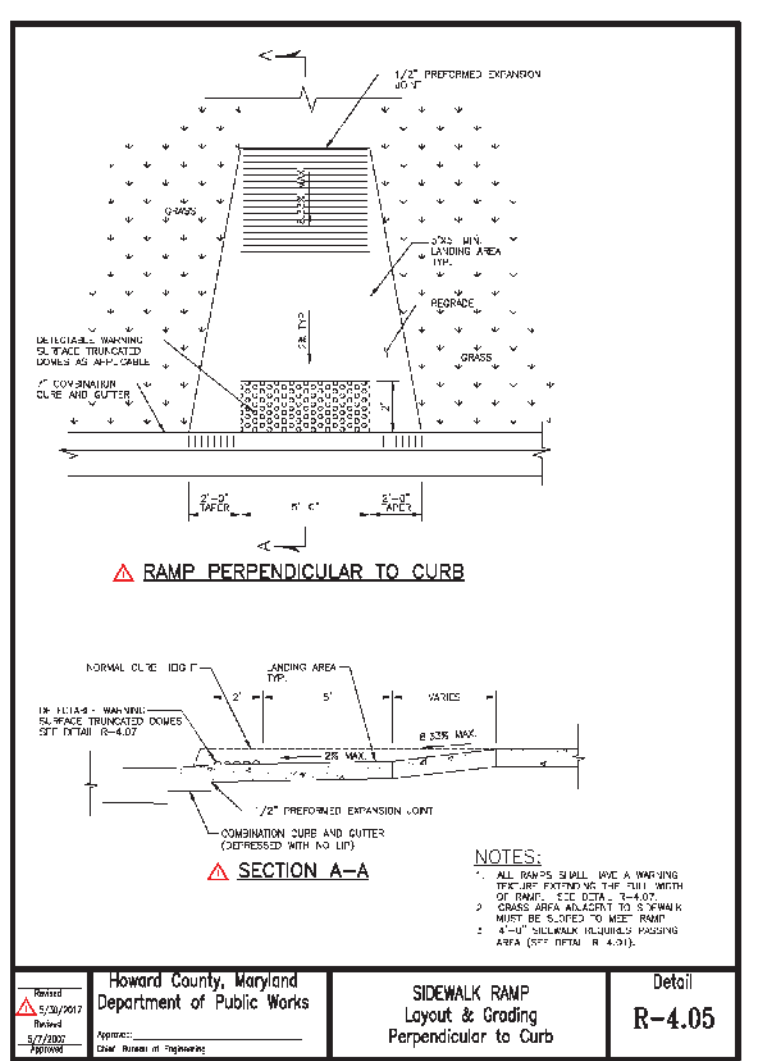
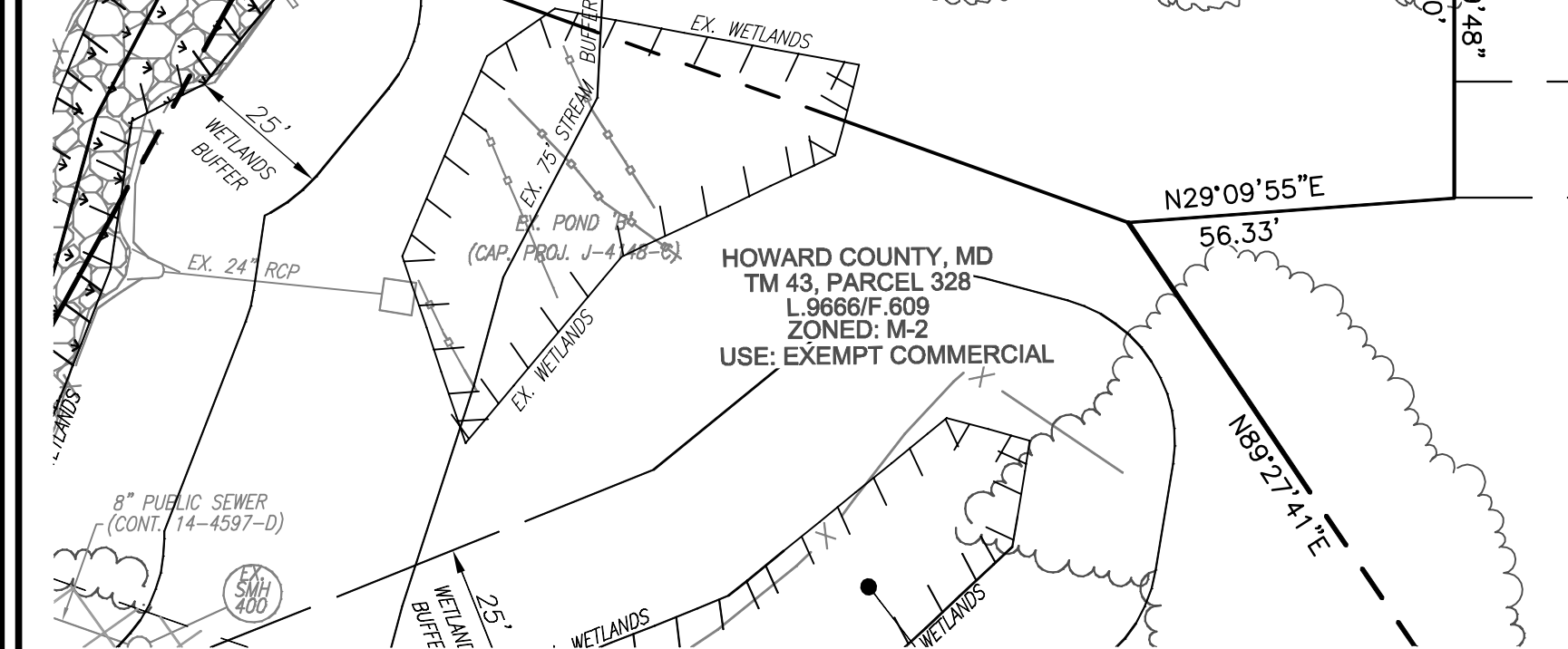


LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING STREAM
- EXISTING STREAM BANK
- EXISTING CURB AND GUTTER
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- EXISTING TREELINE
- EXISTING TREES
- EXISTING TREELINE
- PROPOSED CURB AND GUTTER
- PROPOSED STORM DRAIN
- PROPOSED STORM INLETS
- PROPOSED STORM MANHOLE
- EXISTING WETLANDS
- EX. FOREST CONSERVATION EASEMENT (RETENTION) (PLAT # 22345)
- EX. FOREST CONSERVATION EASEMENT (REFORESTATION) (PLAT # 22345)
- EXISTING PUBLIC DRAINAGE EASEMENT (PLAT #148-05) (PLAT #14148-03)
- PROPOSED STORMWATER FACILITY
- 9.0' MAINTENANCE EASEMENT AND "NO TREE PLANTING" ZONE
- STANDARD PAVING SAW CUT, MILL AND OVERLAY AT 2" DEPTH
- FULL DEPTH P-4 PAVEMENT AT FIRE HYDRANT TRENCHING- EE DETAIL SHEET 8.
- RECOMMENDED PAVING SECTION FOR TRUCK PARKING PER GEOTECH-SEE DETAIL SHEET 8.
- COMMERCIAL/INDUSTRIAL ENTRANCE AND CONCRETE APRON STD. DET. R-6.07
- EXISTING SPECIMEN TREE
- CRITICAL ROOT ZONE



LAYOUT PLAN
SCALE: 1"=30'

** REFER TO GENERAL NOTE #57, SHEET 1 FOR NECESSARY DISTURBANCE APPROVAL OF STORM DRAIN OUTFALL WITHIN THE STREAM BANK BUFFER.**

* REFER TO GENERAL NOTE #53 (BA-19-043V), SHEET 1.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Submitted by: Rob Vogel 9/9/2022

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 9/9/2022

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 9/12/2022

DIRECTOR DATE

OWNER/DEVELOPER
TEAM DORSEY, LLC
C/O ERIC ROSENBAUM
2308 FORT WILLIAM DRIVE
OLNEY, MD 20832
(301) 787-0220

NO. REVISION DATE

SITE DEVELOPMENT PLAN
LAYOUT PLAN

JESSUP PARK PARCEL 108-A
TRAILER PARKING AND STORAGE
7868 DORSEY RUN ROAD
JESSUP, MD 20794
L. 18997 / F. 00119 HOWARD COUNTY, MARYLAND

TAX MAP 43 GRID 22
1ST ELECTION DISTRICT

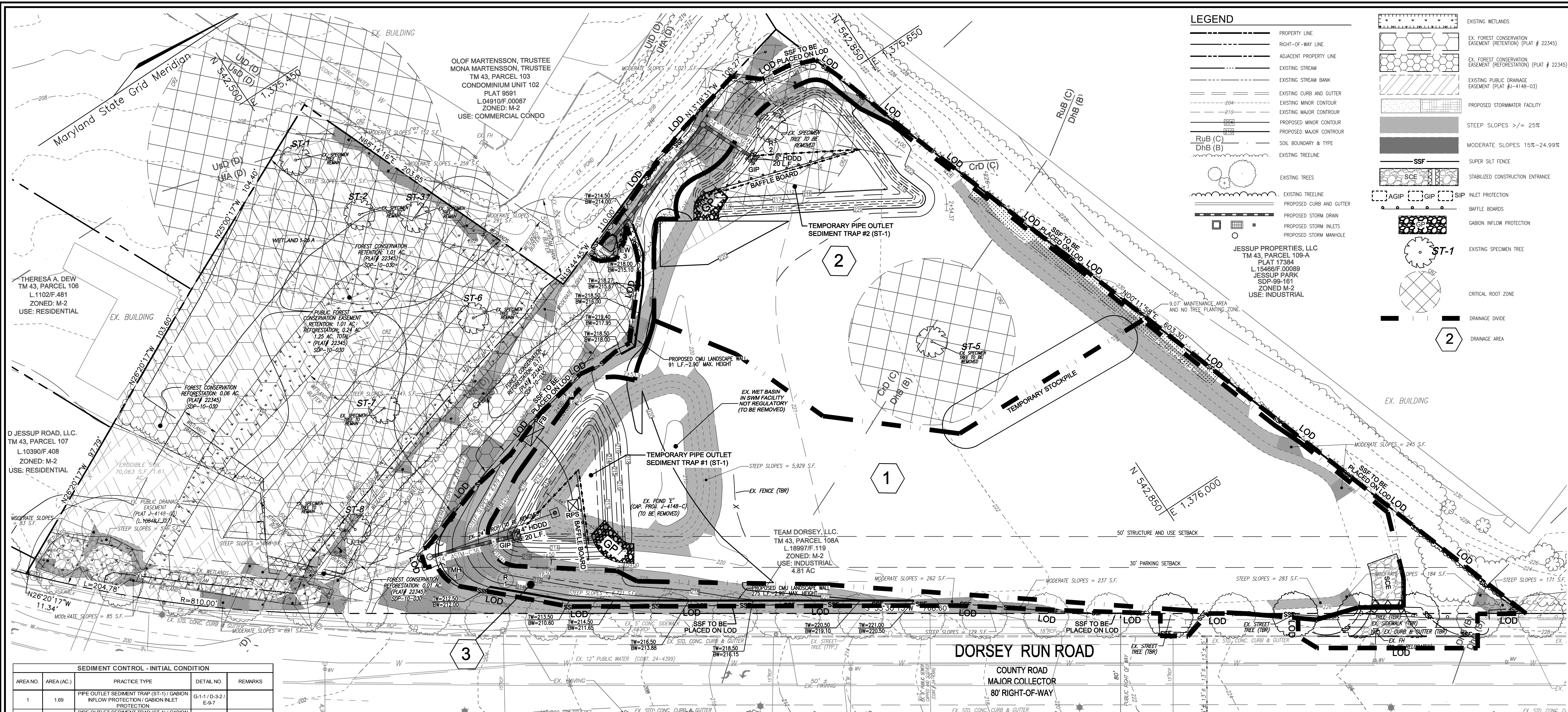
ZONED: M-2
PARCEL 108-A

VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

DESIGN BY: RHV/GAH
DRAWN BY: GAH
CHECKED BY: RHV
DATE: MARCH, 2022
SCALE: AS SHOWN
W.O. NO.: 04-76

PROFESSIONAL CERTIFICATE
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. 16193, EXPIRATION DATE: 09-27-2024

2 OF 18



LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING STREAM
- EXISTING STREAM BANK
- EXISTING CURB AND GUTTER
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- SOIL BOUNDARY & TYPE
- EXISTING TREELINE
- EXISTING TREES
- EXISTING TREELINE
- PROPOSED CURB AND GUTTER
- PROPOSED STORM DRAIN
- PROPOSED STORM INLETS
- PROPOSED STORM MANHOLE

EXISTING WETLANDS

- EX. FOREST CONSERVATION EASEMENT (RETENTION) (PLAT # 22345)
- EX. FOREST CONSERVATION EASEMENT (REFORESTATION) (PLAT # 22345)
- EXISTING PUBLIC DRAINAGE EASEMENT (PLAT #4148-03)

PROPOSED STORMWATER FACILITY

- STEEP SLOPES >= 25%
- MODERATE SLOPES 15%-24.99%
- SUPER SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- INLET PROTECTION
- BAFFLE BOARDS
- GABION INFLOW PROTECTION
- EXISTING SPECIMEN TREE
- CRITICAL ROOT ZONE
- DRAINAGE DIVIDE
- DRAINAGE AREA

SSF TO BE PLACED ON LOD

- SSF
- SCE
- AGIP
- GIP
- SIP
- ST-1

JESSUP PROPERTIES, LLC
 TM 43, PARCEL 109-A
 PLAT 17384
 L.15466/F.00089
 JESSUP PARK
 SDP-99-181
 ZONED M-2
 USE: INDUSTRIAL

AREA NO.	AREA (AC.)	PRACTICE TYPE	DETAIL NO.	REMARKS
1	1.69	PIPE OUTLET SEDIMENT TRAP (ST-1) / GABION INFLOW PROTECTION / GABION INLET PROTECTION	G-1-1 / D-3-2 / E-9-7	
2	0.98	PIPE OUTLET SEDIMENT TRAP (ST-1) / GABION INFLOW PROTECTION / GABION INLET PROTECTION	G-1-1 / D-3-2 / E-9-7	
3	0.41	SUPER SILT FENCE	E-3	

Key (X#)	Species	Size (m.d.bh)	CRZ (feet radius)	Comments	To Remain / To Be Removed
1	Willow oak	64	96	Good	To Remain
2	Willow oak	39	58.5	Fair to poor, twin stems decay noted	To Remain
3	Willow oak	36.5	54.75	Good	To Remain
4	Willow oak	35.5	53.25	Good condition	To Be Removed
5	Black oak	36	54	Fair condition, twin stems, some dieback	To Be Removed
6	Willow oak	31.5	47.25	Good condition	To Remain
7	Willow oak	31	46.5	Good condition	To Remain
8	Red oak	31	46.5	Poor condition, notable dieback	To Remain

NOTE:
 EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR REGARDLESS OF DAYS/DATES IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.

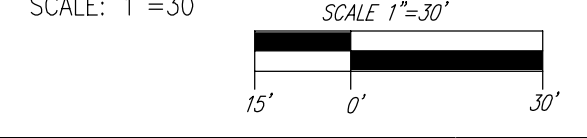
SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	HYDRIC	HYDRIC INCLUSIONS	PRIME FARMLAND	<15% SLOPE W/ EROSION POTENTIAL
DhB	DOWNER-HAMMONTON SANDY LOAM, 2 TO 5 PERCENT	A	.15	NO	NO	NO	NO
DhC	DOWNER-HAMMONTON SANDY LOAM, 5 TO 10 PERCENT	A	.15	NO	NO	NO	NO
CrD	CROOM AND EVESBORO SOILS, 10 TO 15 PERCENT SLOPES	C	.32	NO	NO	NO	NO
RuB	RUSSET AND BELTSVILLE SOILS, 2 TO 5 PERCENT SLOPE	C	.28	NO	NO	YES	NO
U1A	URBAN LAND-FALLSINGTON COMPLEX, 0 TO 2 PERCENT SLOPE	D	-	YES	YES	NO	NO
UsD	URBAN LAND-SASSAFRAS-BELTSVILLE COMPLEX, 5 TO 15 PERCENT SLOPE	D	-	NO	NO	NO	NO

TAKEN FROM: USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY
NOTE:
 HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

**** REFER TO GENERAL NOTE #57, SHEET 1 FOR NECESSARY DISTURBANCE APPROVAL OF STORM DRAIN OUTFALL WITHIN THE STREAM STREAM BANK BUFFER.****

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Approved by: *Alexander Bratchie* 9/12/2022
 HOWARD S.C.D. DATE

GRADING, SEDIMENT AND EROSION CONTROL PLAN



DESCRIPTION	QUANTITY	UNIT
DRAINAGE AREA - INITIAL	1.69	ACRES
DRAINAGE AREA - INTERIM	1.15	ACRES
DRAINAGE AREA - FINAL	1.15	ACRES
TOTAL STORAGE REQUIRED	6068	CF
TOTAL STORAGE PROVIDED	6626	CF
WET STORAGE REQUIRED	3034	CF
WET STORAGE PROVIDED	3465	CF
DRY STORAGE REQUIRED	3034	CF
DRY STORAGE PROVIDED	3161	CF
TRAP BOTTOM ELEVATION	211.00	FT
TRAP BOTTOM DIMENSIONS	44 x 78	FT x FT
HDDH INVERT (WET STORAGE) ELEV.	212.50	FT
RISER CREST (DRY STORAGE) ELEVATION	213.50	FT
CLEANOUT ELEVATION	211.75	FT
TOP OF EMBANKMENT ELEV.	216.00	FT
SIDE SLOPE	3:1	H:V RATIO
EMBANKMENT TOP WIDTH	10	FT
SPILLWAY MATERIAL	RCP	
SPILLWAY (BARREL) DIAMETER	24	IN
RISER MATERIAL	CONCRETE	
RISER DIMENSIONS (INSIDE)	4' x 4'	SQUARE
TRASH RACK DIAMETER / HEIGHT	* N/A	IN
ANTI-SEEP COLLAR DIMENSIONS	* N/A	FT
OUTLET PROTECTION - LENGTH	* N/A	FT
OUTLET PROTECTION - WIDTH	* N/A	FT
OUTLET PROTECTION - DEPTH	* N/A	IN

DESCRIPTION	QUANTITY	UNIT
DRAINAGE AREA - INITIAL	0.98	ACRES
DRAINAGE AREA - INTERIM	1.28	ACRES
DRAINAGE AREA - FINAL	1.28	ACRES
TOTAL STORAGE REQUIRED	4951	CF
TOTAL STORAGE PROVIDED	8986	CF
WET STORAGE REQUIRED	2295	CF
WET STORAGE PROVIDED	4022	CF
DRY STORAGE REQUIRED	2295	CF
DRY STORAGE PROVIDED	4964	CF
TRAP BOTTOM ELEVATION	216.00	FT
TRAP BOTTOM DIMENSIONS	58 x 112	FT x FT
HDDH INVERT (WET STORAGE) ELEV.	217.00	FT
RISER CREST (DRY STORAGE) ELEVATION	218.00	FT
CLEANOUT ELEVATION	216.50	FT
TOP OF EMBANKMENT ELEV.	219.50	FT
SIDE SLOPE	3:1	H:V RATIO
EMBANKMENT TOP WIDTH	10	FT
SPILLWAY MATERIAL	RCP	
SPILLWAY (BARREL) DIAMETER	24	IN
RISER MATERIAL	CONCRETE	
RISER DIMENSIONS (INSIDE)	4' x 4'	SQUARE
TRASH RACK DIAMETER / HEIGHT	* N/A	IN
ANTI-SEEP COLLAR DIMENSIONS	* N/A	FT
OUTLET PROTECTION - LENGTH	* N/A	FT
OUTLET PROTECTION - WIDTH	* N/A	FT
OUTLET PROTECTION - DEPTH	* N/A	IN

OWNER/DEVELOPER
 TEAM DORSEY, LLC
 C/O ERIC ROSENBAUM
 2308 FORT WILLIAM DRIVE
 OLNEY, MD 20832
 (301) 787-0220

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division: *Chad Edmondson* 9/9/2022
 Chief, Division of Land Development: *Steph Grimes* 9/12/2022
 Director: *Steph Grimes* 9/12/2022

BY THE DEVELOPER:
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature of Developer: *[Signature]* DATE: 8/29/2022

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature of Engineer: *Rob Vogel* DATE: 8/29/2022

SITE DEVELOPMENT PLAN
GRADING, EROSION AND SEDIMENT CONTROL PLAN
INITIAL CONDITIONS AND DEMOLITION
JESSUP PARK PARCEL 108-A
 TRAILER PARKING AND STORAGE
 7868 DORSEY RUN ROAD
 JESSUP, MD 20794
 TAX MAP 43 GRID 22
 1ST ELECTION DISTRICT

ZONED: M-2
 PARCEL 108-A
 HOWARD COUNTY, MARYLAND

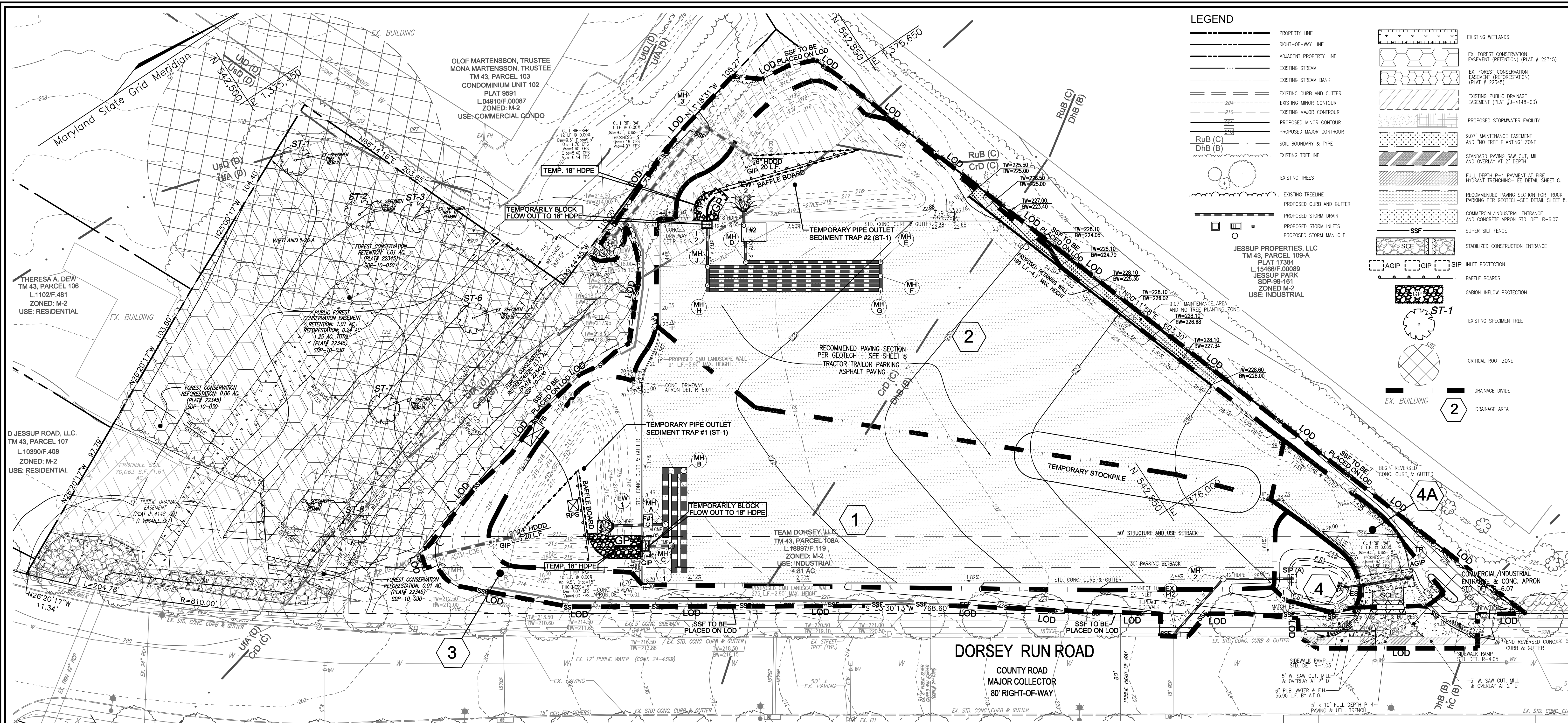
VOGEL ENGINEERING
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

TIMMONS GROUP
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF MARYLAND
 No. 16193
 09/29/2022

DESIGN BY: RHW/GAH
 DRAWN BY: GAH
 CHECKED BY: RHW
 DATE: MARCH, 2022
 SCALE: AS SHOWN
 W.O. NO.: 04-76

PROFESSIONAL CERTIFICATE
 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. 16193 EXPIRATION DATE: 09-29-2024

3 SHEET OF 18



LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING STREAM
- EXISTING STREAM BANK
- EXISTING CURB AND GUTTER
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- RuB (C)
- DhB (B)
- EXISTING TREELINE
- EXISTING TREES
- EXISTING TREELINE
- PROPOSED CURB AND GUTTER
- PROPOSED STORM DRAIN
- PROPOSED STORM INLETS
- PROPOSED STORM MANHOLE
- EXISTING WETLANDS
- EX. FOREST CONSERVATION EASEMENT (RETENTION) (PLAT # 22345)
- EX. FOREST CONSERVATION EASEMENT (REFORESTATION) (PLAT # 22345)
- EXISTING PUBLIC DRAINAGE EASEMENT (PLAT #1-4148-03)
- PROPOSED STORMWATER FACILITY
- 9.07' MAINTENANCE EASEMENT AND 'NO TREE PLANTING' ZONE
- STANDARD PAVING SAW CUT, MILL AND OVERLAY AT 2" DEPTH
- FULL DEPTH P-4 PAVEMENT AT FIRE HYDRANT TRENCHING- SEE DETAIL SHEET 8.
- RECOMMENDED PAVING SECTION FOR TRUCK PARKING PER GEOTECH-SEE DETAIL SHEET 8.
- COMMERCIAL/INDUSTRIAL ENTRANCE AND CONCRETE APRON STD. DET. R-6.07
- SUPER SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- AGIP
- GIP
- SIP
- INLET PROTECTION
- BAFFLE BOARDS
- GABION INFLOW PROTECTION
- ST-1
- EXISTING SPECIMEN TREE
- CRITICAL ROOT ZONE
- EX. BUILDING
- DRAINAGE DIVIDE
- DRAINAGE AREA

GRADING, SEDIMENT AND EROSION CONTROL PLAN

SCALE: 1"=30'

MAPPED SOILS TYPES - SAVAGE MAP #25						
SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	HYDRIC	HYDRIC INCLUSIONS	PRIME FARMLAND
DhB	DOWNER-HAMMONTON SANDY LOAM, 2 TO 5 PERCENT	A	.15	NO	NO	NO
DhC	DOWNER-HAMMONTON SANDY LOAM, 5 TO 10 PERCENT	A	.15	NO	NO	NO
CrD	CROOM AND EVESBORO SOILS, 10 TO 15 PERCENT SLOPES	C	.32	NO	NO	NO
RuB	RUSSET AND BELTSVILLE SOILS, 2 TO 5 PERCENT SLOPE	C	.28	NO	NO	YES
UFA	URBAN LAND-FALLSINGTON COMPLEX, 0 TO 2 PERCENT SLOPE	D	-	YES	YES	NO
USD	URBAN LAND-SASSAFRAS-BELTSVILLE COMPLEX, 5 TO 15 PERCENT SLOPE	D	-	NO	NO	NO

TAKEN FROM: USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY
 NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT
 NOTE: SPECIMEN TREES TO BE REMOVED UNDER GRADING PLAN SDP-10-030, REACTIVATED UNDER WP-21-058. REFER TO NOTE #54 ON SHEET 1.

DRAINAGE AREAS FOR SEDIMENT CONTROL - INTERMEDIATE CONDITION

AREA NO.	AREA (AC.)	PRACTICE TYPE	DETAIL NO.	REMARKS
1	1.15	PIPE OUTLET SEDIMENT TRAP (ST-1)/ GABION INFLOW PROTECTION / GABION INLET PROTECTION	G-1-1 / D-3-2 / E-9-7	
2	1.28	PIPE OUTLET SEDIMENT TRAP (ST-1)/ GABION INFLOW PROTECTION / GABION INLET PROTECTION	G-1-1 / D-3-2 / E-9-7	
3	0.49	SUPER SILT FENCE	E-3	
4	0.16	STANDARD INLET PROTECTION	E-3	TOTAL TO I-3
4A	0.11	AT GRADE INLET PROTECTION	E-9-2	TO TRENCH DRN.

