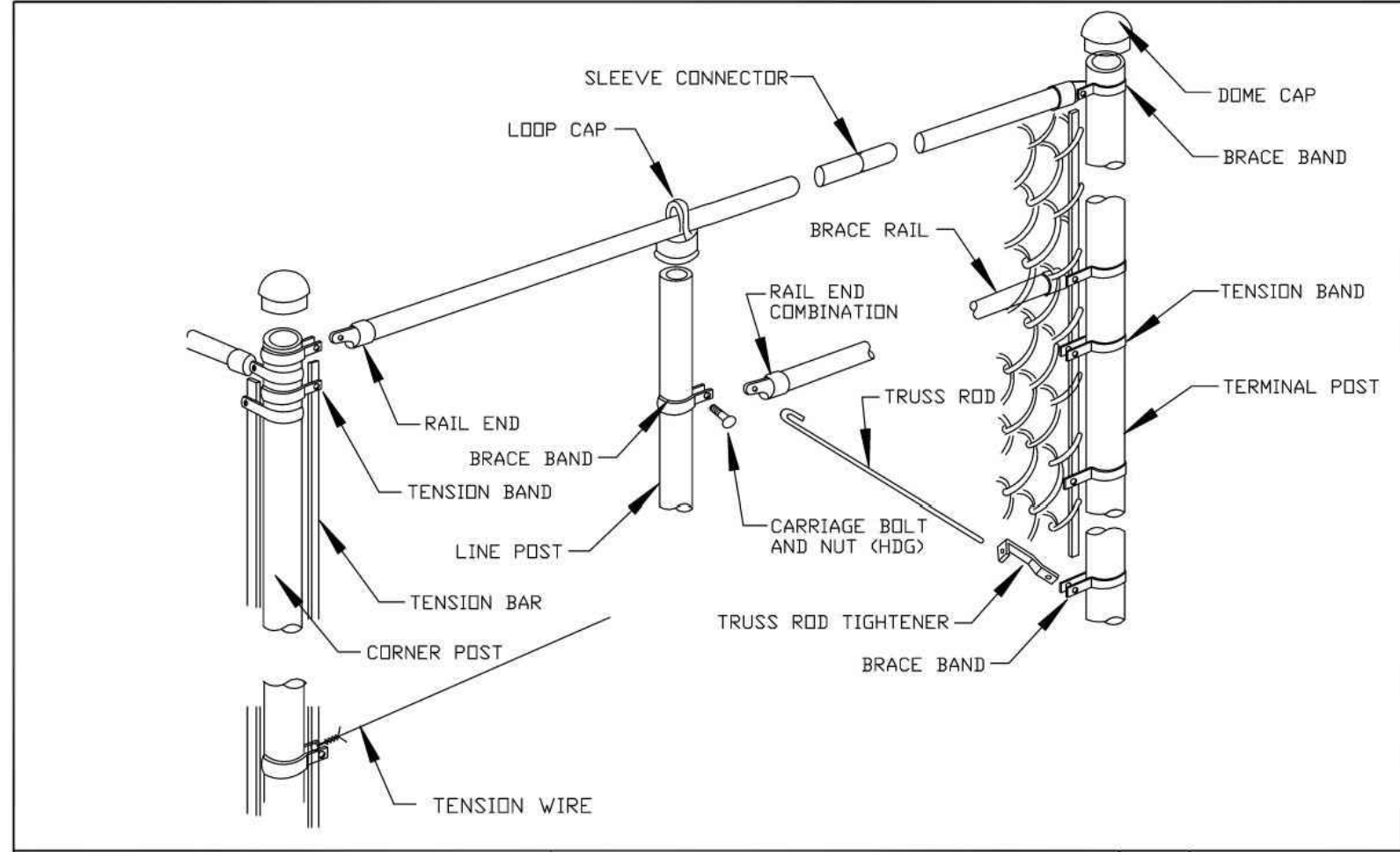
**3 ADAPTIVE BALLFIELD SECTION**  
44 NOT TO SCALE



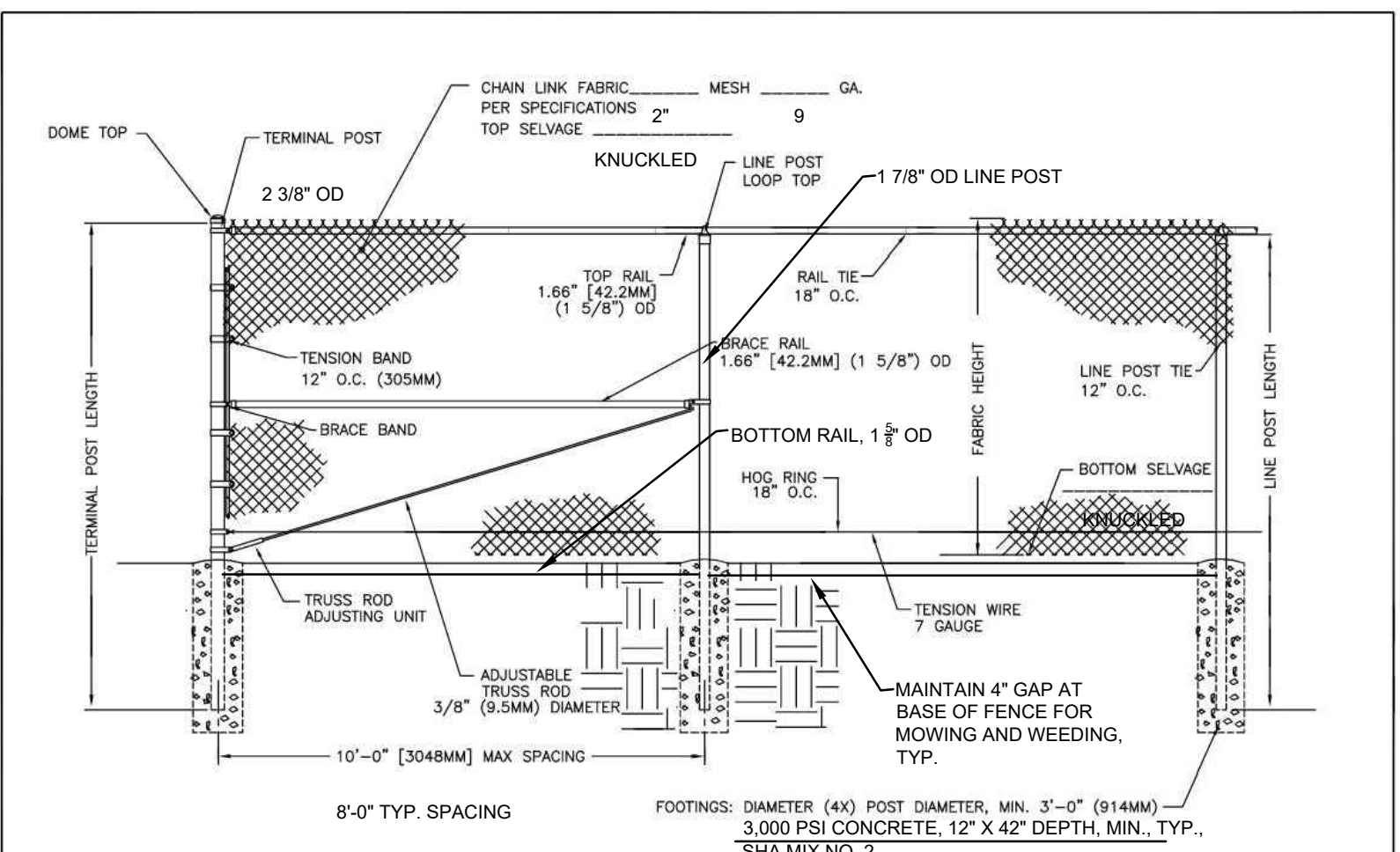
**NOTES**

- ALUMINUM UPRIGHTS WITH HOIST SYSTEM FOR EASY NET HANDLING. ALUMINUM GROUND SLEEVES WITH CAPS. POLYETHYLENE NET AND GROUND PEGS TO HOLD ON GROUND DURING PLAY.
- CONTRACTOR SHALL PROVIDE A SUBMITTAL FOR NETTING AND HOIST SYSTEM PRIOR TO PROCUREMENT.
- NETTING: CUSTOM NETTING SHALL BE HEAVY-DUTY 30 GAUGE, UV-TREATED, TWISTED KNOTTED BLACK NYLON WITH BLACK BOUND ROPE EDGES, 1 1/2\"/>
- INSTALLED HEIGHT ABOVE THE CHAIN LINK FENCE AT 30 FEET AS DETAILED ON THE PLANS.
- PROVIDE BOUND ROPE EDGES AND GALVANIZED 1/4\"/>

**6 COMMUNITY GARDEN PLANTER BOX**  
44 NOT TO SCALE



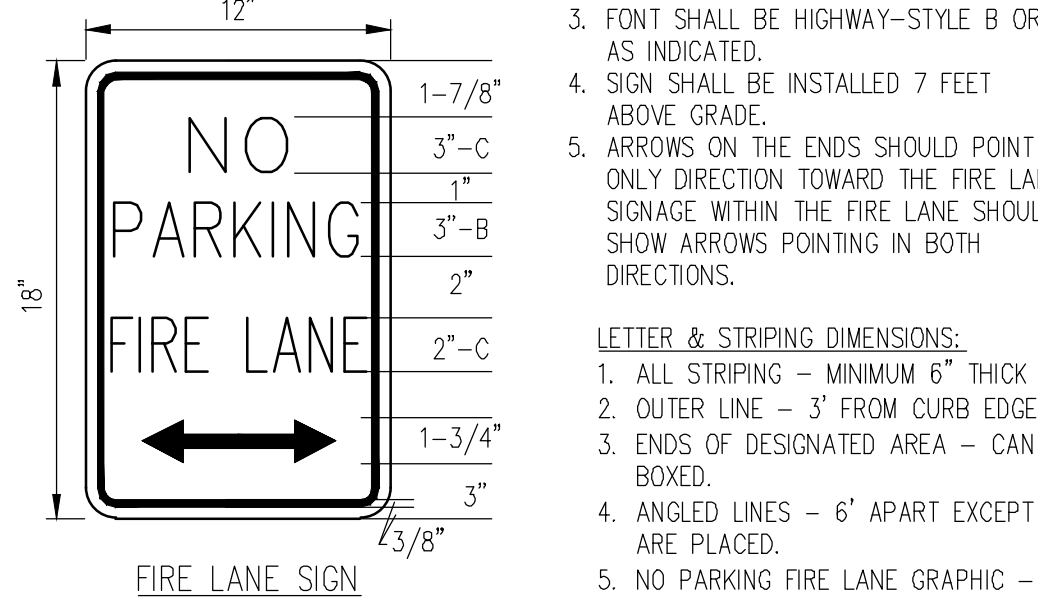
**TYPICAL FENCE SECTION**  
CLFMI DETAILS  
SCALE: 1/4\"/>



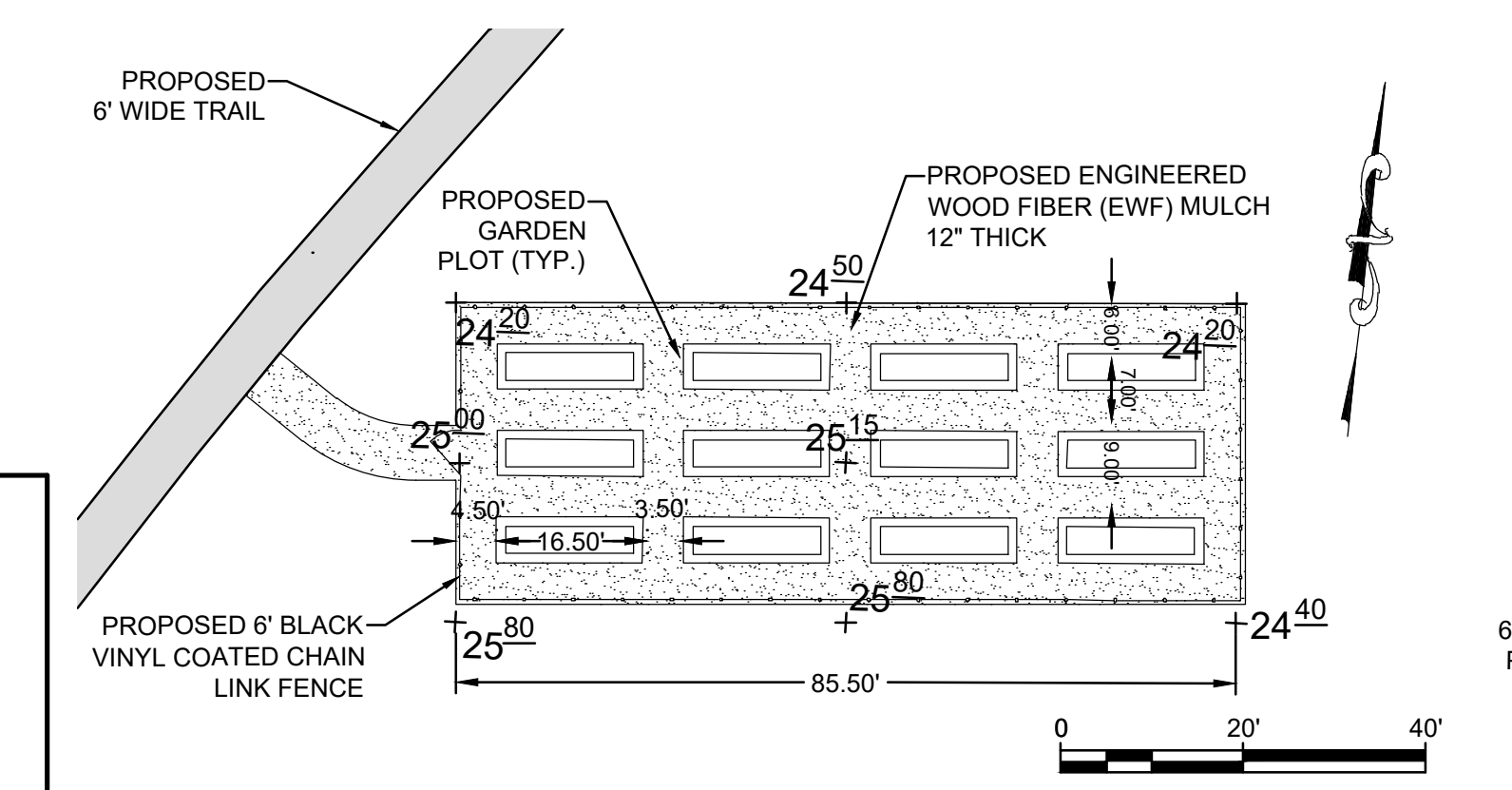
**TYPICAL FENCE SECTION**  
CLFMI CLT  
SCALE: 1:40

**FENCE INSTALLATION NOTES**

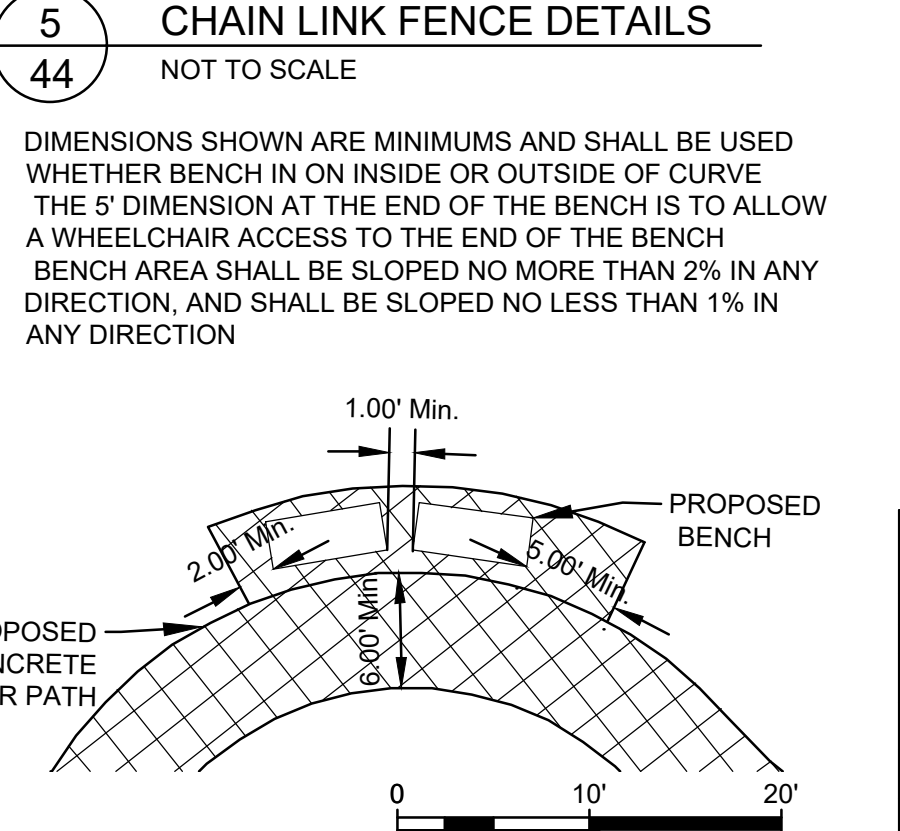
- FENCE SHALL BE BLACK VINYL COATED CHAIN LINK.
- FENCE SHALL BE 6' HIGH, EXCEPT FROM APPROXIMATELY.
- FENCE POSTS SHALL BE 8\"/>
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR FENCE INSTALLATION AND FENCE PRODUCTS PRIOR TO CONSTRUCTION.
- FENCE FABRIC SHALL BE INSTALLED LEAVING THE 'SHARPS' AT THE BOTTOM.
- CONCRETE FOR FOOTINGS SHALL BE SHA MIX NO. 2.



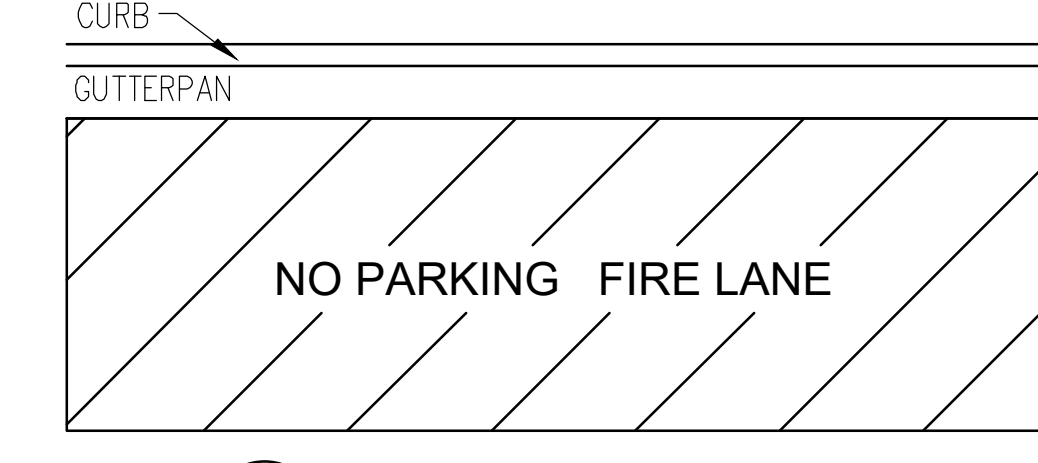
**10 FIRE LANE DETAILS**  
44 NOT TO SCALE



**8 COMMUNITY GARDEN DETAIL PLAN**  
44 1\"/>

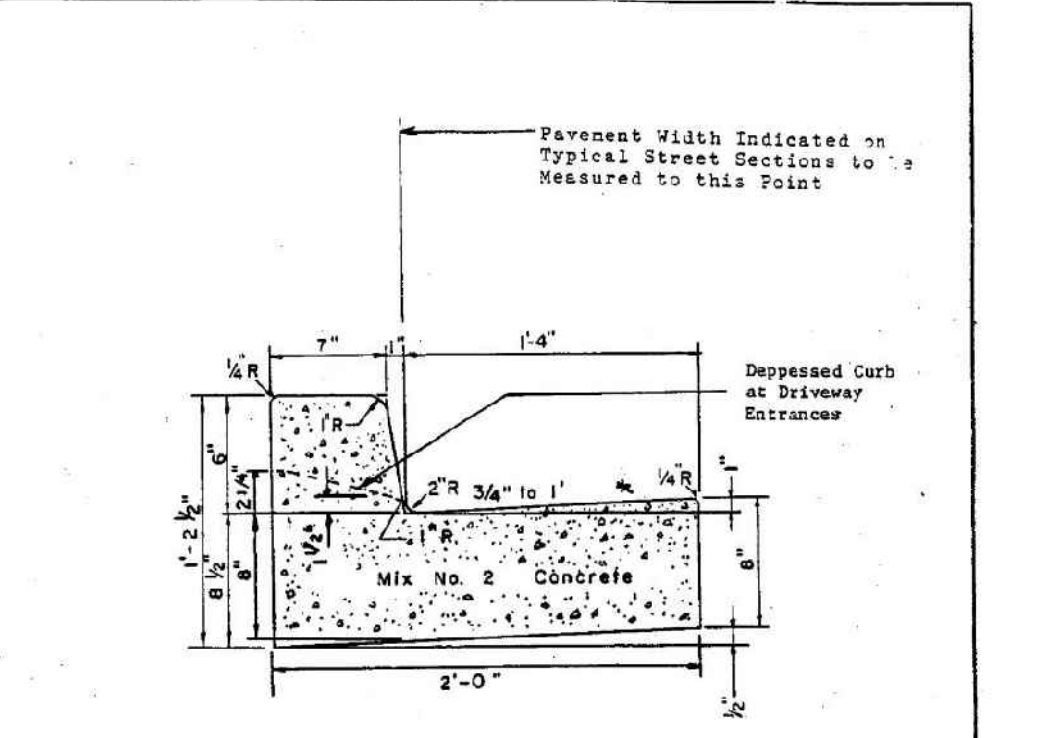


**9 BENCH PAD DETAIL PLAN**  
44 1\"/>



**4 ADAPTIVE BALLFIELD FENCE AND BALL BARRIER ELEVATION**  
44 SCALE: 1\"/>

- NOTES:**
- SIGN MATERIAL AND LETTERING SHALL BE ENGINEERING GRADE/REFLECTIVE.
  - GRAPHICS AND BORDER SHALL BE RED ON WHITE BACKGROUND.
  - FONT SHALL BE HIGHWAY-STYLE B OR C AS INDICATED.
  - SIGN SHALL BE INSTALLED 7 FEET ABOVE GRADE.
  - ARROWS ON THE ENDS SHOULD POINT IN ONLY DIRECTION TOWARD THE FIRE LANE. SIGNAGE WITHIN THE FIRE LANE SHOULD SHOW ARROWS POINTING IN BOTH DIRECTIONS.
- LETTER & STRIPING DIMENSIONS:**
- ALL STRIPING - MINIMUM 6\"/>
  - OUTER LINE - 3\"/>
  - ENDS OF DESIGNATED AREA - CAN BE CURVED/ROUNDED OR BOXED.
  - ANGLED LINES - 6\"/>
  - NO PARKING FIRE LANE GRAPHIC - MINIMUM 8\"/>
  - NO PARKING FIRE LANE SIGNS - PER STANDARD DETAIL - AT EACH END OF FIRE LANE WITH ADDITIONAL SIGNS AS NEEDED AT 100 FT. SPACING.



