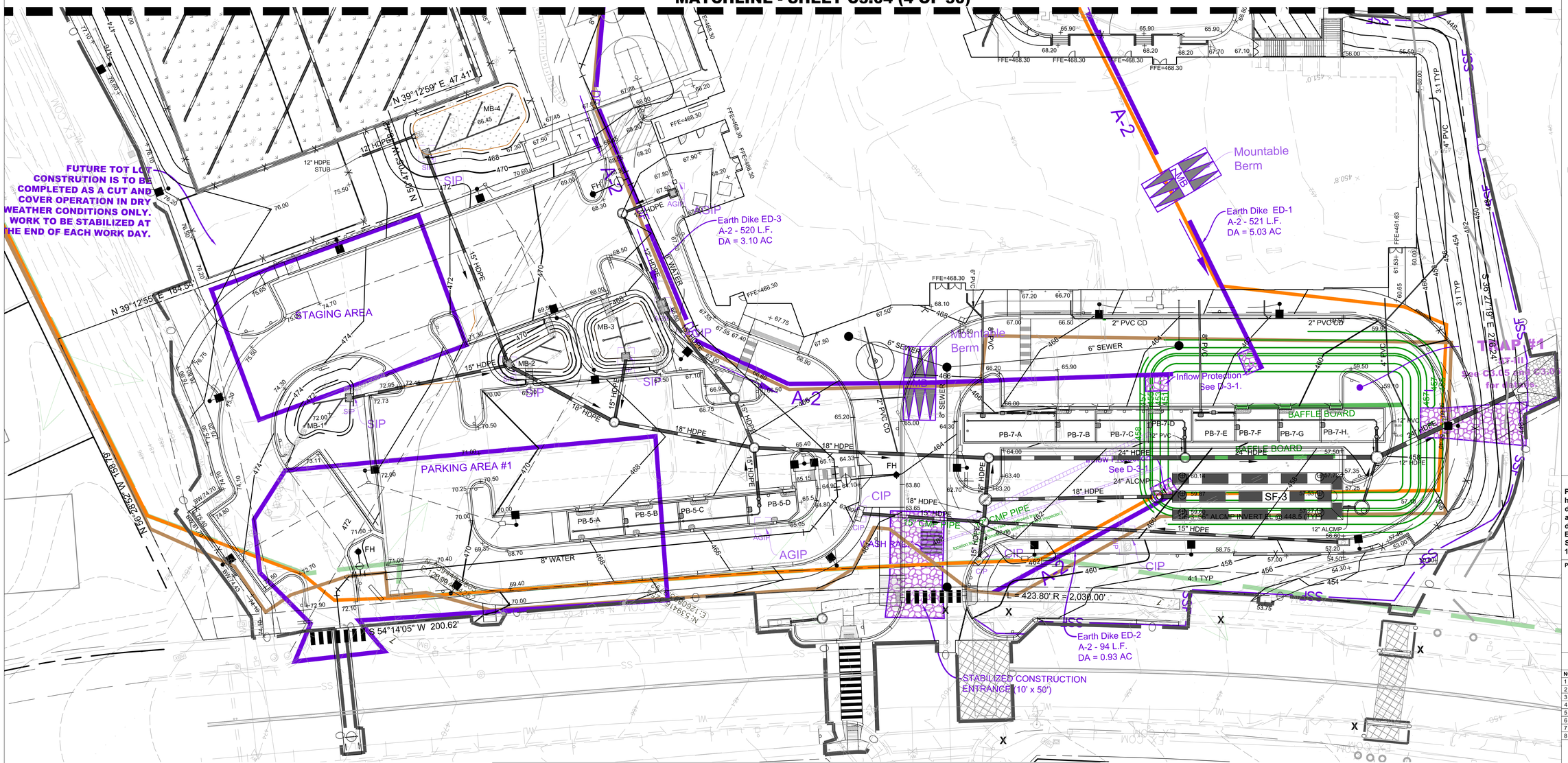


SWM LEGEND

- Existing Contour Major
- Existing Contour Minor
- Existing Walk
- EX. 15" RCP — Existing Storm Drain
- 426 — Proposed Contours
- × 10.32 — Proposed Spot Elevation
- Limit of Disturbance
- SCE — Stabilized Construction Entrance
- Sediment Trap Existing Drainage Divide
- Sediment Trap Proposed Drainage Divide
- Temporary Pipe
- SSF — Super Silt Fence
- ST-III — Sediment Trap ST–III
- 9C / 16C — Soil Boundary
- Existing Drainage Divide
- A-2 — Earth Dike
- Micro–Bioretention Bed
- SIP — Standard Inlet Protection
- CIP — Curb Inlet Protection
- AGIP — At–Grade Inlet Protection
- Mountable Berm