* INCLUDES AREA 4A

** REFER TO GENERAL NOTE #57, SHEET 1 FOR NECESSARY DISTURBANCE APPROVAL OF STORM DRAIN OUTFALL WITHIN THE STREAM BANK BUFFER.**

NOTE: EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR REGARDLESS OF DAYS/DATES IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 9/9/2022
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 9/9/2022
 CHIEF, DIVISION OF LAND DEVELOPMENT
 9/12/2022
 DIRECTOR

BY THE DEVELOPER:
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY CONSERVATION DISTRICT.
 8/29/2022

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY CONSERVATION DISTRICT.
 8/29/2022

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.
 9/12/2022

OWNER/DEVELOPER
 TEAM DORSEY, LLC
 C/O ERIC ROSENBAUM
 2308 FORT WILLIAM DRIVE
 OLNEY, MD 20832
 (301) 787-0220

NO.	REVISION	DATE

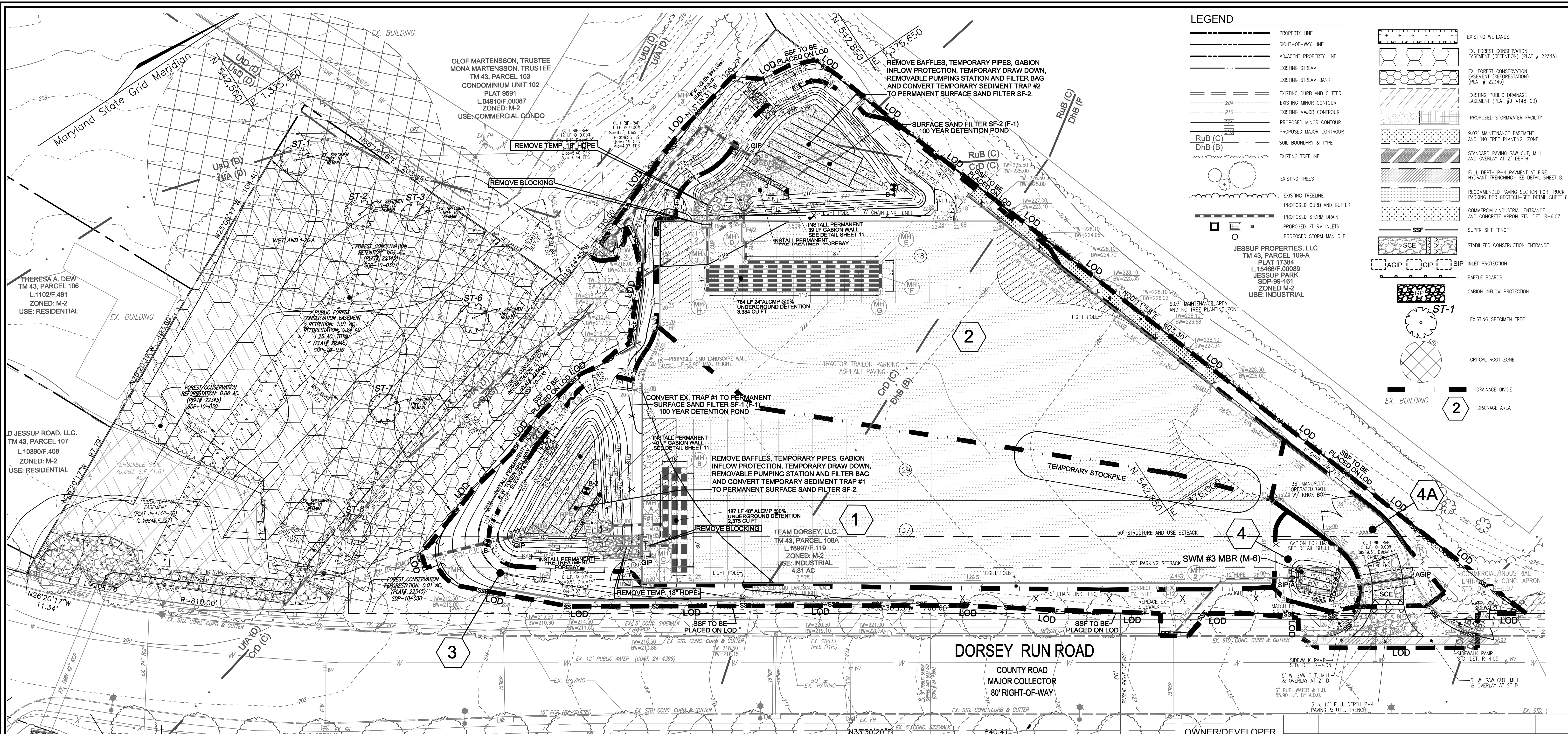
SITE DEVELOPMENT PLAN
 GRADING, EROSION AND SEDIMENT CONTROL PLAN
 INTERMEDIATE CONDITIONS
JESSUP PARK PARCEL 108-A
 TRAILER PARKING AND STORAGE
 7868 DORSEY RUN ROAD
 JESSUP, MD 20794
 TAX MAP 43 GRID 22
 1ST ELECTION DISTRICT

VOGEL ENGINEERING
TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE
 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. 19193
 EXPIRATION DATE: 09-27-2022

DESIGN BY: RHW/GAH
 DRAWN BY: GAH
 CHECKED BY: RHW
 DATE: MARCH, 2022
 SCALE: AS SHOWN
 W.O. NO.: 04-76

4 SHEET 18



LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING STREAM
- EXISTING STREAM BANK
- EXISTING CURB AND GUTTER
- EXISTING MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- SOIL BOUNDARY & TYPE
- EXISTING TREELINE
- EXISTING TREES
- EXISTING CURB AND GUTTER
- PROPOSED STORM DRAIN
- PROPOSED STORM INLETS
- PROPOSED STORM MANHOLE

EXISTING WETLANDS

- EX. FOREST CONSERVATION EASEMENT (RETENTION) (PLAT # 22345)
- EX. FOREST CONSERVATION EASEMENT (REForestation) (PLAT # 22345)
- EXISTING PUBLIC DRAINAGE EASEMENT (PLAT #1-4148-03)
- PROPOSED STORMWATER FACILITY
- 3.0' MAINTENANCE EASEMENT AND NO TREE PLANTING ZONE
- STANDARD PAVING SAW CUT, MILL AND OVERLAY AT 2" DEPTH
- FULL DEPTH P-4 PAVEMENT AT FIRE HYDRANT TRENCH- SEE DETAIL SHEET B.
- RECOMMENDED PAVING SECTION FOR TRUCK PARKING PER GEOTECH-SEE DETAIL SHEET B.
- COMMERCIAL/INDUSTRIAL ENTRANCE AND CONCRETE APRON STD. DET. R-6.07
- SUPER SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- INLET PROTECTION
- BAFFLE BOARDS
- GABION INFLOW PROTECTION
- EXISTING SPECIMEN TREE
- CRITICAL ROZE ZONE
- DRAINAGE DIVIDE
- DRAINAGE AREA

OWNER/DEVELOPER
 TEAM DORSEY, LLC
 C/O ERIC ROSENBAUM
 2308 FORT WILLIAM DRIVE
 OLNEY, MD 20832
 (301) 787-0220

MAPPED SOILS TYPES - SAVAGE MAP #25

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	HYDRIC	HYDRIC INCLUSIONS	PRIME FARMLAND	<15% SLOPE W/ EROSION POTENTIAL
DhB	DOWNER-HAMMONTON SANDY LOAM, 2 TO 5 PERCENT	A	.15	NO	NO	NO	NO
DhC	DOWNER-HAMMONTON SANDY LOAM, 5 TO 10 PERCENT	A	.15	NO	NO	NO	NO
CrD	CROOM AND EVESBORO SOILS, 10 TO 15 PERCENT SLOPES	C	.32	NO	NO	NO	NO
RuB	RUSSET AND BELTSVILLE SOILS, 2 TO 5 PERCENT SLOPE	C	.28	NO	NO	YES	NO
UFA	URBAN LAND-FALLSINGTON COMPLEX, 0 TO 2 PERCENT SLOPE	D	-	YES	YES	NO	NO
UsD	URBAN LAND-SASSAFRAS-BELTSVILLE COMPLEX, 5 TO 15 PERCENT SLOPE	D	-	NO	NO	NO	NO

GRADING, SEDIMENT AND EROSION CONTROL PLAN

SEDIMENT CONTROL - FINAL CONDITION

AREA NO.	AREA (AC.)	PRACTICE TYPE	DETAIL NO.	REMARKS
1	1.15	PIPE OUTLET SEDIMENT TRAP (ST-1) / GABION INFLOW PROTECTION / GABION INLET PROTECTION	G-1-1 / D-3-2 / E-9-7	
2	1.28	PIPE OUTLET SEDIMENT TRAP (ST-1) / GABION INFLOW PROTECTION / GABION INLET PROTECTION	G-1-1 / D-3-2 / E-9-7	
3	0.49	SUPER SILT FENCE	E-3	
4	0.16	STANDARD INLET PROTECTION	E-3	* TOTAL TO I-3
4A	0.11	AT GRADE INLET PROTECTION	E-9-2	TO TRENCH DRN

* INCLUDES AREA 4A

** REFER TO GENERAL NOTE #57, SHEET 1 FOR NECESSARY DISTURBANCE APPROVAL OF STORM DRAIN OUTFALL WITHIN THE STREAM BANK BUFFER.**

NOTE:
 EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR REGARDLESS OF DAYS/DATES IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.

TAKEN FROM: USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY
NOTE:
 HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT
NOTE:
 SPECIMEN TREES TO BE REMOVED UNDER GRADING PLAN SDP-10-030, REACTIVATED UNDER WP-21-058. REFER TO NOTE #54 ON SHEET 1.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Disseminated by: And Edmondson 9/9/2022
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE: 9/9/2022

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 9/12/2022

DIRECTOR
 DATE:

BY THE DEVELOPER:

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Disseminated by: Rob Vogel 8/29/2022
 SIGNATURE OF DEVELOPER DATE

BY THE ENGINEER:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Disseminated by: Alexander Bratchie 9/12/2022
 SIGNATURE OF ENGINEER DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Disseminated by: Alexander Bratchie 9/12/2022
 HOWARD S.C.D. DATE

NO. REVISION DATE

SITE DEVELOPMENT PLAN

GRADING, EROSION AND SEDIMENT CONTROL PLAN

FINAL CONDITION

JESSUP PARK PARCEL 108-A

TRAILER PARKING AND STORAGE
 7868 DORSEY RUN ROAD
 JESSUP, MD 20794
 TAX MAP 43 GRID 22 1ST ELECTION DISTRICT

ZONED: M-2
 PARCEL 108-A
 L. 18997 / F. 00119 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING

TIMMONS GROUP

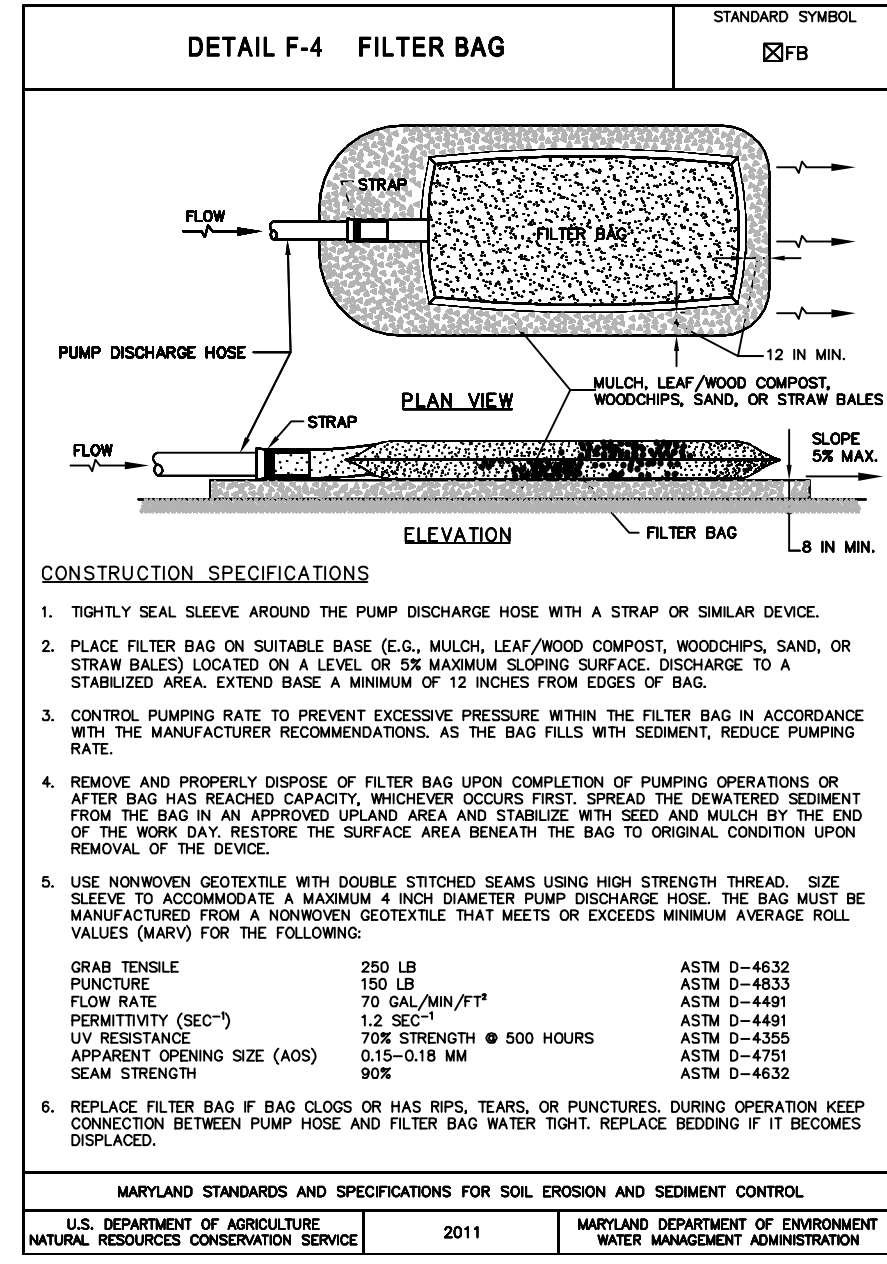
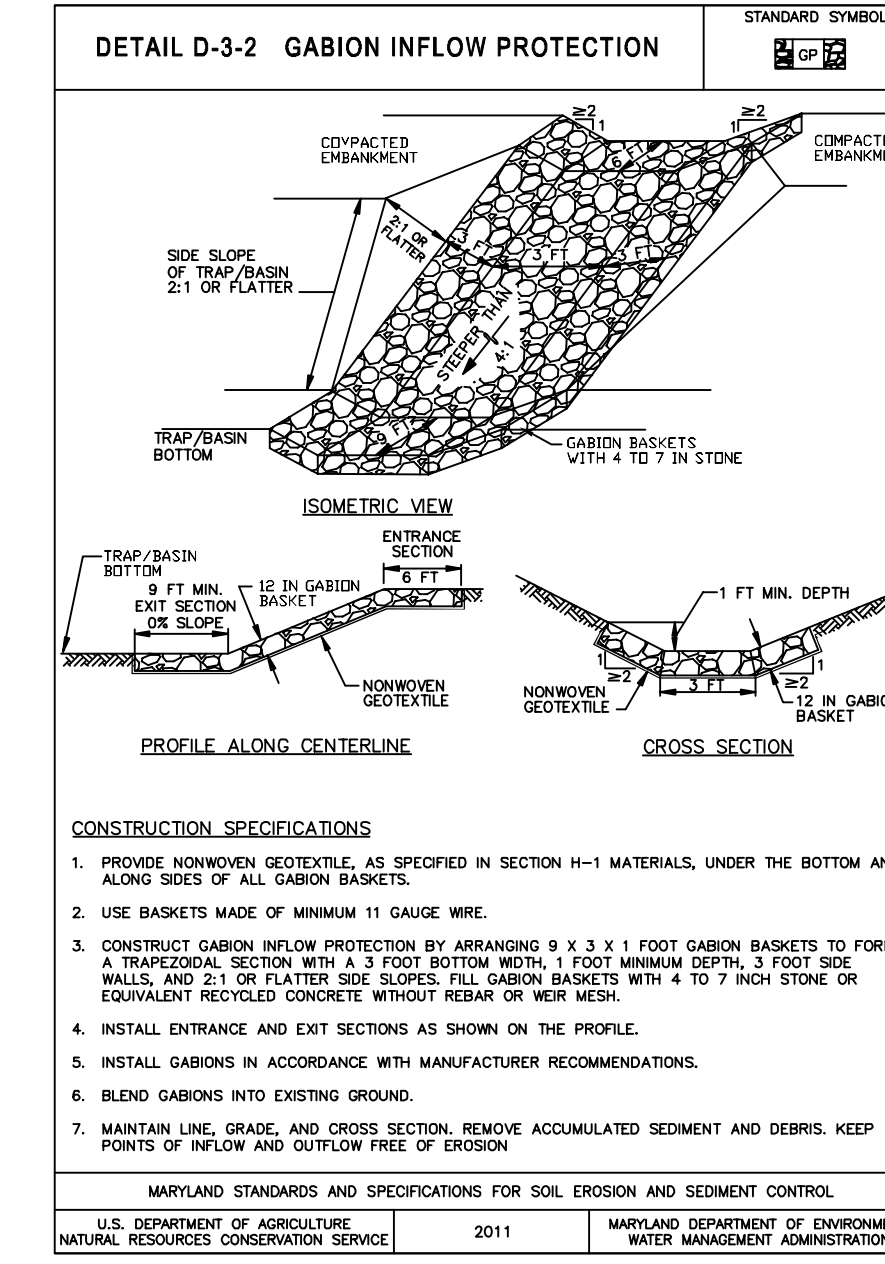
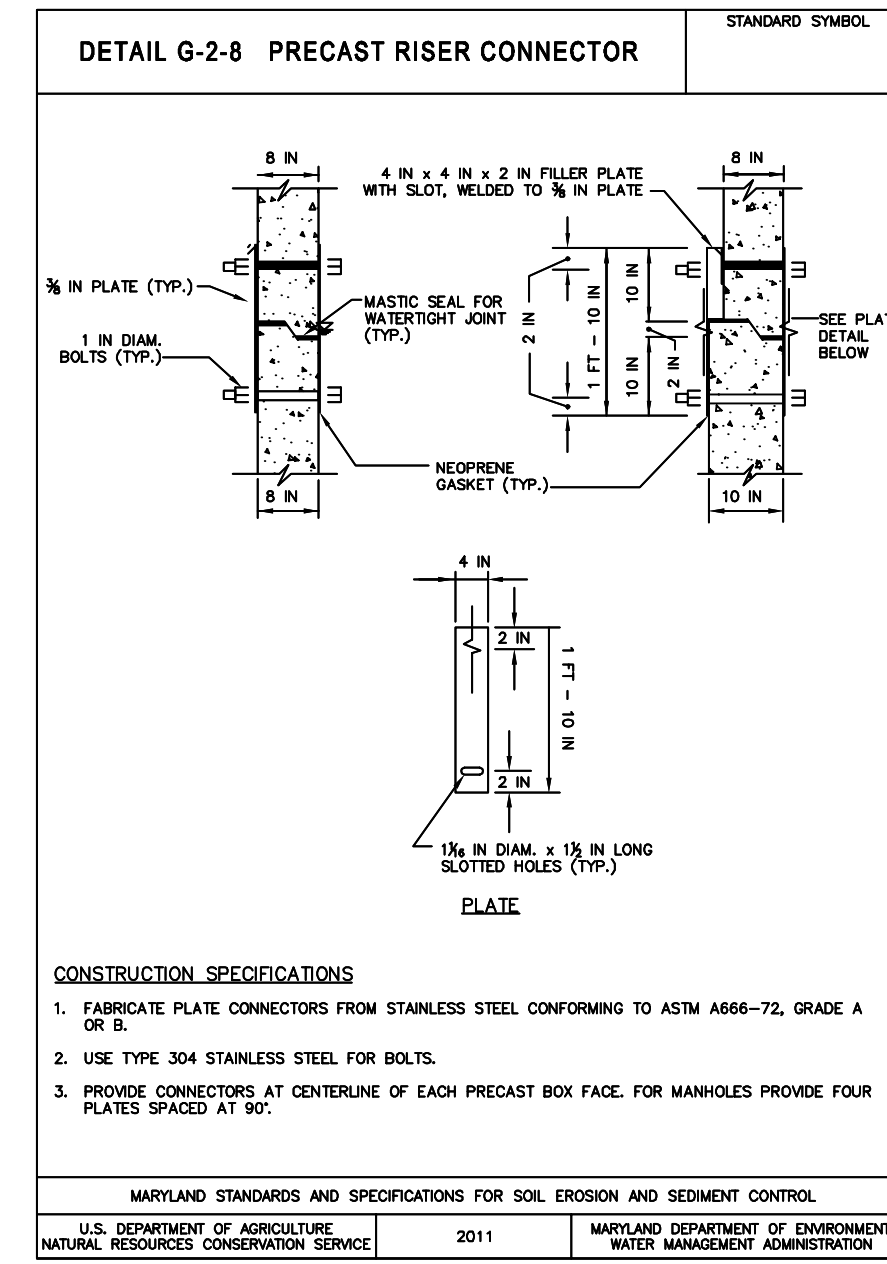
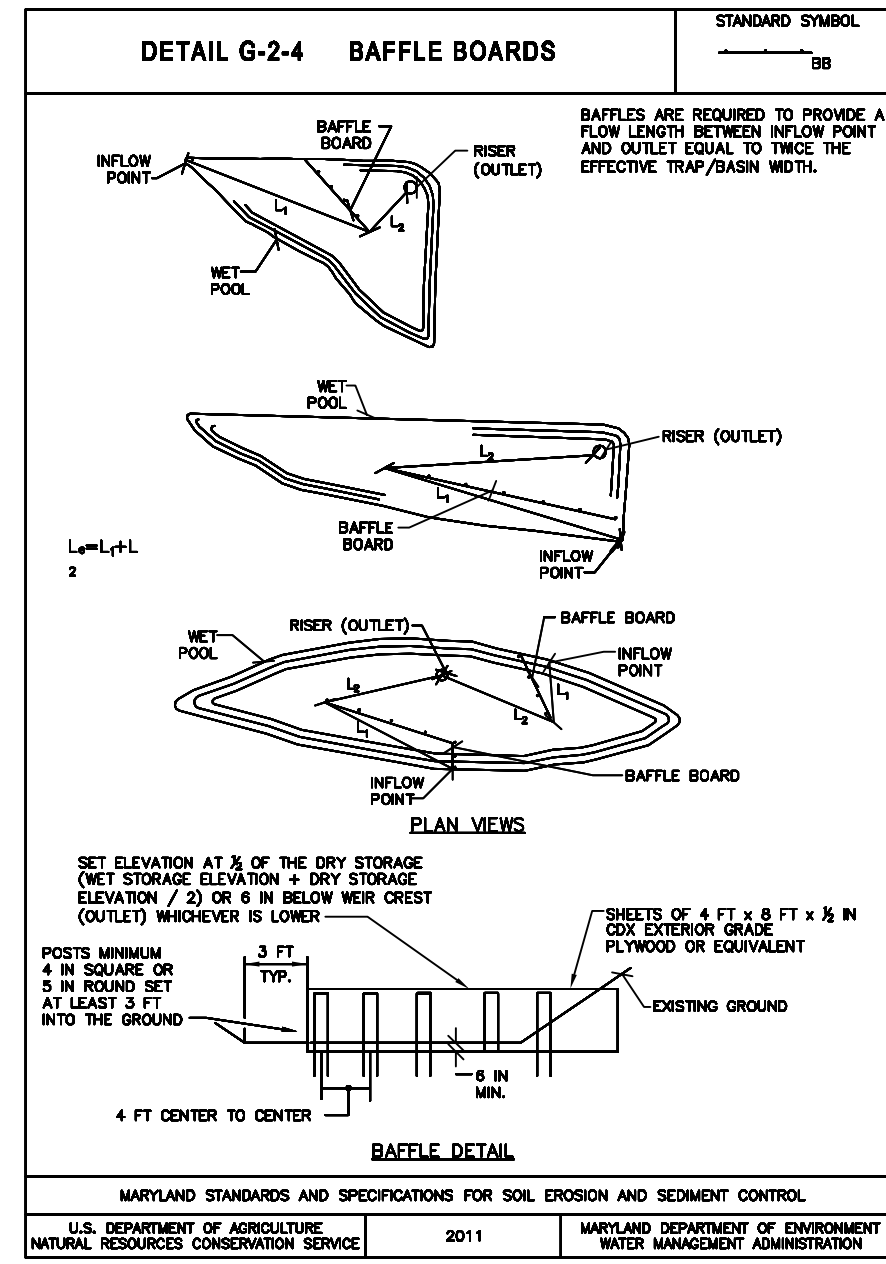
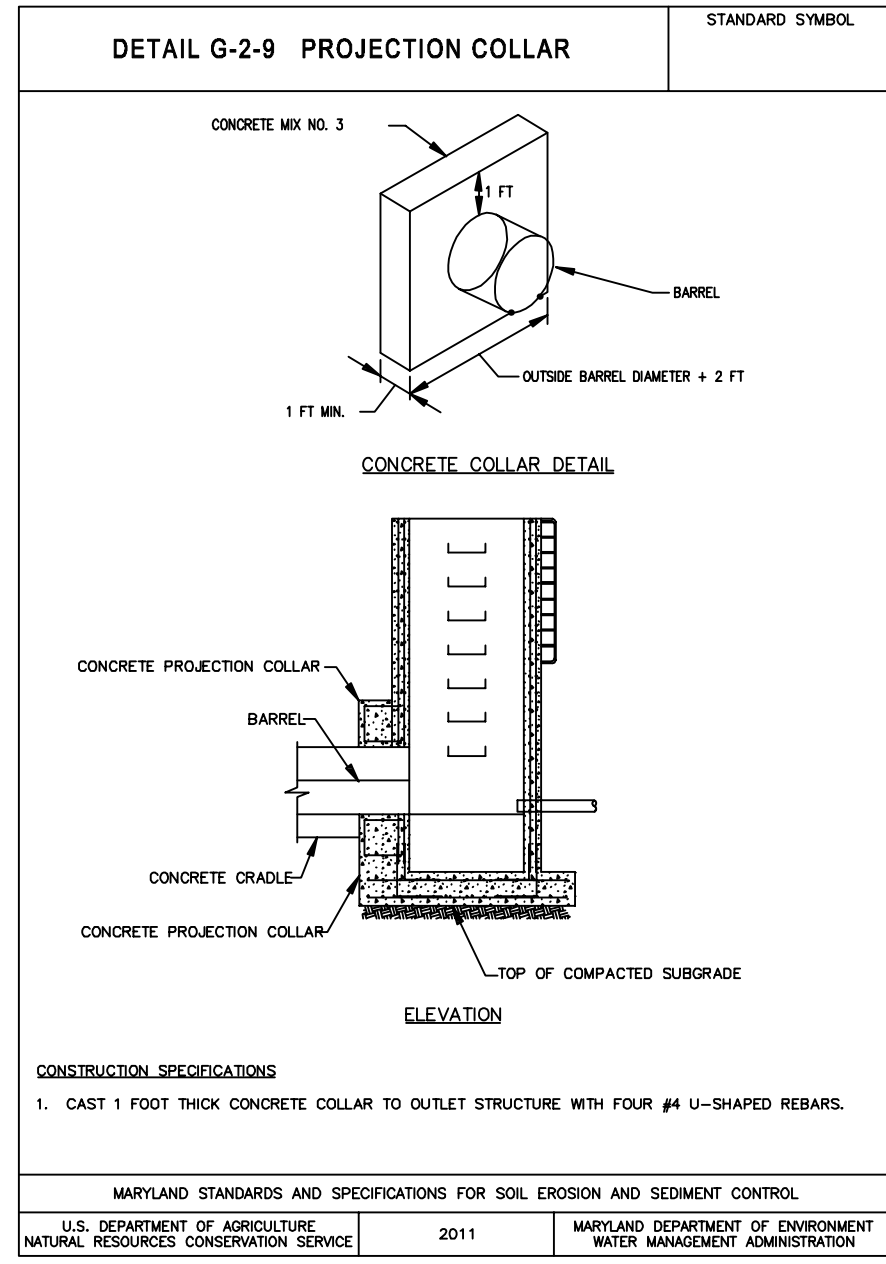
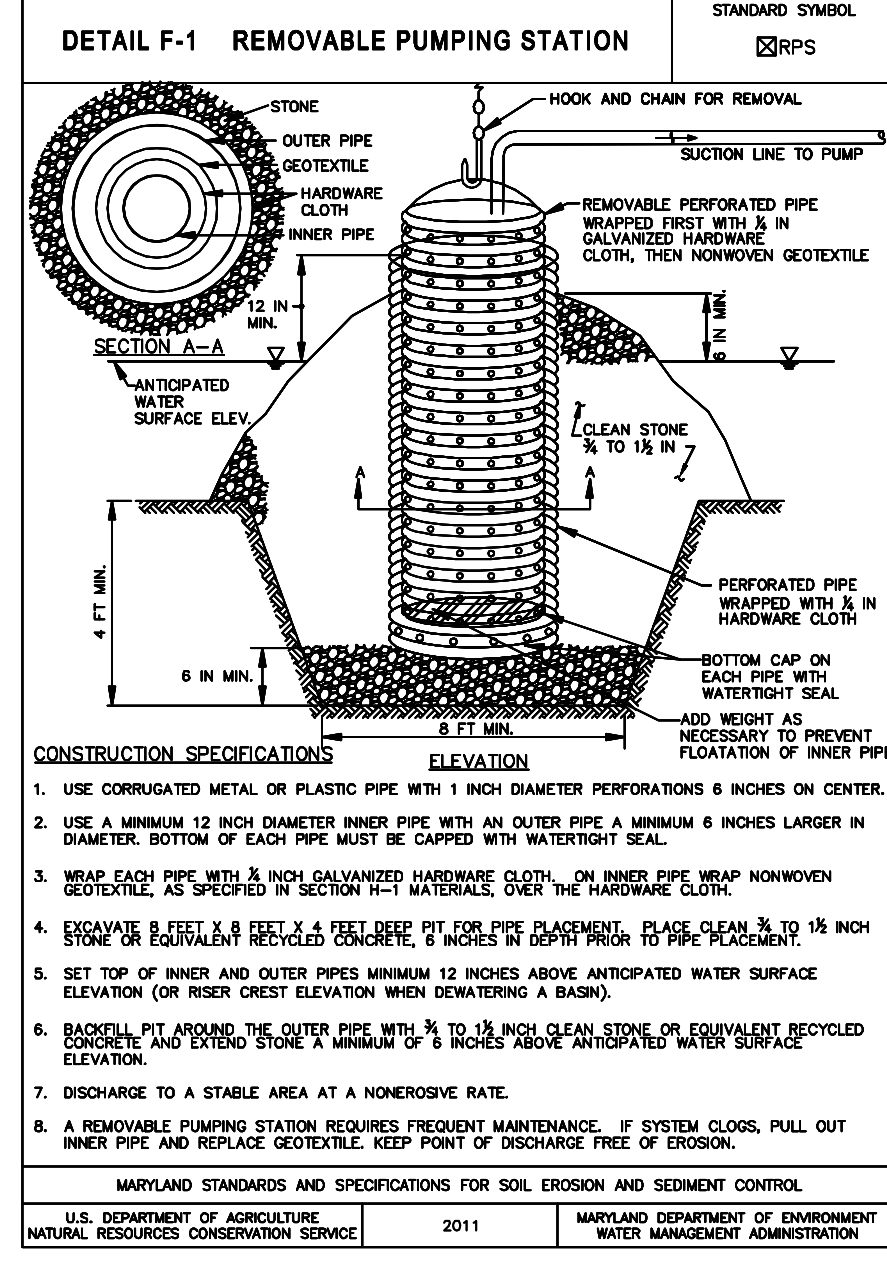
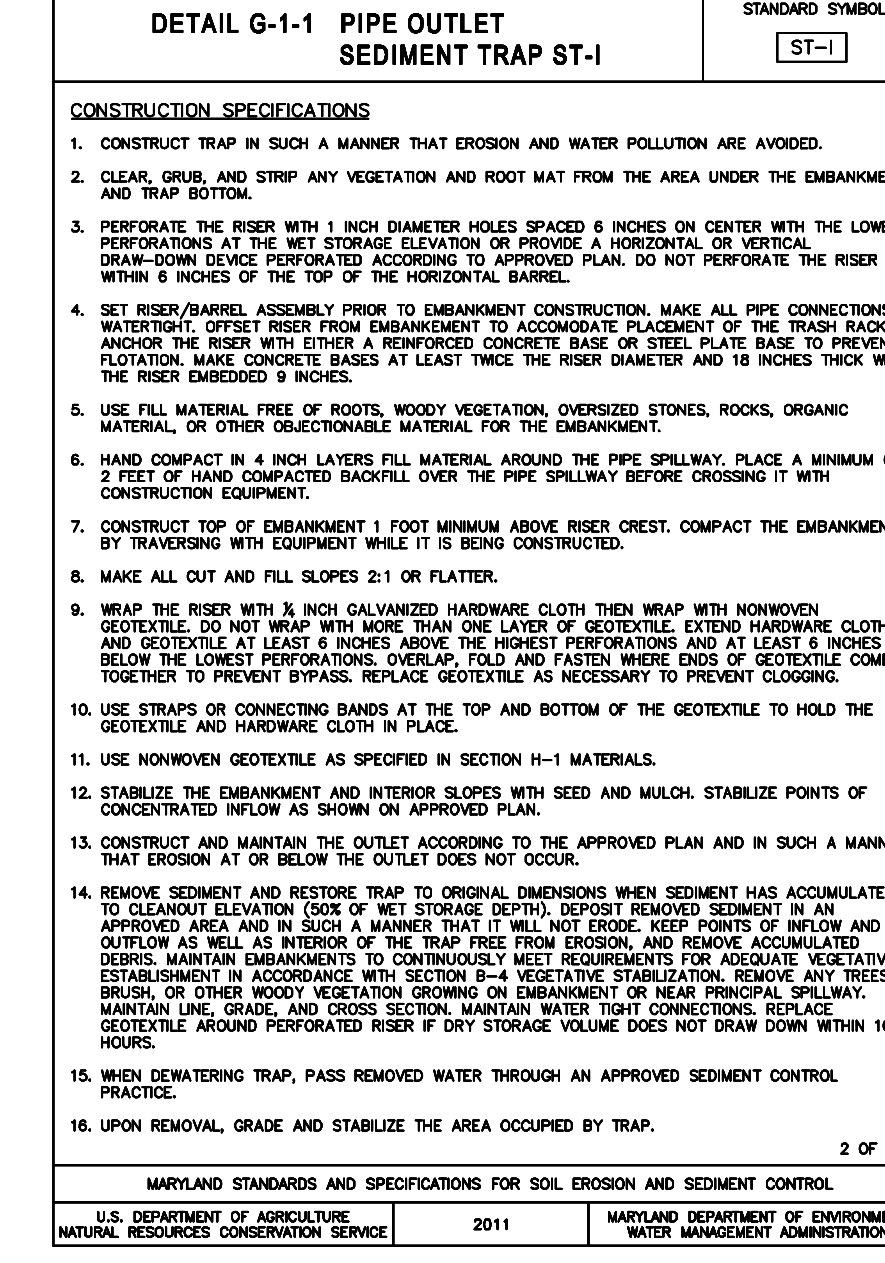
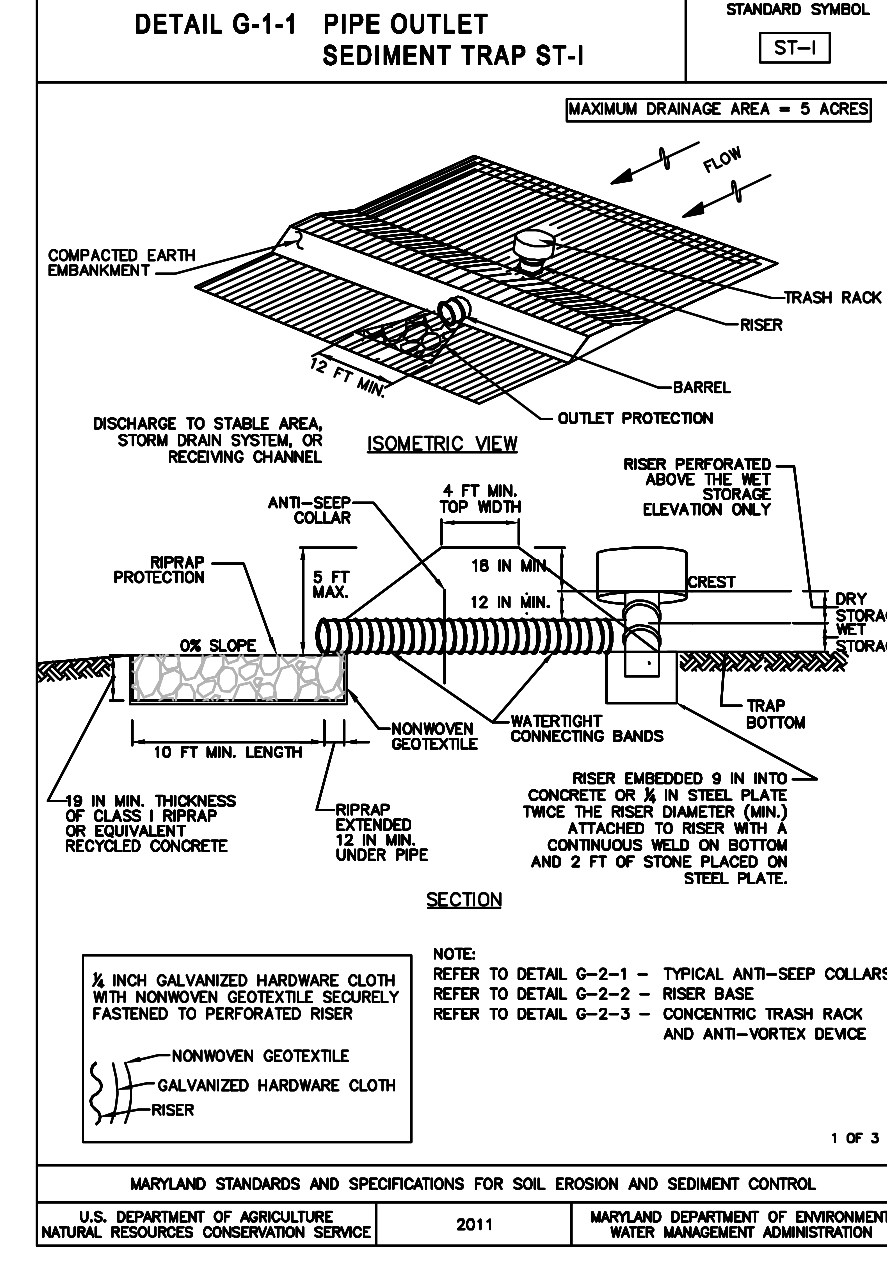
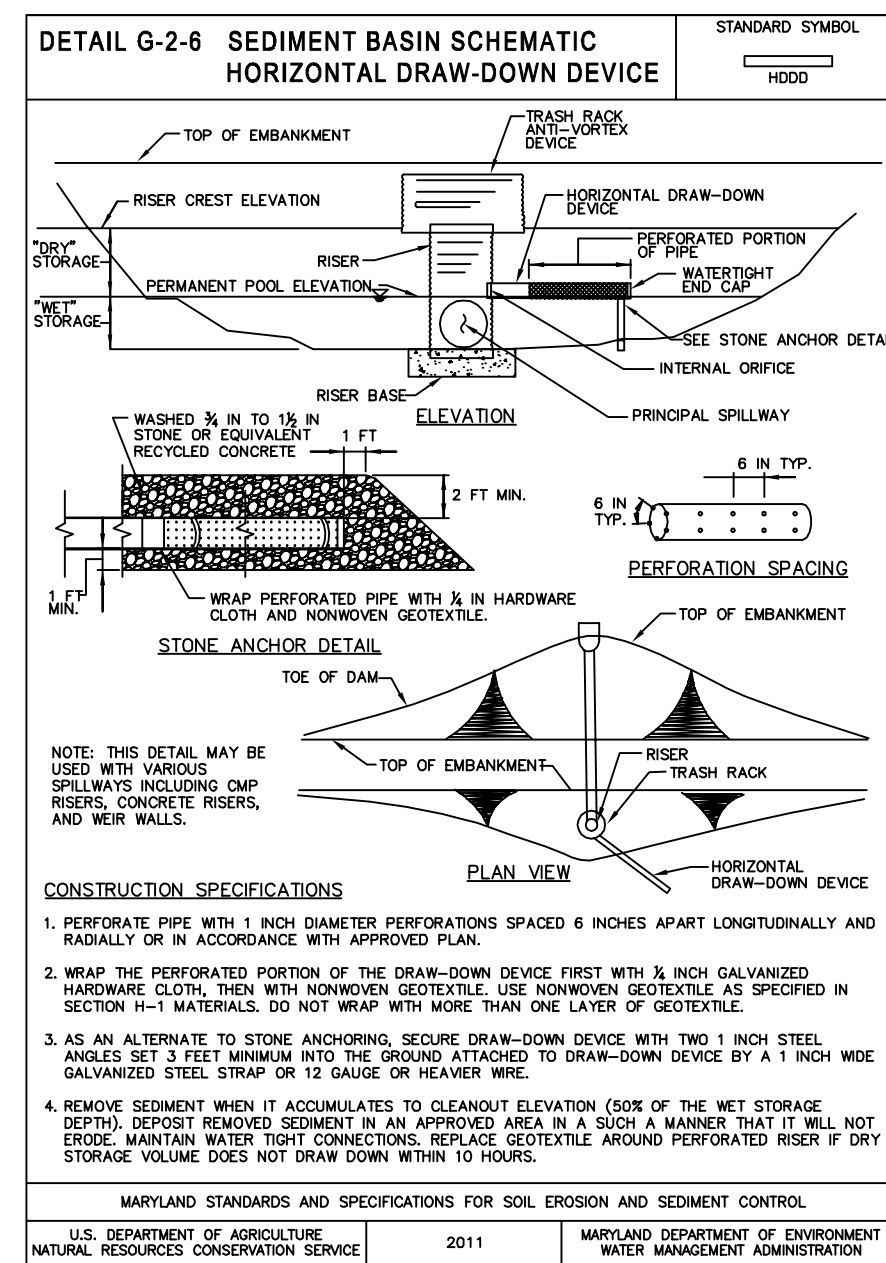
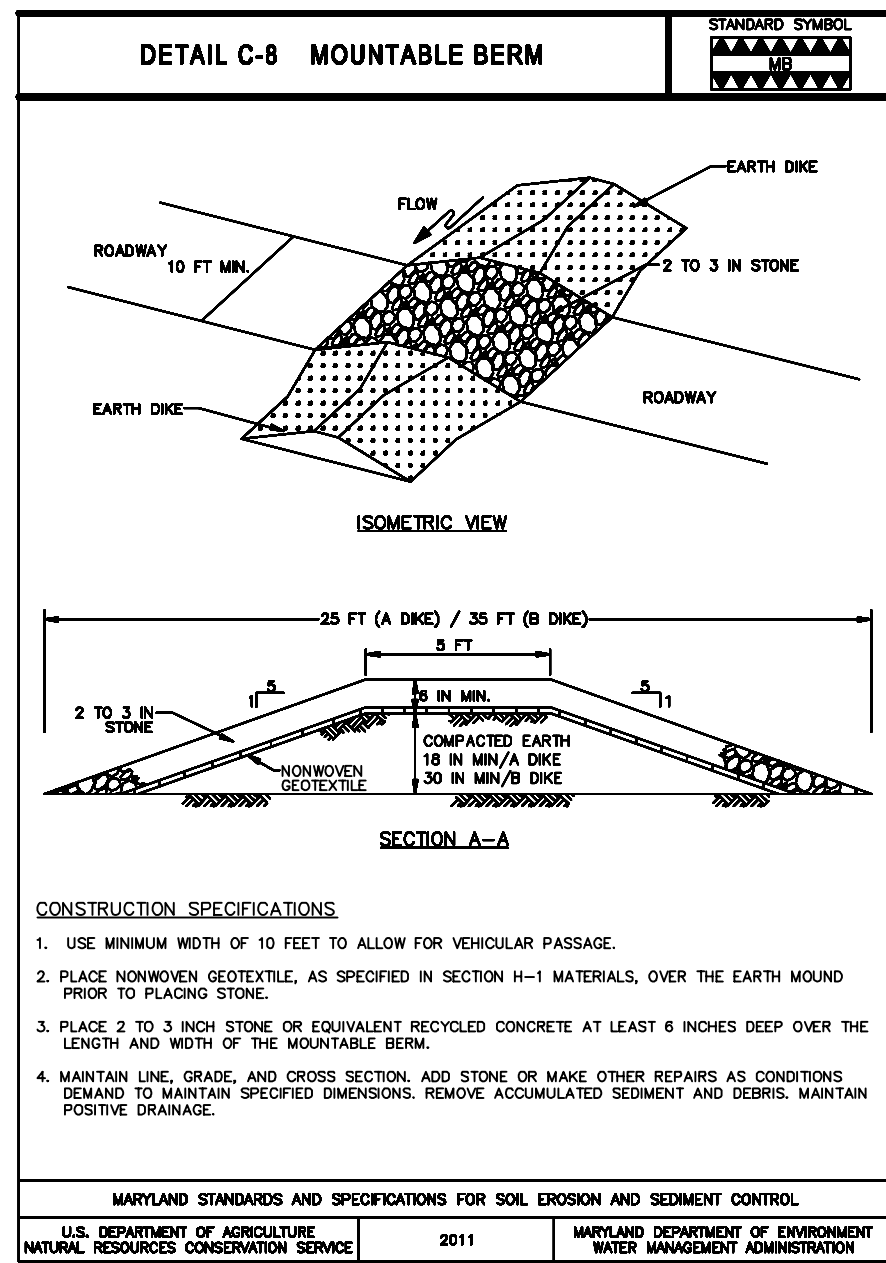
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