**7 STANDARD COMBINATION CURB & GUTTER**  
44 NOT TO SCALE

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774. EXPIRATION DATE 11/10/2023.

#	REVISIONS DESCRIPTION	APPROVED BY	DATE

**Pennoni**  
PENNONI ASSOCIATES INC.  
8890 McGaw Road, Suite 100  
Columbia, MD 21045  
T 410.997.8900 F 410.997.9282

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
CHIEF ENGINEER

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
PROJECT MANAGER

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
ASSISTANT CHIEF ENGINEER

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_  
CHIEF, RIGHT OF WAY SERVICES

ANNIE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS

ANNIE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS

STANDARD ROADWAY & SITE IMPROVEMENT DETAILS  
STANDARD COMBINATION CURB & GUTTER

Published: 0101 Revised: \_\_\_\_\_

NOTE: CURB SHALL USE SHA MIX NO. 2 CONCRETE.

**7 STANDARD COMBINATION CURB & GUTTER**  
44 NOT TO SCALE

Scale: 1" = 4'

DRAWN BY: JSN/SVH  
CHECKED BY: PJS/JAR  
SHEET 44 of 51  
PROJECT #: 579000  
PROPOSAL #: 579001

SITE DETAILS  
**BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS**  
TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNIE ARUNDEL COUNTY, MD

MAY 31, 2023

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### Dual Pedestal Shade Bench with Perforated Canopy



#### 6' Bench with Shade Canopy

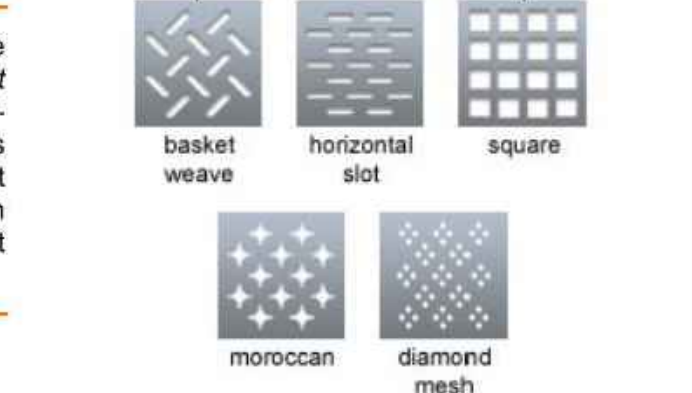
Beautiful shade bench with an arched canopy decorated with small square perforations. Mounts into the ground for a permanent shade structure paired perfectly with a bench in one simple installation. The bench is perforated in your choice of patterns shown below.

#### Specifications

- 19" Seat Height.
- 4" x 4" Square Dual Pedestals.
- 13 Gauge Perforated Steel.

Dimensions: 85-1/2"L x 78"W x 96"H

#### Pattern Options



#### Color Options



#### Finish Options

The state of the art finishing process used on the bench combines the application of an *Electrocoat Zinc Rich Primer* with a durable polyester powder-coat top layer to ensure every crevice and joint is completely sealed, providing full protection against corrosion and weathering. Benches are finished in either a **gloss** or **textured** polyester powder-coat finish.

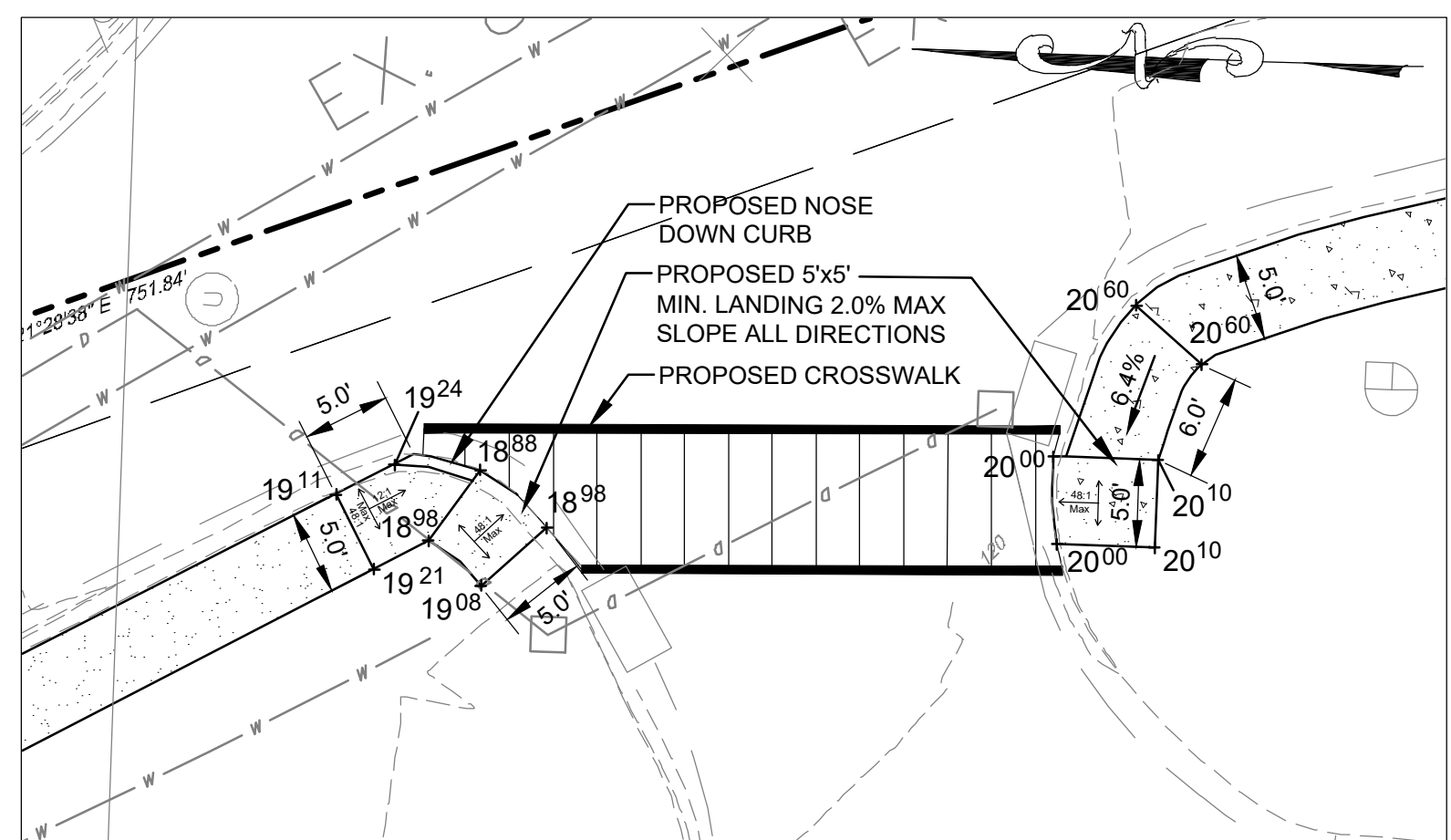
#### Quick Buying Guide

Gloss vs Textured

#### Matching Products



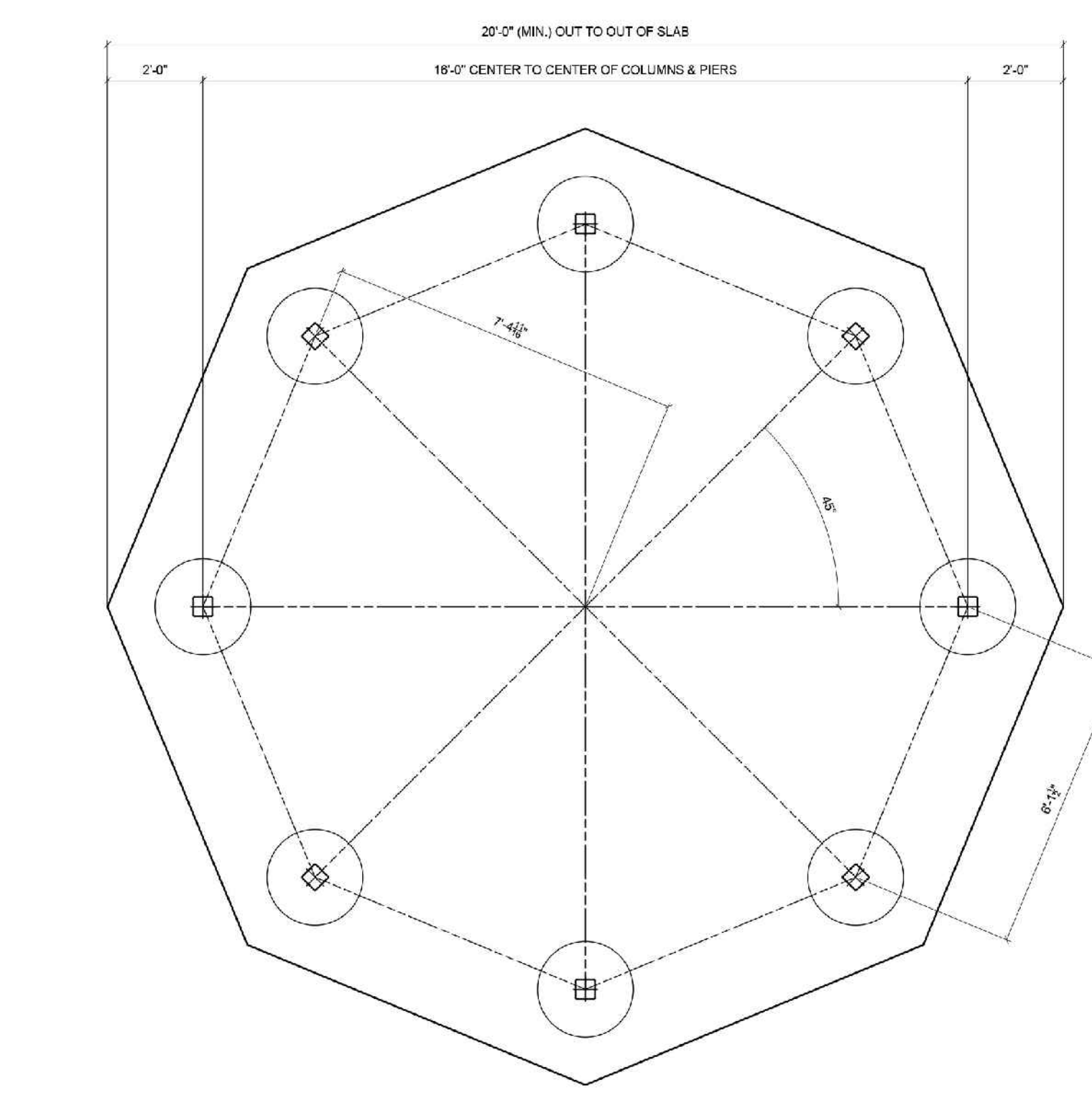
1 SHADE BENCH  
45 NOT TO SCALE



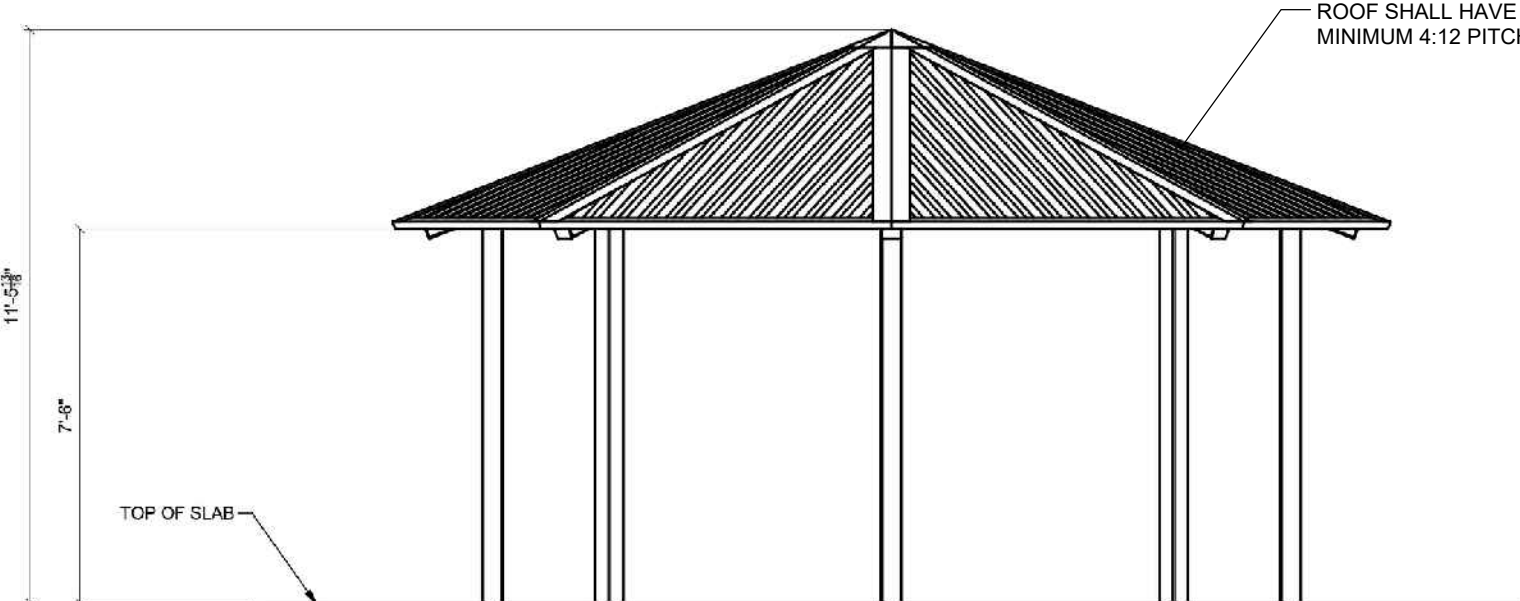
**ACCESSIBILITY NOTES:**  
 1. ACCESSIBLE ROUTE SHALL BE PROVIDED BETWEEN HANDICAPPED PARKING OR PUBLIC RIGHT OF WAYS TO THE MAIN BUILDING ENTRANCE IN ACCORDANCE WITH CURRENT ADA AND LOCAL STANDARDS. ALL HANDICAPPED RAMPS SHALL BE CONSTRUCTED ACCORDING TO CURRENT ADA AND LOCAL STANDARDS, EXCEPT AS SUPERSEDED IN CURRENT ADA AND LOCAL STANDARDS THE FOLLOWING SHALL APPLY:  
 A) MAXIMUM SIDEWALK CROSS SLOPES SHALL BE 2%.  
 B) A MINIMUM 5' x 5' LANDING AREA WITH A MAXIMUM SLOPE IN ANY DIRECTION OF 2% SHALL BE PROVIDED AT ALL CHANGES IN DIRECTION, TOPS AND BOTTOMS OF RAMPS, AND BUILDING EGRESS POINTS.  
 C) ALL HANDICAPPED PARKING SHALL BE SLOPED NO GREATER THAN 2% IN ANY DIRECTION, INCLUDING A 5' WIDE AREA BEHIND THE PARKING SPACES.  
 D) AN ACCESS ROUTE FROM THE PARKING SPACE(S) TO THE MAIN BUILDING ENTRANCE SHALL BE PROVIDED. ALL SLOPES ALONG THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:20 UNLESS THEY FALL UNDER CONDITION B) ABOVE. SLOPES IN EXCESS OF 1:20 EXCEPT FOR CURB RAMPS, REQUIRE A HANDRAIL MEETING ADA REQUIREMENTS.

2 ADA RAMPS AT LIBRARY ENTRANCE  
1"=10'

**NOTE:**  
 THE PREFABRICATED STRUCTURES ON THIS SHEET SHALL INCLUDE STAMPED, ENGINEERED DRAWINGS WITH THEIR SUBMITTAL AND THAT THEY WILL BE RESPONSIBLE FOR THE BUILDING PERMITS FOR THESE ITEMS.