MACRIS, HENDRICKS & GLASCOCK P.A.
9220 WIGHTMAN ROAD, SUITE 120
MONTGOMERY VILLAGE, MD 20886-1226
301-670-0840

SEDIMENT TRAP COMPUTATIONS
Criswell Clarksburg

USER: LKS
CHECKED I SEC
DATE: Oct-20
FILE: 2018.145.12

DESIGN INFORMATION

TRAP DESIGNATION: # 1
DESIGN AREA = 3.58 ACRES
STORAGE VOLUME REQUIRED = 3600 CUBIC FEET PER ACRE
REQUIRED DEVICE VOLUME = 12888 CUBIC FEET
BOTTOM LENGTH:WIDTH RATIO = 2 : 1

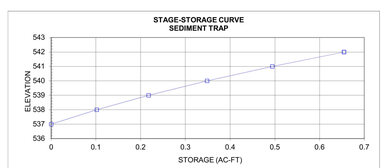
TRAP DIMENSIONS	REQUIRED		PROVIDED					
RIGHT SIDE SLOPE =	2	:1	2	:1				
LEFT SIDE SLOPE =	2	:1	2	:1				
END SLOPES =	2	:1	2	:1				
BOTTOM WIDTH =	45	FEET	45	FEET	WIDTH	X	LENGTH	
BOTTOM LENGTH =	90	FEET	92	FEET				
STORAGE DEPTH	2.68	FEET	3.5	FEET	59 FT	X	106 FT	
50 % STORAGE DEPTH:	1.45	FEET	1.75	FEET	52 FT	X	99 FT	
50 % STORAGE VOLUME:	6444	CU FT	9507	CU FT				
25 % STORAGE DEPTH:	0.76	FEET	0.875	FEET	49 FT	X	96 FT	
25 % STORAGE VOLUME:	3222	CU FT	3868	CU FT				
33 % DEPTH	0.89	FEET	1.17	FEET	49 FT	X	96 FT	
33 % DEPTH VOLUME:	3836	CU FT	5287	CU FT				

NOTE: VOLUME = DEPTH/3 X (BASE AREA+ TOP AREA + (TOP AREA X BOTTOM AREA)^0.5)

RIPRAP OUTLET SEDIMENT TRAP	# 1	
TYPE OF TRAP =	ST-I	
EX. DRAINAGE AREA =	3.58	AC.
PROP. DRAINAGE AREA =	3.32	AC.
STORAGE REQUIRED =	12888	CF / 477 CY
STORAGE PROVIDED =	18352	CF / 680 CY
SIZE @ STORAGE ELEV. =	59.0	FT X 106.0 FT
SIZE @ BOTTOM ELEV. =	45.0	FT X 92.0 FT
DEPTH =	3.5	FEET
OUTLET ELEVATION. =	540.50	FEET
WET STORAGE ELEVATION =	538.75	FEET
CLEANOUT ELEV. =	537.88	FEET
BOTTOM ELEV. =	537.00	FEET
EMBANKMENT ELEVATION =	544.00	FEET
EMBANKMENT HEIGHT =	5.00	FEET
CHANNEL DEPTH =		FEET
WEIR LENGTH =		FEET
SIDE SLOPES =	2:1	H:V
RISER DIA. =	42	INCHES
BARREL DIA. =	30	INCHES