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. 16193 EXPIRATION DATE: 09-27-2022

DESIGN BY: RHW/GAH
 DRAWN BY: GAH
 CHECKED BY: RHW
 DATE: MARCH, 2022
 SCALE: AS SHOWN
 W.O. NO.: 04-76

5 SHEET OF 18



OWNER/DEVELOPER
 TEAM DORSEY, LLC
 C/O ERIC ROSENBAUM
 2308 FORT WILLIAM DRIVE
 OLNEY, MD 20832
 (301) 787-0220

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
 GRADING EROSION AND SEDIMENT CONTROL
 NOTES & DETAILS

JESSUP PARK PARCEL 108-A
 TRAILER PARKING AND STORAGE
 7868 DORSEY RUN ROAD
 JESSUP, MD 20794
 TAX MAP 43 GRID 22 1ST ELECTION DISTRICT
 L. 18997 / F. 00119

ZONED: M-2
 PARCEL: 108-A
 EXPIRATION DATE: 09-27-2022

VOGEL ENGINEERING
 +
TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: RHW/GAH
 DRAWN BY: GAH
 CHECKED BY: RHW
 DATE: MARCH, 2022
 SCALE: AS SHOWN
 W.O. NO.: 04-76

1. 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. 16193 EXPIRATION DATE: 09-27-2022

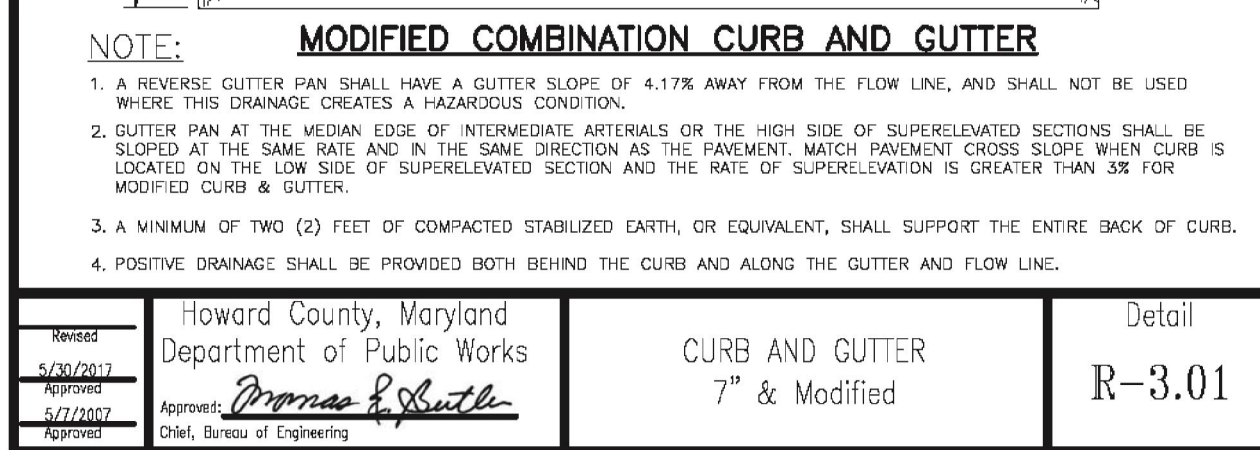
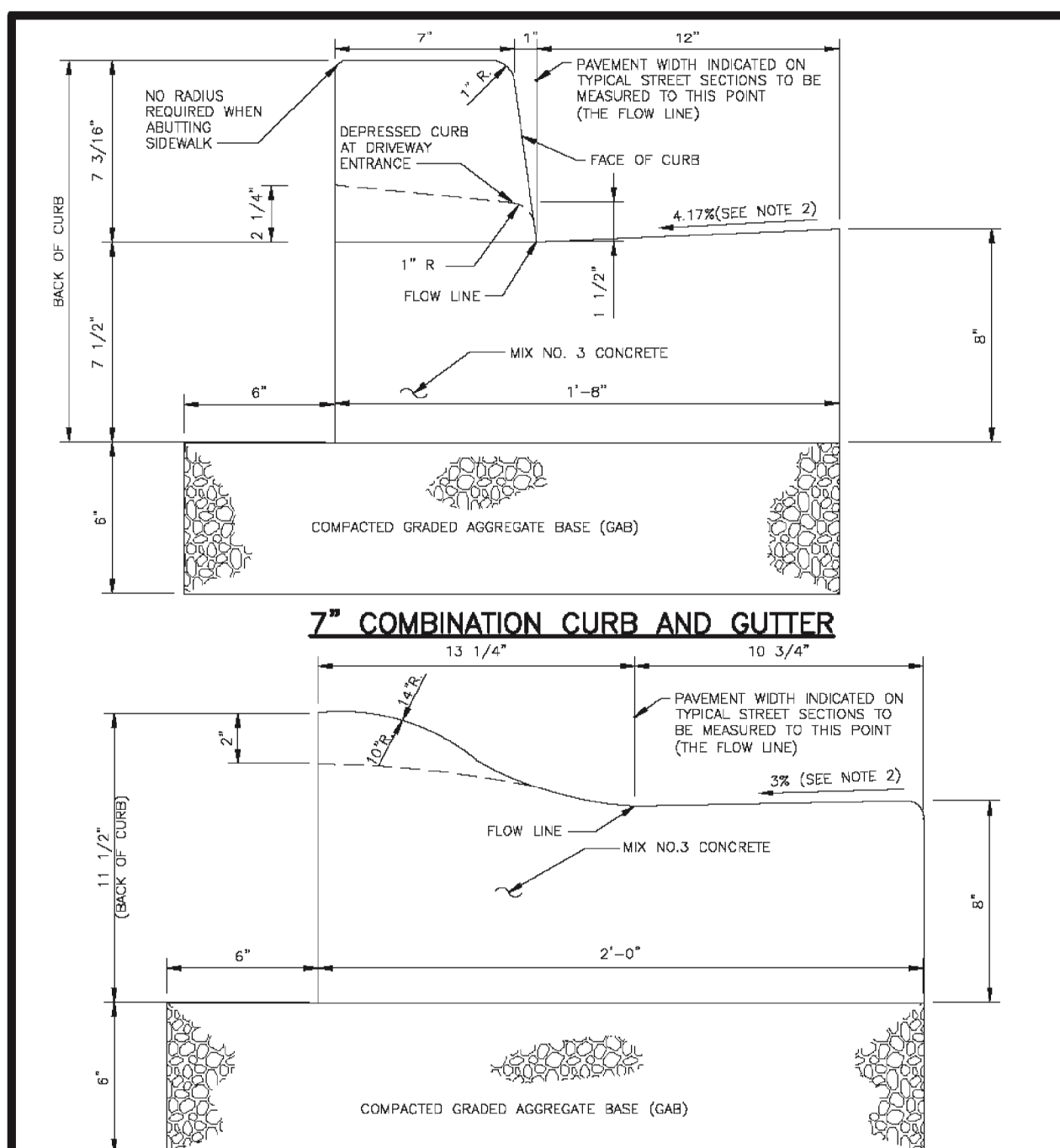
7 SHEET OF 18

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 9/9/2022
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 9/9/2022
 CHIEF, DIVISION OF LAND DEVELOPMENT
 9/12/2022
 DIRECTOR

BY THE DEVELOPER:
 I, WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
 8/29/2022

BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 9/12/2022

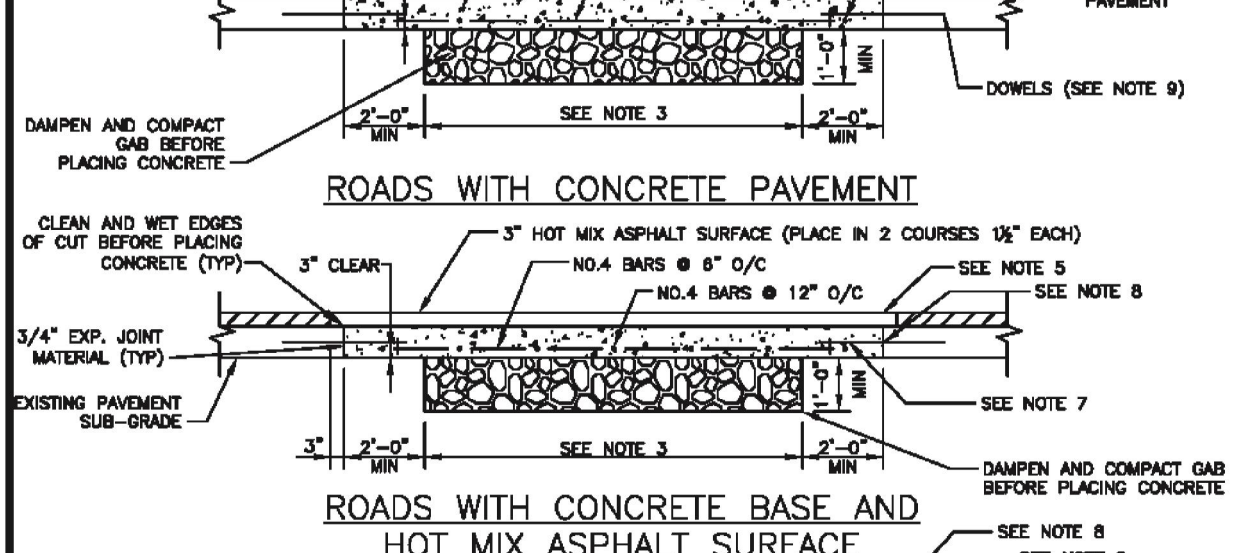
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 9/12/2022



NOTE: 1. A REVERSE GUTTER PAN SHALL HAVE A GUTTER SLOPE OF 4.17% AWAY FROM THE FLOW LINE, AND SHALL NOT BE USED WHERE THIS DRAINAGE CREATES A HAZARDOUS CONDITION. 2. GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB & GUTTER. 3. A MINIMUM OF TWO (2) FEET OF COMPACTED STABILIZED EARTH, OR EQUIVALENT, SHALL SUPPORT THE ENTIRE BACK OF CURB. 4. POSITIVE DRAINAGE SHALL BE PROVIDED BOTH BEHIND THE CURB AND ALONG THE GUTTER AND FLOW LINE.

Howard County, Maryland Department of Public Works
 Approved: *Promiss & South*
 Chief, Bureau of Engineering

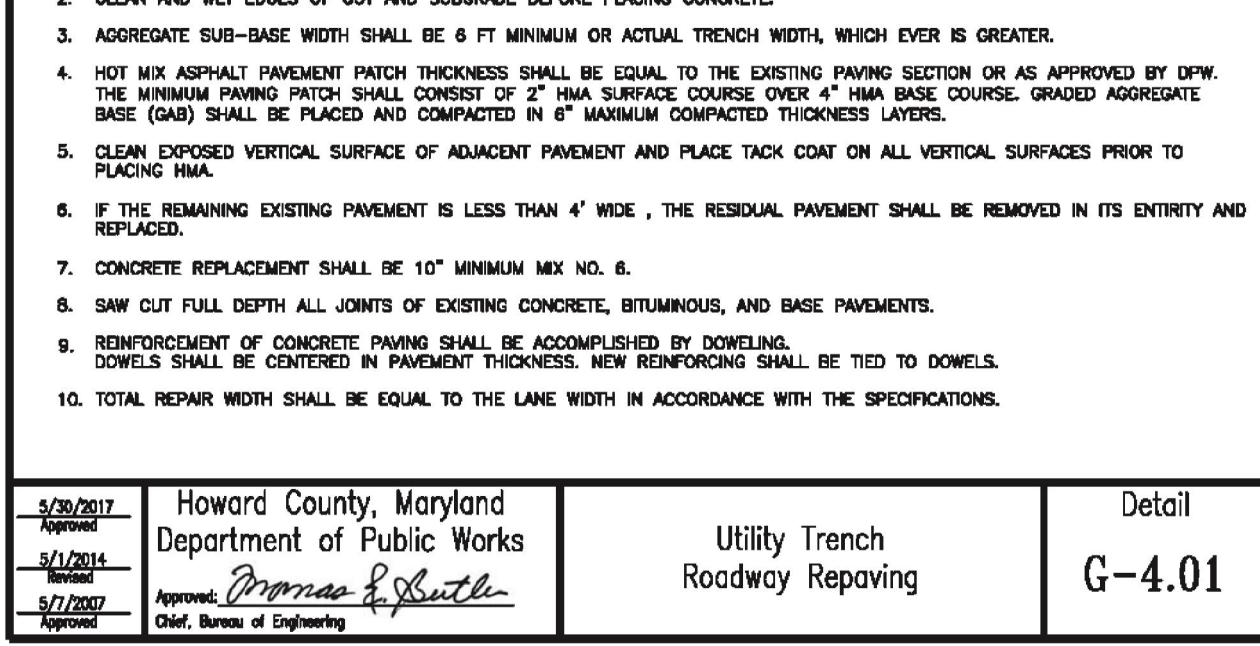
Detail R-3.01



NOTES: 1. WHEREVER A TRENCH CROSSES A CONCRETE ROADWAY THAT HAS JOINT INSTALLATIONS THE ENTIRE SLAB BETWEEN THE EDGE OF THE TRENCH AND THE NEAREST JOINT SHALL BE REMOVED IF THE DISTANCE IS LESS THAN 10 FEET. 2. CLEAN AND WET EDGES OF CUT BEFORE PLACING CONCRETE (TYP). 3. AGGREGATE SUB-BASE WIDTH SHALL BE 6 FT MINIMUM OR ACTUAL TRENCH WIDTH, WHICH EVER IS GREATER. 4. HOT MIX ASPHALT PAVEMENT PATCH THICKNESS SHALL BE EQUAL TO THE EXISTING PAVING SECTION OR AS APPROVED BY DPW. THE MINIMUM PAVING PATCH SHALL CONSIST OF 2" HMA SURFACE COURSE OVER 4" HMA BASE COURSE, GRADED AGGREGATE BASE (GAB) SHALL BE PLACED AND COMPACTED IN 6" MAXIMUM COMPACTED THICKNESS LAYERS. 5. CLEAN EXPOSED VERTICAL SURFACE OF ADJACENT PAVEMENT AND PLACE TACK COAT ON ALL VERTICAL SURFACES PRIOR TO PLACING HMA. 6. IF THE REMAINING EXISTING PAVEMENT IS LESS THAN 4" WIDE, THE RESIDUAL PAVEMENT SHALL BE REMOVED IN ITS ENTIRETY AND REPLACED. 7. CONCRETE REPLACEMENT SHALL BE 10" MINIMUM MIX NO. 6. 8. SAW CUT FULL DEPTH ALL JOINTS OF EXISTING CONCRETE, BITUMINOUS, AND BASE PAVEMENTS. 9. REINFORCEMENT OF CONCRETE PAVING SHALL BE ACCOMPLISHED BY DOWELING. DOWELS SHALL BE CENTERED IN PAVEMENT THICKNESS. NEW REINFORCING SHALL BE TIED TO DOWELS. 10. TOTAL REPAIR WIDTH SHALL BE EQUAL TO THE LANE WIDTH IN ACCORDANCE WITH THE SPECIFICATIONS.