#### FOUNDATION PLAN



#### FRONT ELEVATION

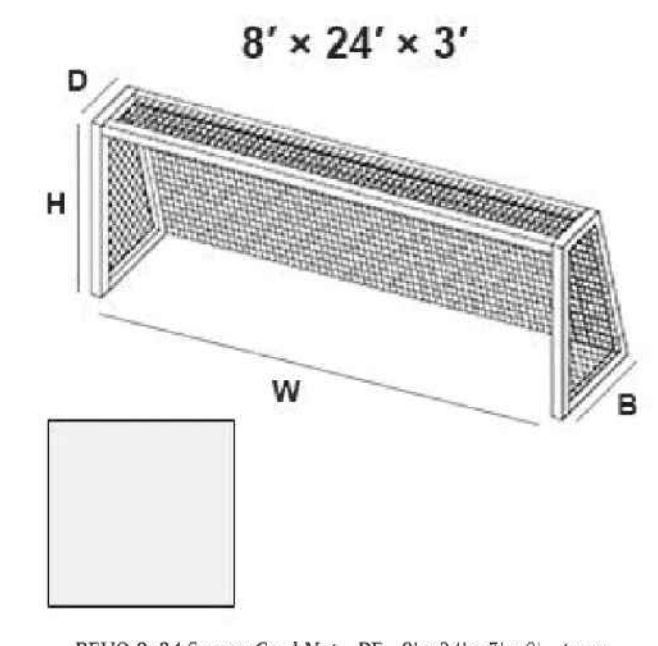
1 GAZEBO SHADE STRUCTURE  
45 NOT TO SCALE

#### AUXILIARY VIEW



- NOTES**
1. PROVIDE A 5" THICK SLAB WITH TURNED DOWN EDGES. SLAB EDGES SHALL ALIGN WITH DRIP EDGE OF ROOF. SEE DETAILS FOR TURNED DOWN SLAB ON SHEET S1.
  2. PROVIDE FOUNDATIONS FOR POSTS PER MANUFACTURER'S RECOMMENDATIONS.
  3. SUBMIT SELECTION AND SHOP DRAWING FOR STRUCTURES FOR REVIEW PRIOR TO PROCUREMENT.
  4. INSTALL STRUCTURES PER MANUFACTURER'S RECOMMENDATIONS.
  5. COLORS TO BE SELECTED BY OWNER. PROVIDE SELECTION OPTIONS PRIOR TO PROCUREMENT.
  6. USE SHA MIX NO 3 FOR ALL CONCRETE.
  7. PERMITS FOR STRUCTURES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

### PEVO



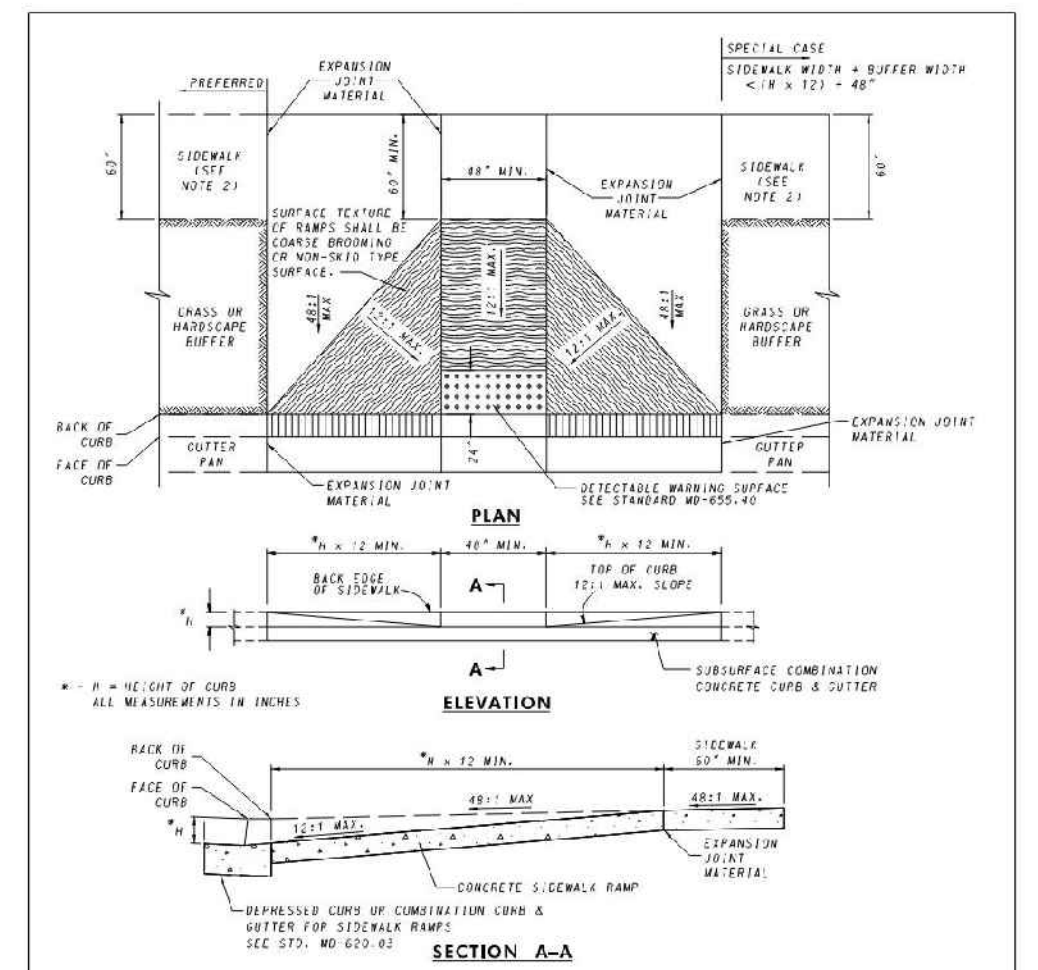
PEVO 8x24 Soccer Goal Net - PE - 8' x 24' x 3' - 4mm

This product is **Made in the USA**.  
 The Pevo Park Series Goal features an all aluminum, powder coated white, 3" round upright, crossbar, ground bar, and 1-3/8" round aluminum backstay. The net is attached in the built-in channel using MP Clips. The finished, rounded bottom means this goal can easily be maneuvered around all surfaces without damaging the grass or turf and ensuring safety of the users. The Park Series Goal meets ASTM and NCAA/NFSA standards.  
 This goal comes in five pieces; two sides, crossbar, ground bar, kit box, and can easily be assembled in 30 minutes.

- Features:**
- All Aluminum Construction
  - Lightweight 3" Round Tubing with Built-in Channel Around the Entire Goal that comes in a Powder Coated White Finish
  - High Strength, Durable, Aerospace Grade Aluminum Corner Castings
  - Designed and Tested to meet ASTM Standard F2873-08 and NFSA/NFSA Rules
  - 5 Year Limited Warranty

Model: SGM-8x24P  
 Includes: 8x24 Net, PEVO MP Clips, Ground Anchors  
 Weight: 187.5 lbs  
 Height: 8'  
 Width: 24'  
 Depth: 3'  
 Base: 8'  
 Finish: Powder Coated

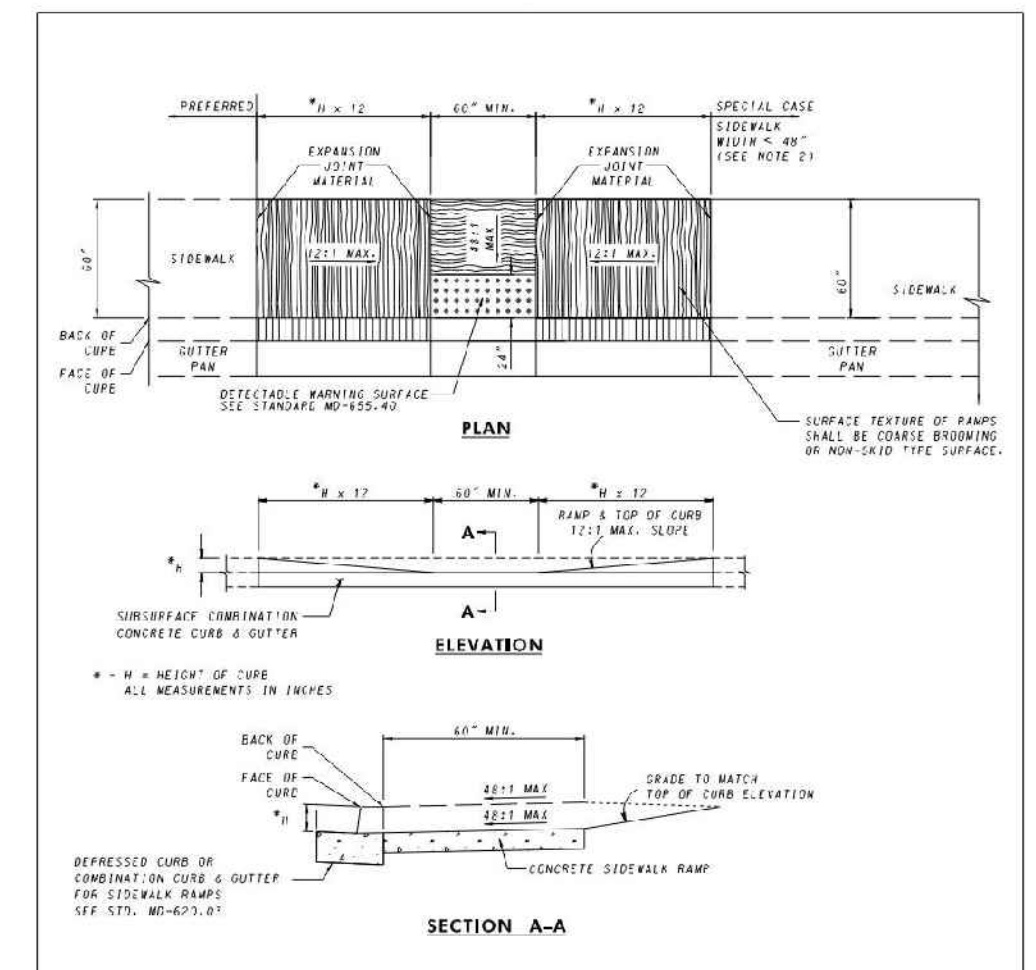
4 SOCCER GOAL  
45 NOT TO SCALE



**NOTES**

1. TO BE USED ON ALL SIDEWALKS OR CURBS WITH SLOPES IN EXCESS OF 1:20. THIS STANDARD MAY BE MODIFIED TO SUIT A PARTICULAR LOCATION.
2. WHERE 5/8" SIDEWALK CURB IS NOT PROVIDED, A SECTION WALKER MUST BE PROVIDED.
3. ALL DIMENSIONS TO THE TOP OF CURB UNLESS OTHERWISE SPECIFIED. DIMENSIONS TO THE TOP OF CURB SHALL BE MINIMUM 48" UNLESS OTHERWISE SPECIFIED.
4. EXPANSION JOINT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH STD. MD-655.11.
5. EXPANSION JOINT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH STD. MD-655.11.
6. FRANCHISE PANELS TO FIT INTO EXISTING SIDEWALK MUST BE A MINIMUM 6" IN LENGTH.

DESIGNED BY	COURTNEY COOP PERNS	4020 & 4111	APPROVED	<i>[Signature]</i>
Maryland Department of Transportation		STATE HIGHWAY ADMINISTRATION		
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES		SIDEWALK RAMPS PERPENDICULAR		
STANDARD NO.		MD 655.11		



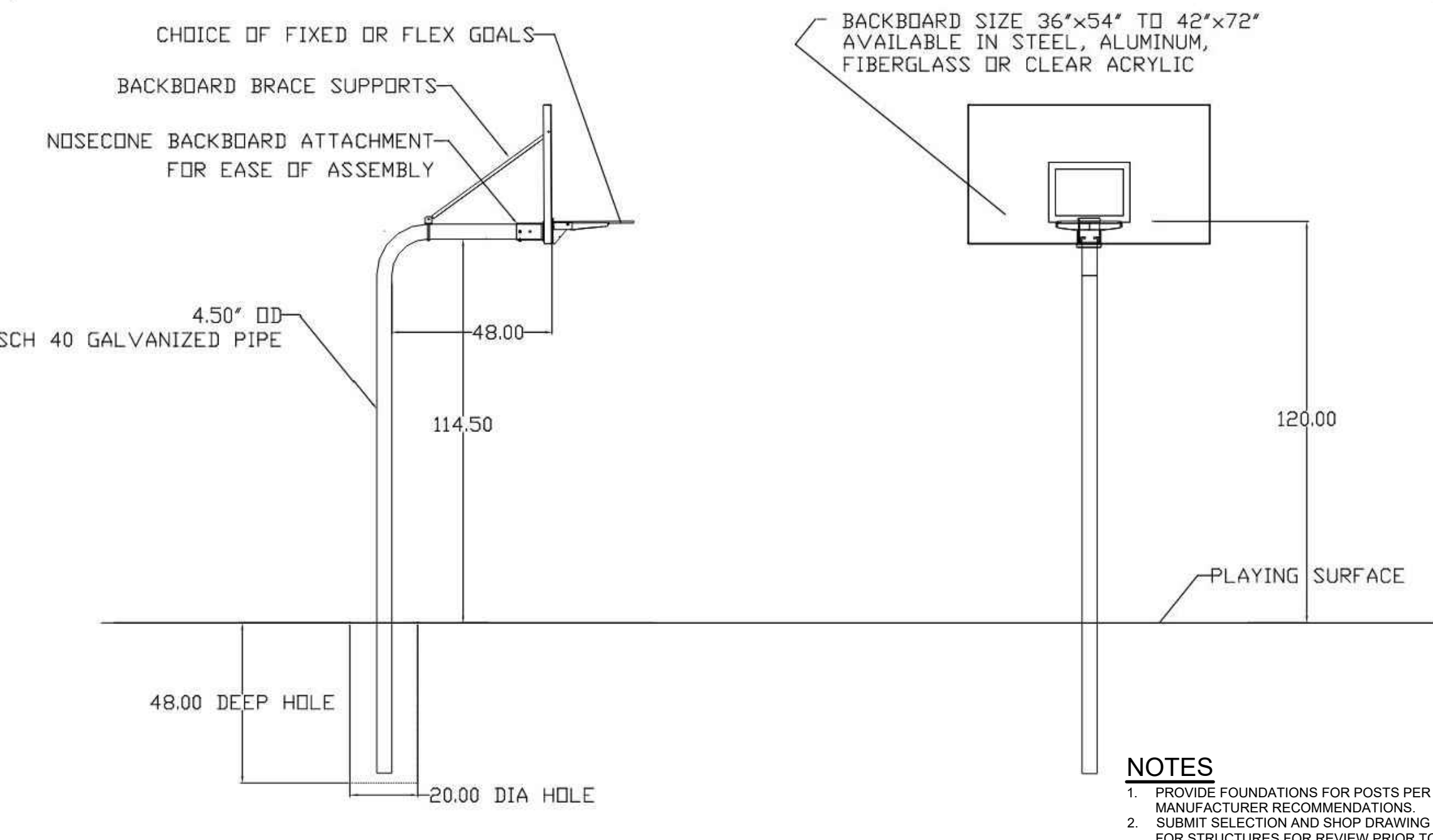
**NOTES**

1. TO BE USED WHERE SIDEWALK IS ADJACENT TO THE CURB. THIS STANDARD MAY BE MODIFIED TO SUIT A PARTICULAR LOCATION.
2. WHERE 5/8" SIDEWALK CURB IS NOT PROVIDED, A SECTION WALKER MUST BE PROVIDED.
3. ALL DIMENSIONS TO THE TOP OF CURB UNLESS OTHERWISE SPECIFIED. DIMENSIONS TO THE TOP OF CURB SHALL BE MINIMUM 48" UNLESS OTHERWISE SPECIFIED.
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DESIGNED BY	COURTNEY COOP PERNS	4020 & 4111	APPROVED	<i>[Signature]</i>
Maryland Department of Transportation		STATE HIGHWAY ADMINISTRATION		
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES		SIDEWALK RAMPS PARALLEL		
STANDARD NO.		MD 655.12		

FIRST TEAM SPORTS INC.  
 HUTCHINSON, KS 67501  
 1-800-649-3688  
 www.firstteaminc.com

RUFFNECK BASKETBALL GOAL  
 PRODUCT SUBMITTAL



3 BASKETBALL BACKBOARD  
45 NOT TO SCALE

- NOTES**
1. PROVIDE FOUNDATIONS FOR POSTS PER MANUFACTURER RECOMMENDATIONS.
  2. SUBMIT SELECTION AND SHOP DRAWING FOR STRUCTURES FOR REVIEW PRIOR TO PROCUREMENT.
  3. INSTALL STRUCTURES PER MANUFACTURER RECOMMENDATIONS.
  4. COLORS TO BE SELECTED BY OWNER. PROVIDE SELECTION OPTIONS PRIOR TO PROCUREMENT.
  5. USE SHA MIX NO 3 FOR ALL CONCRETE

PROFESSIONAL CERTIFICATION: I, JAMES A. RUFF, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 21774, EXPIRATION DATE 11/10/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



**Pennoni**  
 PENNONI ASSOCIATES INC.  
 8890 McGaw Road, Suite 100  
 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

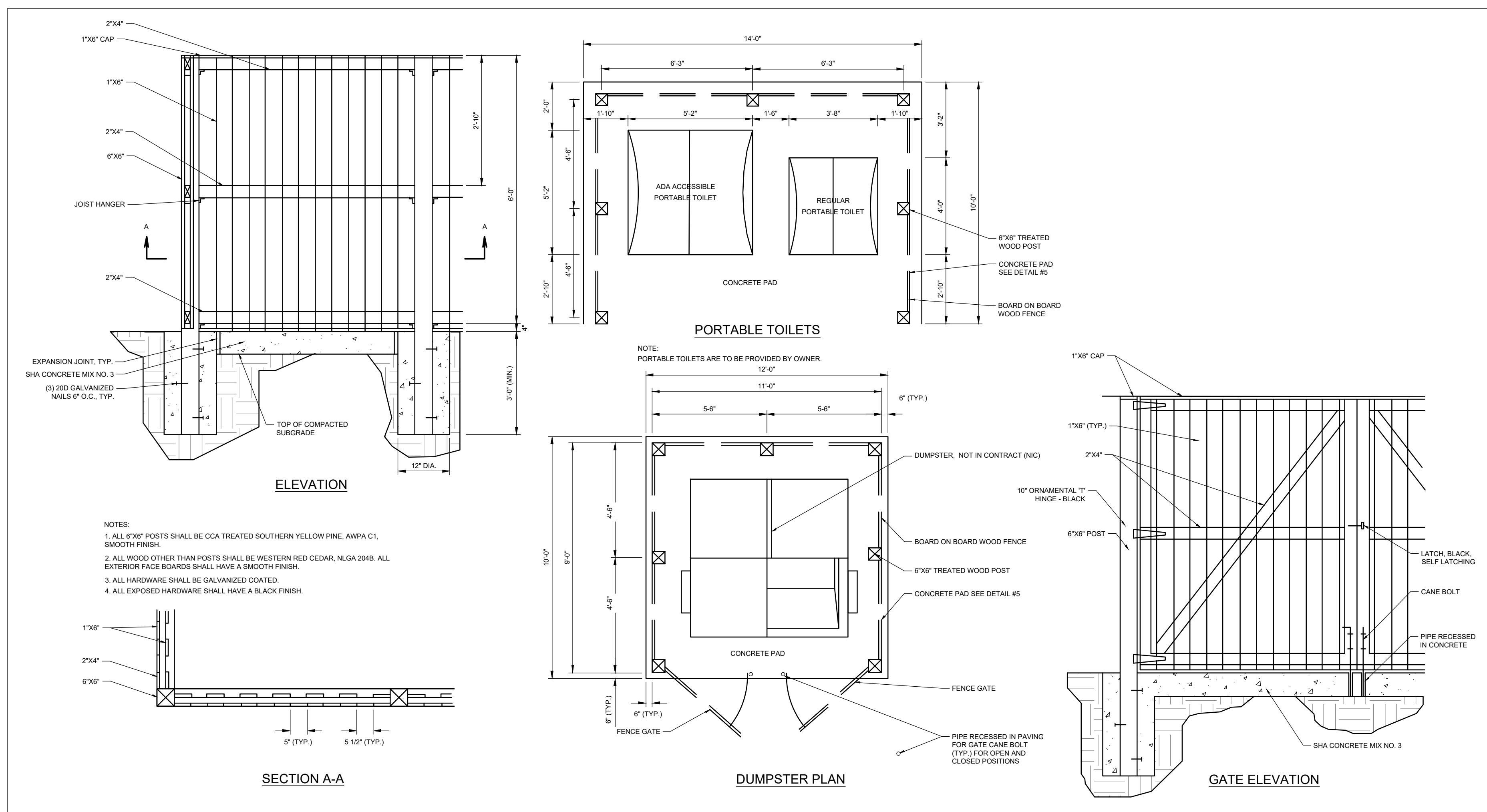
APPROVED DATE APPROVED DATE  
 CHIEF ENGINEER PROJECT MANAGER  
 APPROVAL DATE APPROVED DATE  
 ASSISTANT CHIEF ENGINEER CHIEF, RIGHT OF WAY SERVICES

APPROVED	DATE	APPROVED	DATE
CHIEF ENGINEER		PROJECT MANAGER	
APPROVAL	DATE	APPROVED	DATE
ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY SERVICES	