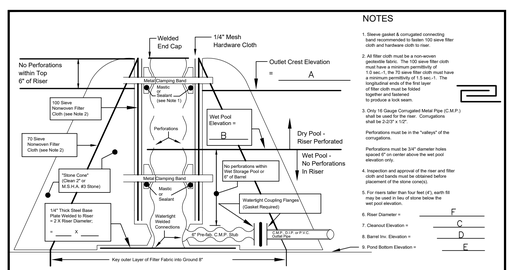
MHG

USER: LKS
DATE: 10/26/2020
CHECKED B SEC
JOB NO.: 2013.111.21
FILE NAME: STRAP1-VOL



SEDIMENT CONTROL
STAGE/STORAGE TABULATION
PLAN SCALE: 1 in. = 1 FT

ELEV.	AREA SQ. IN.	AREA SQ. FT.	AVG. AREA SQ. FT.	ELEV. DIFF. FT.	INCR. VOLUME CU. FT.	TOTAL VOLUME CU. FT.	TOTAL VOLUME AC-FT.
537	4148.00	4148				0	0.0000
537.875			4444	1.0	4444	3888	0.0893
538	4739.00	4739				4444	0.1020
538.167			5050	1.0	5050	5287	0.1214
538.75						9507	0.1909
539	5360.00	5360				9493	0.2179
539.25			5685	1.0	5685	10914	0.2506
539.5						13046	0.2847
540	6009.00	6009				15178	0.3484
540.5			6349	1.0	6349	18352	0.4213
541	6689.00	6689				21527	0.4942
			6990	1.0	6990		
542	7290.00	7290				28516	0.6546



NOTES

1. Sleeve gasket & corrugated connecting band recommended to fasten 100 sieve filter cloth and hardware cloth to riser.
2. All filter cloth must be a non-woven geotextile fabric. The 100 sieve filter cloth must have a minimum permittivity of 1.0 sec.-1, the 70 sieve filter cloth must have a minimum permittivity of 1.5 sec.-1. The longitudinal ends of the first layer of filter cloth must be sewed together and fastened together to produce a lock seam.
3. Only 16 Gauge Corrugated Metal Pipe (C.M.P.) shall be used for the riser. Corrugations shall be 2-2/3" x 1/2".

   Perforations must be in the "valleys" of the corrugations.

   Perforations must be 3/4" diameter holes spaced 6" on center above the wet pool elevation only.
4. Inspection and approval of the riser and filter cloth and bands must be obtained before placement of the stone cone(s).
5. For risers taller than four feet (4'), earth fill may be used in lieu of stone below the wet pool elevation.
6. Riser Diameter = F
7. Cleanout Elevation = C
8. Barrel Inv. Elevation = D
9. Pool Bottom Elevation = E

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES WATER RESOURCES

MODIFIED DEWATERING DEVICE FOR SEDIMENT TRAPS, SEDIMENT BASINS AND STORMWATER MANAGEMENT PONDS

DATE: Feb.1997
REVISION: May 1997
SCALE: NONE

DEWATERING DEVICES ELEVATIONS TABLE

TRAP# OR BASIN#	A STORAGE ELEVATION	B WET POOL ELEVATION	C CLEANOUT ELEVATION	D BARREL INVERT	E BOTTOM ELEVATION	F RISER DIAMETER	G BASE PLATE
TRAP 1	455.50'	455.50'	452.13'	452.00'	451.00'	42"	84"

SM#285890
SC005SESCPLANN
SC#286335
LOWER (NORTH) SEDIMENT CONTROL PLAN

ARCHITECT

SMOLEN • EMR • ILKOVITCH ARCHITECTS
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COMPREHENSIVE STRUCTURAL SOLUTIONS
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MECH./ELECTRICAL/PLUMBING
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NYIKOS-GARCIA FOODSERVICE DESIGN, INC
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SUSTAINABILITY
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BALTIMORE, MD 21204
443-653-3792 (P)

CONSTRUCTION MANAGER
SKANSKA USA BUILDING INC.
700 KING FARM BLVD, SUITE 200
ROCKVILLE, MD 20850
301-795-3100 (P)

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No.: 16905, Expiration Date: 4.21.2022.

PROFESSIONAL SEAL:

PRINTS ISSUED

NO:	DESCRIPTION:	DATE:
1	SCHEMATIC DESIGN	11/01/2019
2	DD KICKOFF	12/03/2019
3	COORDINATION SET 1	02/03/2020
4	DD PRICING SET	03/09/2020
5	DESIGN DEVELOPMENT	04/06/2020
6	65% CD SET	06/15/2020
7	PERMIT SET	08/10/2020
8	CD IAC SET	09/04/2020

TAX MAP FT62 WSSC 224NW09
PLAT 12762
9TH ELECTION DISTRICT
CITY OF GAITHERSBURG, MD

GAITHERSBURG CLUSTER ELEMENTARY SCHOOL #8

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:
SEDIMENT CONTROL PLAN FOR THE LOWER SITE SECTION (NORTH)

PROJECT NO: 19007
DATE: 10/16/20
SCALE: 1"=50'
NORTH
SHEET NO: C3.05
Sheet 5 of 28

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