Howard County, Maryland Department of Public Works
 Approved: *Promiss & South*
 Chief, Bureau of Engineering

Detail G-4.01



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

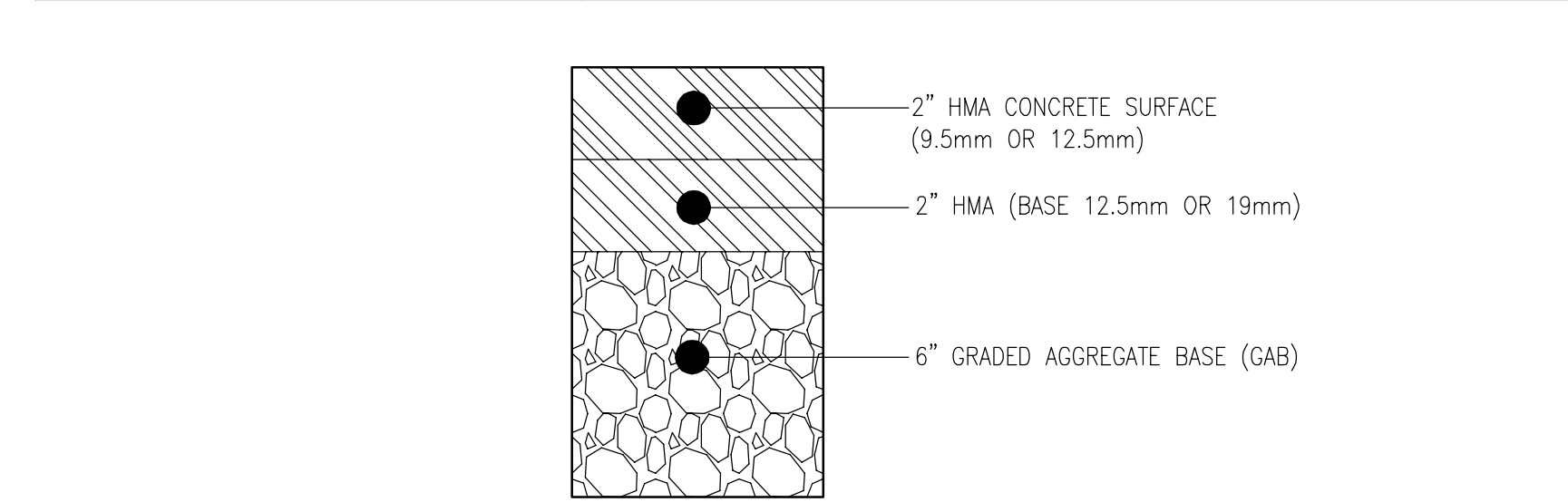
Chief, Development Engineering Division: *David J. ...* 9/9/2022

Chief, Division of Land Development: *...* 9/9/2022

Director: *...* 9/12/2022

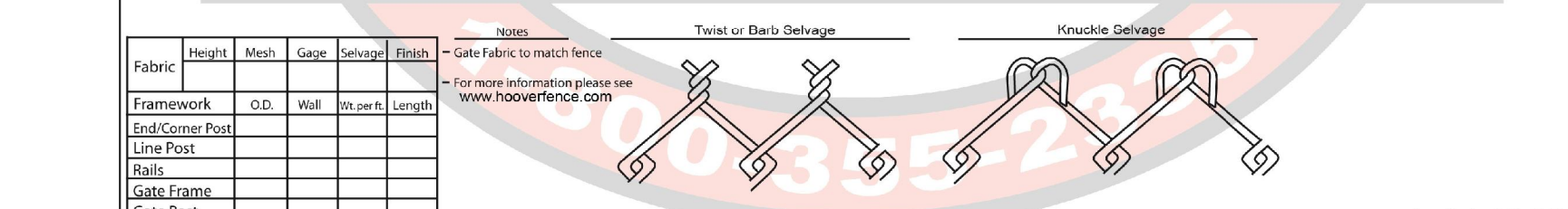
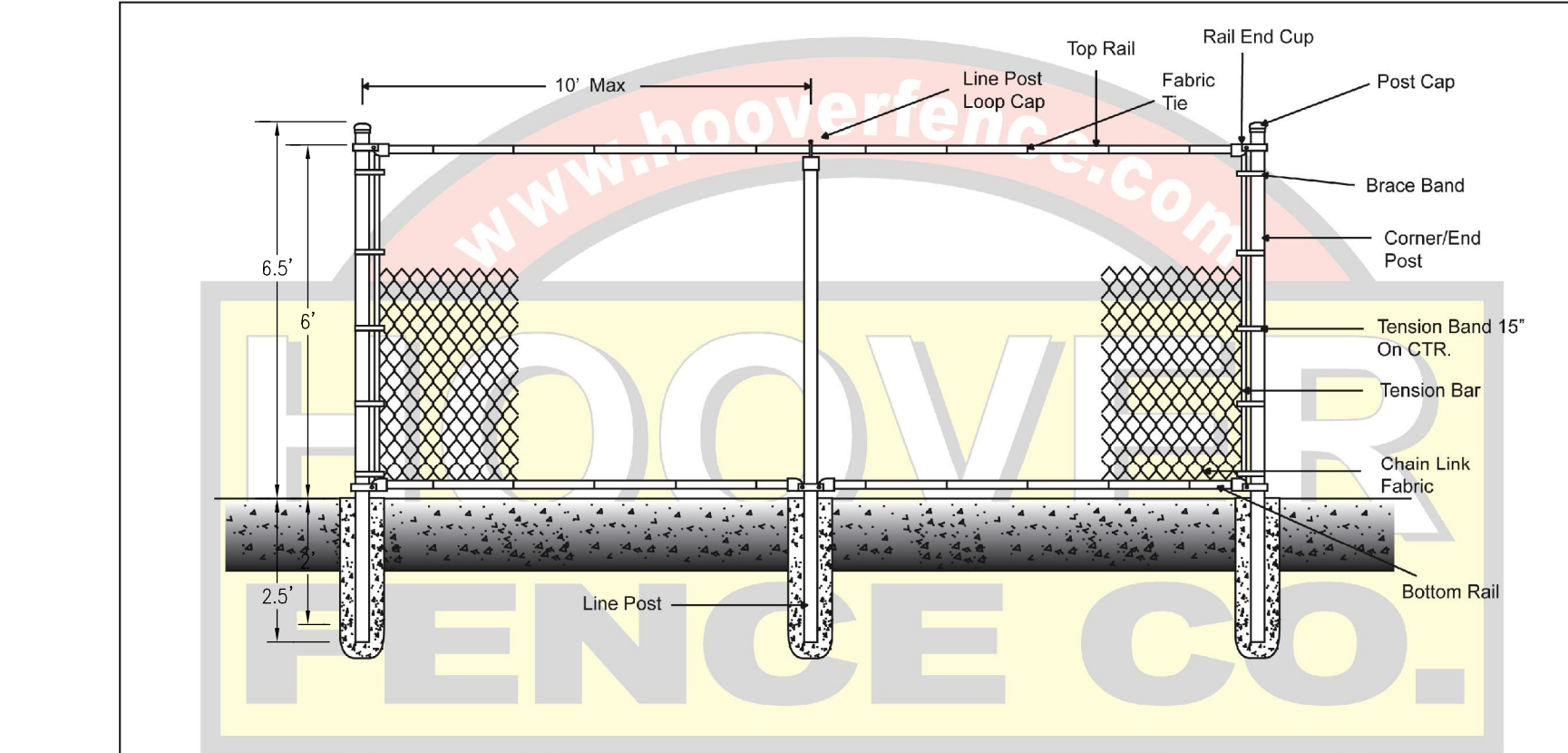
MINOR COLLECTORS NON-RESIDENTIAL MAJOR COLLECTORS	FOR FULL DEPTH PAVING REPAIR OF UTILITY TRENCH (IN ROW)	SUPERPAVE ASPHALT MIX FINAL SURFACE NON-RESIDENTIAL 12.5 MM PG 64-225, LEVEL 2 (LOW ESAL)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE 12.5 MM PG 64-225, LEVEL 2 (LOW ESAL)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
		SUPERPAVE ASPHALT MIX BASE 19.0 MM PG 64-225, LEVEL 2 (LOW ESAL)	4.0	4.0	3.0	6.0	5.0	6.0	3.0
		GRADED AGGREGATE BASE (GAB)	13.0	7.0	4.0	6.0	6.0	6.0	6.0

NOTES: 1. HEAVY TRUCKS ARE DEFINED AS THOSE WITH SIX (6) WHEELS OR MORE INCLUDING GARbage TRUCKS. 2. SUPERPAVE ASPHALT MIX LAYERS SHALL BE PLACED IN APPROXIMATELY COMPACTED LIFT THICKNESS: 19.0 MM BASE (2.0" MIN. TO 4.0" MAX), 12.5 MM SURFACE (1.5" MIN. TO 3.0" MAX), AND 9.5 MM SURFACE (1.0" MIN. TO 2.0" MAX). 3. GRADED AGGREGATE BASE (GAB) TO BE PLACED AND COMPACTED IN 6" MAX COMPACTED THICKNESS LAYERS. 4. THE INTERMEDIATE SURFACE COURSE LAYER MUST BE PLACED WITHIN 2 WEEKS OF PLACEMENT OF BASE COURSE, AND IS REQUIRED PRIOR TO SUBSTANTIAL COMPLETION INSPECTION AND ROAD REDUCTION. 5. IN LIEU OF PLACING THE INTERMEDIATE SURFACE COURSE LAYER FOR COMMERCIAL/INDUSTRIAL ENTRANCE APRONS WITHIN THE COUNTY RIGHT-OF-WAY WHERE ALTERNATE LAYERS ARE NOT REQUIRED, THE THICKNESS OF THE INTERMEDIATE PAVEMENT LAYER CAN BE ADDED TO THE REQUIRED THICKNESS OF THE BASE ASPHALT LAYER. 6. THE CONSTRUCTION DRAWINGS SHALL SHOW THE PAVING SECTION, ROAD CLASSIFICATION AND CBR VALUE FOR EACH ROADWAY.



Howard County, Maryland Department of Public Works
 Approved: *Promiss & South*
 Chief, Bureau of Engineering

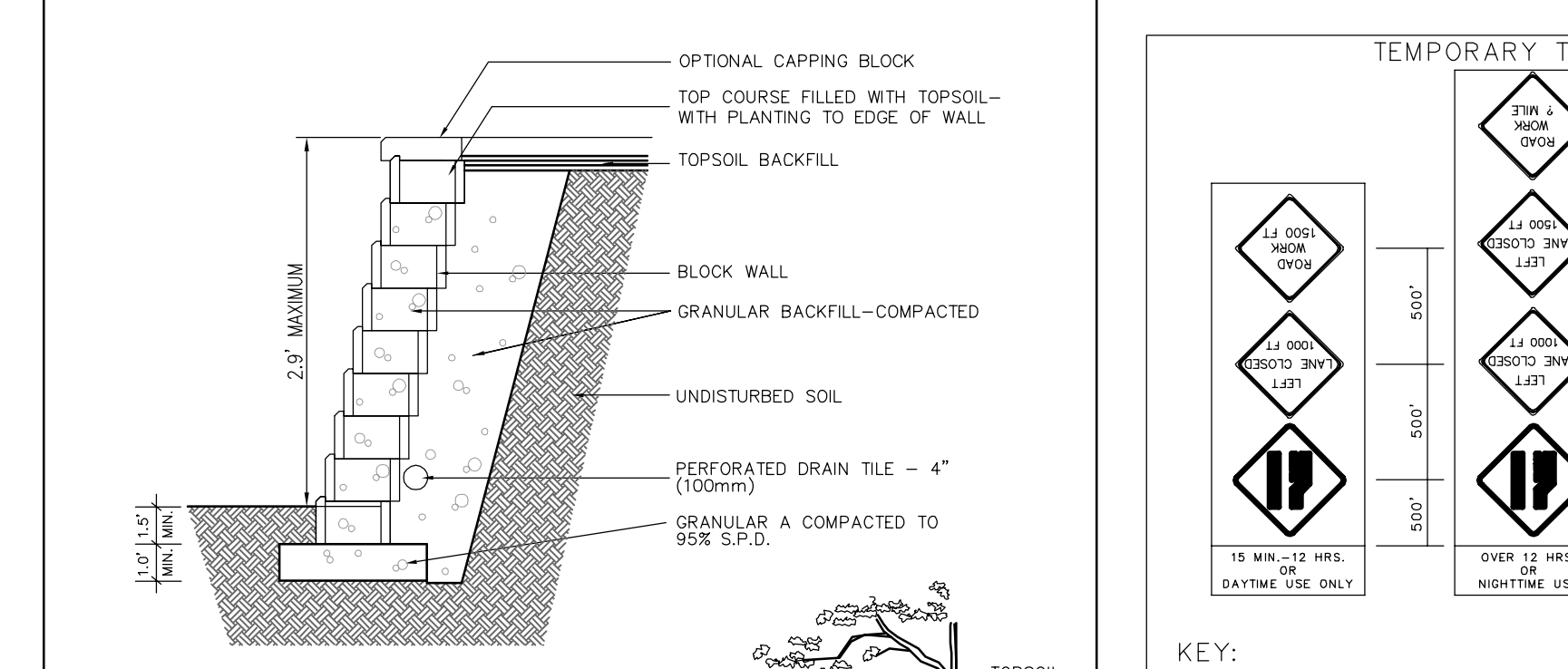
Detail R-2.01



HOOPER FENCE CO. Standard Chain Link Fencing

Notes: 1. Gate Fabric to match fence. 2. For more information please see www.hooperfence.com

Last Revised: 10-03-06



IMPORTANT: THIS DRAWING SHALL BE USED IN COMBINATION WITH THE GENERAL NOTES MD 104.00-01 - MD 104.00-18 AND STANDARD DETAILS MD 104.01-01 - MD 104.01-01.

NOTES: SHOULDER CLOSED SIGNS ARE REQUIRED IN PLACE OF SHOULDER WORK SIGNS WHEN THE SHOULDER IS CLOSED BY POSITIVE PROTECTION (TEMPORARY CONCRETE BARRIER OR SIMILAR DEVICE). REFER TO STANDARD NO. MD 104.06-18.

THE ENGINEER SHOULD CONSIDER ADDITIONAL ADJACENT LANE CLOSURES WHEN THE POSSIBILITY OF UNPLANNED TRAVELWAY ENCROACHMENTS EXISTS.

OWNER/DEVELOPER: MULLILLIC, MICHAEL LEVITAS, 8040 WASHINGTON BLVD, JESSUP, MD 20794, (410) 799-7223, TPRACING@GMAIL.COM

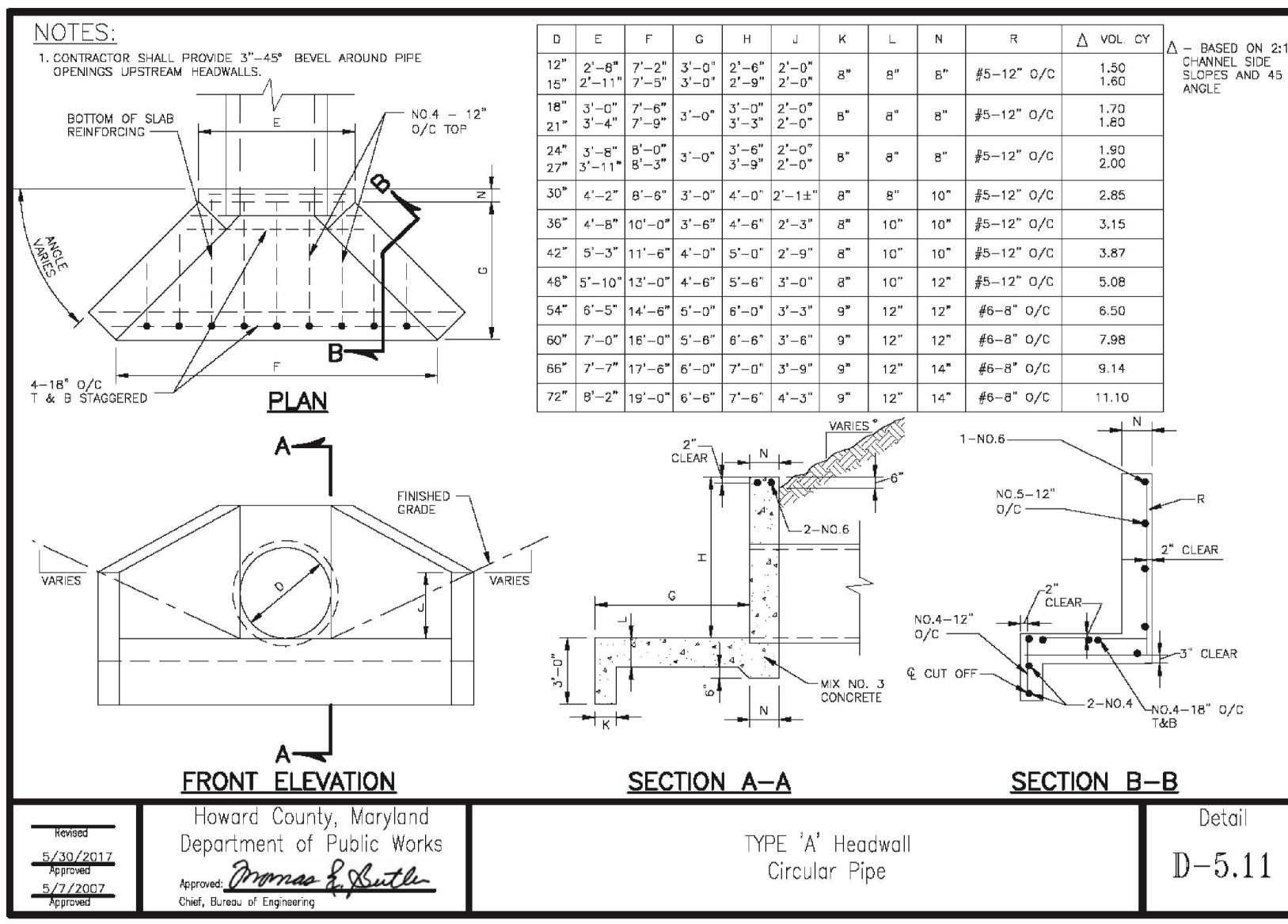
SITE DEVELOPMENT PLAN SITE DETAILS

JESSUP PARK PARCEL 108-A
 TRAILER PARKING AND STORAGE
 7868 DORSEY RUN ROAD
 JESSUP, MD 20794
 TAX MAP 43 DRD 22 1ST ELECTION DISTRICT

VOGEL ENGINEERING
 TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

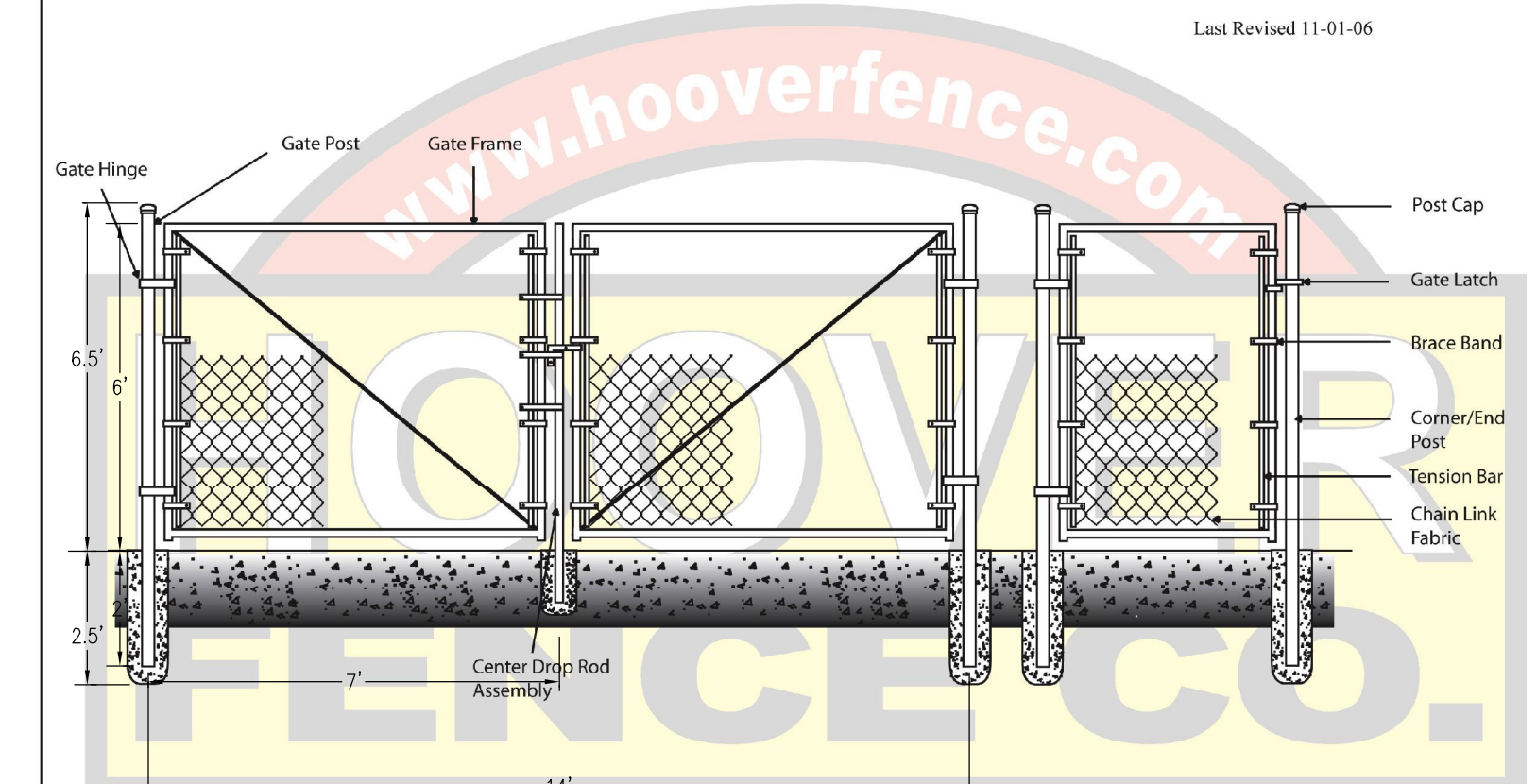
DESIGN BY: RHW/GAH
 DRAWN BY: GAH
 CHECKED BY: RHW
 DATE: MARCH, 2022
 SCALE: AS SHOWN
 W.O. NO.: 04-76

8 SHEET OF 18



Howard County, Maryland Department of Public Works
 Approved: *Promiss & South*
 Chief, Bureau of Engineering

Detail D-5.11



HOOPER FENCE CO. Standard Chain Link Fencing

Notes: 1. Gate Fabric to match fence. 2. For more information please see www.hooperfence.com

Last Revised: 10-03-06

OWNER/DEVELOPER: MULLILLIC, MICHAEL LEVITAS, 8040 WASHINGTON BLVD, JESSUP, MD 20794, (410) 799-7223, TPRACING@GMAIL.COM

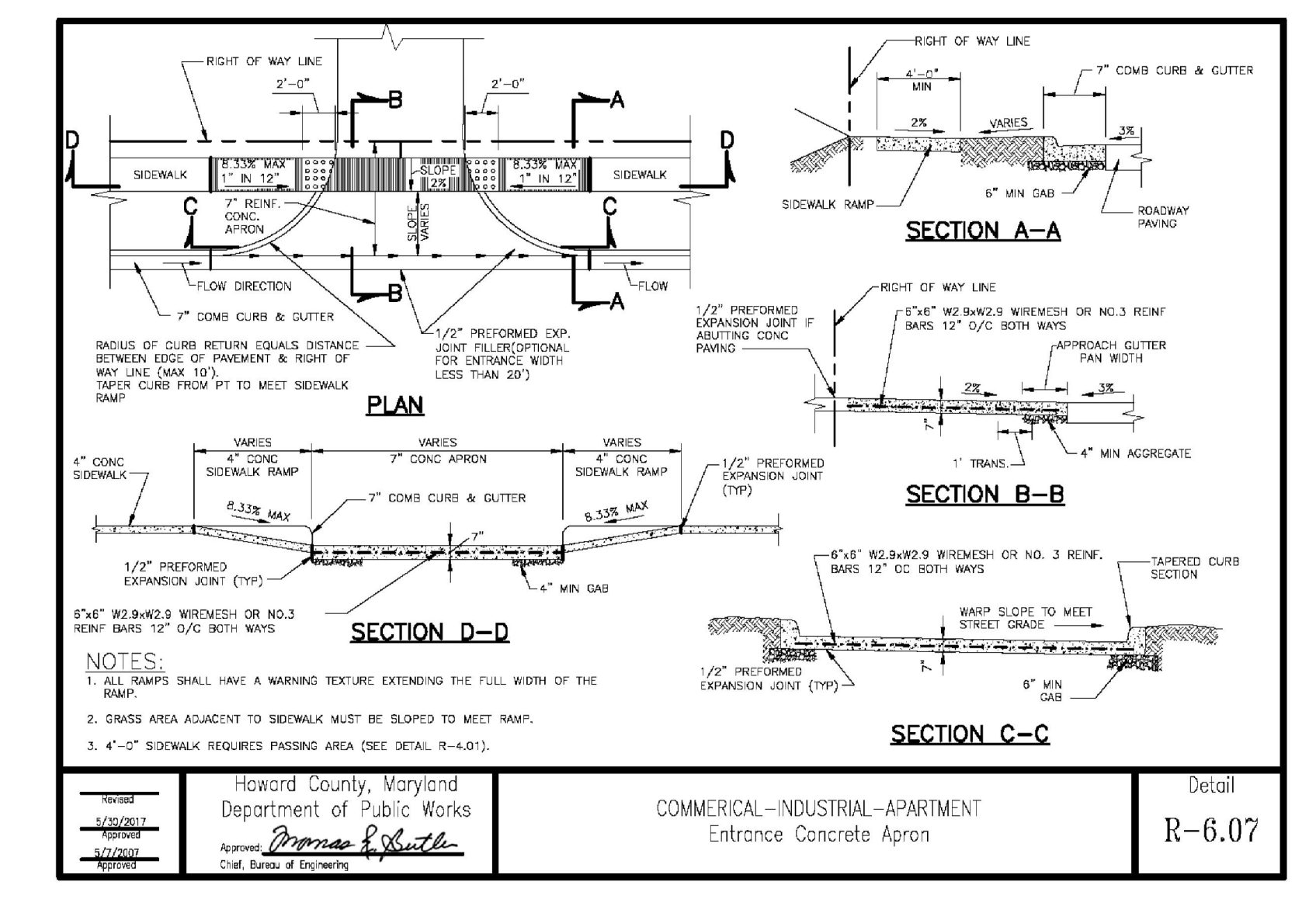
SITE DEVELOPMENT PLAN SITE DETAILS

JESSUP PARK PARCEL 108-A
 TRAILER PARKING AND STORAGE
 7868 DORSEY RUN ROAD
 JESSUP, MD 20794
 TAX MAP 43 DRD 22 1ST ELECTION DISTRICT