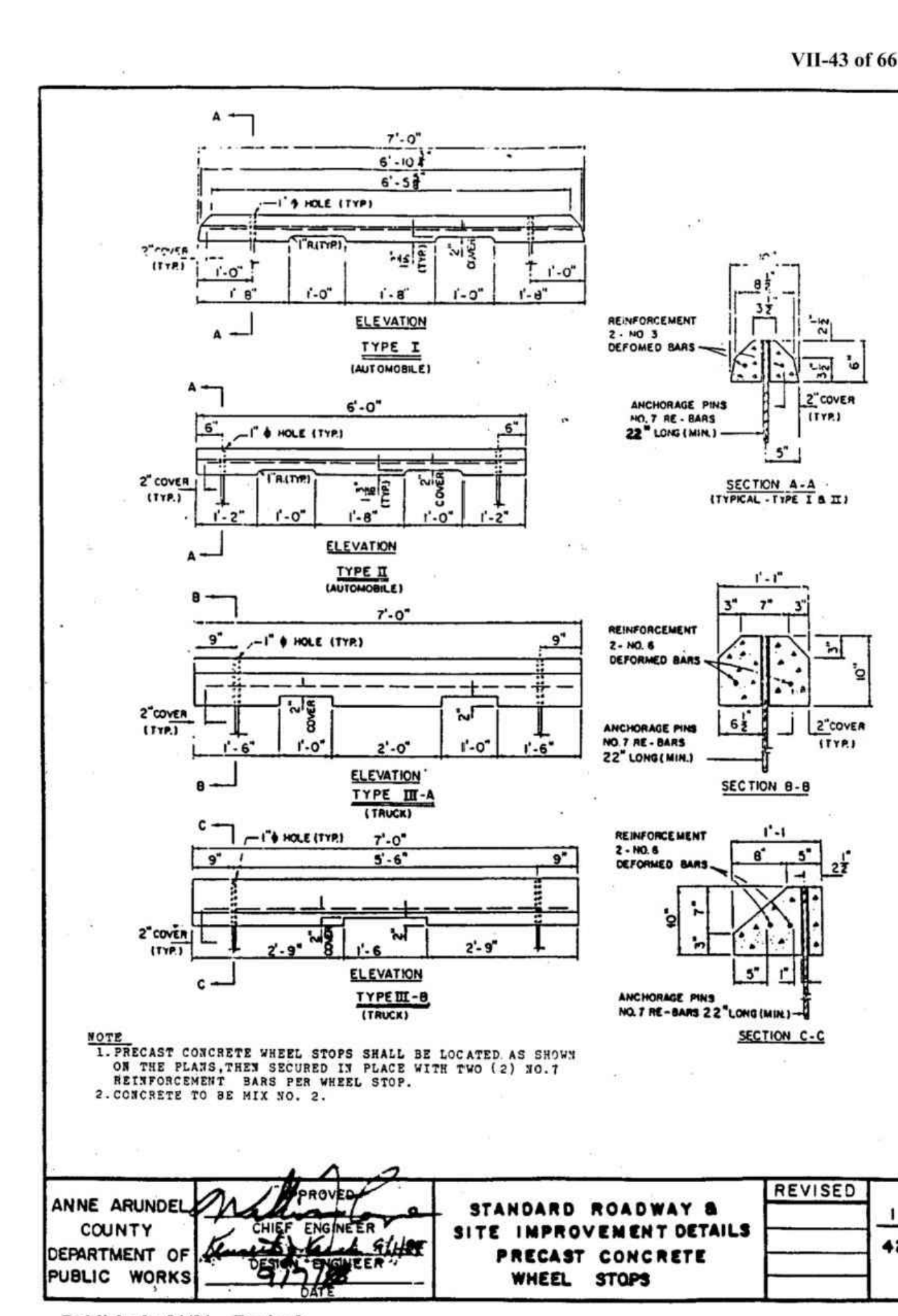
SCALE: 1" = 4'  
 DRAWN BY: JSN/SVH  
 CHECKED BY: PJS/JAR  
 SHEET 45 of 51  
 PROJECT # 579000  
 PROPOSAL # 579001

ANNE ARUNDEL COUNTY  
 DEPARTMENT OF PUBLIC WORKS  
 MAY 31, 2023  
 SITE DETAILS  
 BROOKLYN HEIGHTS  
 COMMUNITY CENTER PARK  
 DESIGN DEVELOPMENT PLANS  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD

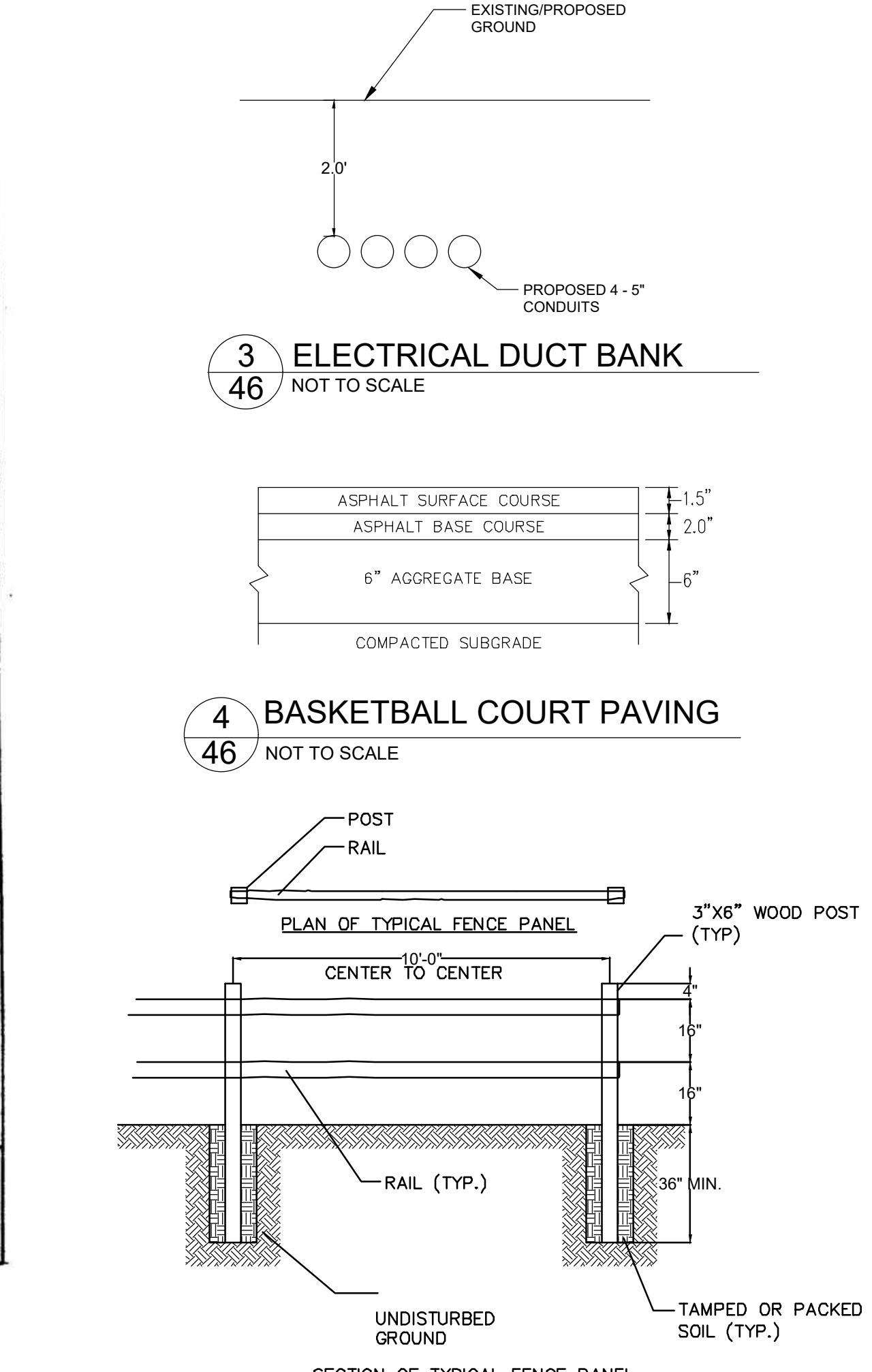
9PM 8/20/24/57 Dwg No.: DD45



**1 DUMPSTER PAD AND PORTABLE TOILETS ENCLOSURES**  
46 NOT TO SCALE



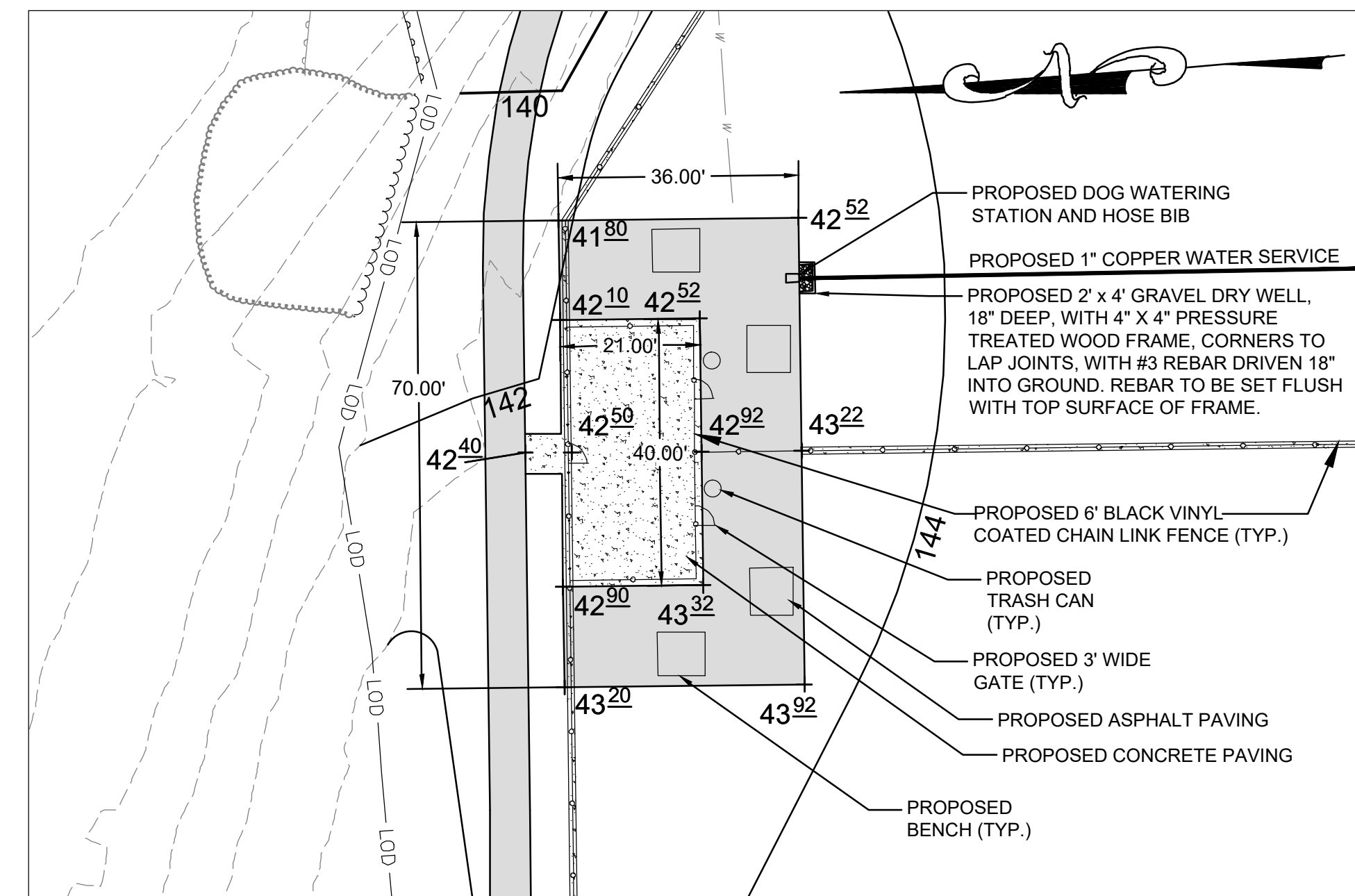
**2 CONCRETE WHEELSTOP**  
46 NOT TO SCALE



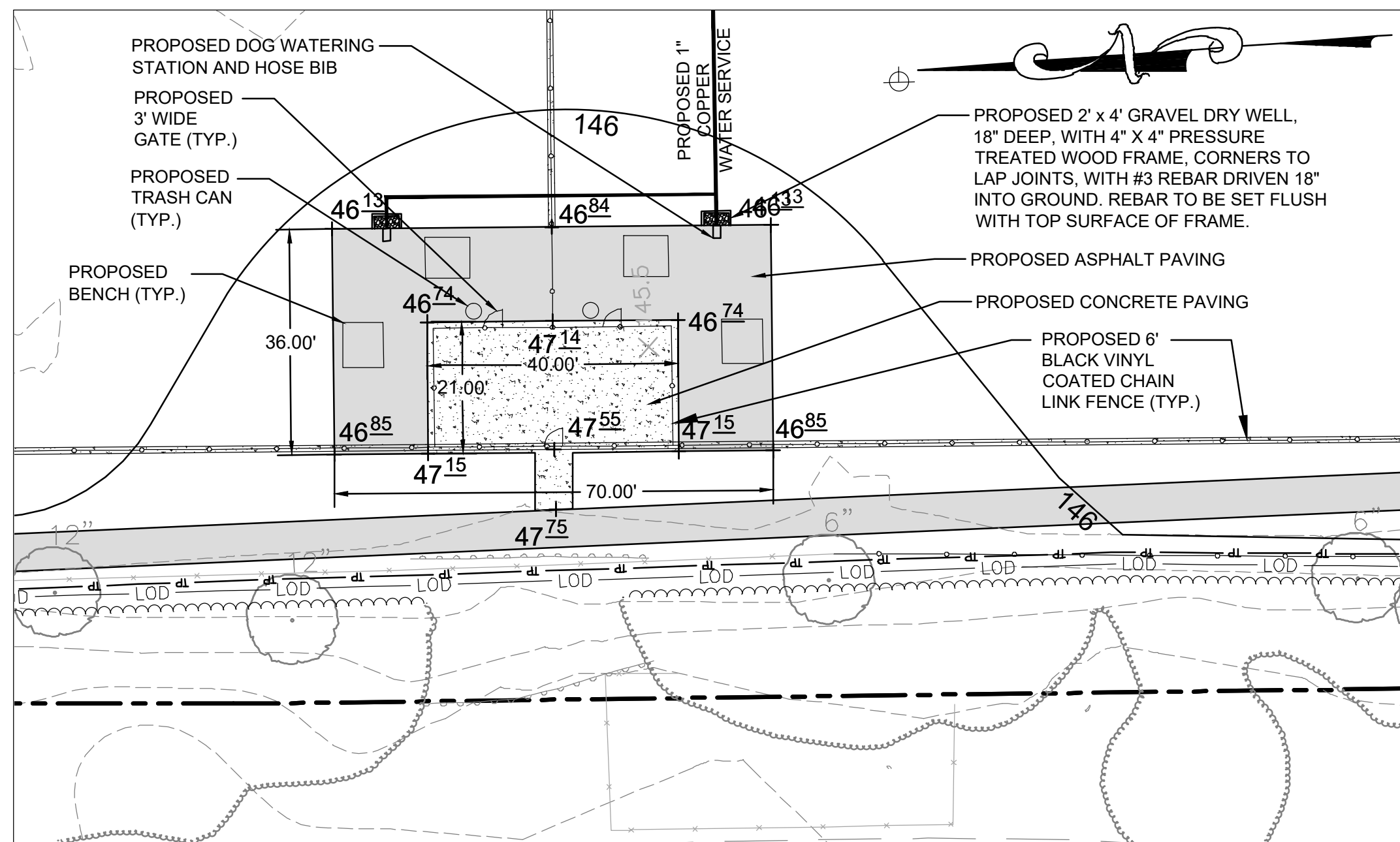
**3 ELECTRICAL DUCT BANK**  
46 NOT TO SCALE

**4 BASKETBALL COURT PAVING**  
46 NOT TO SCALE

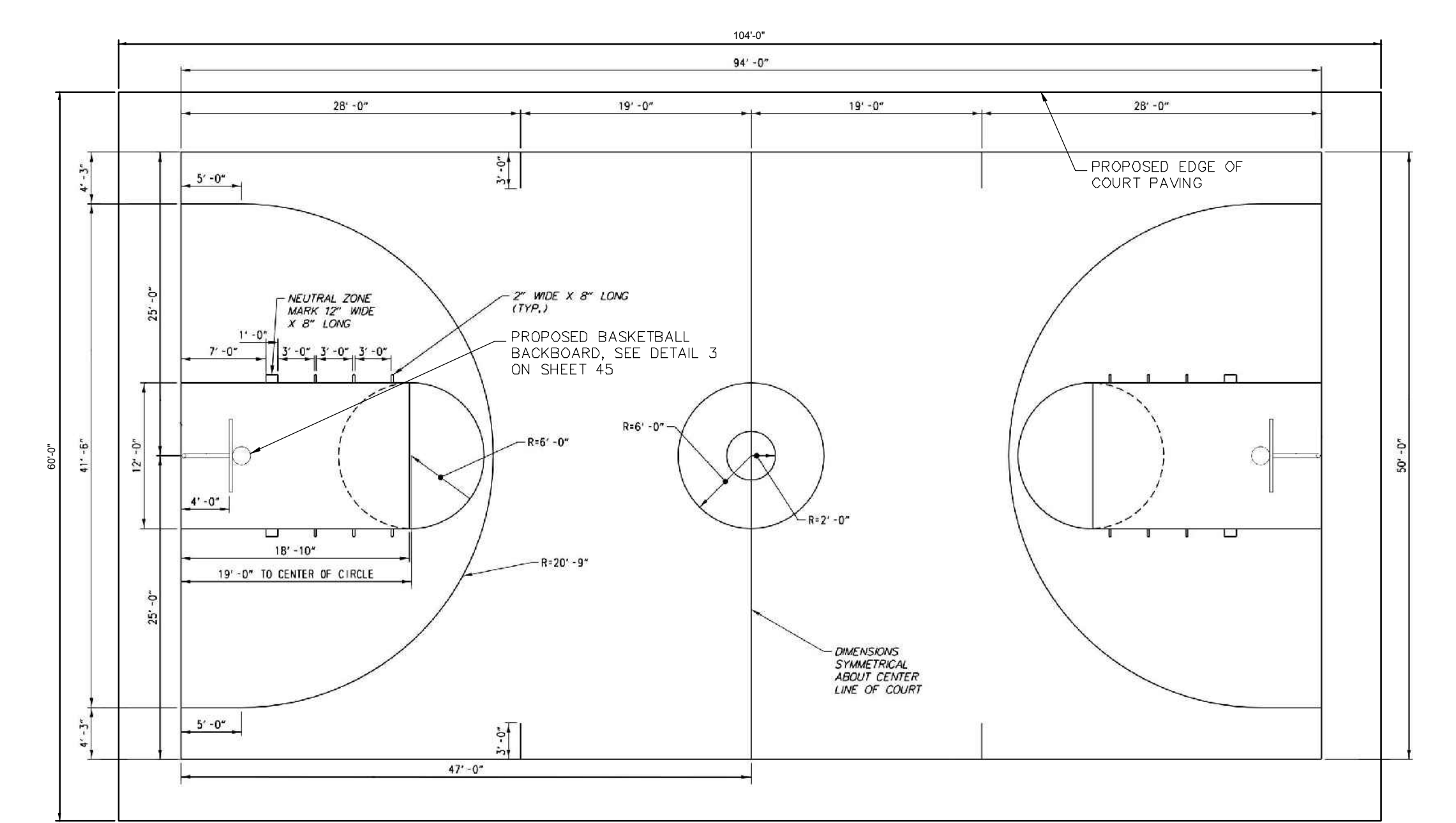
**8 SPLIT RAIL FENCE**  
46 NOT TO SCALE



**5 DOG PARK ENTRANCE**  
46 1"=20'



**6 DOG PARK ENTRANCE**  
46 1"=20'



**7 BASKETBALL COURT LAYOUT**  
46 1"=20'

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PENNONI ASSOCIATES INC.  
8890 McGaw Road, Suite 100  
Columbia, MD 21045  
T 410.997.8900 F 410.997.9282

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

CHIEF ENGINEER: \_\_\_\_\_ PROJECT MANAGER: \_\_\_\_\_

APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_

ASSISTANT CHIEF ENGINEER: \_\_\_\_\_ CHIEF, RIGHT OF WAY SERVICES: \_\_\_\_\_

SCALE: 1" = 60'

DRAWN BY: JSN/SVH

CHECKED BY: PJS/JAR

SHEET 46 of 51

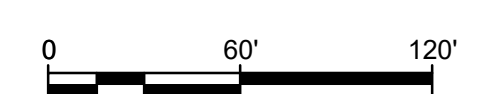
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PROPOSAL #: 579001

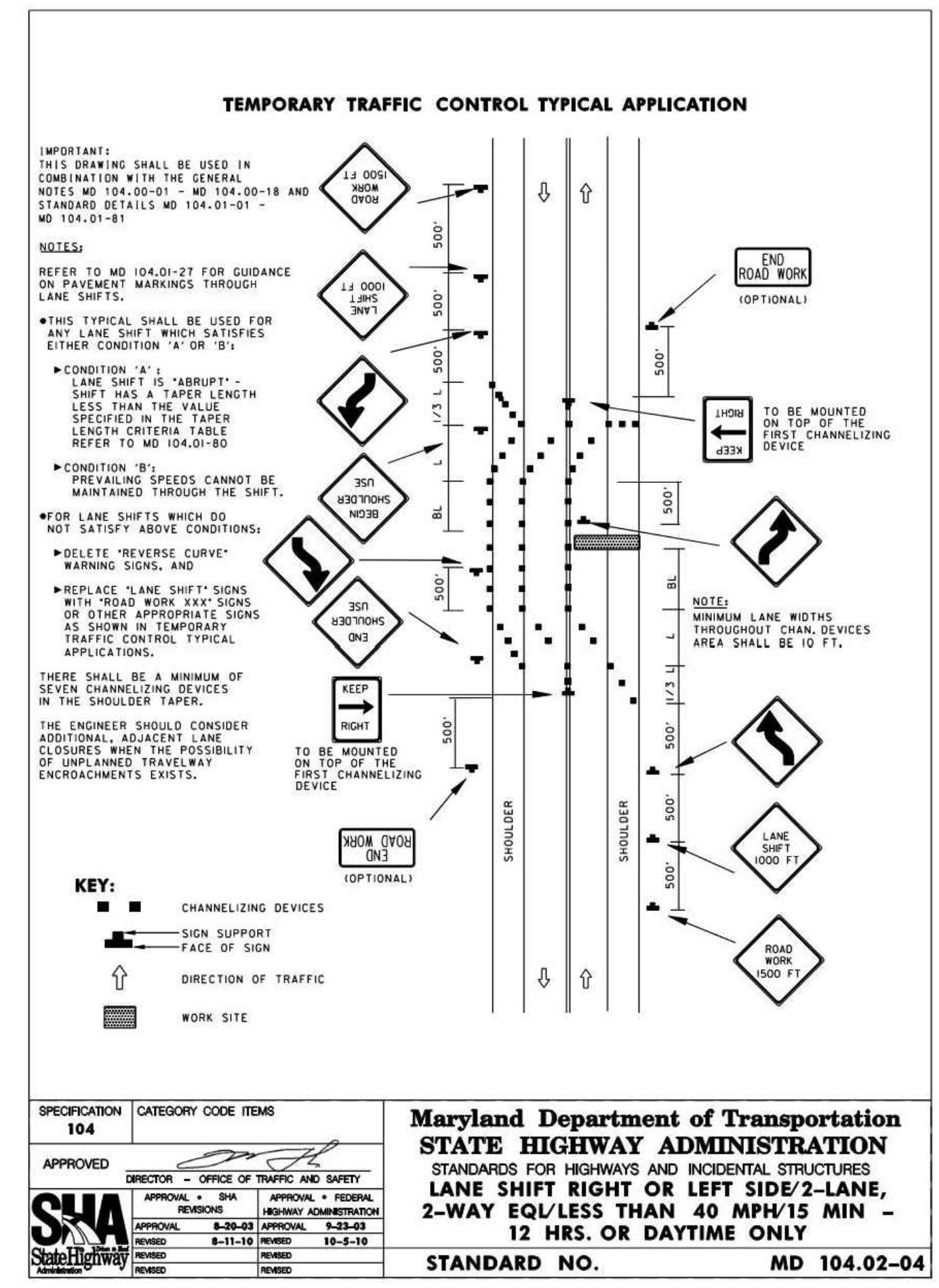
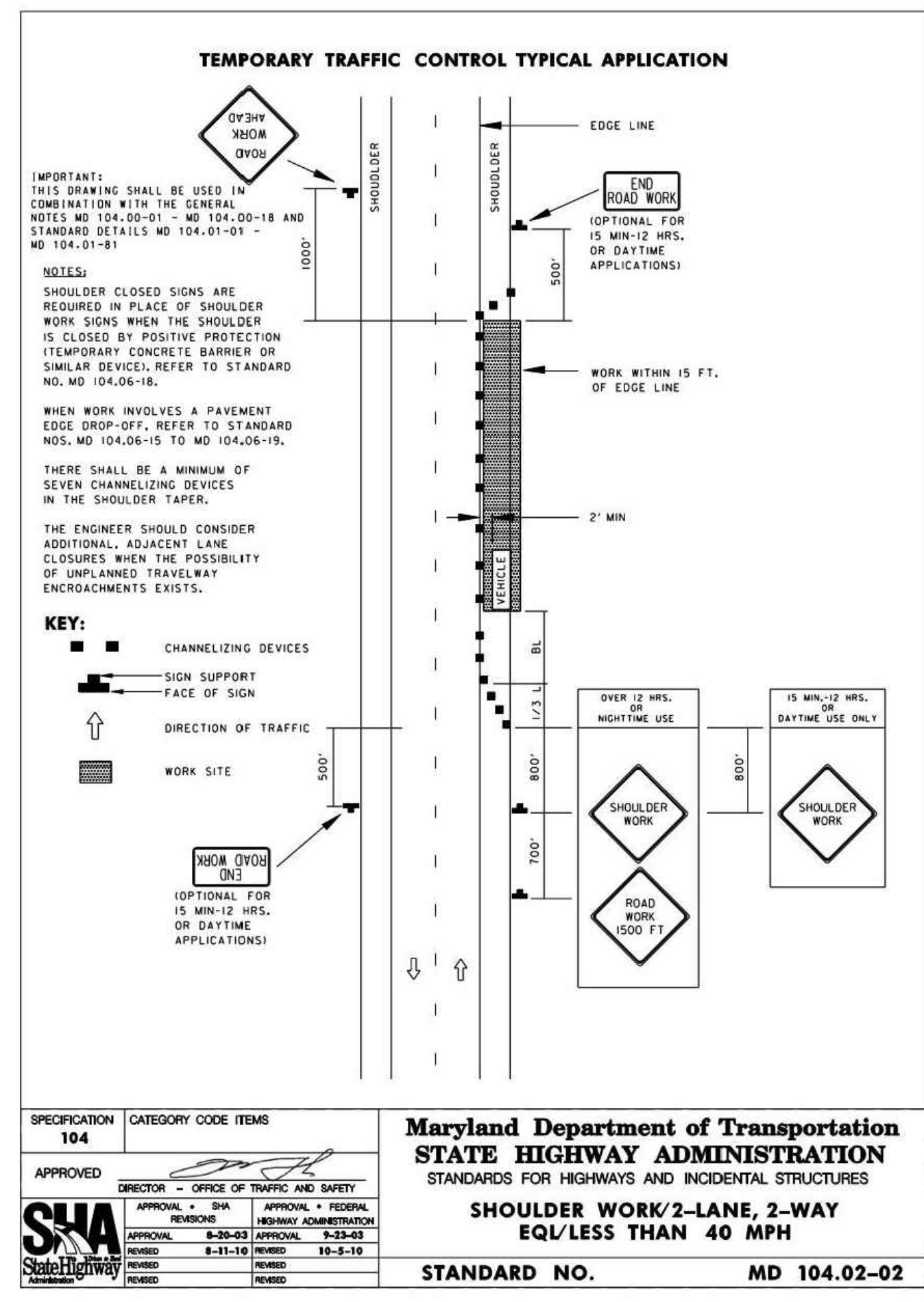
SITE DETAILS

**BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS**

TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
ANNE ARUNDEL COUNTY, MD







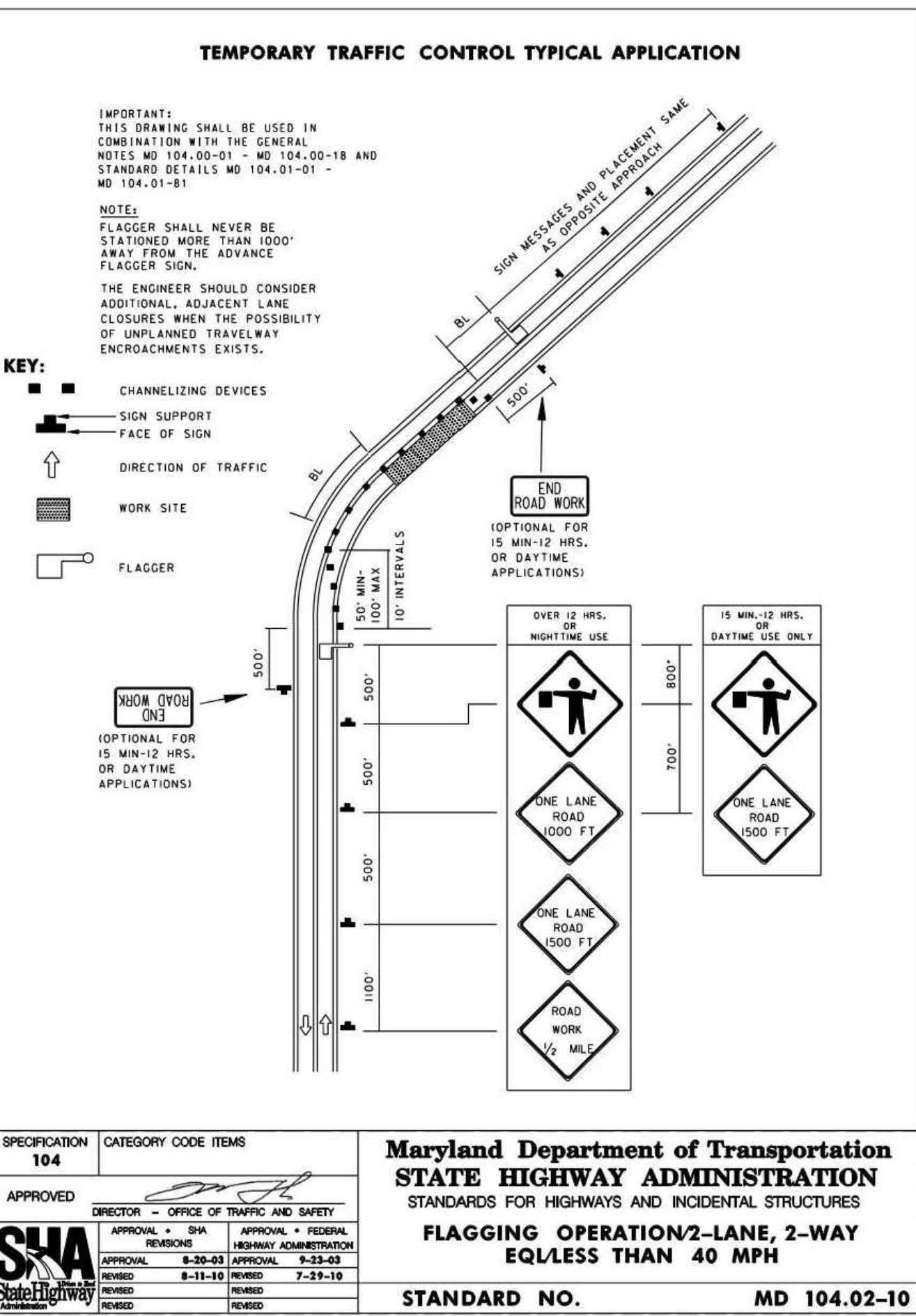
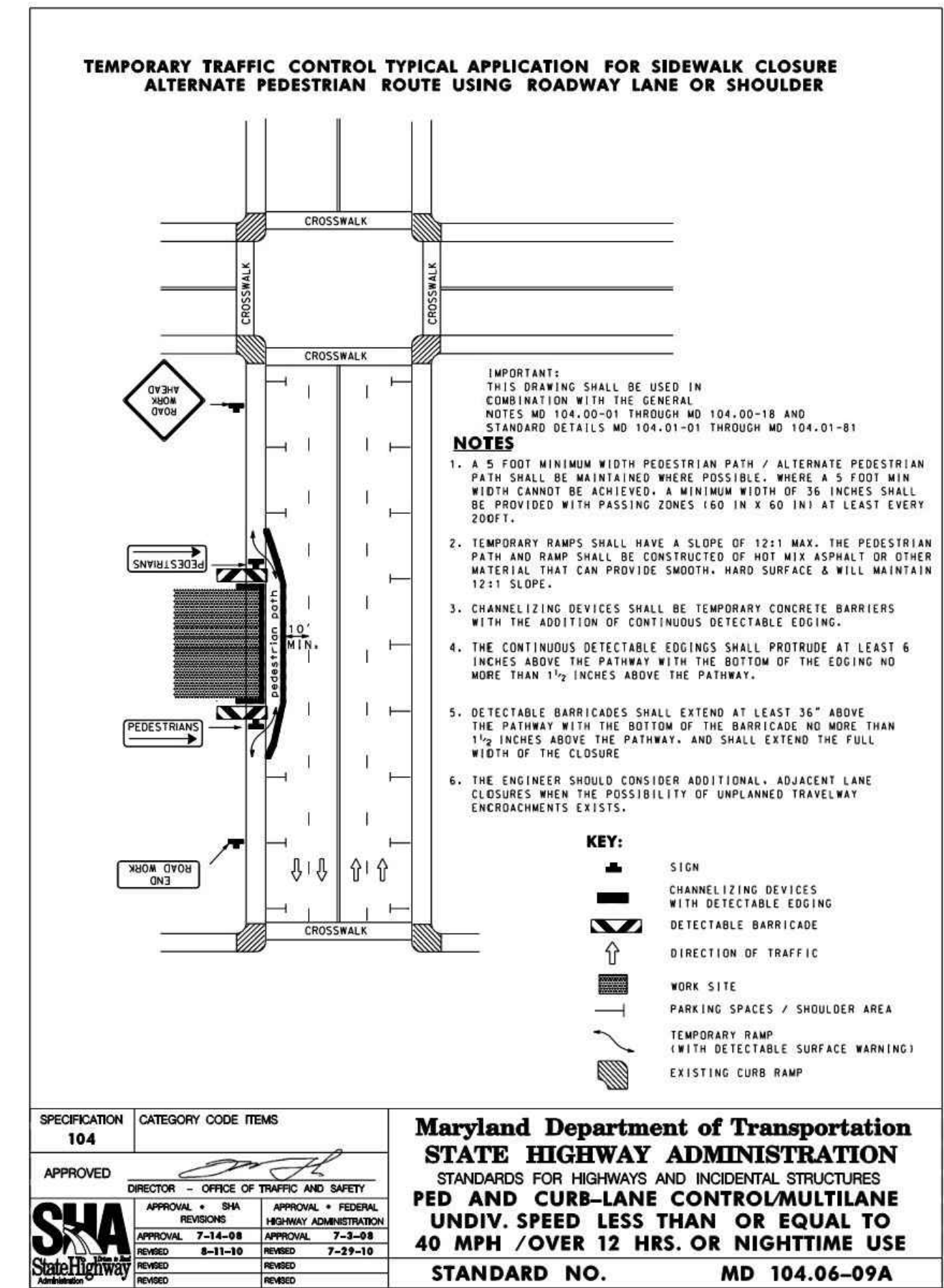
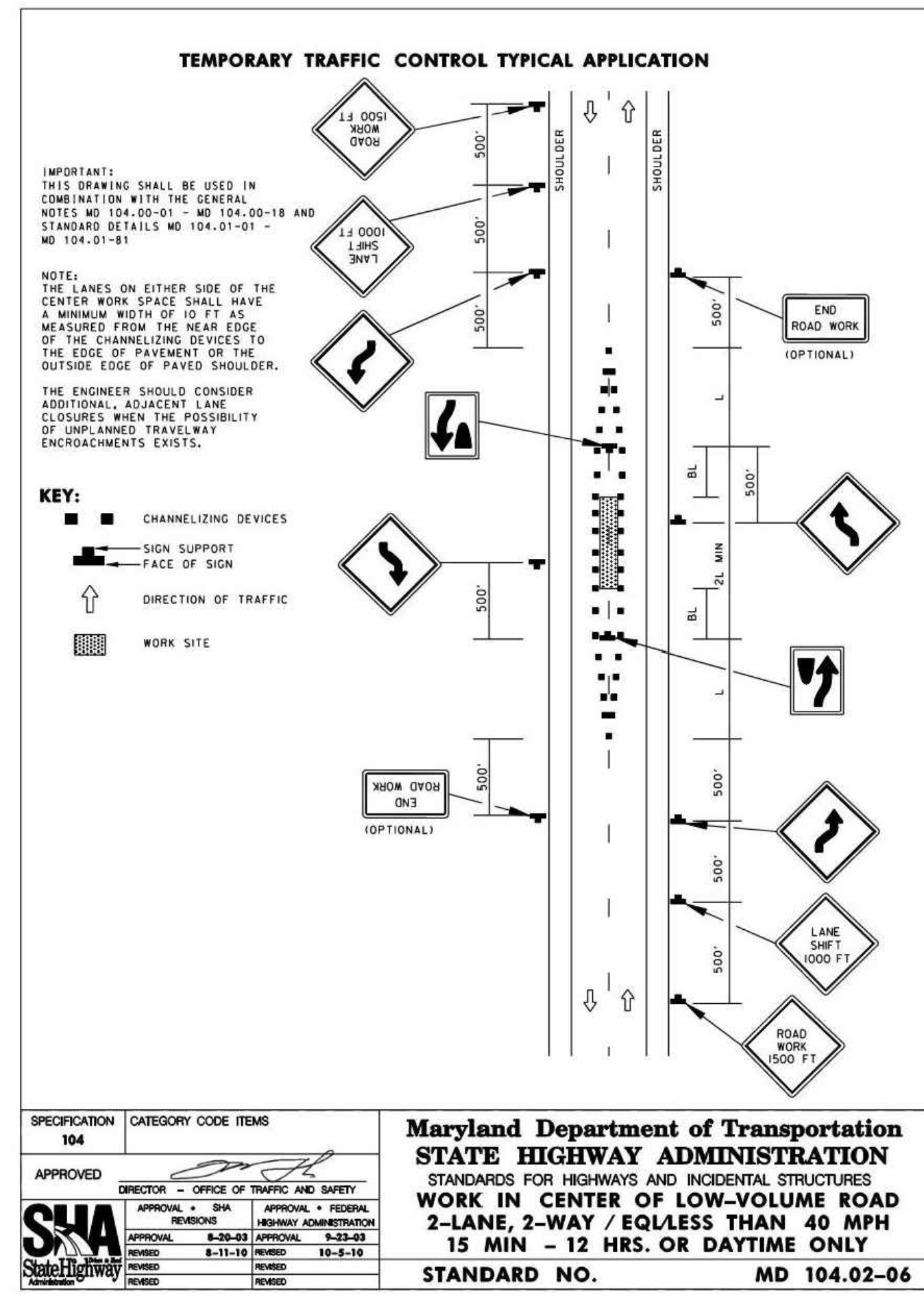
#### ANNE ARUNDEL COUNTY - TRAFFIC ENGINEERING TRAFFIC CONTROL PLAN GENERAL NOTES

- ANNE ARUNDEL COUNTY SHALL BE NOTIFIED AT LEAST TWO BUSINESS DAYS PRIOR TO BEGINNING ANY WORK IN ORDER TO SCHEDULE A FIELD INSPECTION OF TRAFFIC CONTROL DEVICES. NOTIFY INSPECTIONS AND PERMITS AT EITHER 410-222-7794 OR 410-222-7542.
- ALL CONSTRUCTION AND MATERIALS FOR THE TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE STANDARDS CONTAINED IN THE LATEST EDITION OF THE STATE OF MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- NO WORK SHALL BE PERFORMED IN THE ROADWAY FROM 7:00 AM TO 9:00 AM AND 2:00 PM TO 4:00 PM.
- TRAVEL LANES SHALL BE A MINIMUM OF TEN FEET IN WIDTH. WHEN ONLY ONE LANE IS OPEN, FLAGGERS AND THE APPROPRIATE SIGNING SHALL BE PROVIDED. THE ROADWAY SHOULD BE REOPENED TO TWO LANES AT NIGHT.
- REFLECTORIZED TRAFFIC DRUMS SHALL BE USED AS CHANNELIZING DEVICES AT NIGHT ALONG THE CONSTRUCTION AREA.
- IF A DROP-OFF MEASURES GREATER THAN 2", A BARRIER OR 2:1 SLOPE OF COMPACTED CRUSH-RUN GRAVEL WILL BE REQUIRED.
- PAVEMENT DISRUPTIONS OF ONE INCH (1") OR GREATER SHALL BE RAMPED WITH A BEVELED EDGE OF FOUR HORIZONTAL TO ONE VERTICAL (4:1).
- ALL OPEN TRENCHES SHALL BE CLOSED AT THE END OF EACH DAY. IF STEEL PLATES ARE TO BE USED, APPROPRIATE SIGNING WILL BE REQUIRED. STEEL PLATES MUST ADHERE TO DESIGN STANDARDS. STEEL PLATES MUST BE PINNED. STEEL PLATES ON ARTERIAL ROADWAYS MUST BE RECESSED, AS MUST ALL STEEL PLATES TO BE PLACED FOR MORE THAN 24 HOURS BETWEEN DECEMBER AND MARCH. ALL OTHER STEEL PLATES MUST BE RAMPED.
- CONTRACTOR SHALL INSTALL "CAUTION STEEL PLATES AHEAD" SIGNS IN ADVANCE OF STEEL PLATE BRIDGING.
- ALL TEMPORARY SIGNS THAT DO NOT APPLY SHALL BE COVERED OR REMOVED.
- CHANNELIZING DEVICES AND TEMPORARY STRIPING SHALL BE REMOVED AS SOON AS PRACTICAL.
- ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN THEIR PROPER POSITION AT ALL TIMES, AND SHALL BE REPAIRED, REPLACED, OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY.
- ACCESS SHALL BE PROVIDED TO ALL EXISTING DRIVEWAYS AT ALL TIMES UNLESS COVERED BY THE APPROVED TRAFFIC CONTROL PLAN.
- ALL CONES AND FLAGMEN SHALL BE MOVED ACCORDINGLY AS CONSTRUCTION PROGRESSES.
- ALL CONSTRUCTION SIGNING SHALL BE IN ACCORDANCE WITH THE TYPICAL SIGN PLACEMENT SHOWN ON THESE PLANS AND SHALL NOT OBSTRUCT EXISTING TRAFFIC CONTROL DEVICES.
- ANY CHANGES TO THE TCP SHALL BE SUBMITTED TO THE TRAFFIC ENGINEERING DIVISION FOR REVIEW AND APPROVAL. REQUESTS FOR DETOURS AND ROAD CLOSURES SHALL BE SUBMITTED TO RIGHT OF WAY MANAGEMENT SECTION.
- THE CONTRACTOR MUST CONTACT TRAFFIC ENGINEERING FOR APPROVAL PRIOR TO PLACEMENT OF ANY TEMPORARY PARKING RESTRICTIONS. IF RESTRICTIONS ARE APPROVED, THE CONTRACTOR MUST NOTIFY ALL AFFECTED RESIDENTS AT LEAST 48 HOURS IN ADVANCE AND MUST SUPPLY AND INSTALL ALL NECESSARY SIGNING.
- CONSTRUCTION & WORKER'S VEHICLES SHALL NOT BE PARKED IN A MANNER THAT WILL IMPEDE TRAFFIC OR IMPAIR SIGHT DISTANCE. THESE VEHICLES SHOULD BE PARKED OFF-STREET ON THE CONSTRUCTION SITE OR ON A SIDE STREET NOT UNDER CONSTRUCTION.
- CONTRACTORS SHALL ADHERE TO ANNE ARUNDEL COUNTY'S, DEPARTMENT OF PUBLIC WORKS, DESIGN MANUAL AND STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, SECTION VLLL - TRAFFIC CONTROL.
- ALL WORK SHALL BE PERFORMED ON DAYS WHEN THE COUNTY'S DEPARTMENT OF PUBLIC WORKS IS OPEN FOR BUSINESS.