VOGEL ENGINEERING
 TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

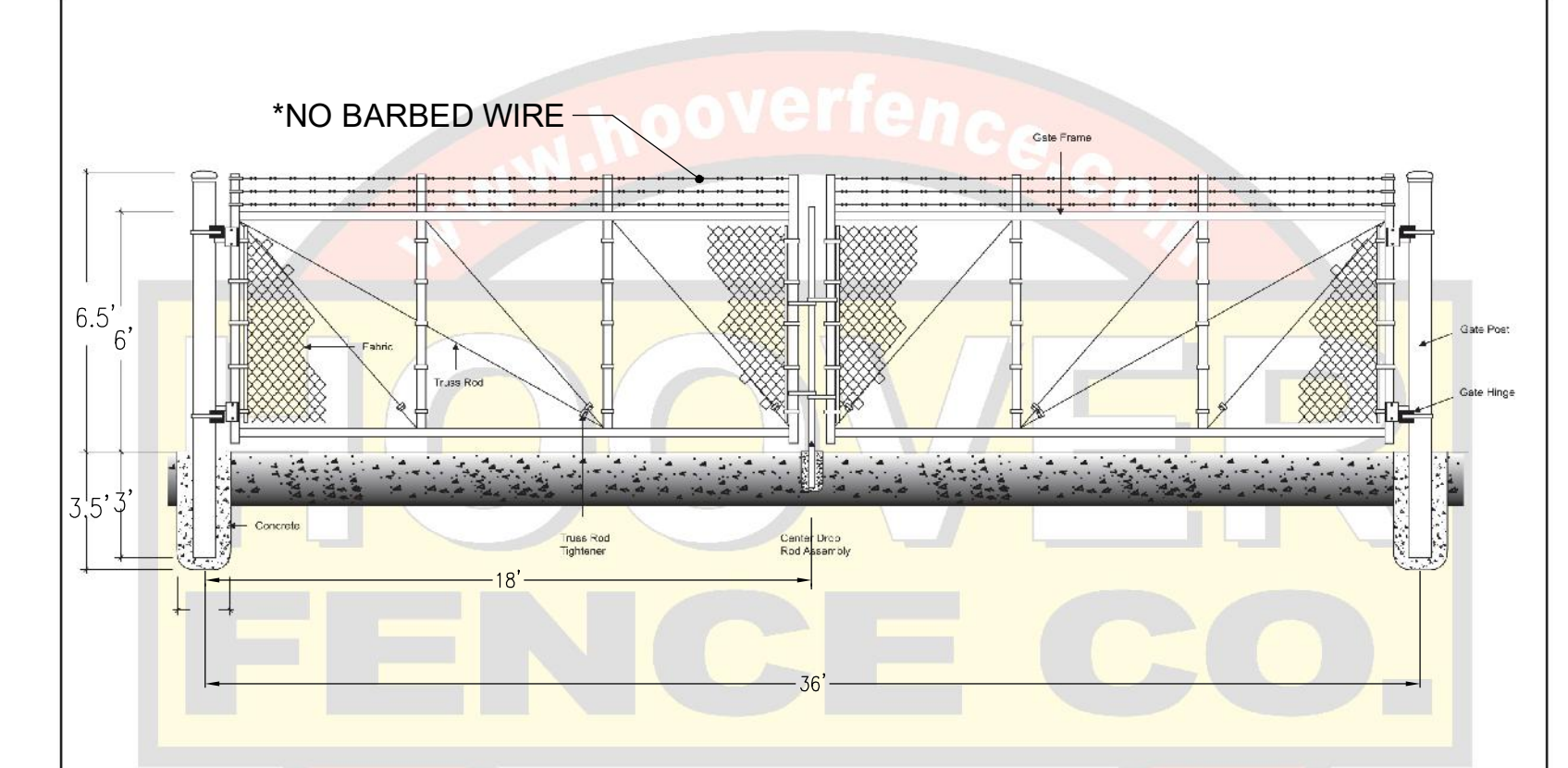
DESIGN BY: RHW/GAH
 DRAWN BY: GAH
 CHECKED BY: RHW
 DATE: MARCH, 2022
 SCALE: AS SHOWN
 W.O. NO.: 04-76

8 SHEET OF 18



Howard County, Maryland Department of Public Works
 Approved: *Promiss & South*
 Chief, Bureau of Engineering

Detail R-6.07



HOOPER FENCE CO. Standard Chain Link Fencing

Notes: 1. Gate Fabric to match fence. 2. For more information please see www.hooperfence.com

Last Revised: 10-03-06

OWNER/DEVELOPER: MULLILLIC, MICHAEL LEVITAS, 8040 WASHINGTON BLVD, JESSUP, MD 20794, (410) 799-7223, TPRACING@GMAIL.COM

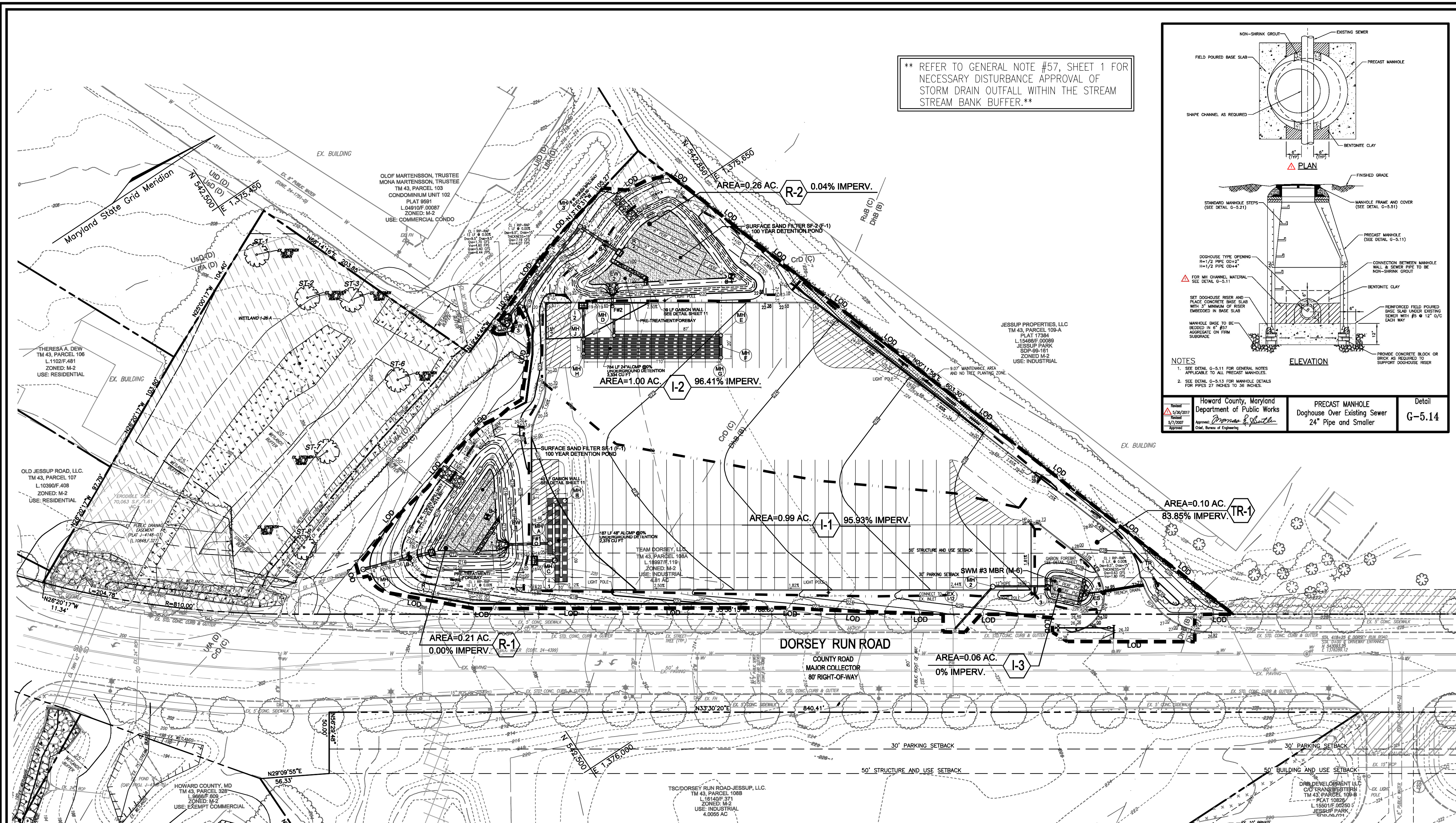
SITE DEVELOPMENT PLAN SITE DETAILS

JESSUP PARK PARCEL 108-A
 TRAILER PARKING AND STORAGE
 7868 DORSEY RUN ROAD
 JESSUP, MD 20794
 TAX MAP 43 DRD 22 1ST ELECTION DISTRICT

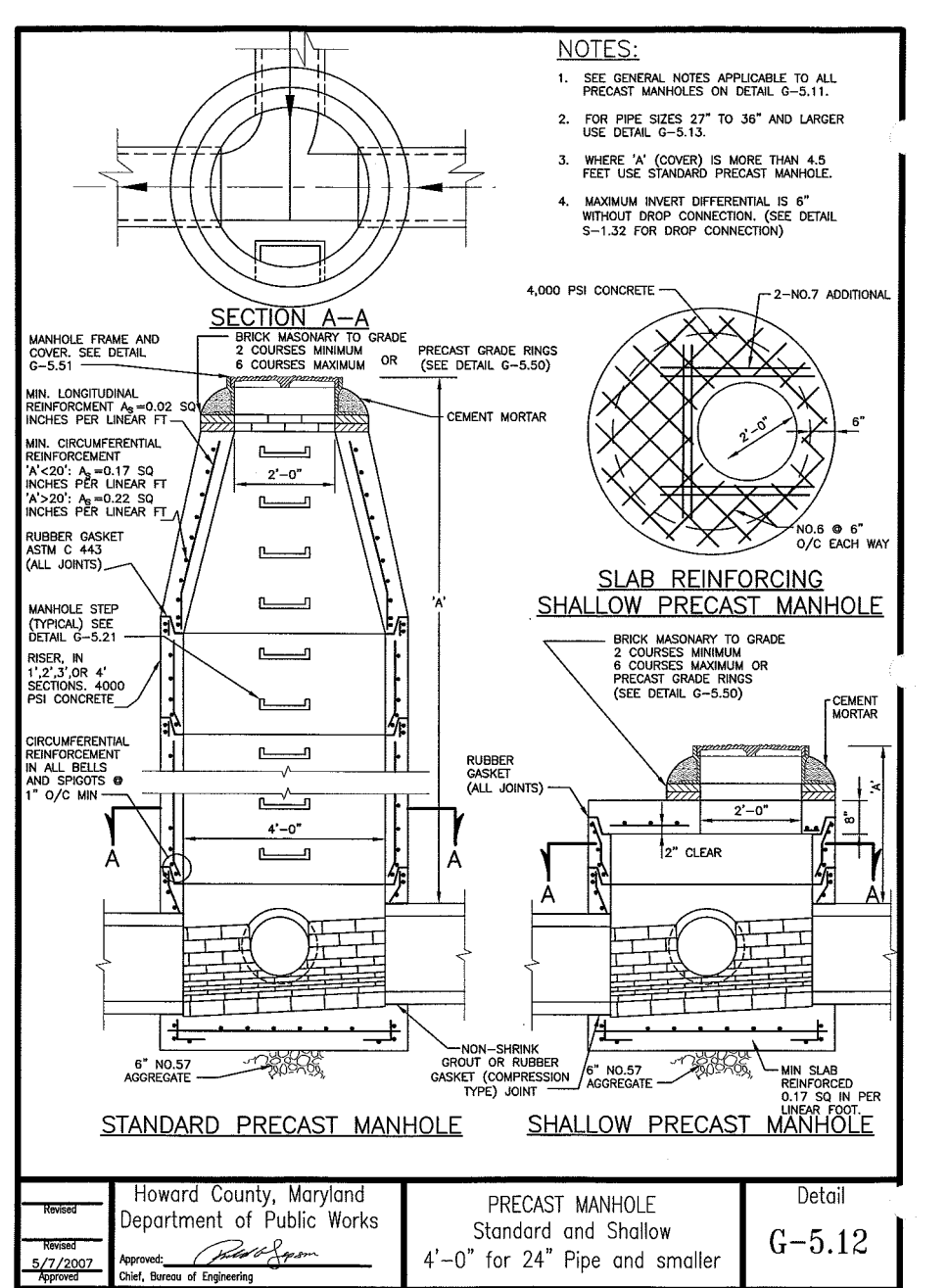
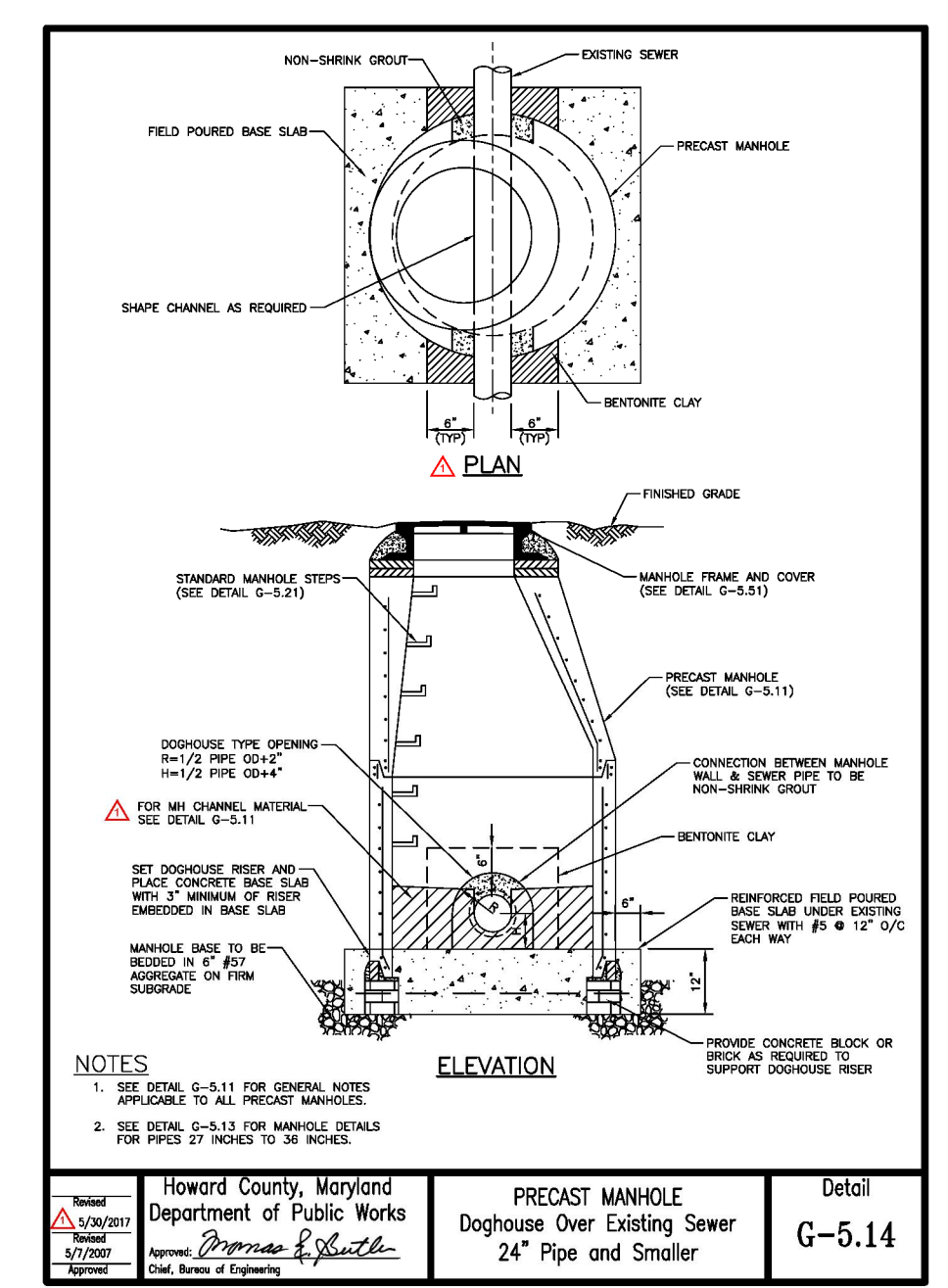
VOGEL ENGINEERING
 TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

DESIGN BY: RHW/GAH
 DRAWN BY: GAH
 CHECKED BY: RHW
 DATE: MARCH, 2022
 SCALE: AS SHOWN
 W.O. NO.: 04-76

8 SHEET OF 18



**** REFER TO GENERAL NOTE #57, SHEET 1 FOR NECESSARY DISTURBANCE APPROVAL OF STORM DRAIN OUTFALL WITHIN THE STREAM BANK BUFFER.****

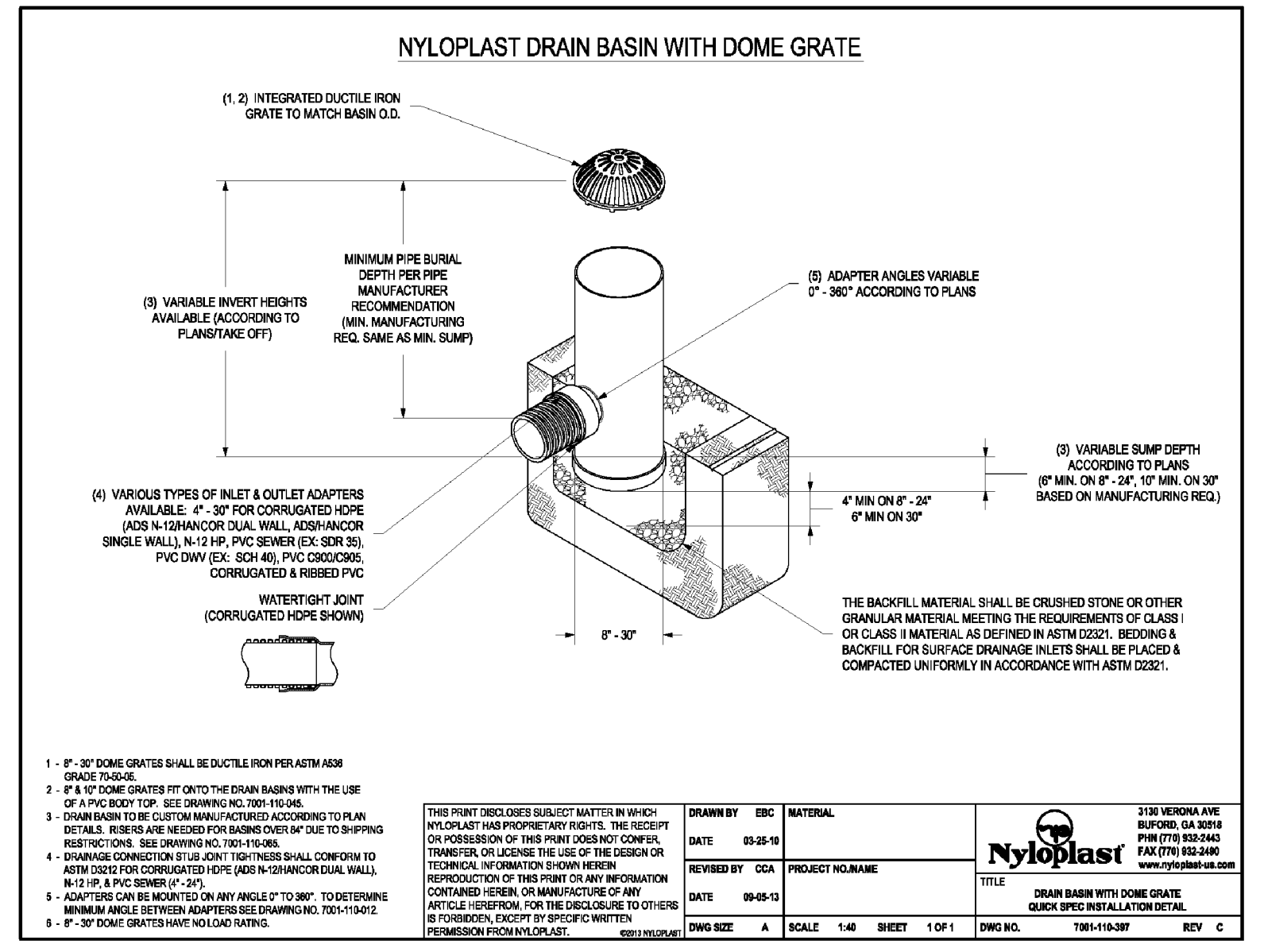


LEGEND

---	PROPERTY LINE
---	RIGHT-OF-WAY LINE
---	ADJACENT PROPERTY LINE
---	EXISTING STREAM
---	EXISTING STREAM BANK
---	EXISTING MINOR CONTOUR
---	EXISTING MAJOR CONTOUR
---	PROPOSED MINOR CONTOUR
---	PROPOSED MAJOR CONTOUR
---	EXISTING CURB AND GUTTER
---	EXISTING TREELINE
---	EXISTING TREES
---	PROPOSED TREELINE
---	PROPOSED CURB AND GUTTER
---	PROPOSED STORM DRAIN
---	PROPOSED STORM INLET
---	EXISTING WETLANDS
---	PROPOSED STORMWATER FACILITY
---	STORMDRAIN AREA DIVIDE
---	STORMDRAIN AREA LABEL
---	TIME OF CONCENTRATION PATH

DRAINAGE AREAS FOR STORM DRAINAGE

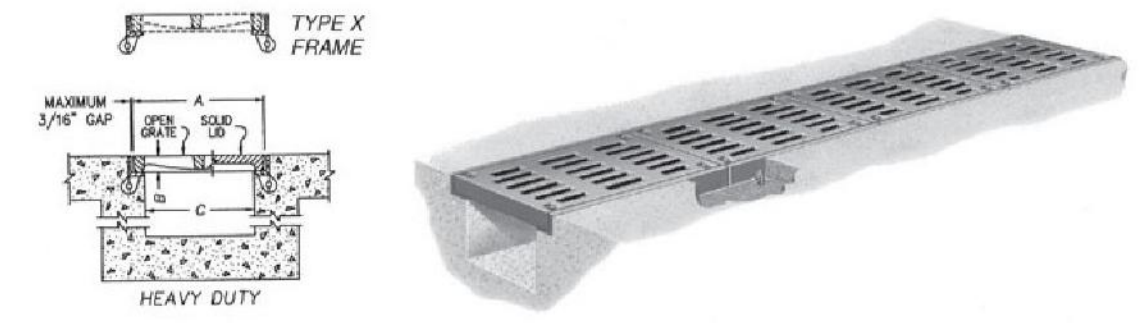
AREA NO.	AREA (AC.)	C FACTOR	IMPERVIOUS %
R-1	0.21	0.1900	0.00
I-1	0.99	0.8414	95.93
I-2	1.00	0.8449	96.41
R-2	0.26	0.1273	0.04
TR-1	0.10	0.7554	83.85
I-3	0.06	0.1600	0.00



STORM DRAIN DRAINAGE AREA MAP
SCALE: 1"=50'

SCALE 1"=50'
25' 0' 50'

R-4990-CX

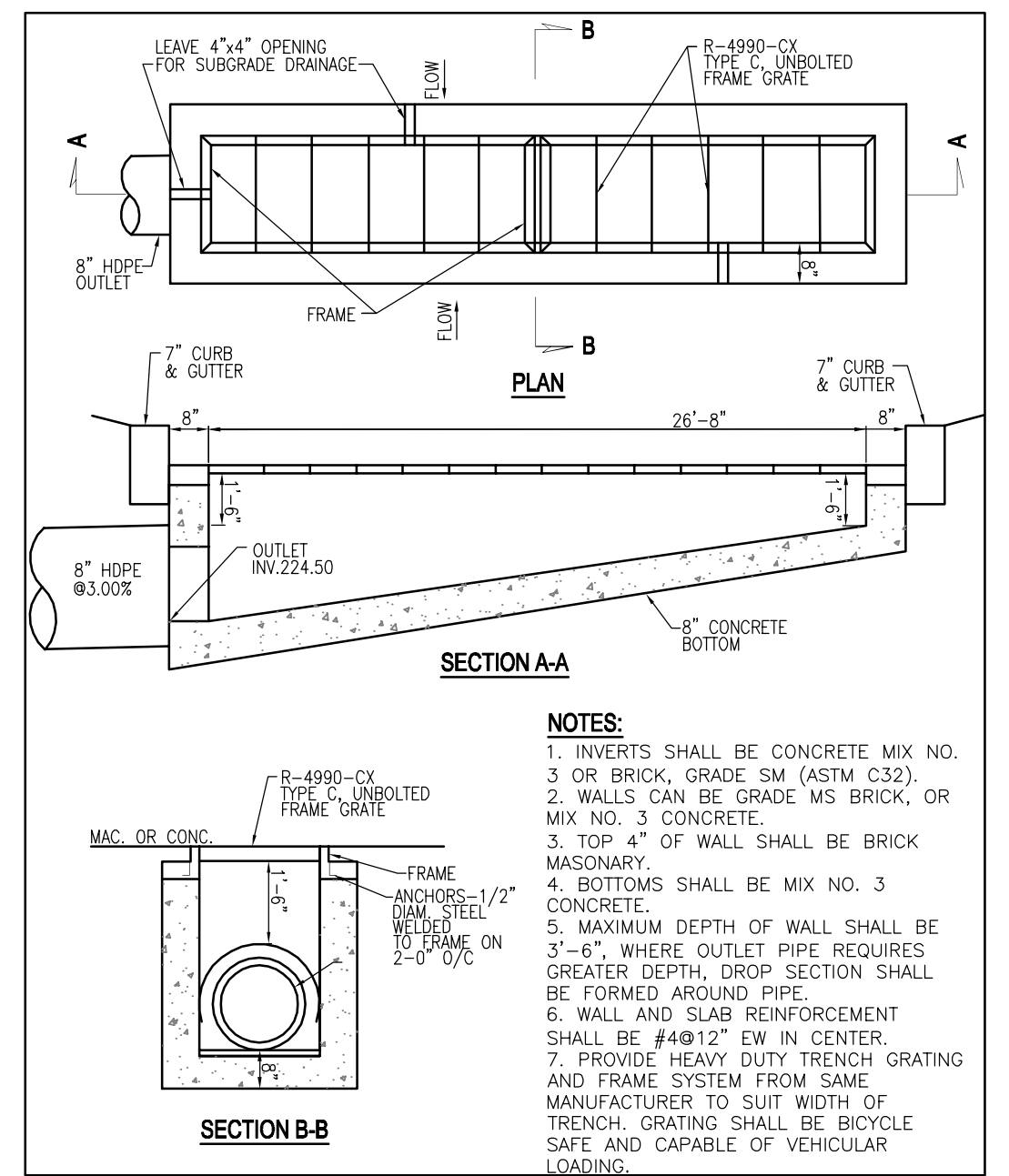


General schematic shown may not apply to all designs. Bar and rib depths, plate thicknesses, and seating widths vary on different sizes and styles. If your project has design restrictions, contact your sales representative or product engineering.

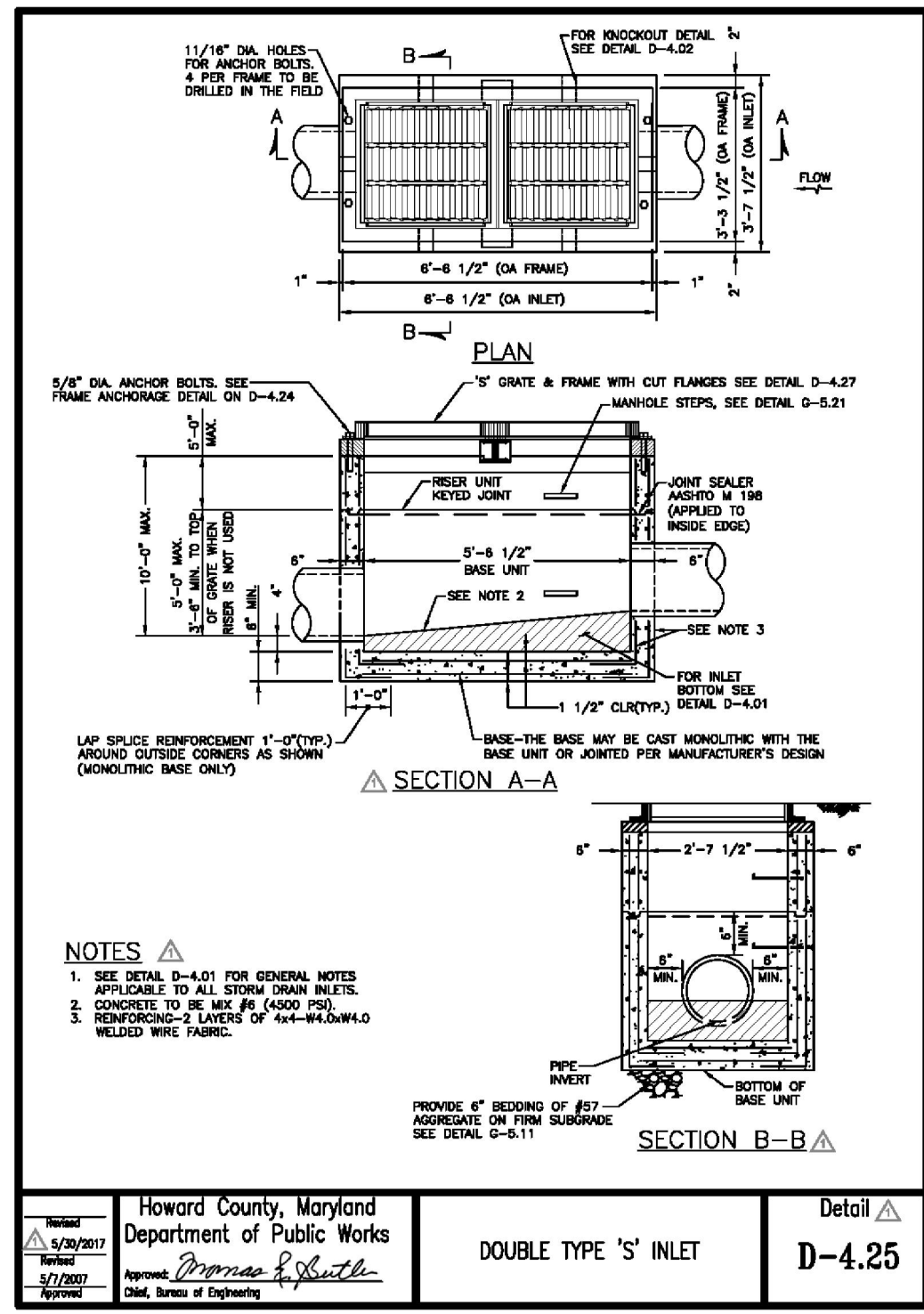
MAPPED SOILS TYPES - SAVAGE MAP #25

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	HYDRIC	HYDRIC INCLUSIONS	PRIME FARMLAND	<15% SLOPE W/ EROSION POTENTIAL
DhB	DOWNER-HAMMONTON SANDY LOAM, 2 TO 5 PERCENT	A	.17	NO	NO	NO	NO
DhC	DOWNER-HAMMONTON SANDY LOAM, 5 TO 10 PERCENT	A	.17	NO	NO	NO	NO
CdD	CROM AND EVESBORO SOILS, 10 TO 15 PERCENT SLOPES	C	.37	NO	NO	NO	YES
RuB	RUSSET AND BELTSVILLE SOILS, 2 TO 5 PERCENT SLOPE	C	.43	NO	NO	YES	NO
U1A	URBAN LAND-FALLSINGTON COMPLEX, 0 TO 2 PERCENT SLOPE	D	.28	YES	YES	NO	NO
UdD	URBAN LAND-SASSAFRAS-BELTSVILLE COMPLEX, 5 TO 15 PERCENT SLOPE	D	-	NO	NO	NO	NO

NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT



PROPOSED NEENAH# R-4990-CX HEAVY DUTY TRENCH DRAIN (TR-1)
SEE SPECIFICATIONS ON THIS SHEET
SCALE: N.T.S.