#### MAINTENANCE OF TRAFFIC SEQUENCE OF CONSTRUCTION:

- CHANNELIZING DEVICES AND MAINTENANCE OF TRAFFIC SIGNAGE ARE TO BE INSTALLED PER THE PLAN. TEMPORARY CHANNELIZING DEVICES AND SIGNAGE ARE TO BE PLACED SO THAT TRAFFIC CAN BE SAFELY DIVERTED AROUND THE PROPOSED WORK AREA.
- SIGNAGE SHALL REMAIN COVERED UNTIL ASSOCIATED WORK IS STARTED.
- INSTALL 8" SEWER CONNECTION TO FUTURE BUILDING LOCATION WITHIN PARK AND SCHOOL DRIVEWAY. INSTALL NEW SIDEWALK ALONG PARK AND SCHOOL DRIVEWAY. INSTALL ELECTRICAL CONDUIT IN PARK AND SCHOOL DRIVEWAY. PERFORM 1" SAW CUT WHERE PAVEMENT REMOVAL IS REQUIRED. EXCAVATE AS NEEDED TO INSTALL UTILITIES AND NEW STRUCTURES.
- BACKFILL UTILITY EXCAVATION, AND INSTALL PAVEMENT PATCH.
- MAINTAIN CHANNELIZING DEVICES, AND SIGNAGE UNTIL ALL PHASES OF CONSTRUCTION ARE COMPLETE.

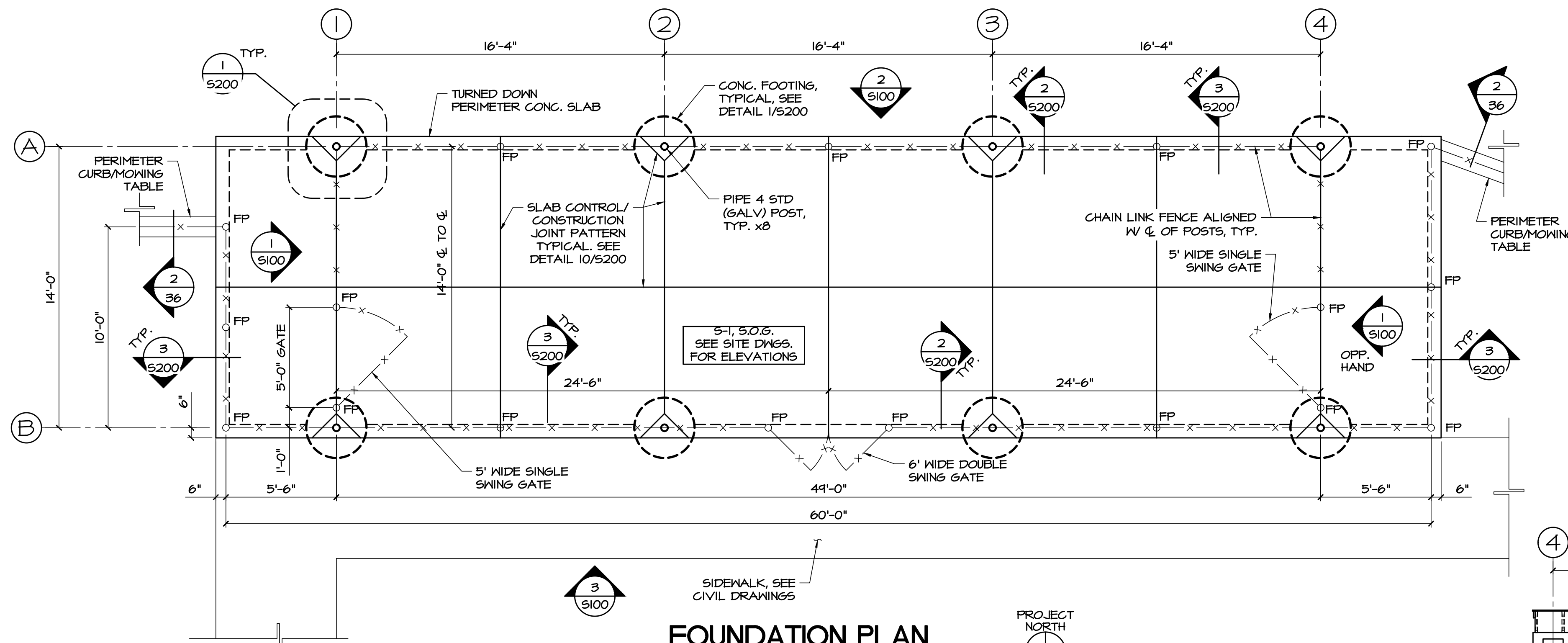
**NOTE: NO WORK OR DELIVERIES SHALL BE PERFORMED IN THE SCHOOL DRIVEWAYS DURING DROPOFF AND PICKUP TIMES (7:00 AM TO 9:00 AM AND 2:00 PM TO 4:00 PM).**



PROFESSIONAL CERTIFICATION: I, <u>JAMES A. RUFF, PE</u> , CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # <u>21774</u> EXPIRATION DATE <u>11/10/2023</u>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REVISIONS</th> <th>APPROVED</th> </tr> <tr> <th>#</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS	APPROVED	#	DESCRIPTION								<p><b>Pennoni ASSOCIATES INC.</b>        8890 McGaw Road, Suite 100        Columbia, MD 21045        T 410.997.8900 F 410.997.9282</p>	<p style="text-align: right;">974 920219457      DWG NO. DD48</p> <p style="text-align: center;"><b>ANNE ARUNDEL COUNTY</b>  <b>DEPARTMENT OF PUBLIC WORKS</b></p> <p style="text-align: right;">MAY 31, 2023</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">APPROVED _____ DATE _____</td> <td style="width: 50%;">APPROVED _____ DATE _____</td> </tr> <tr> <td>CHIEF ENGINEER</td> <td>PROJECT MANAGER</td> </tr> <tr> <td>APPROVAL _____ DATE _____</td> <td>APPROVED _____ DATE _____</td> </tr> <tr> <td>ASSISTANT CHIEF ENGINEER</td> <td>CHIEF, RIGHT OF WAY SERVICES</td> </tr> </table>	APPROVED _____ DATE _____	APPROVED _____ DATE _____	CHIEF ENGINEER	PROJECT MANAGER	APPROVAL _____ DATE _____	APPROVED _____ DATE _____	ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY SERVICES
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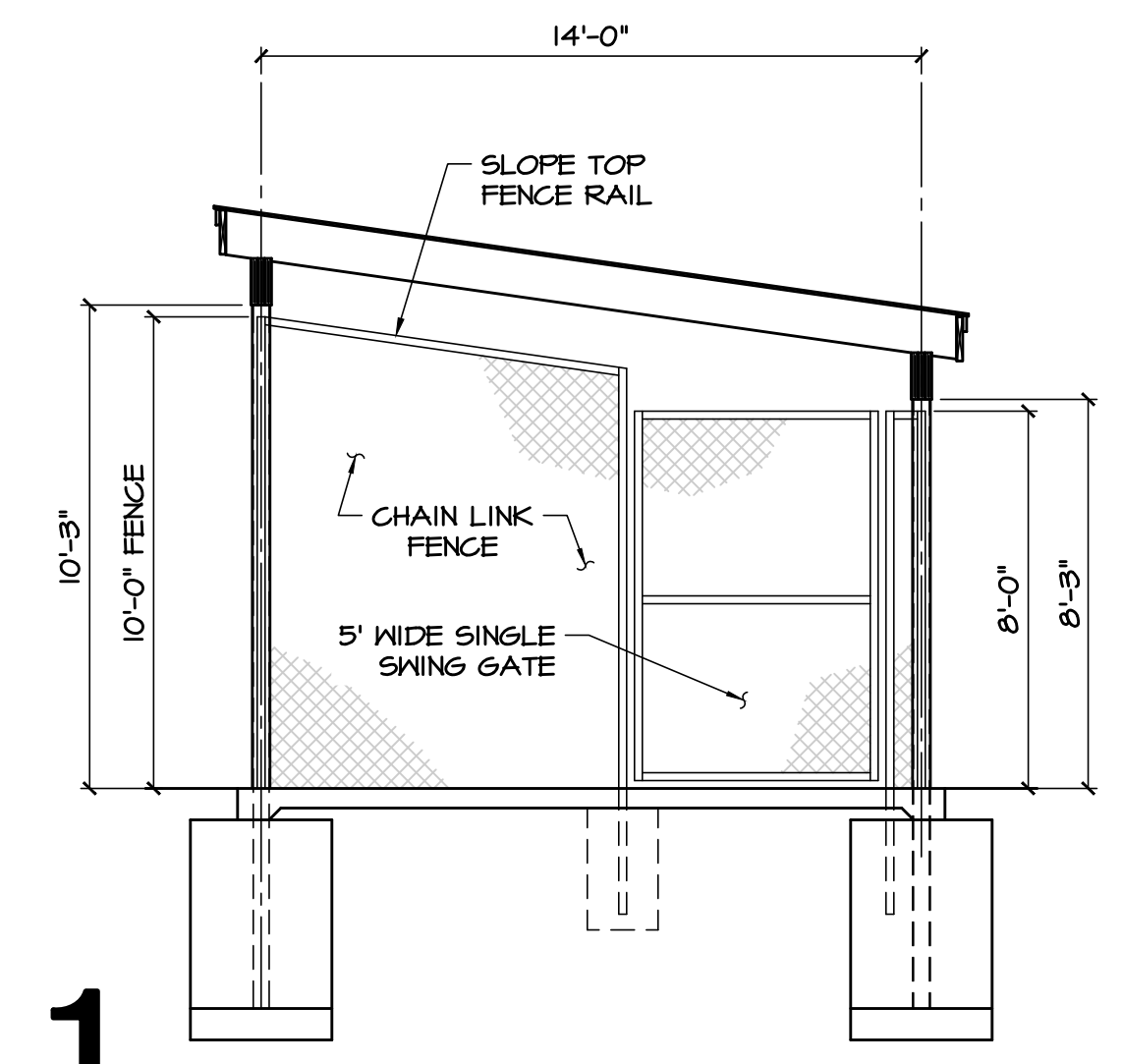




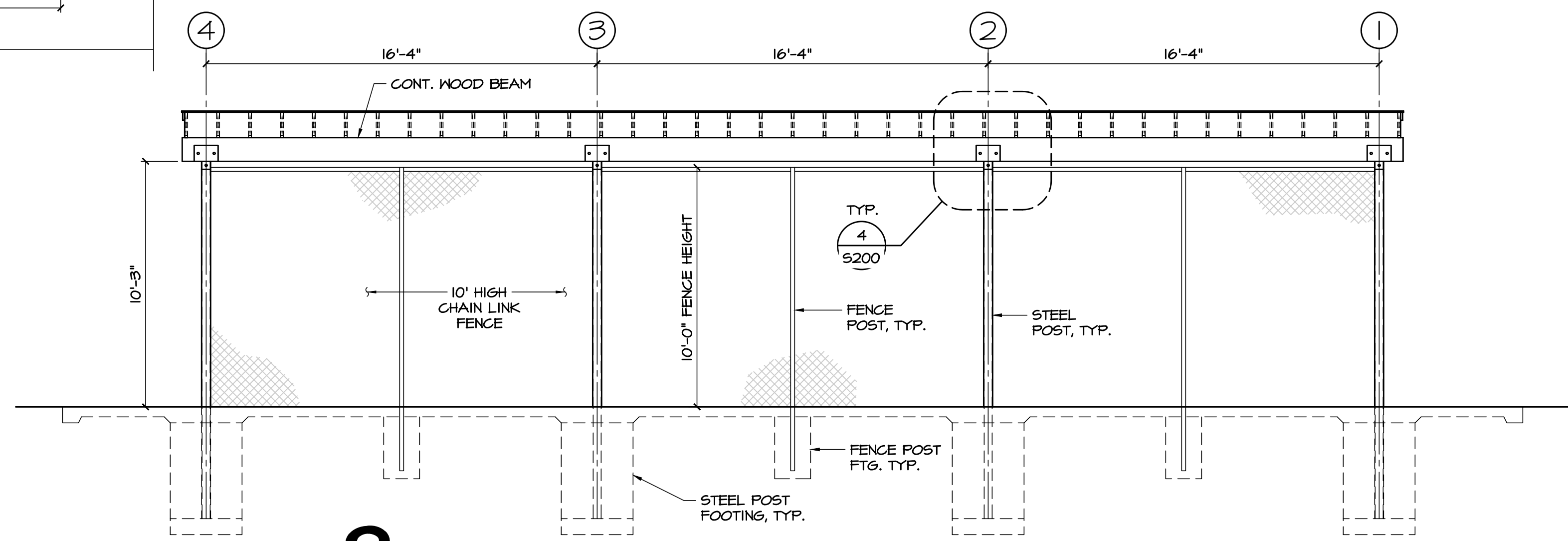


**FOUNDATION PLAN**  
SCALE: 1/4" = 1'-0"

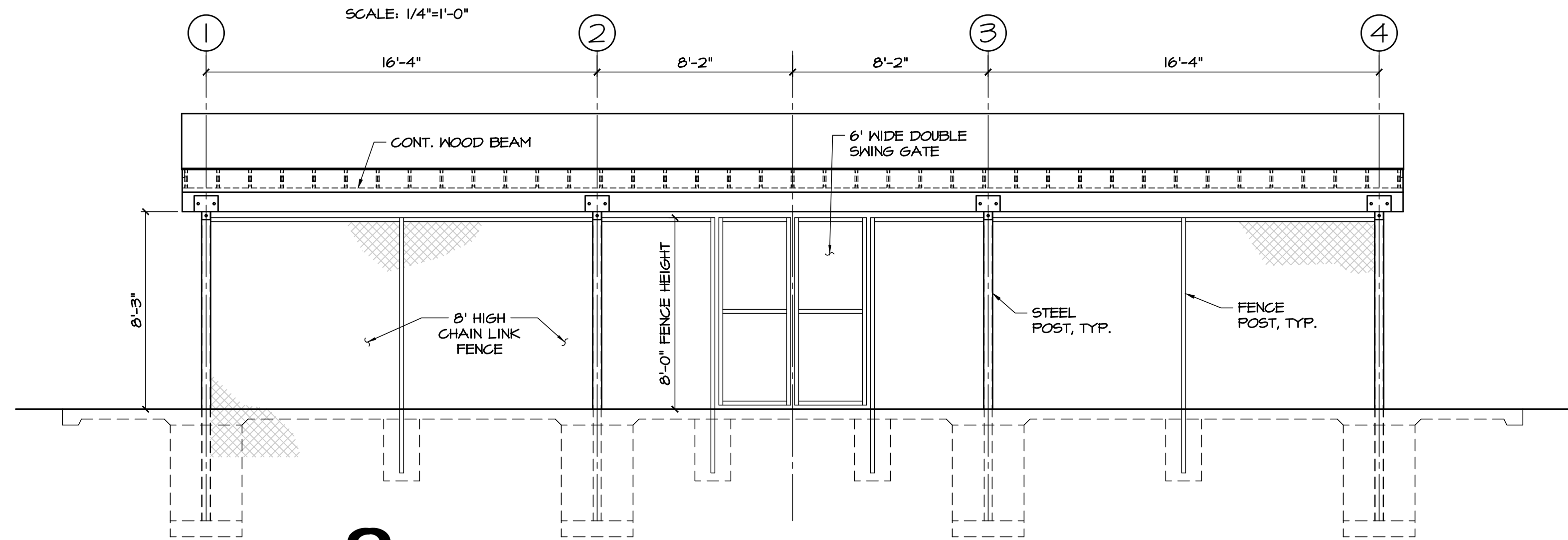
- PLAN NOTES:**
1. ALL STRUCTURAL STEEL, BEAM SADDLES AND FASTENERS TO BE HOT DIPPED GALVANIZED AND PAINTED.
  2. ALL FENCING POSTS TO BE GALVANIZED AND PAINTED.
  3. FP DENOTES CHAIN LINK FENCE POST. SEE SITE CIVIL DRAWINGS FOR FENCING DETAILS INCLUDING CONCRETE FOOTINGS.
  4. - x - DENOTES CHAIN LINK FENCE. SEE SITE CIVIL DRAWINGS FOR FENCING DETAILS.
  5. S-1 DENOTES 5" CONCRETE SLAB ON GRADE REINFORCED WITH 6x6 - #2.1 x #2.1 W/MR OVER 6" CRUSHED STONE.
  6. SEE DRAWING S001 FOR DESIGN CRITERIA AND GENERAL NOTES.
  7. SEE DRAWING S200 FOR TYPICAL CONSTRUCTION DETAILS.



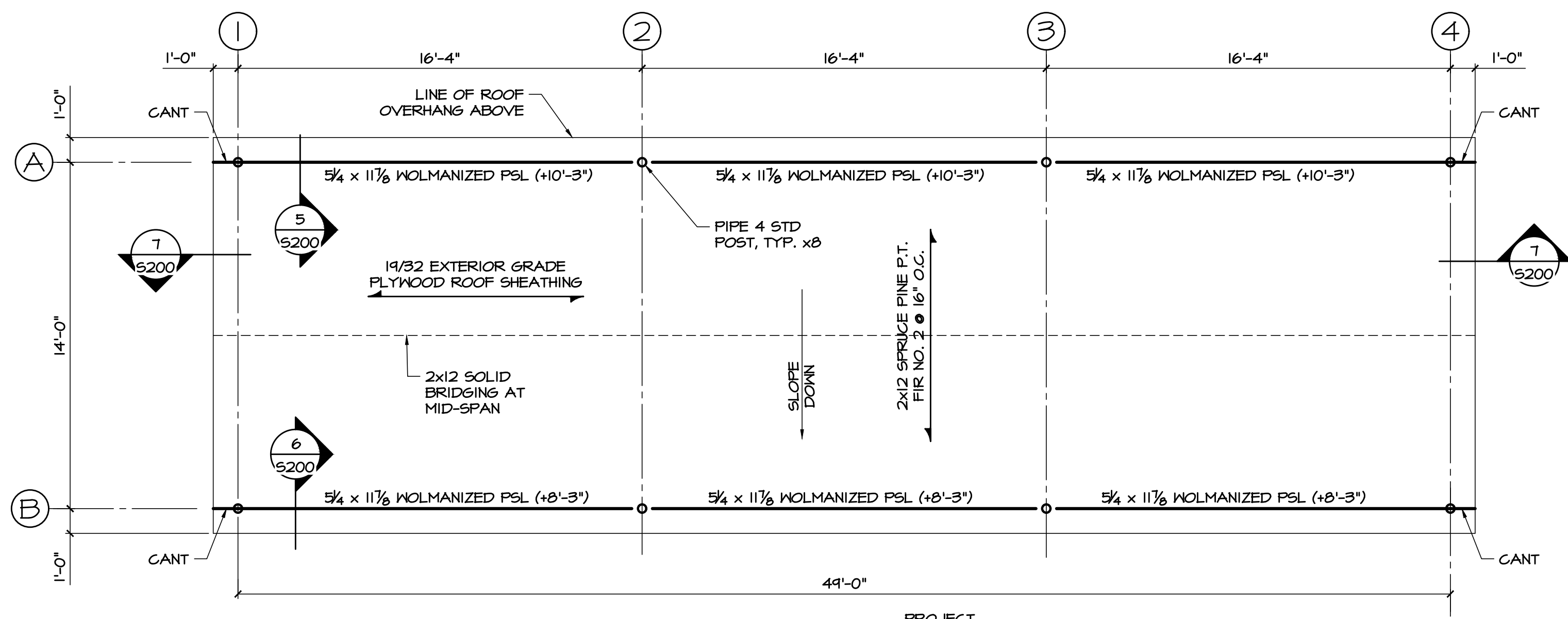
**1**  
SCALE: 1/4" = 1'-0"



**2**  
SCALE: 1/4" = 1'-0"

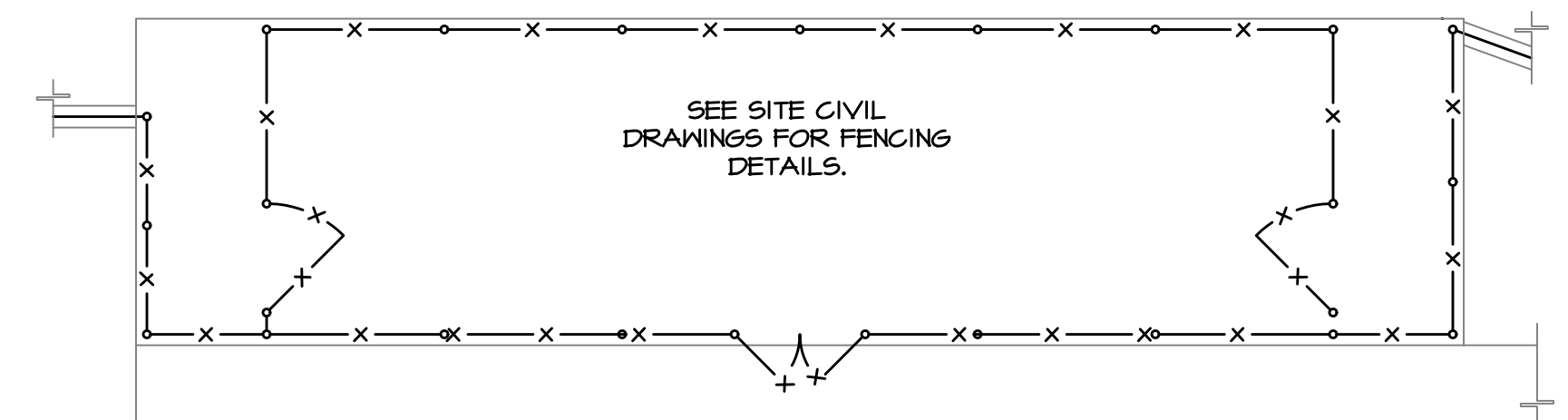


**3**  
SCALE: 1/4" = 1'-0"



**ROOF FRAMING PLAN**  
SCALE: 1/4" = 1'-0"

- PLAN NOTES:**
1. ALL WOOD FRAMING TO BE PRESSURE TREATED EXTERIOR GRADE.
  2. ROOFING TO BE EXPOSED FASTENER STANDING SEAM METAL ROOFING OVER ICE & WATER SHIELD (COVER ENTIRE ROOF) OVER 30# ROOFING FELT ADHERED TO PLYWOOD ROOF SHEATHING.

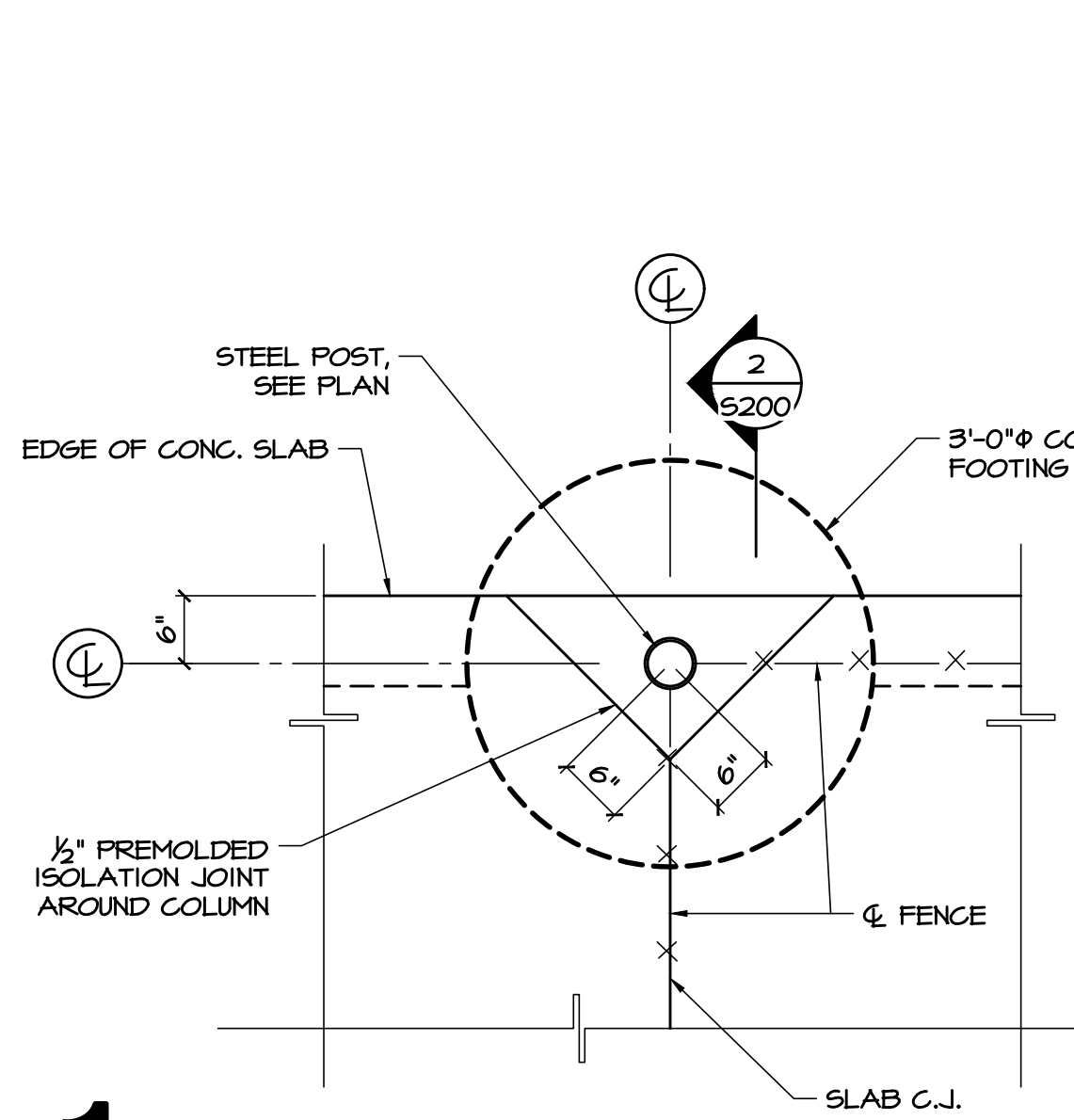


**FENCE PLAN**  
SCALE: 1/8" = 1'-0"



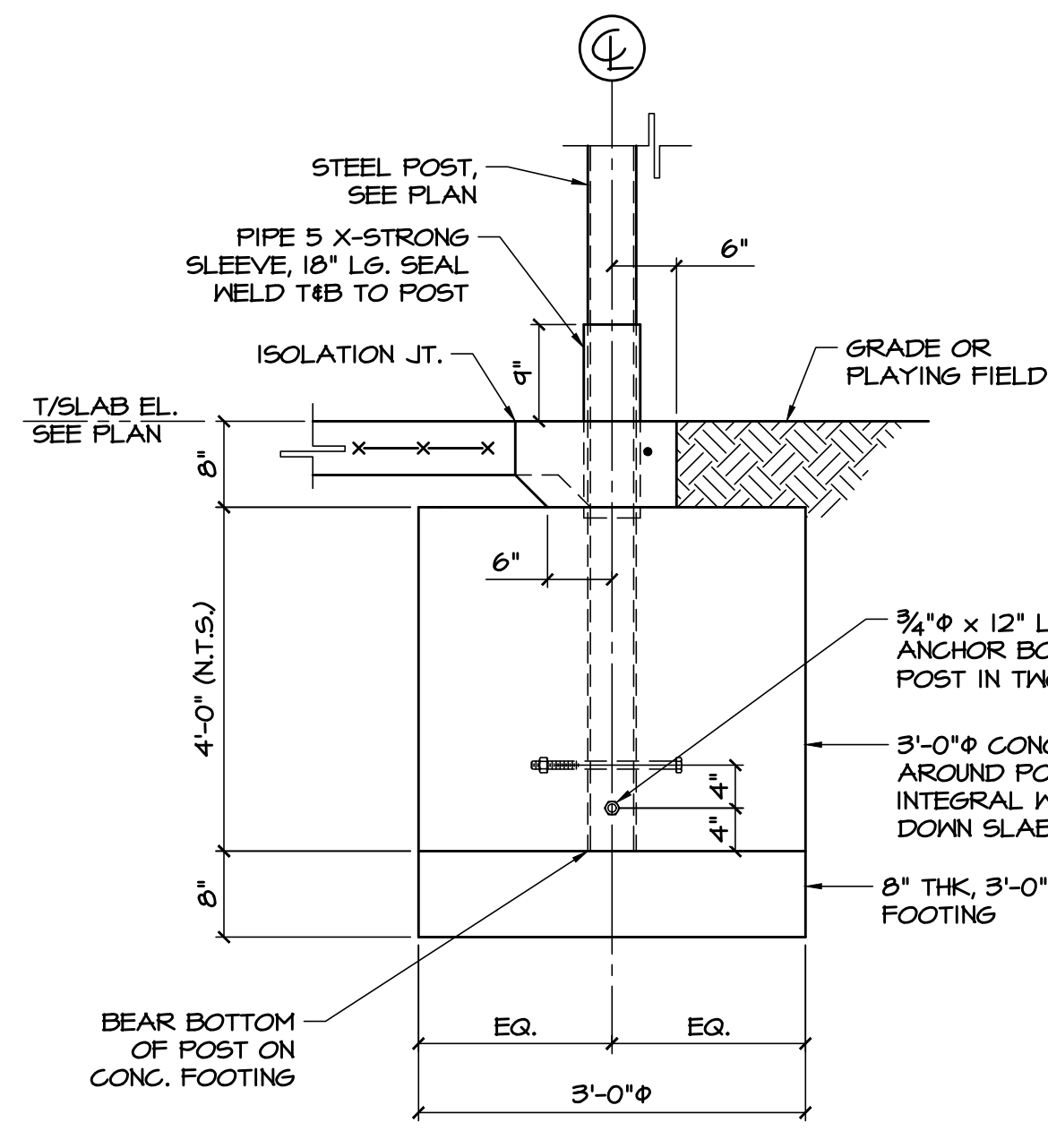
GP# G20219457 DWG NO: S100

PROFESSIONAL CERTIFICATION: I, <u>ROSS EVAN STUART, PE</u> , CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # <u>53964</u> EXPIRATION DATE <u>2/19/2023</u>		<b>ANNE ARUNDEL COUNTY</b> DEPARTMENT OF PUBLIC WORKS NOVEMBER 28, 2022																											
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PENNONI ASSOCIATES INC. 8890 McGaw Road, Suite 100 Columbia, MD 21045 T 410.997.8900 F 410.997.9282		SCALE: AS NOTED DRAWN BY: JSN/SVH CHECKED BY: PJS/JAR SHEET <u>50</u> of <u>51</u> PROJECT #: 579000 PROPOSAL #: 579001	STRUCTURAL PLANS AND ELEVATIONS <b>BROOKLYN HEIGHTS COMMUNITY CENTER PARK</b> DESIGN DEVELOPMENT PLANS TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT ANNE ARUNDEL COUNTY, MD																										



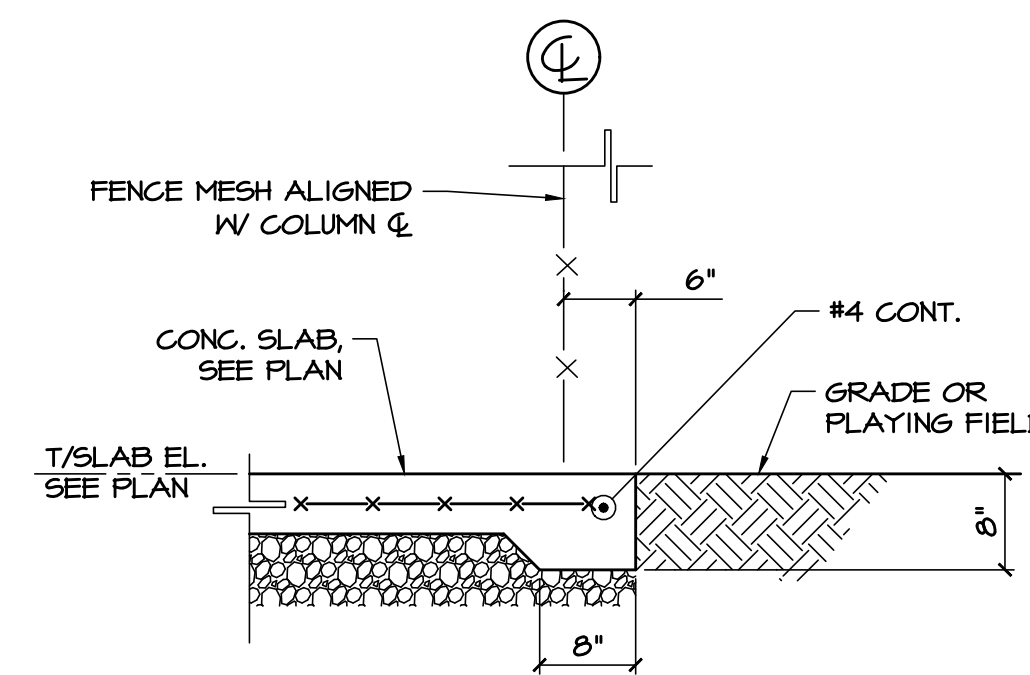
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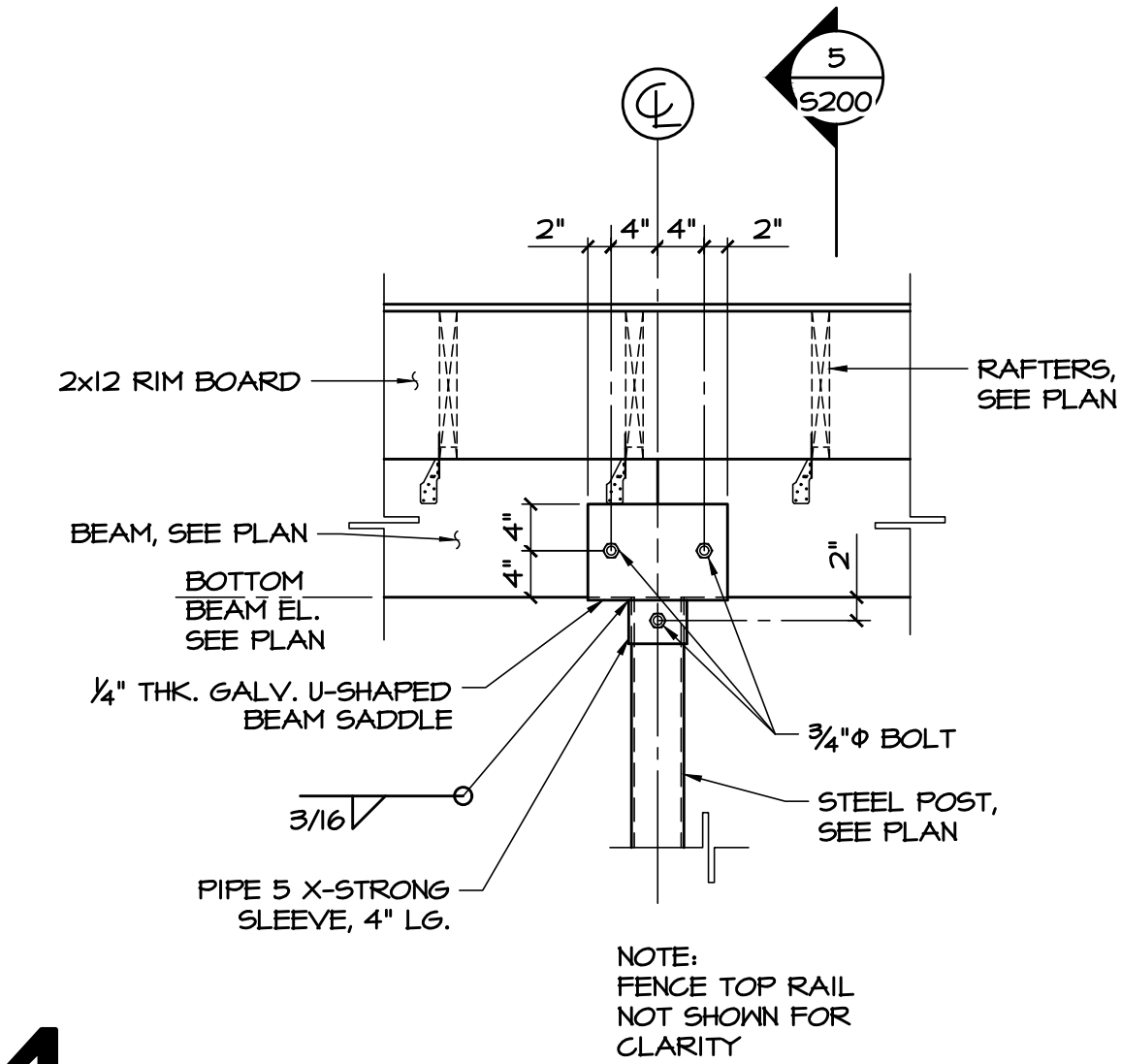
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SCALE: 3/4"=1'-0"