DOUBLE TYPE 'S' INLET
Detail D-4.25

OWNER/DEVELOPER
TEAM DORSEY, LLC
C/O ERIC ROSENBAUM
2308 FORT WILLIAM DRIVE
OLNEY, MD 20832
(301) 787-0220

NO.	REVISION	DATE

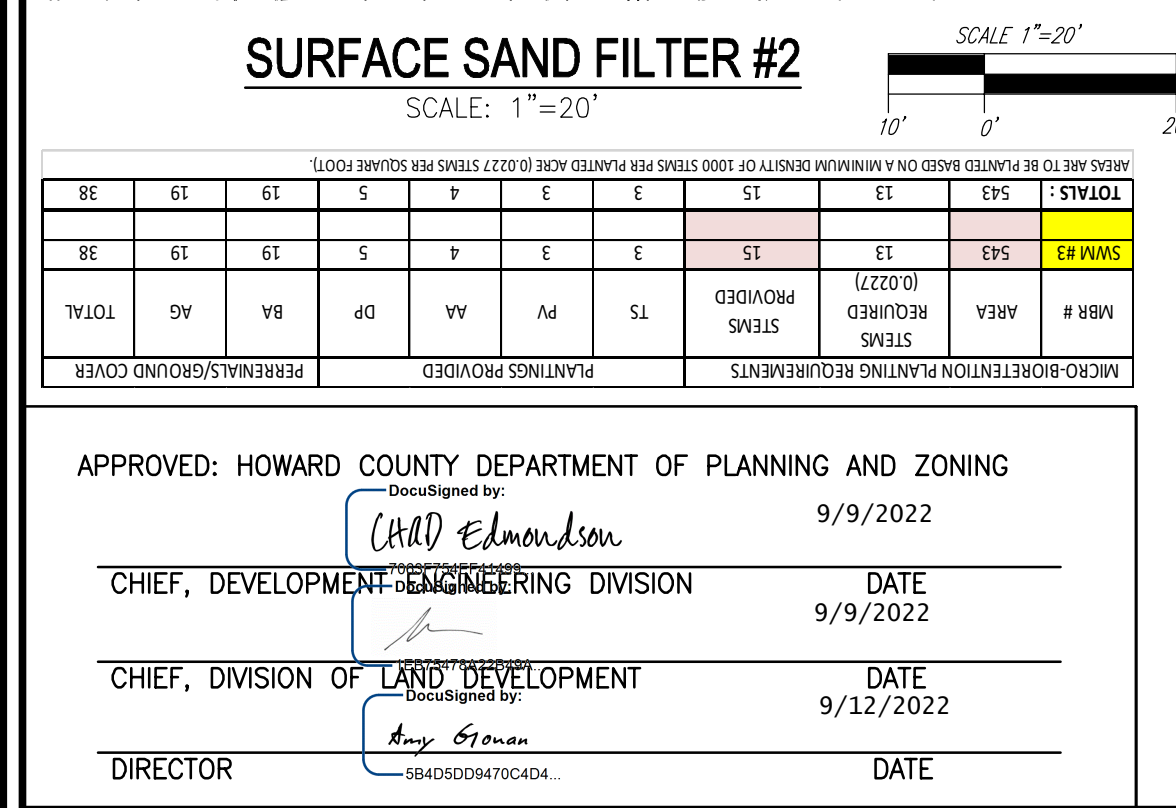
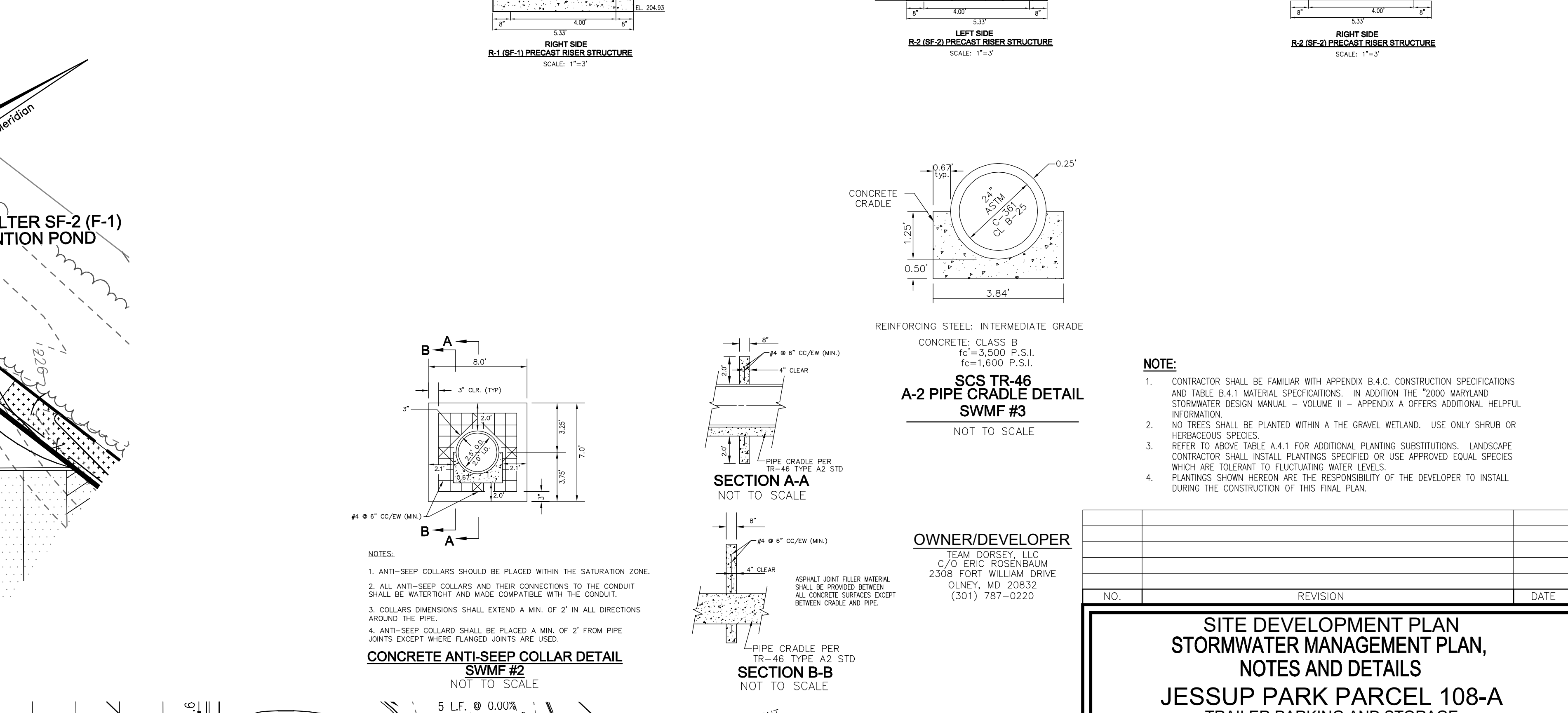
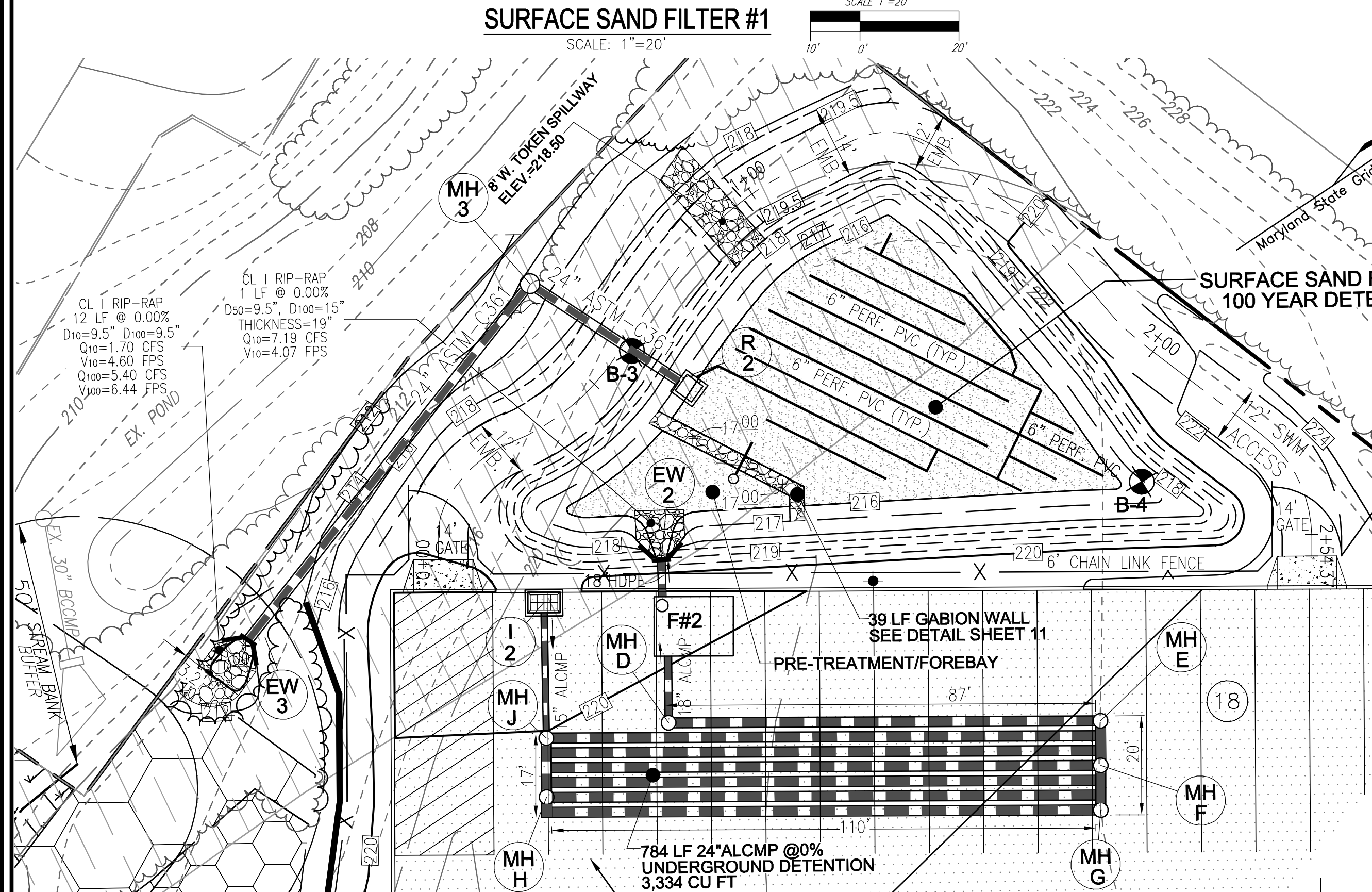
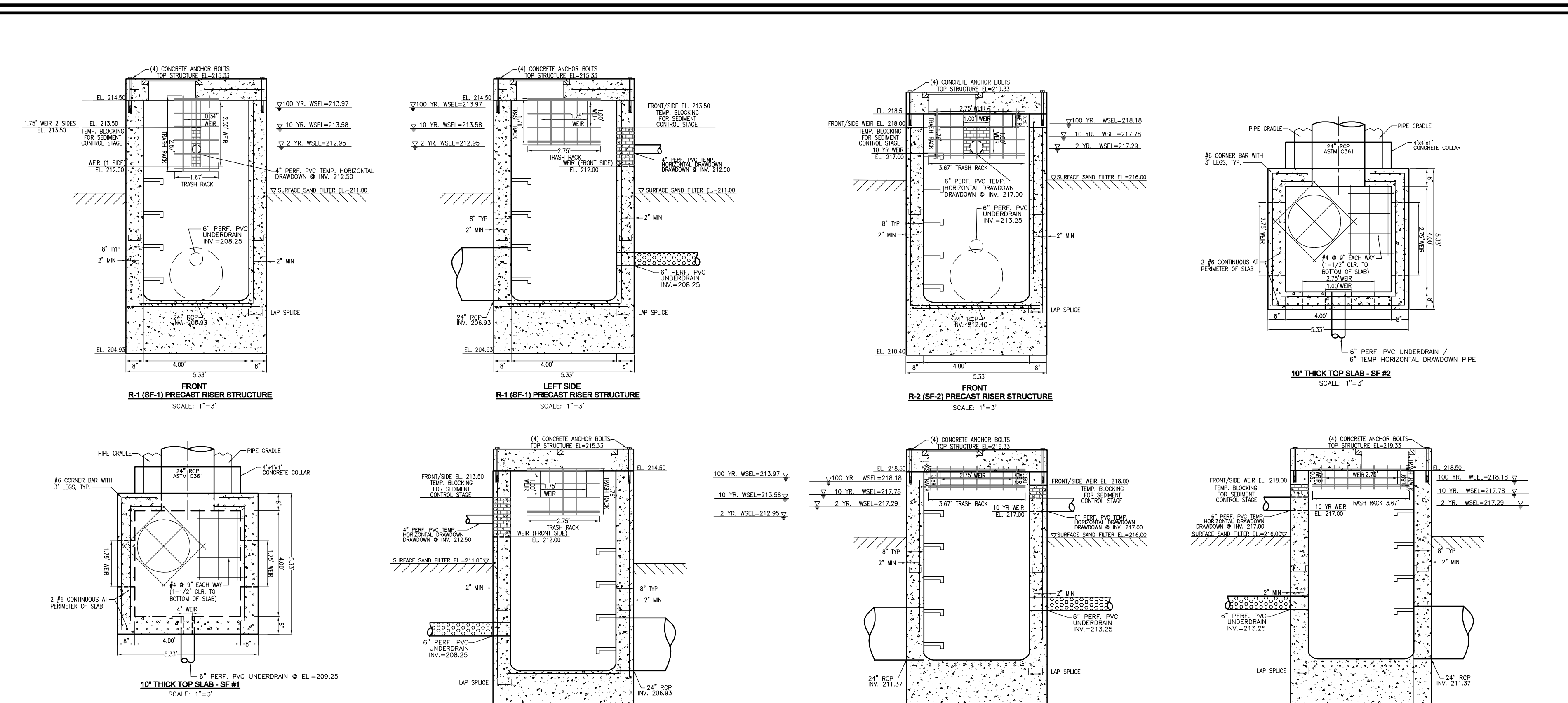
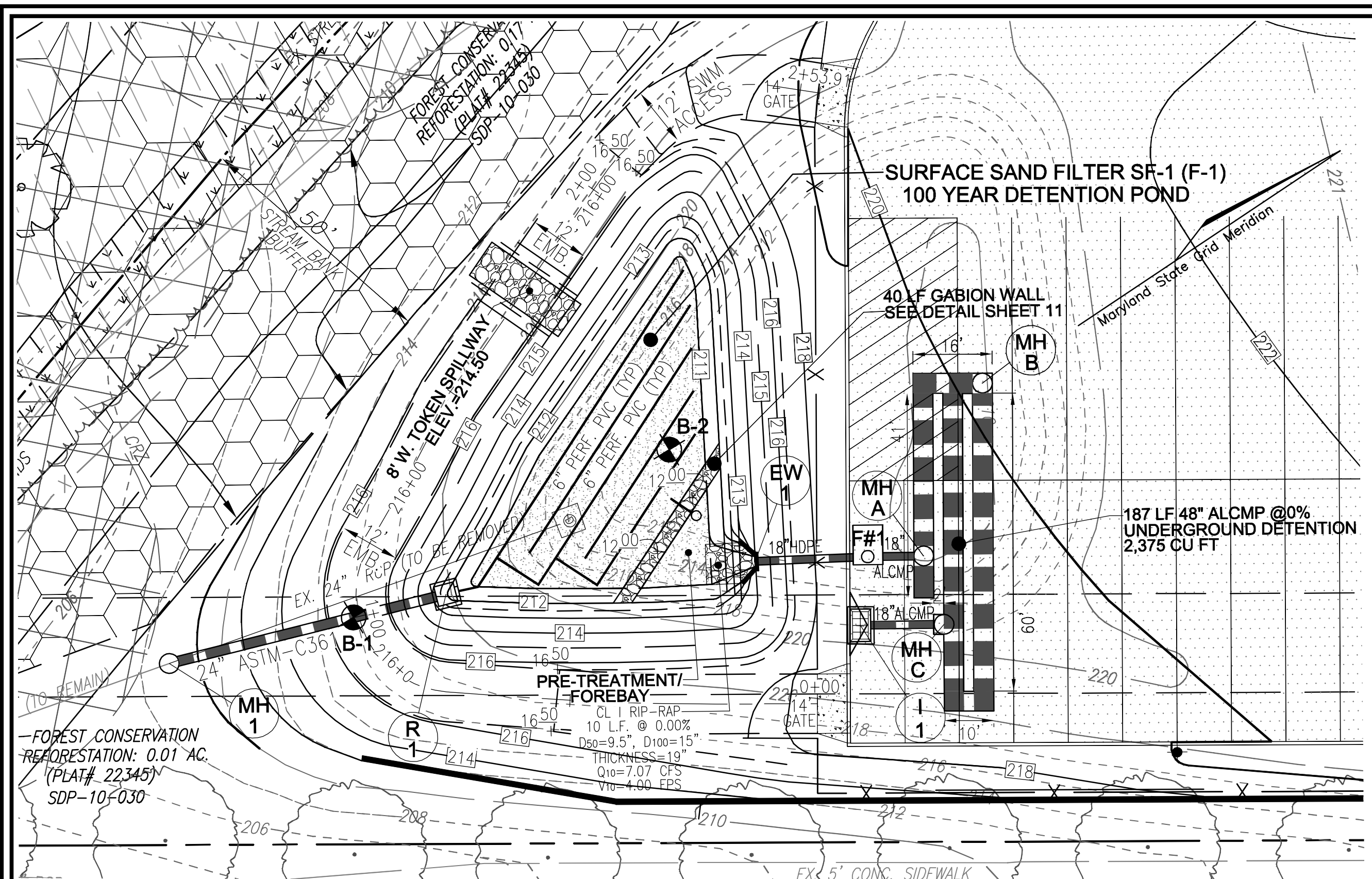
SITE DEVELOPMENT PLAN
STORM DRAIN DRAINAGE AREA MAP
SUMMARY TABLE AND DETAILS
JESSUP PARK PARCEL 108-A
TRAILER PARKING AND STORAGE
7868 DORSEY RUN ROAD
JESSUP, MD 20794
TAX MAP 43 GRID 22
1ST ELECTION DISTRICT

VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE
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. 1913

DESIGN BY: RHY/GAH
DRAWN BY: GAH
CHECKED BY: RHY
DATE: MARCH, 2022
SCALE: AS SHOWN
W.O. NO.: 04-76

9 SHEET OF 18

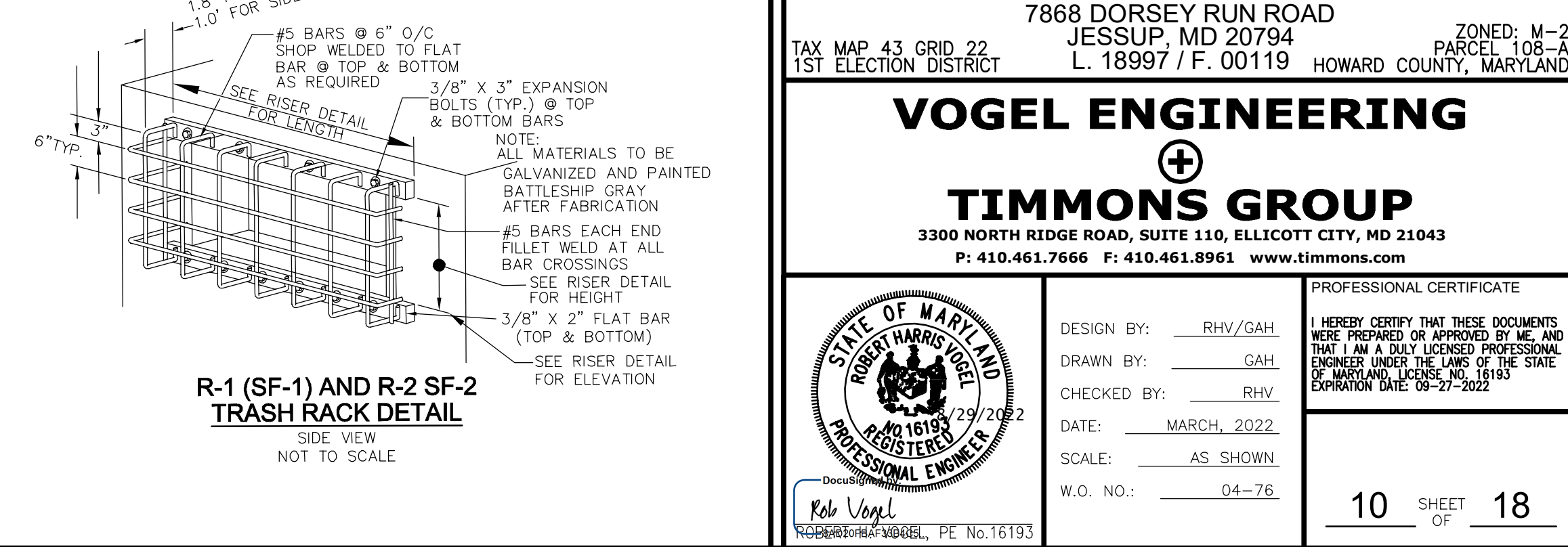
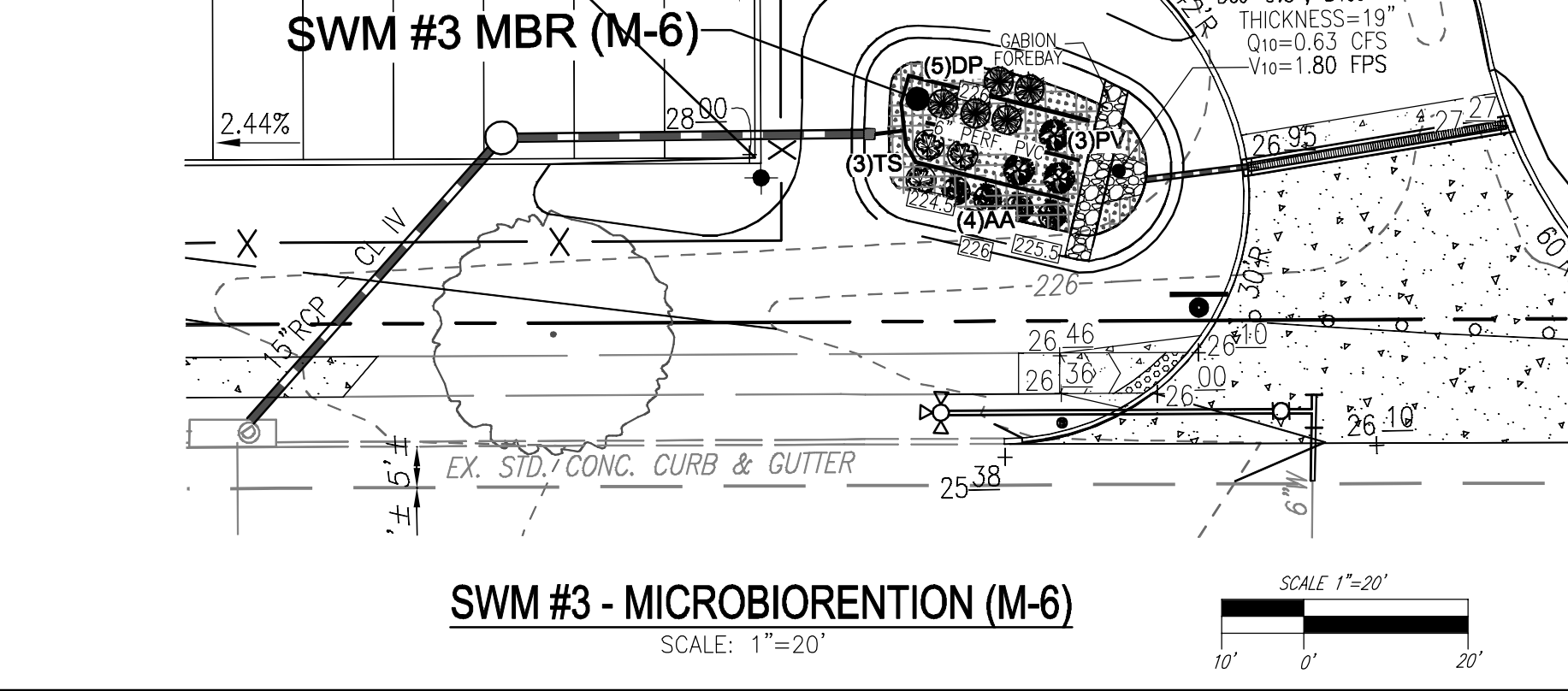


PLANTING SCHEDULE (SHRUB/ORNAMENTAL GRASSES)

LEGEND KEY	QTY	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
TS	3	SCIRPUS PUNGENS COMMON THREE-SQUARE	PLANT STOCK	CONT
DP	5	SAGITTARIA LATIFOLIA ARROWHEAD/DUCK POTATO	PLANT STOCK	9-12\"/>
AA	4	PELTANDRA VIRGINICA ARROW ARUM	PLANT STOCK	9-12\"/>
PV	3	PANICUM VIRGATUM SWITCHGRASS	1 GAL.	

BIORETENTION PERENNIALS/GROUND COVER PLANTING SCHEDULE

LEGEND	QTY	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
	19	BAPTISIA AUSTRALIS FALSE INDIGO	4\"/>	
	19	ACORUS GRAMINEUS 'OGON' GOLDEN VARIEGATED SWEET FLAG	1 QT.	



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

9/9/2022

CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE 9/9/2022

CHIEF, DIVISION OF LAND DEVELOPMENT

DATE 9/12/2022

DIRECTOR

DATE

NOTE:

- CONTRACTOR SHALL BE FAMILIAR WITH APPENDIX B.4.C. CONSTRUCTION SPECIFICATIONS AND TABLE B.4.1 MATERIAL SPECIFICATIONS. IN ADDITION THE "2000 MARYLAND STORMWATER DESIGN MANUAL - VOLUME II - APPENDIX A OFFERS ADDITIONAL HELPFUL INFORMATION.
- NO TREES SHALL BE PLANTED WITHIN A THE GRAVEL WETLAND. USE ONLY SHRUB OR HERBACEOUS SPECIES.
- REFER TO ABOVE TABLE A.4.1 FOR ADDITIONAL PLANTING SUBSTITUTIONS. LANDSCAPE CONTRACTOR SHALL INSTALL PLANTINGS SPECIFIED OR USE APPROVED EQUAL SPECIES WHICH ARE TOLERANT TO FLUCTUATING WATER LEVELS.
- PLANTINGS SHOWN HEREON ARE THE RESPONSIBILITY OF THE DEVELOPER TO INSTALL DURING THE CONSTRUCTION OF THIS FINAL PLAN.