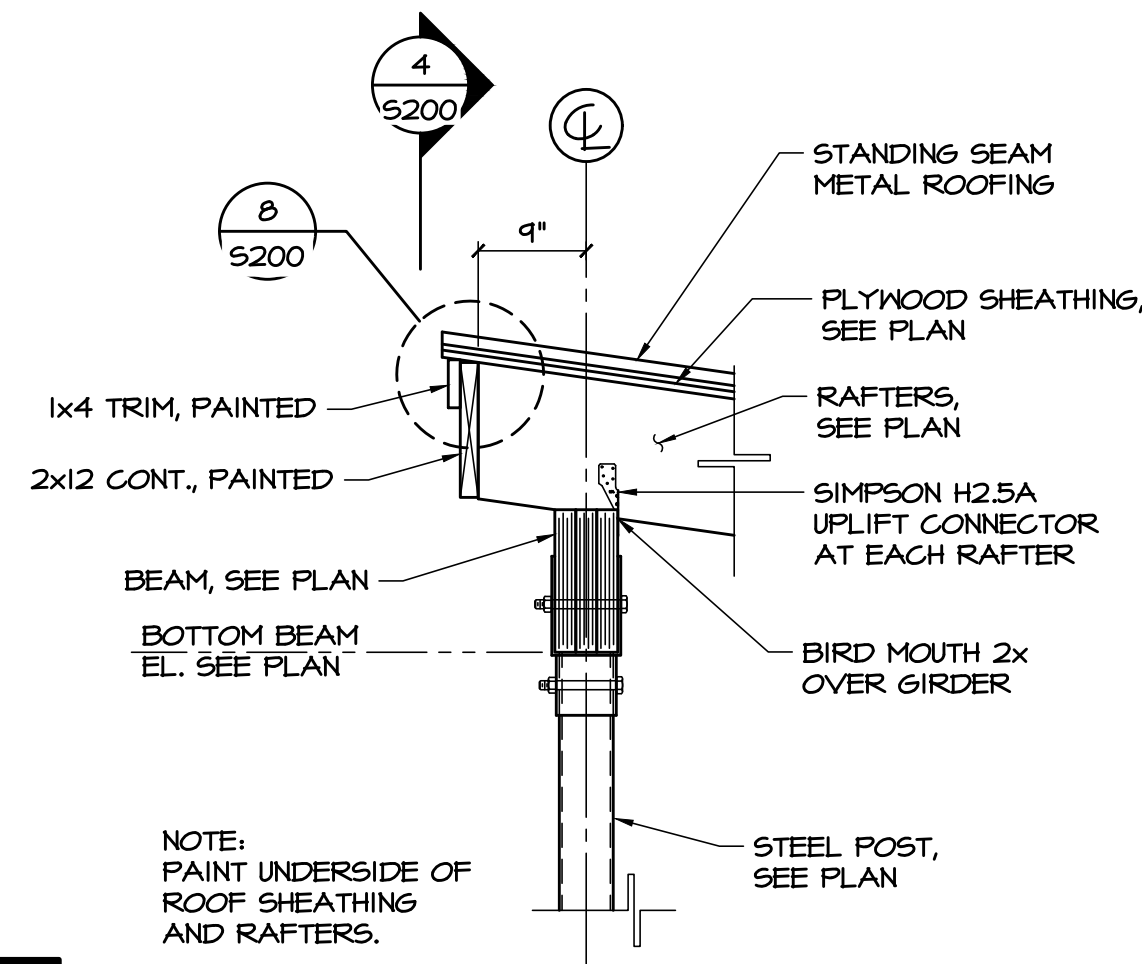
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SCALE: 3/4"=1'-0"



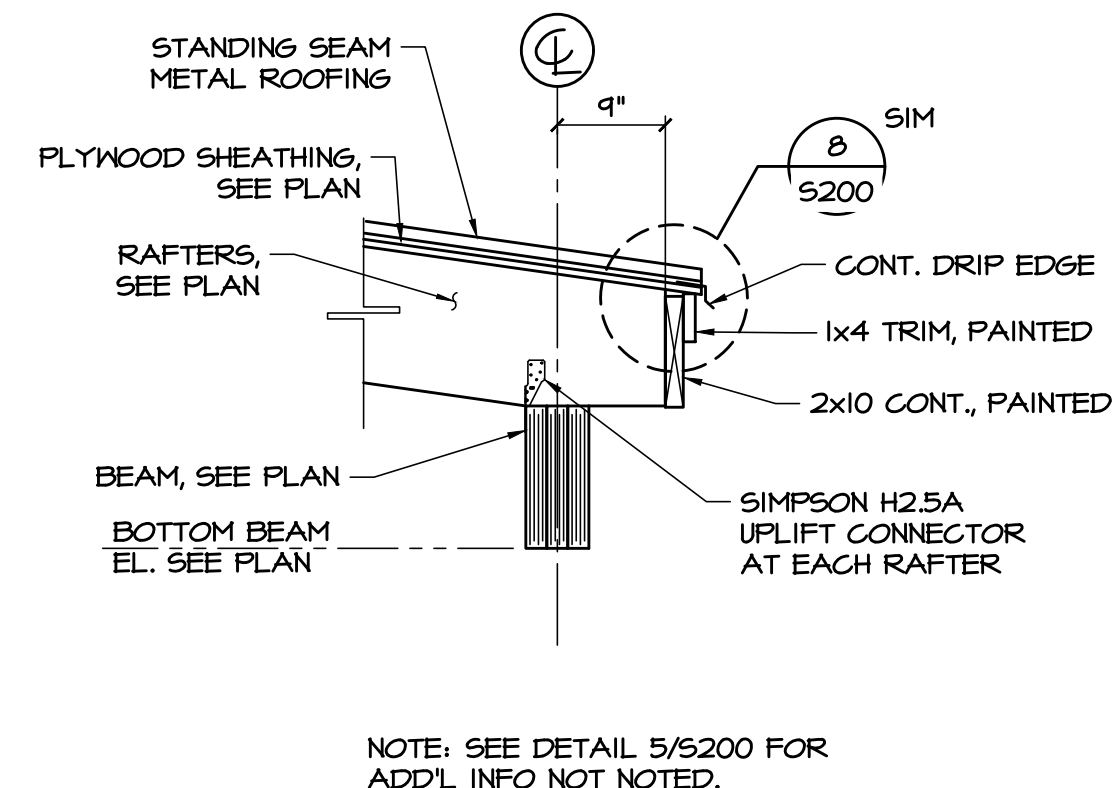
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SCALE: 3/4"=1'-0"



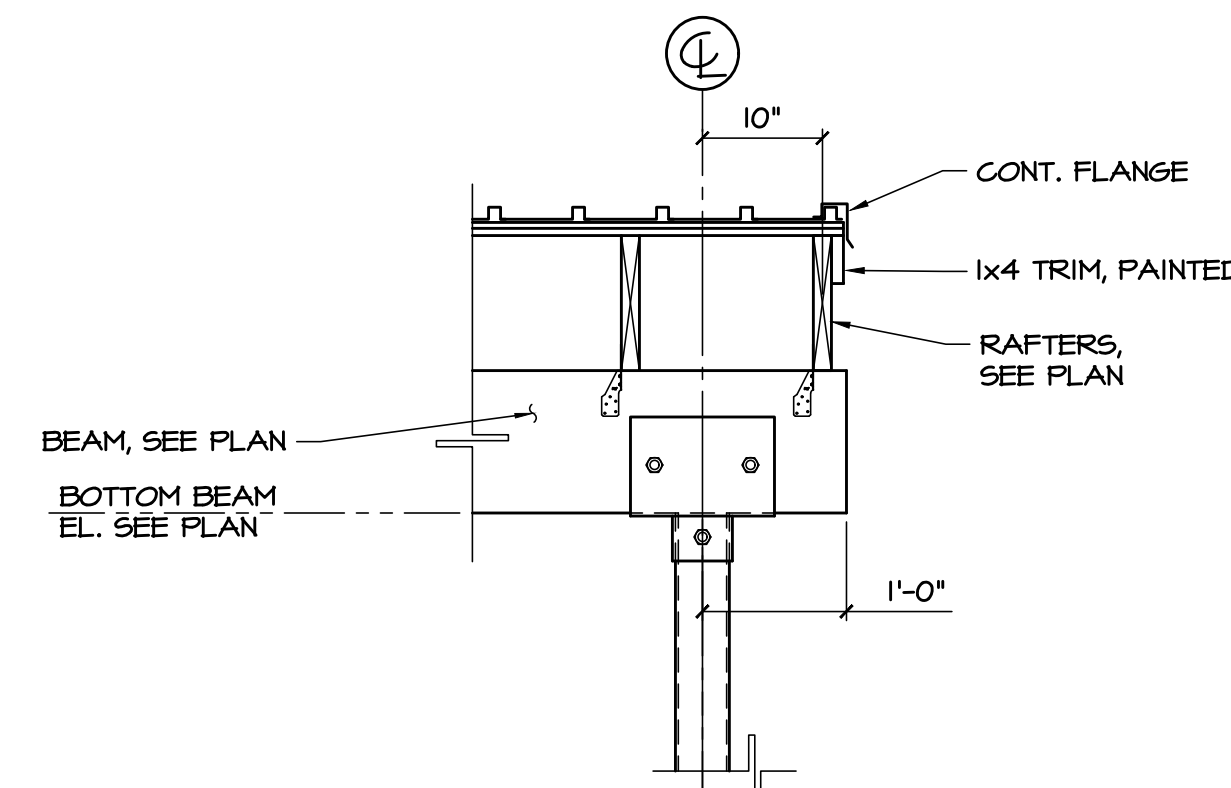
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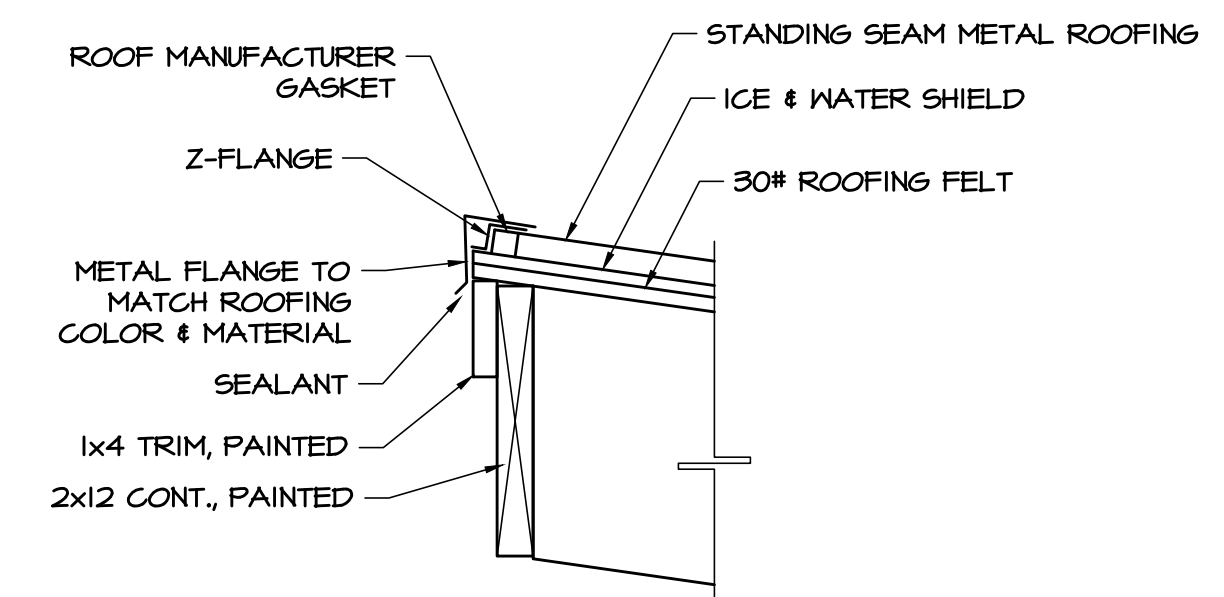
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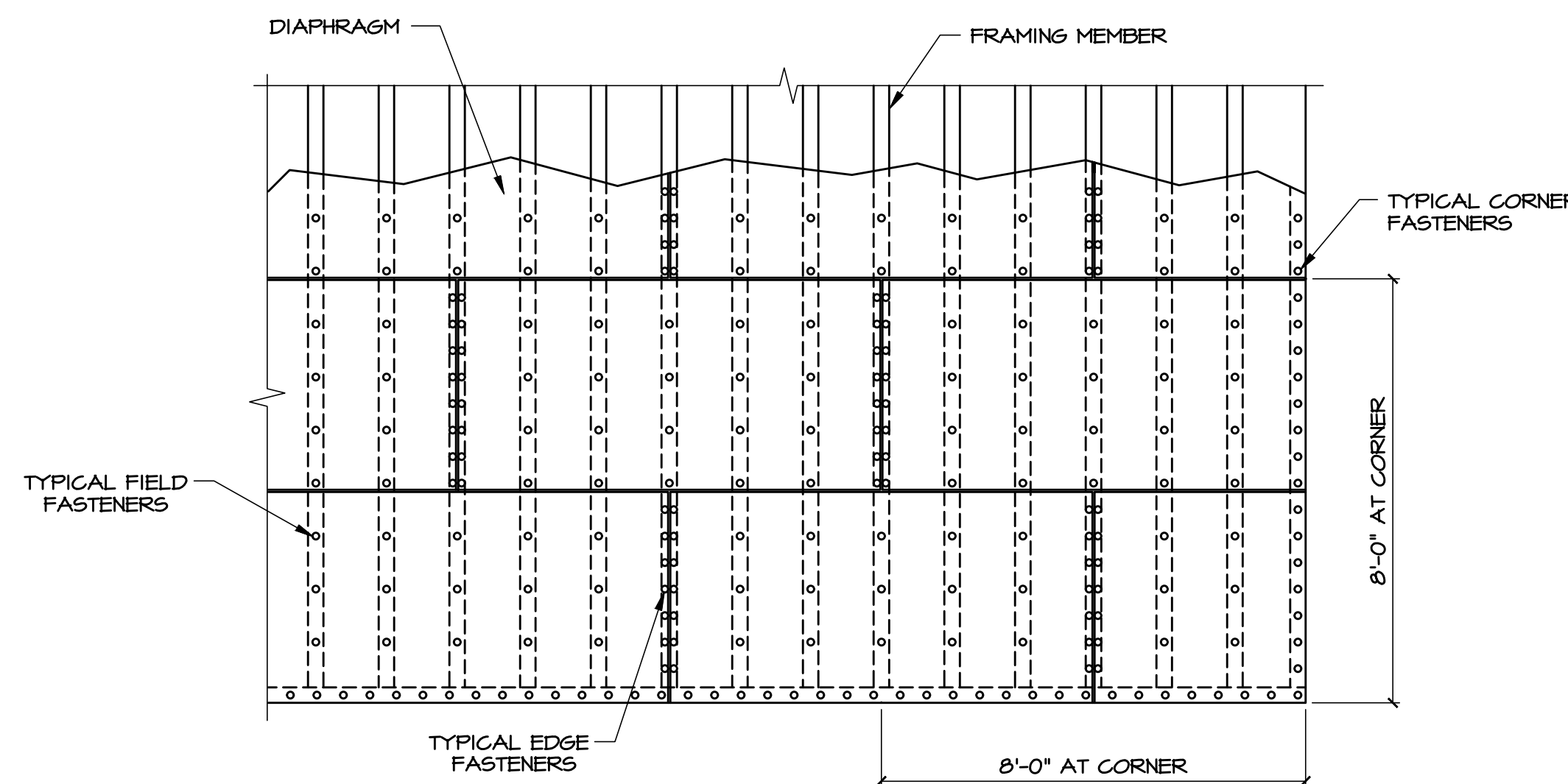
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SCALE: 3/4"=1'-0"



**8**

SCALE: 1/2"=1'-0"



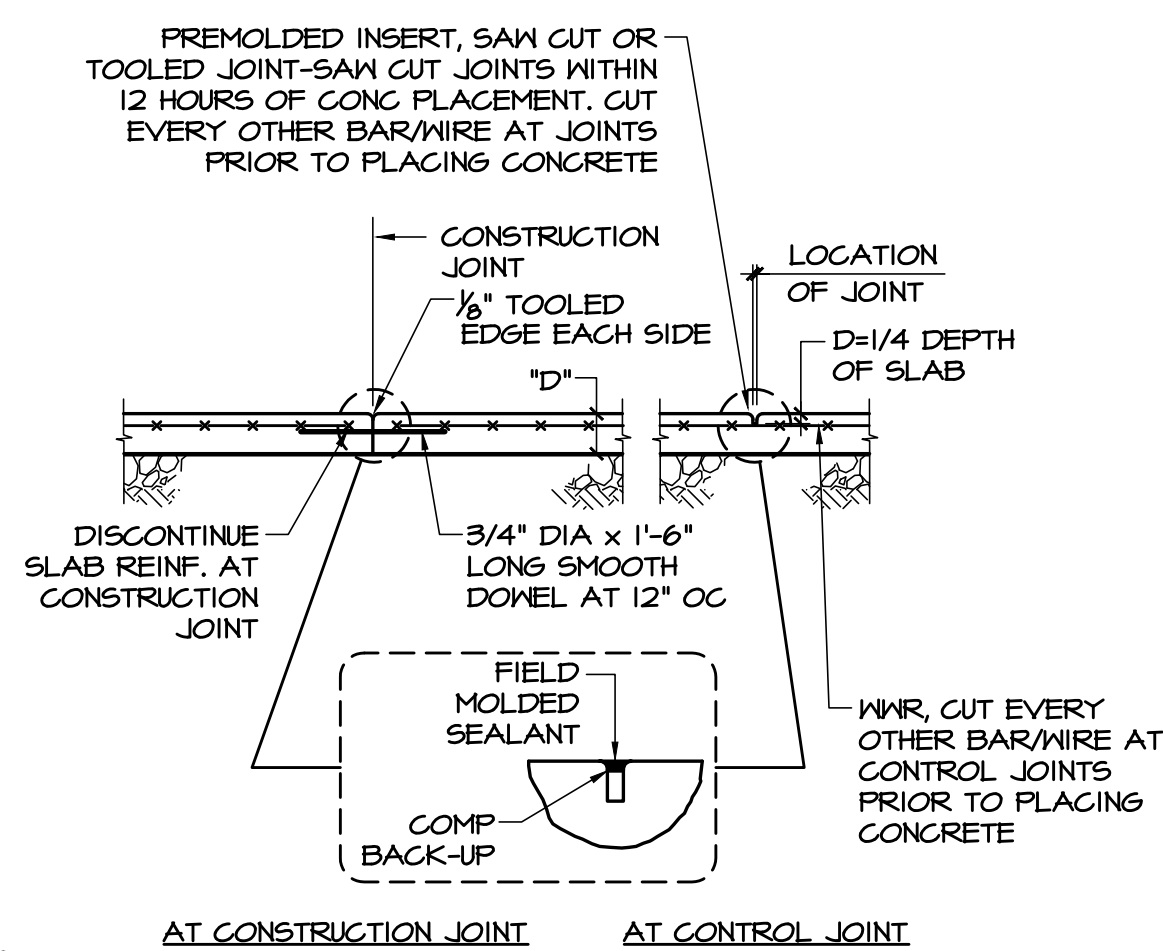
FASTENER SCHEDULE	
TYPICAL EDGE FASTENER	10d NAILS AT 4" O.C.
TYPICAL FIELD FASTENER	10d NAILS AT 8" O.C.
TYPICAL CORNER FASTENER	10d NAILS AT 4" O.C.

- NOTES:  
 1. SHEATHING SHALL BE STRUCTURAL APA RATED  
 2. UNBLOCKED WITH MINIMUM NAIL PENETRATION 1 1/2"

**9**

TYPICAL DIAPHRAM ATTACHMENT

SCALE: N.T.S.



**10**

TYPICAL DETAIL SLAB ON GRADE

SCALE: N.T.S.

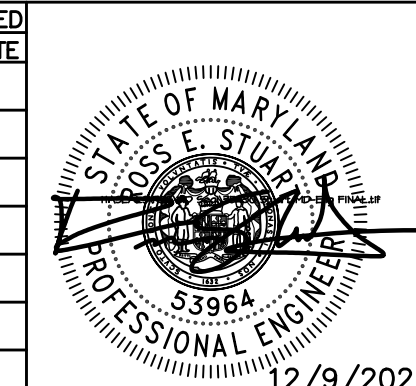
0 1'-4" 2'-8"

GP# G20219457

DWG NO: S200

PROFESSIONAL CERTIFICATION: I, ROSS EVAN STUART, PE, CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE # 53964 EXPIRATION DATE 2/19/2023

#	REVISIONS DESCRIPTION	APPROVED BY	DATE



**PENNONI ASSOCIATES INC.**  
 8890 McGaw Road, Suite 100  
 Columbia, MD 21045  
 T 410.997.8900 F 410.997.9282

ANNE ARUNDEL COUNTY  
 DEPARTMENT OF PUBLIC WORKS

NOVEMBER 28, 2022

APPROVED	DATE	APPROVED	DATE

SCALE: AS NOTED  
 DRAWN BY: JSN/SVH  
 CHECKED BY: PJS/JAR  
 SHEET 51 of 51  
 PROJECT #: 579000  
 PROPOSAL #: 579001

STRUCTURAL SECTIONS AND DETAILS  
**BROOKLYN HEIGHTS COMMUNITY CENTER PARK DESIGN DEVELOPMENT PLANS**  
 TAX MAP 2 GRID 19 PARCEL 38 ACCOUNT #00273010  
 BALTIMORE, MD ZIP CODE 21225 5TH DISTRICT  
 ANNE ARUNDEL COUNTY, MD