OWNER/DEVELOPER

TEAM DORSEY, LLC
C/O ERIC ROSENBAUM
2308 FORT WILLIAM DRIVE
OLNEY, MD 20832
(301) 787-0220

**SITE DEVELOPMENT PLAN
STORMWATER MANAGEMENT PLAN,
NOTES AND DETAILS**

JESSUP PARK PARCEL 108-A
TRAILER PARKING AND STORAGE
7868 DORSEY RUN ROAD
JESSUP, MD 20794
L. 18997 / F. 00119 HOWARD COUNTY, MARYLAND

ZONED: M-2
PARCEL 108-A
1ST ELECTION DISTRICT

VOGEL ENGINEERING

TIMMONS GROUP

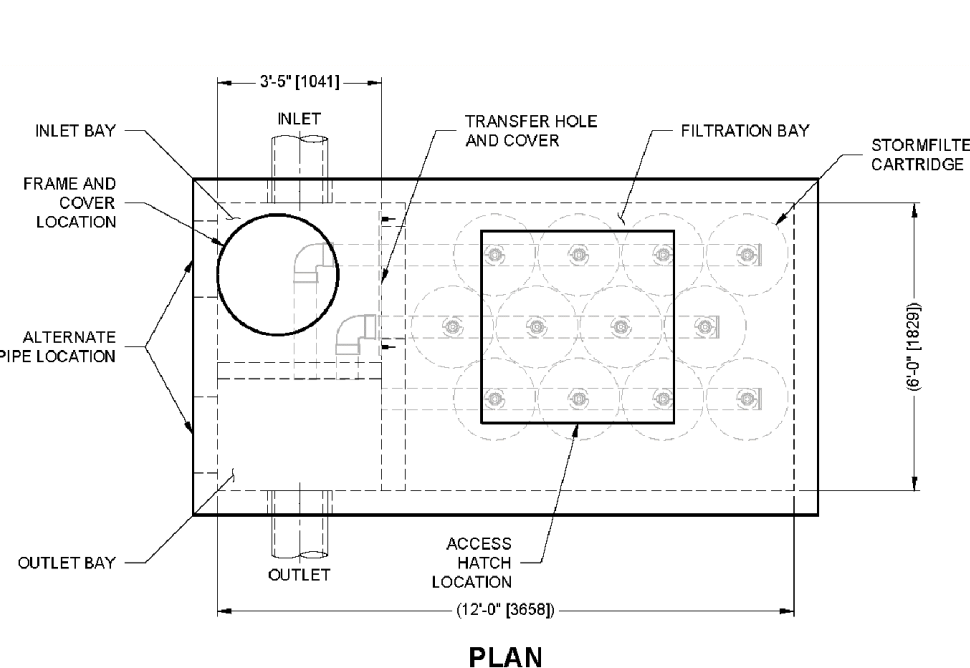
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

DESIGN BY: RHV/GAH
DRAWN BY: GAH
CHECKED BY: RHV
DATE: MARCH, 2022
SCALE: AS SHOWN
W.D. NO.: 04-76

PROFESSIONAL CERTIFICATE

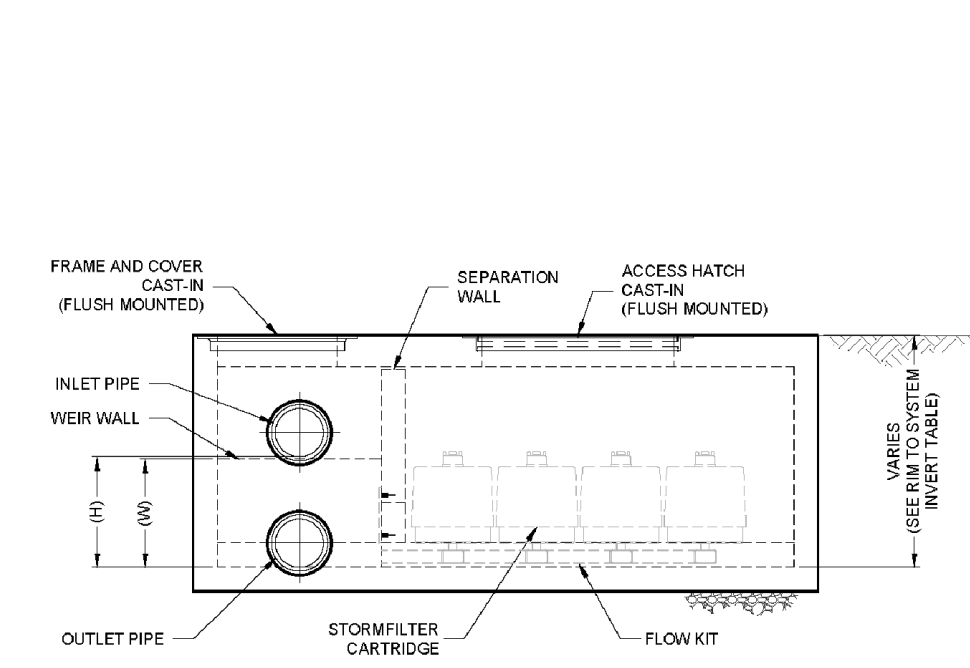
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DEX LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193
EXPIRATION DATE: 09-27-2022

10 SHEET OF 18



CONTECH ENGINEERED SOLUTIONS StormFilter. Project Name: Jessup Park Parcel 108-A. Site Designation: SF-3. Date: 4/30/21. Design Engineer: BAB. Table with columns for Site Characteristics, WQV Calculations, Stormfilter Design Constants, Sizing, System Design, and Storage Summary.

SITE SPECIFIC DATA REQUIREMENTS. Table with columns: STRUCTURE ID, WATER QUALITY FLOW RATE (cfs [L/s]), PEAK FLOW RATE (cfs [L/s]), RETURN PERIOD OF PEAK FLOW (yrs), CARTRIDGE FLOW RATE, CARTRIDGE SIZE (27, 18, LOW DROP [LD]), MEDIA TYPE (PERLITE, ZPG, PSORB), NUMBER OF CARTRIDGES REQUIRED, FILTER BAY RIM ELEVATION.



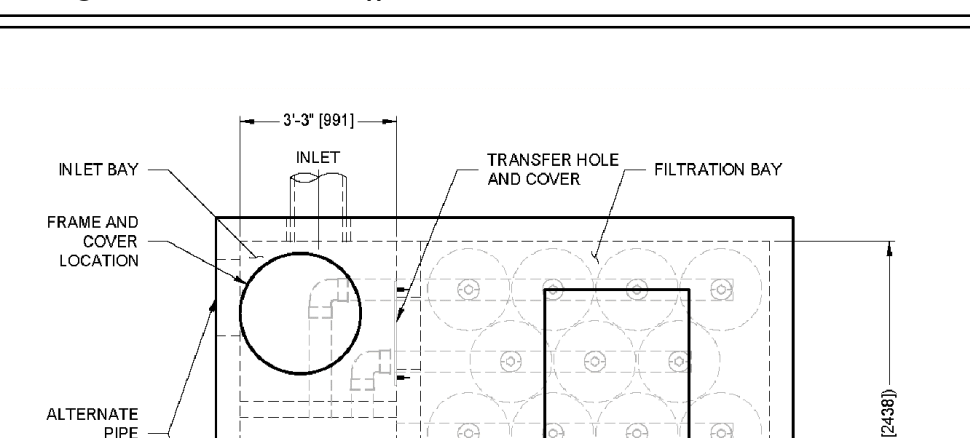
Stormfilter Design Constants (Per MDE Manual). Table with columns: Cartridge Height (in.), Filter Bed Depth, Df (ft), Coeff. of Perm. of Filter Media, k (ft/day), Avg. Height of Water above Filter Bed, Hf (ft), Design Filter Bed Drain Time, Tf (days), Surface Area of Stormfilter Cartridge (sq ft), Surface Area of Equivalent Filter Bed (sq ft).

RIM TO SYSTEM INVERT. Table with columns: CARTRIDGE SIZE, MIN. HEIGHT, MAX. HEIGHT. Rows for LOW DROP / 18", 3'-6", 4'-10".



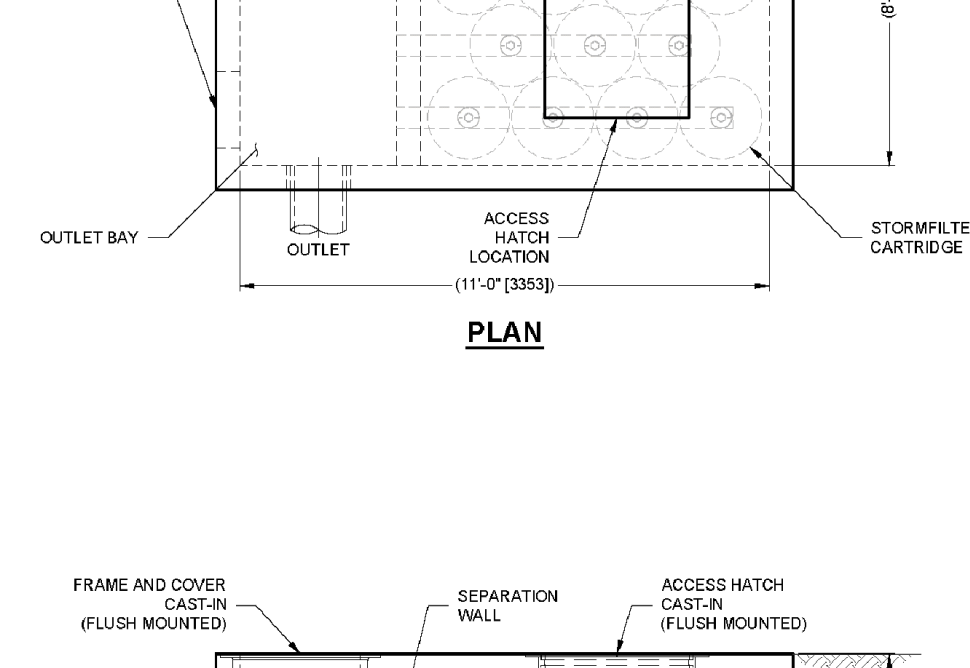
Stormfilter Design Constants (Per MDE Manual). Table with columns: Cartridge Height (in.), Filter Bed Depth, Df (ft), Coeff. of Perm. of Filter Media, k (ft/day), Avg. Height of Water above Filter Bed, Hf (ft), Design Filter Bed Drain Time, Tf (days), Surface Area of Stormfilter Cartridge (sq ft), Surface Area of Equivalent Filter Bed (sq ft).

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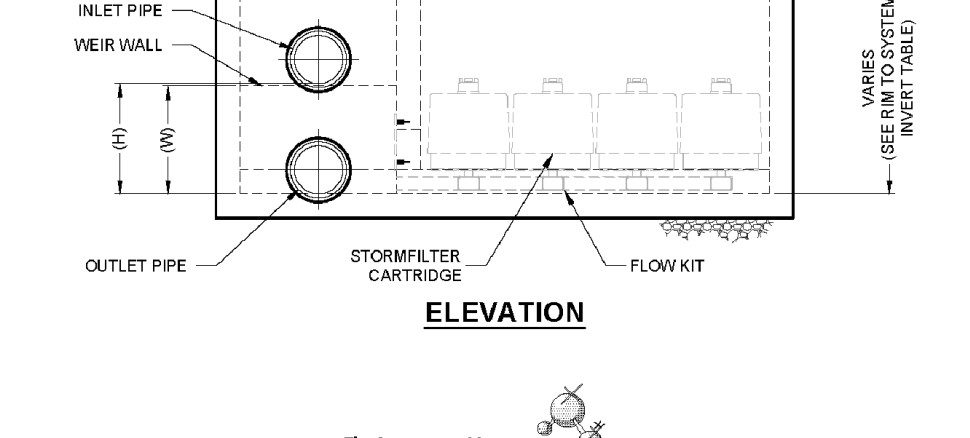
CONTECH ENGINEERED SOLUTIONS StormFilter. Project Name: Jessup Park Parcel 108-A. Site Designation: SF-2. Date: 4/30/21. Design Engineer: BAB. Table with columns for Site Characteristics, WQV Calculations, Stormfilter Design Constants, Sizing, System Design, and Storage Summary.

SITE SPECIFIC DATA REQUIREMENTS. Table with columns: STRUCTURE ID, WATER QUALITY FLOW RATE (cfs [L/s]), PEAK FLOW RATE (cfs [L/s]), RETURN PERIOD OF PEAK FLOW (yrs), CARTRIDGE FLOW RATE, CARTRIDGE SIZE (27, 18, LOW DROP [LD]), MEDIA TYPE (PERLITE, ZPG, PSORB), NUMBER OF CARTRIDGES REQUIRED, FILTER BAY RIM ELEVATION.



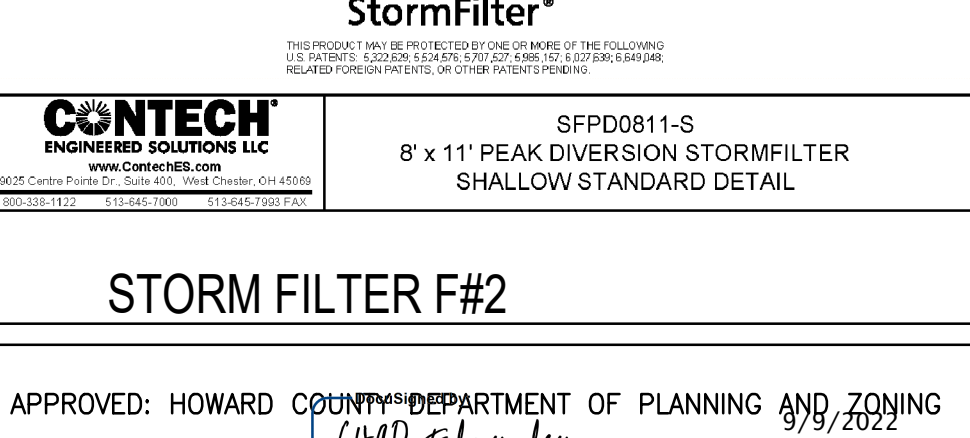
Stormfilter Design Constants (Per MDE Manual). Table with columns: Cartridge Height (in.), Filter Bed Depth, Df (ft), Coeff. of Perm. of Filter Media, k (ft/day), Avg. Height of Water above Filter Bed, Hf (ft), Design Filter Bed Drain Time, Tf (days), Surface Area of Stormfilter Cartridge (sq ft), Surface Area of Equivalent Filter Bed (sq ft).

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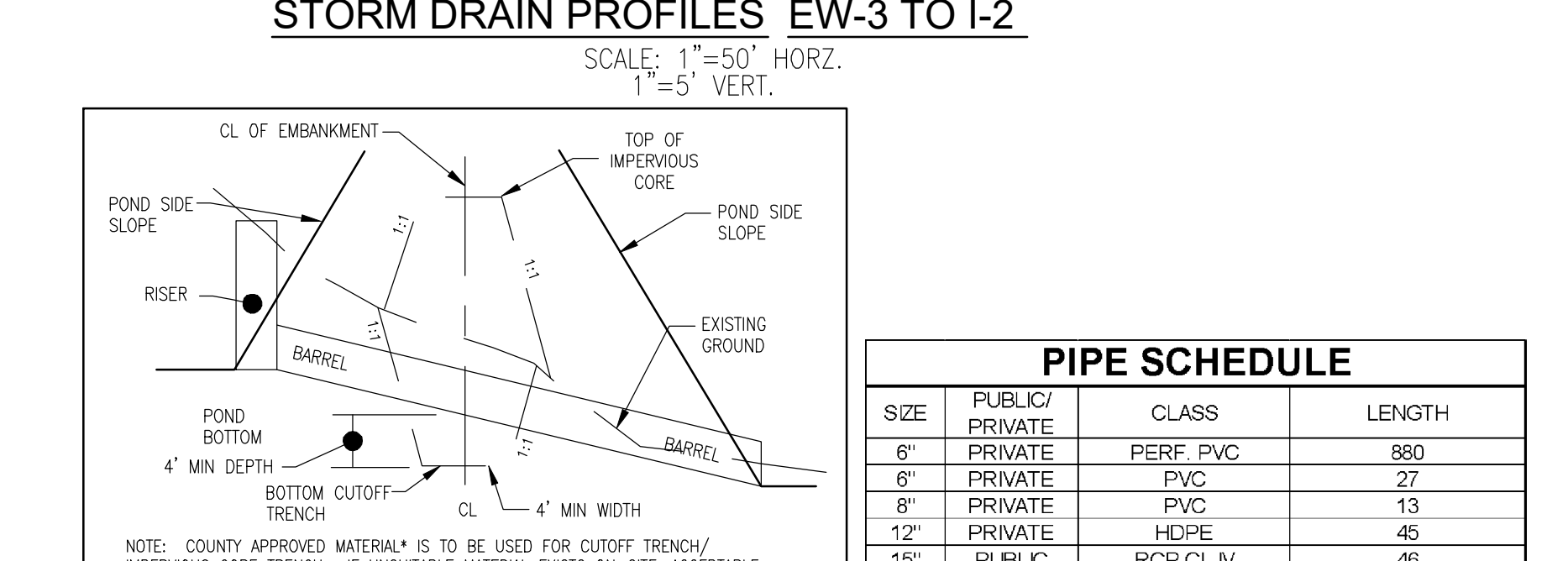
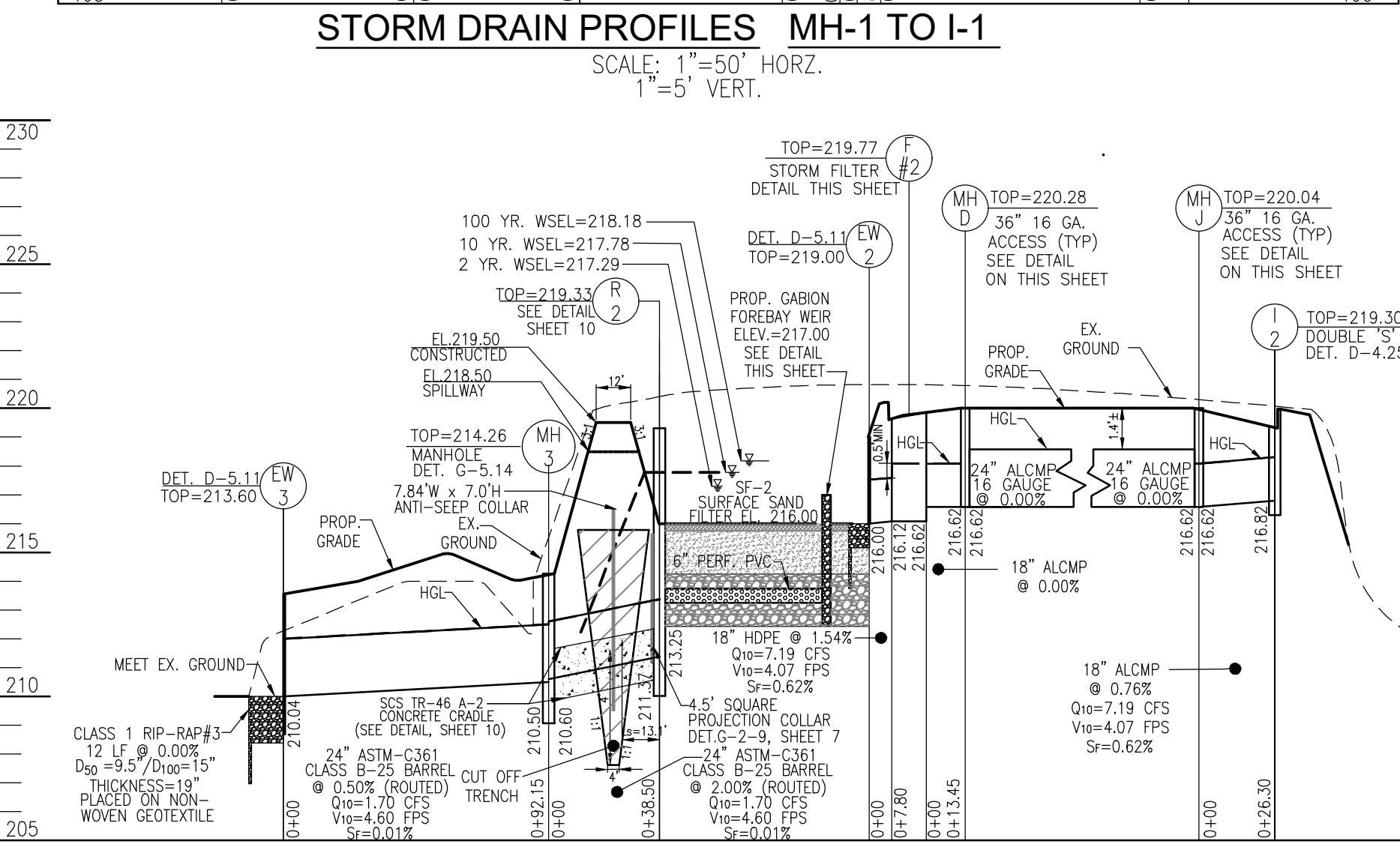
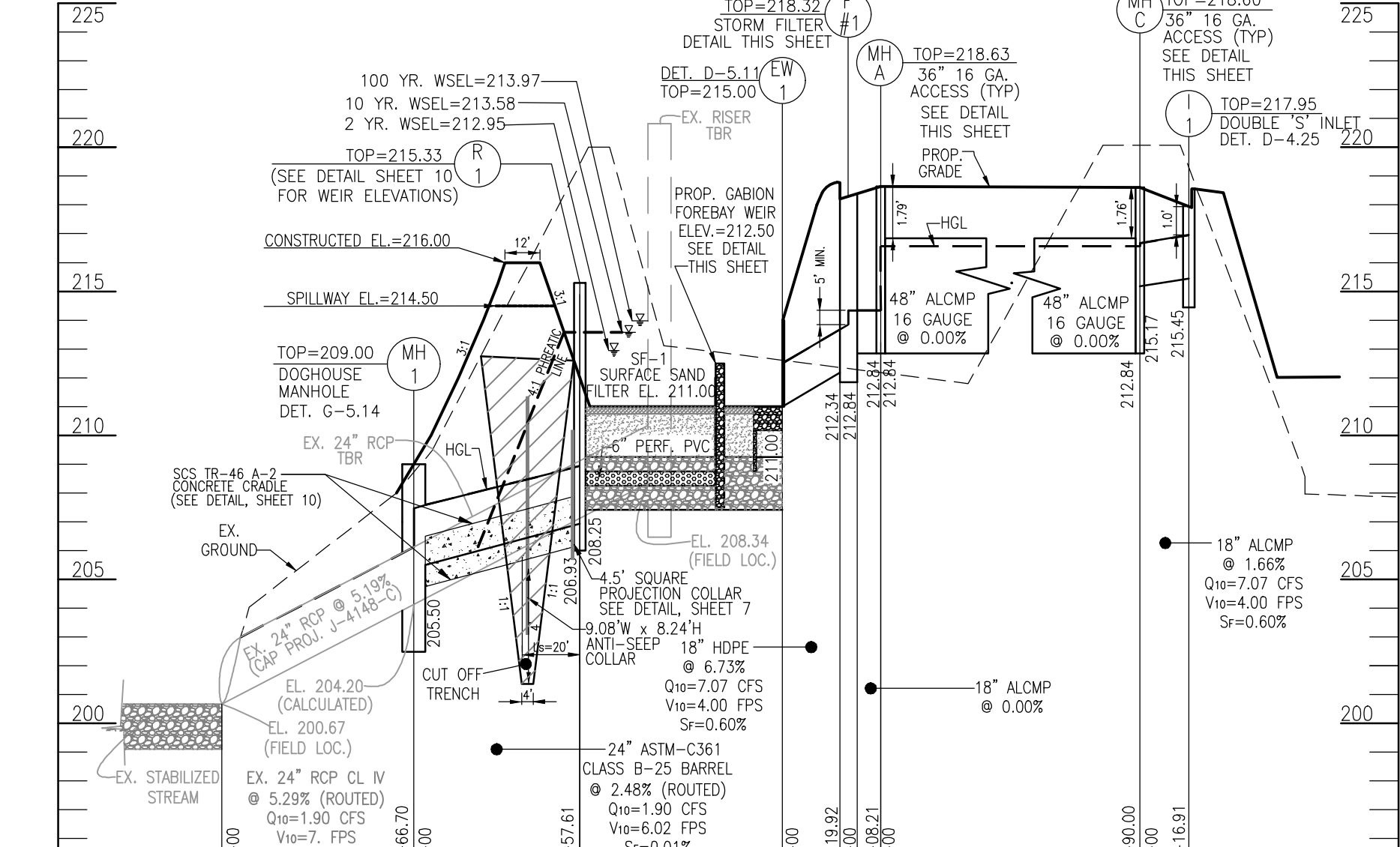
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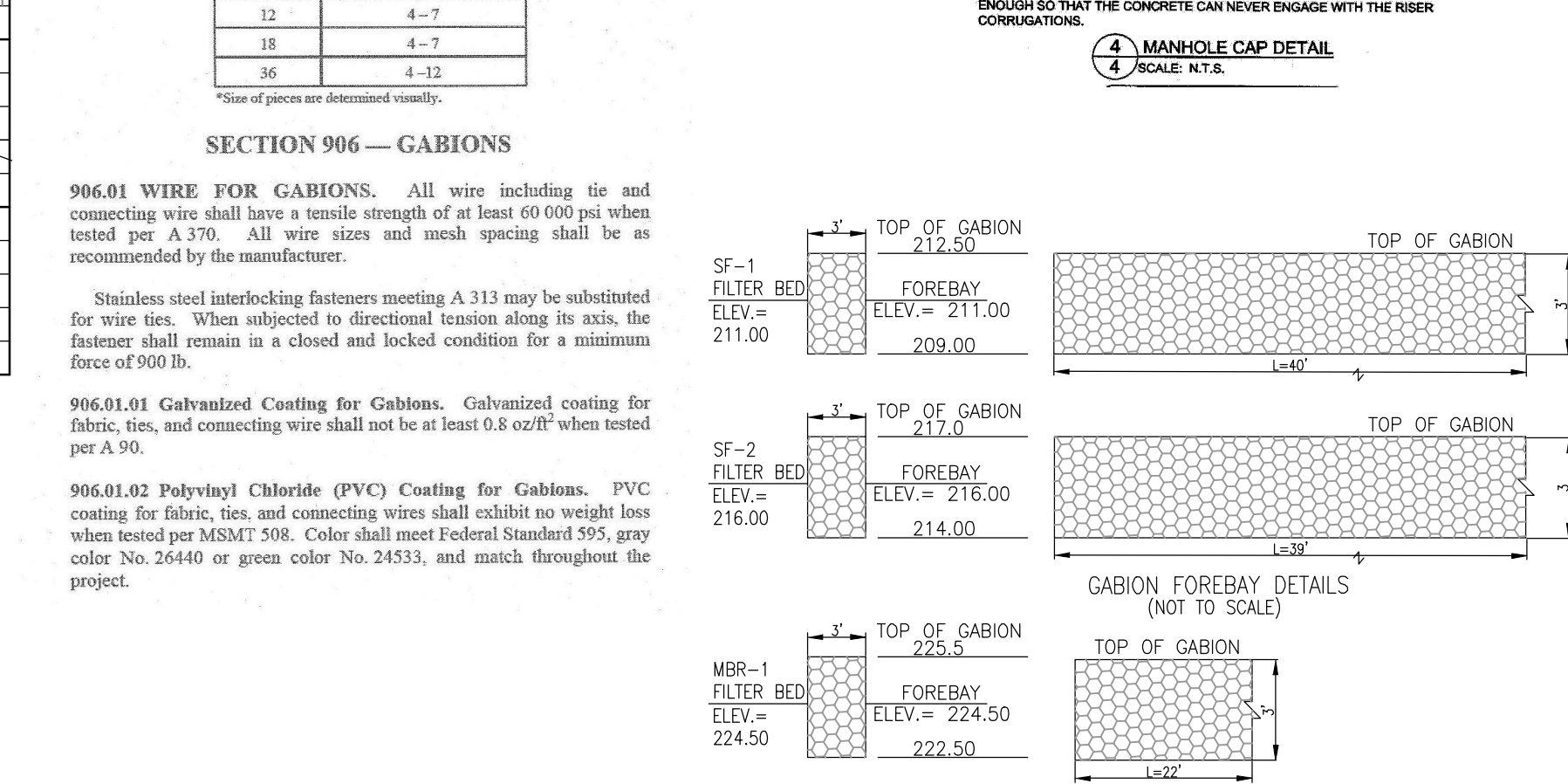
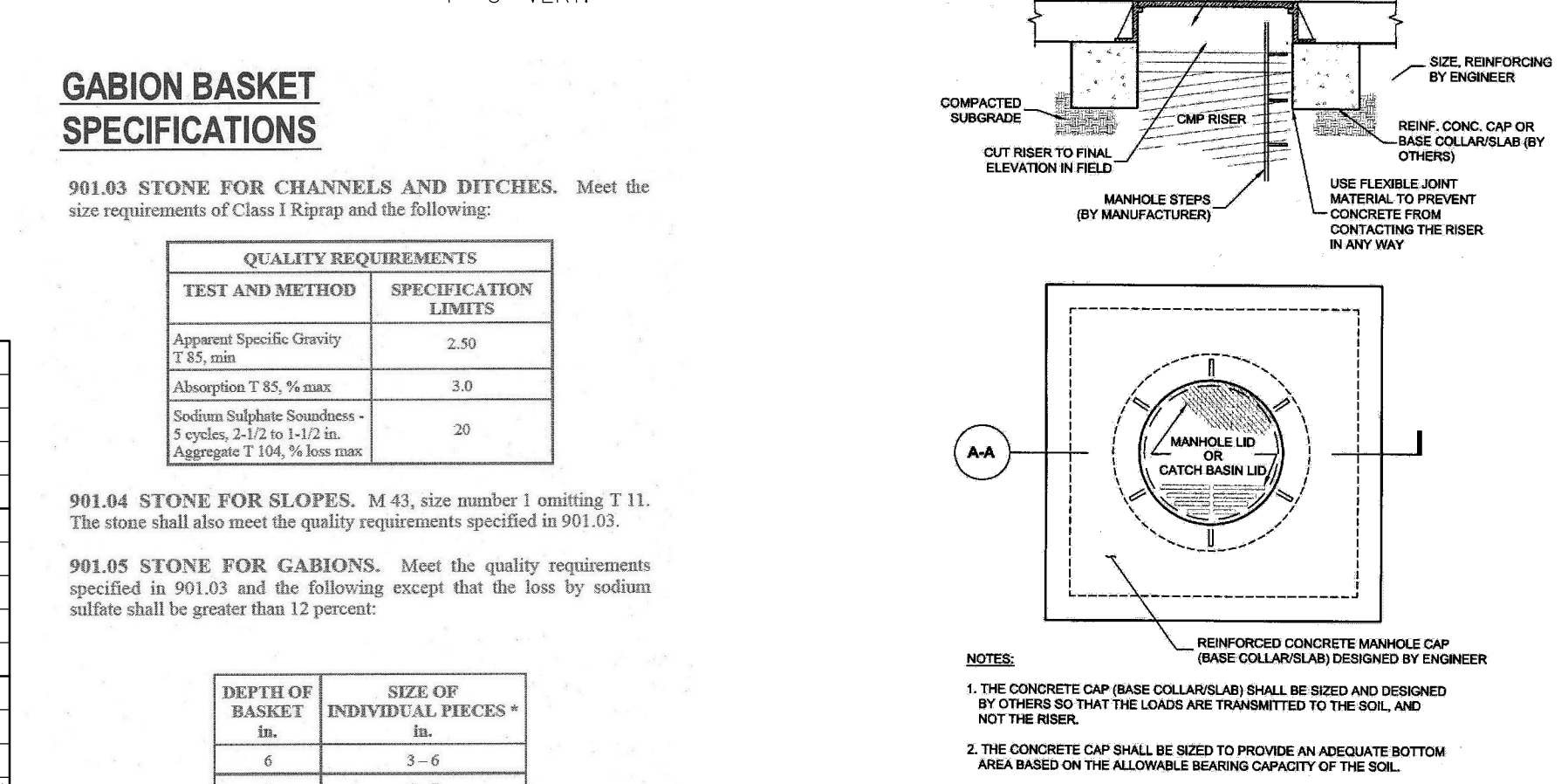
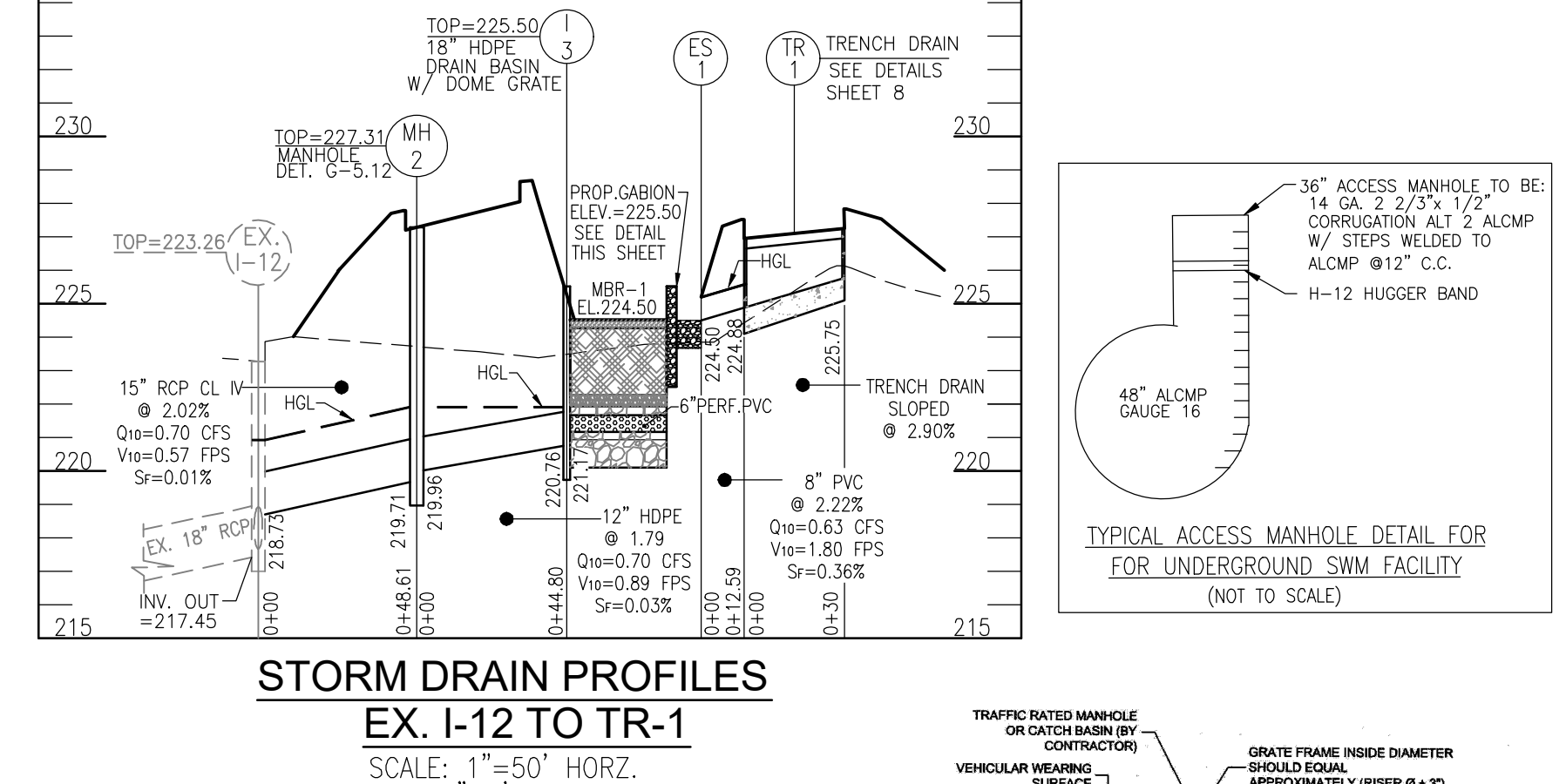
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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. CHIEF, DEVELOPMENT ENGINEERING DIVISION. CHIEF, DIVISION OF LAND DEVELOPMENT. DIRECTOR.



PIPE SCHEDULE and STORM DRAIN STRUCTURE SCHEDULE. Tables listing pipe sizes, classes, lengths, and storm drain structure details including STR #, TYPE, INV. OUT, INV. ELEV, TOP ELEV, DETAIL, LOCATION, and REMARKS.



OWNER/DEVELOPER: TEAM DORSEY, LLC. C/O ERIC ROSENBAUM. 2308 FORT WILLIAM DRIVE. OLNEY, MD 20832. (301) 787-0220.

SITE DEVELOPMENT PLAN. STORMWATER MANAGEMENT NOTES, DETAILS, PROFILES AND SCHEDULES. JESSUP PARK PARCEL 108-A. TRAILER PARKING AND STORAGE. 7868 DORSEY RUN ROAD. JESSUP, MD 20794. VOGEL ENGINEERING. TIMMONS GROUP. 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043. P: 410.461.7666 F: 410.461.8961 www.timmons.com

JESSUP PARK TRAILER STORAGE - ESDv COMPUTATIONS

SITE DEVELOPMENT AREA:	3.14	AC	136978	SF	Designed by:	gah
TARGET Pe:	2.08	IN			Date:	11/11/21
SITE IMPERVIOUS:	65.05	PERCENT			Checked by:	RHV
SITE Rv REQUIRED:	0.6354				Date:	
SITE ESDv REQUIRED:	15110	CF +/- (see Table 1)	SITE Rev REQUIRED:	1374	cf	

DRAINAGE AREA ID	% IMPERV	Rv	DA (SF)	DA (AC)	MINIMUM VOLUME (CF)	MAXIMUM VOLUME (CF)	TARGET VOLUME (CF)	PROVIDED VOLUME (CF)	IMPERV AREA (SF)	IMPERV AREA (AC)	GREEN SPACE (AC)	FILTER AREA (SF)	RECHARGE PROVIDED (CF)	FOREBAY PROVIDED (CF)	REMARKS				
DA #1 Surface Sand Filter (F-1)	79.11	0.7620	52203	1.20	3315	8619	6895	2359	41300	0.95	0.25	1940	590	349	Surface Sand Filter (F-1)				
															2359	1769 SF SF FILTER AREA @ 1' PONDING			
															236	Pre-treatment Required	2359	x	0.1
															349	* Pre-treatment Provided			
															1061	1769 SF SF @ 1.5' FILTER	1.5	x	0.4
DA #2 Surface Sand Filter (F-1)	76.31	0.7368	55115	1.27	3384	8798	7039	4671	42057	0.97	0.30	3755	1168	576	Surface Sand Filter (F-1)				
															4671	3755 SF SF @ 1' PONDING			
															467	Pre-treatment Required	4671	x	0.1
															576	* Pre-treatment Provided			
															2102	3503 SF SF @ 1.5' FILTER	1.5	x	0.4
DA #3 MBR (M-6)	53.10	0.5279	6729	0.15	296	770	616	724	3573	0.08	0.01	306	181	82	MICRO-BIORETENTION (M-6)				
															724	543 SF MBR @ 1.0 PONDING			
															72	Pre-treatment Required	724	x	0.1
															82	* Pre-treatment Provided			
															1168	3503 Rev Recharge	0.83	x	0.4
TOTALS	76.22	0.7360	114047	2.62	6995	18187	14549	16258	86930	2.00	0.56	N/A	1939		*See Stage-Storage Computations Pre-treatment included in ESDv				

Note: Pe of 1 inch ESDv to be provided in proposed Storm Filters SF-1 and SF-2 prior to enter in the surface sand filters facilities.
DA #2 Exceeds Max Volume provided. Only the max volume (2.6 pe) has been credited in the volume provided total.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED SURFACE STORMWATER FILTRATION SYSTEMS F-1 AND F-2

THE STORMWATER WETLAND FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE FACILITY IS FUNCTIONING PROPERLY. THE TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF ONCE PER YEAR, WHEN VEGETATION REACHES 18" IN HEIGHT OR AS NEEDED. FILTERS THAT HAVE A GRASS COVER SHALL BE MOWED A MINIMUM OF THREE (3) TIMES PER GROWING SEASON TO MAINTAIN A MAXIMUM GRASS HEIGHT OF LESS THAN 12 INCHES. DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED. VISIBLE SIGNS OF EROSION IN THE FACILITY SHALL BE REPAIRED AS SOON AS IT IS NOTICED. REMOVE SILT WHEN IT EXCEEDS FOUR (4) INCHES DEEP IN THE FOREBAY. WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 72 HOURS, THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REPLACED WITH FRESH MATERIAL. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER. A LOGBOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS. THE MAINTENANCE LOGBOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION SYSTEM HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

OPERATION AND MAINTENANCE SCHEDULE FOR (M-6), (M-7) AND (M-8) MICROBIORETENTION AREAS

1. 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. 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. 3. MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS. 4. SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

MICROBIORETENTION AND RAINGARDEN NOTES:

- ONLY THE SIDES OF MICROBIORETENTION ARE TO BE WRAPPED IN FILTER FABRIC. FILTER FABRIC BETWEEN LAYER OR AT THE BOTTOM OF THE MICROBIORETENTION WILL CAUSE THE MBR TO FAIL, AND THEREFORE SHALL NOT BE INSTALLED.
- WRAP THE PERFORATED MBR UNDERDRAIN PIPE WITH 1/4" MESH (4x4) OR SMALLER GALVANIZED HARDWARE CLOTH.
- PROVIDE 5' MINIMUM SPACING BETWEEN UNDER DRAIN AND PERFORATED PIPE THROUGH STONE RESERVOIR OR SPACE PIPE EQUALLY ACROSS BOTTOM FOR SMALL BIOS. (SEE PLANS)

NOTE:
50% OF MICRO-BIORETENTION AND RAIN GARDEN SURFACE AREA SHALL BE PLANTED.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	Designated by:	9/9/2022
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE	9/9/2022
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE	9/12/2022
DIRECTOR	DATE	

APPENDIX B.3 CONSTRUCTION SPECIFICATIONS FOR SAND FILTERS, BIORETENTION AND OPEN CHANNELS 1. MATERIAL SPECIFICATIONS

THE ALLOWABLE MATERIALS TO BE USED IN BIORETENTION AREA ARE DETAILED IN TABLE B.3.2.

THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE BIORETENTION AREA THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING SOIL SHALL BE FREE OF BERMUDA GRASS, QUACKGRASS, JOHNSON GRASS, OR OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15.08.01.05. THE PLANTING SOIL SHALL BE TESTED AND SHALL MEET THE FOLLOWING CRITERIA:
PH RANGE: 5.2 - 7.0
ORGANIC MATTER: 1.5% (4% WEIGHT)
MAGNESIUM: 35 LB./AC
PHOSPHORUS (PHOSPHATES): 15 LB./AC
POTASSIUM (POTASH OR K2O): 15 LB./AC
SOLUBLE SALTS: NIT TO EXCEED 500 PPM
ALL BIORETENTION AREAS SHALL HAVE A MINIMUM OF ONE TEST. EACH TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR PH, PHOSPHORUS, AND POTASSIUM AND ADDITIONAL TEST OF ORGANIC MATTER, AND SOLUBLE SALTS. A TEXTURAL ANALYSIS SHALL BE PERFORMED FOR EACH LOCATION WHERE THE TOP SOIL WAS EXCAVATED. SINCE DIFFERENT LAB CALIBRATE THEIR TESTING EQUIPMENT DIFFERENTLY, ALL TESTING RESULTS SHALL COME FROM THE SAME TESTING FACILITY. SHOULD THE PH FALL OUT OF THE ACCEPTABLE RANGE, IT MAY BE MODIFIED (HIGHER) WITH LIME OR (LOWER) WITH IRON SULFATE PLUS SULFUR.

IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BIORETENTION AREA AND THE REQUIRED BACKFILL. WHEN POSSIBLE, USE HOES TO REMOVE ORIGINAL SOIL. IF BIORETENTION AREAS ARE EXCAVATED USING LOADER, THE CONTRACTOR SHOULD USE WIDE TRACK OR MARSH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH TURF TIRE TIRE. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LOGS, OR HIGH PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE. COMPACTION CAN BE ALLEVIATED AT THE BASE OF THE BIORETENTION FACILITY BY USING A PRIMARY TILLING OPERATION SUCH AS CHISEL PLOW, RIPPER, OR SUBSOILER. THESE TILLING OPERATIONS ARE TO REFRACTURE THE SOIL PROFILE THROUGH THE 12 INCH COMPACTION ZONE. SUBSTITUTE METHODS MUST BE APPROVED BY THE ENGINEER. ROTOTILLERS TYPICALLY DO NOT TILL DEEP ENOUGH TO REDUCE THE EFFECTS OF COMPACTION FROM HEAVY EQUIPMENT. ROTOTILL TO 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENTION FACILITY BEFORE BACKFILLING THE REQUIRED SAND LAYER. PUMP ANY PONDED WATER BEFORE PREPARING (ROTOTILLING) BASE. WHEN BACKFILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTOTILL THE SAND/TOPSOIL TO CREATE A GRADATION ZONE. BACKFILL THE REMAINDER OF THE TOPSOIL TO FINAL GRADE. WHEN BACKFILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" TO 18". DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN. HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND SAND. GRADE BIORETENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS.

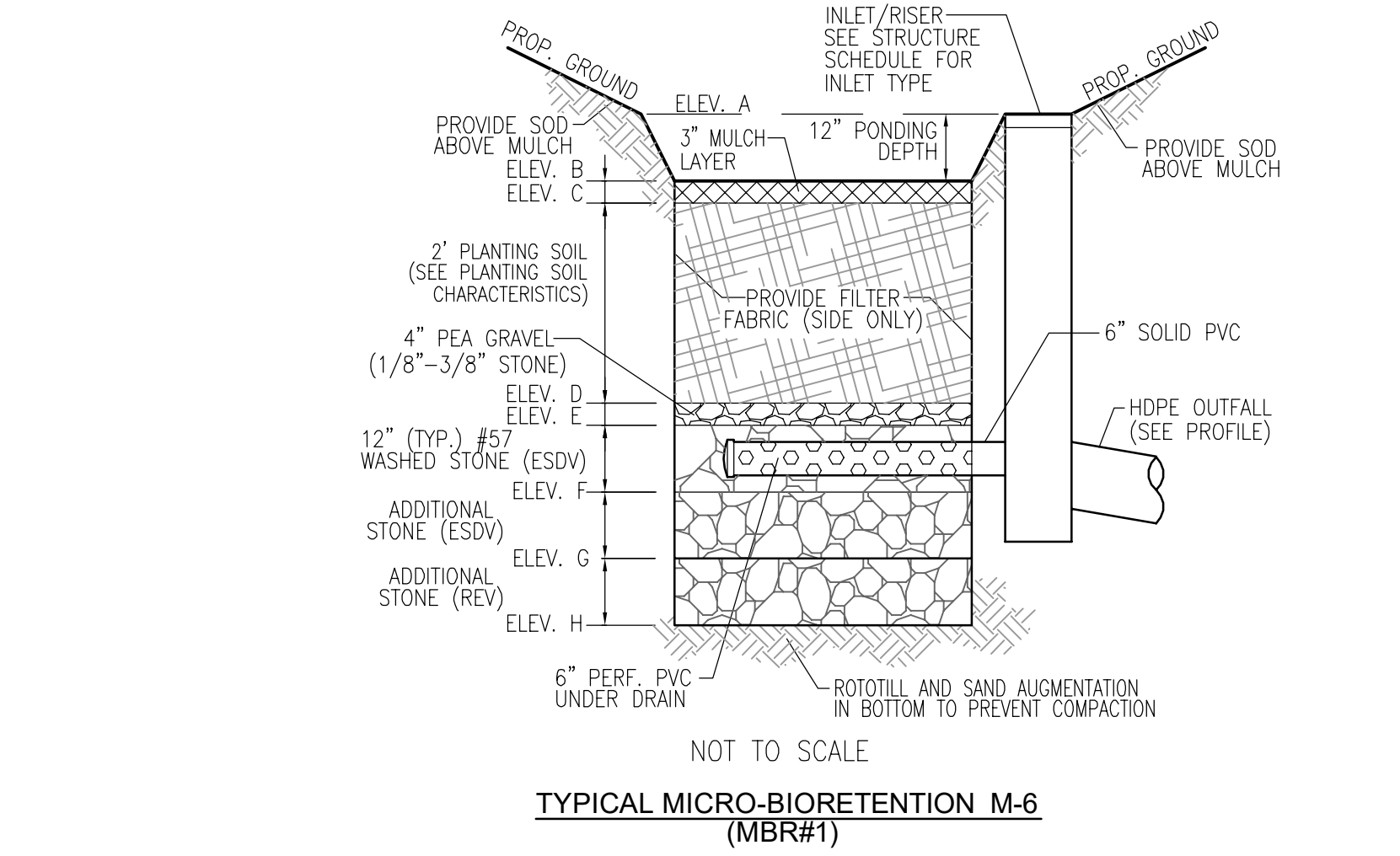
RECOMMENDED PLANT MATERIAL FOR BIORETENTION AREAS CAN BE FOUND IN APPENDIX A, SECTION A.2.3. OF THE 2000 MARYLAND STORMWATER DESIGN MANUAL.

MULCH SHALL BE PLACED TO A UNIFORM THICKNESS OF 2" TO 3". SHREDDED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS WHO FLOAT AND MOVE TO THE PERIMETER OF THE BIORETENTION AREA DURING A STORM EVENT AND ARE NOT ACCEPTABLE. SHREDDED MULCH SHALL BE WELL AGE (6 TO 12 MONTHS) FOR ACCEPTANCE. ROOT STOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT AND ON-SITE STORAGE. THE PLANT ROOT BALL SHOULD BE PLANTED SO 1/8TH OF THE BALL IS ABOVE FINAL GRADE SURFACE. THE DIAMETER OF THE PLANTING PIT SHALL BE AT LEAST SIX INCHES LARGER THAN THE DIAMETER OF THE PLANTING BALL. SET AND MAINTAIN THE PLANT STRAIGHT DURING THE ENTIRE PLANTING PROCESS. TREES SHALL BE BRACED USING 2" BY 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL. GRASSES AND LEGUME SEED SHOULD BE DRILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEGUME PLOTS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING SPECIFICATIONS. THE TOPSOIL SPECIFICATIONS PROVIDE ENOUGH ORGANIC MATERIAL TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING. THE PRIMARY FUNCTION OF THE BIORETENTION STRUCTURE IS TO IMPROVE WATER QUALITY. ADDING FERTILIZERS DEPLETS, OR AT A MINIMUM, IMPEDES THIS GOAL. ONLY ADD FERTILIZER IF WOOD CHIPS OR MULCH ARE USED TO AMEND THE SOIL. ROTOTILL EARTH FERTILIZER AT A RATE OF 2 POUNDS OF NITROGEN PER 1000 SQUARE FEET.

UNDERDRAINS ARE TO BE PLACED ON A 3"-0" WIDE SECTION FILTER CLOTH. PIPE IS PLACED NEXT, FOLLOWED BY THE GRAVEL BEDDING. THE ENDS OF UNDERDRAIN PIPES NOT TERMINATING IN AN OBSERVATION WELL SHALL BE CAPPED. THE MAIN COLLECTOR PIPE FOR UNDERDRAIN SYSTEMS SHALL BE CONSTRUCTED AT A MINIMUM SLOPE OF 0.5%. OBSERVATION WELL AND/OR CLEAN-OUT PIPES MUST BE PROVIDED (ONE MINIMUM PER EVERY 1000 SQUARE FEET OF SURFACE AREA). THE BIORETENTION FACILITY MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.

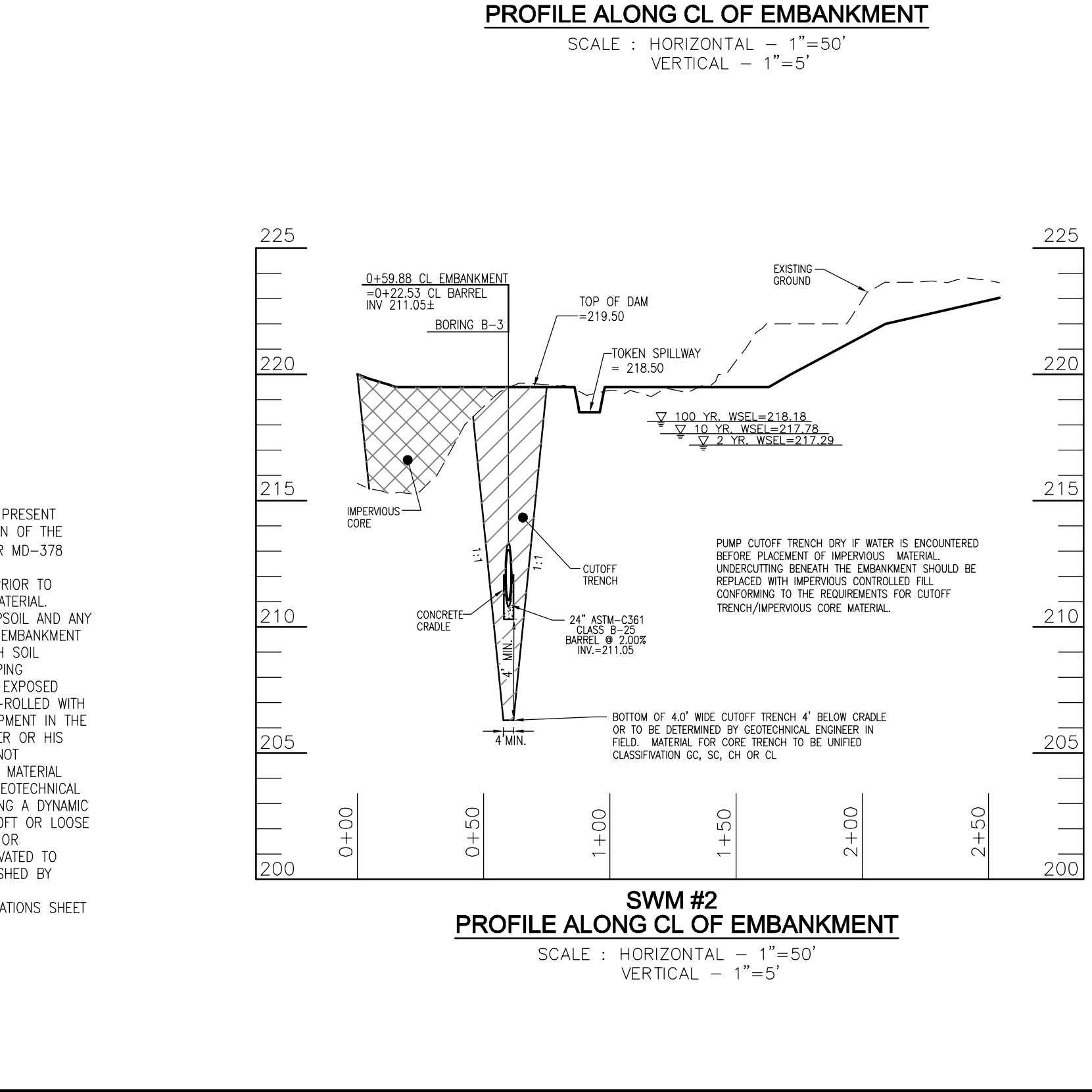
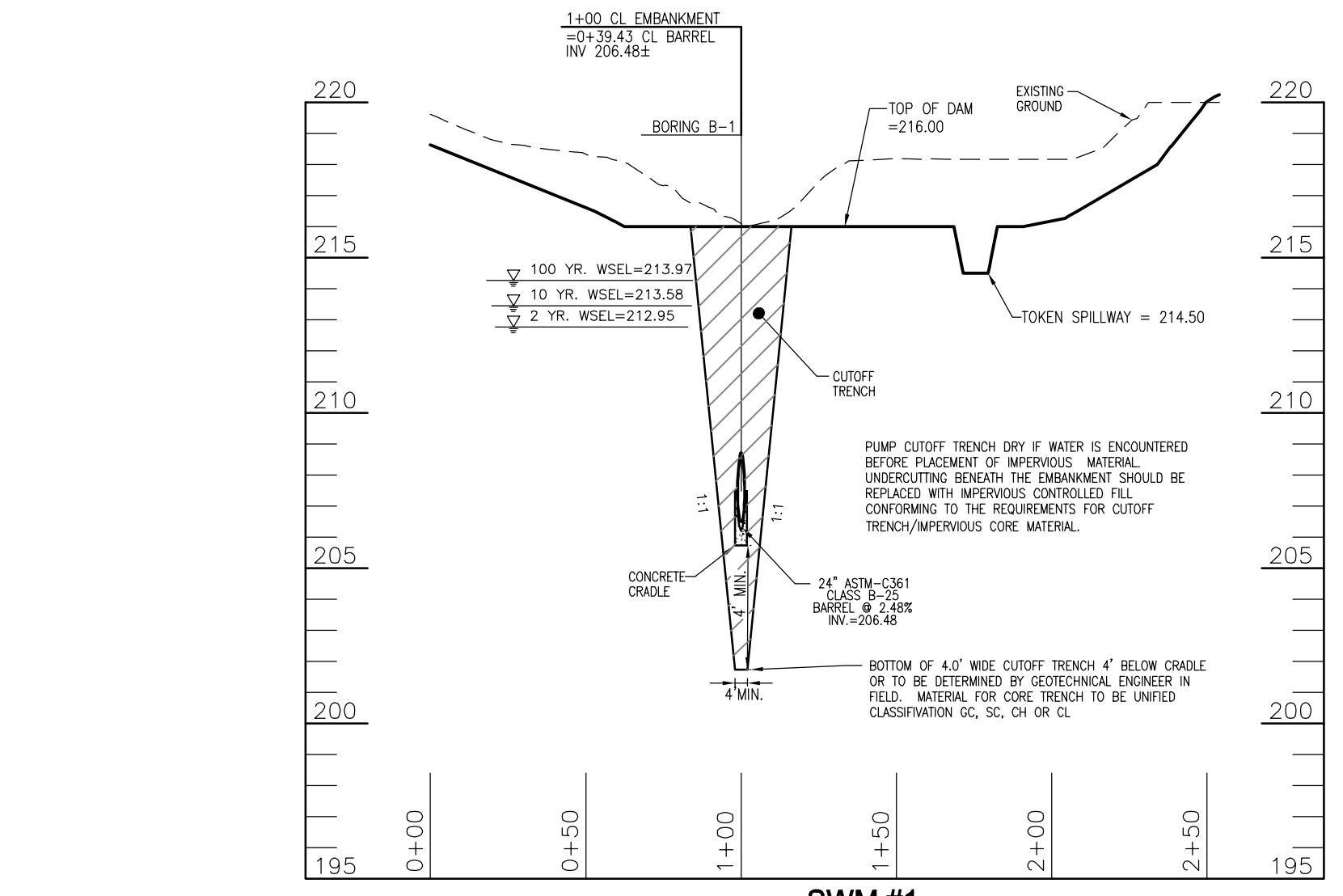
OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED SURFACE STORMWATER FILTRATION SYSTEMS (F-1 AND F-2)

- THE STORMWATER WETLAND FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE FACILITY IS FUNCTIONING PROPERLY.
- THE TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF ONCE PER YEAR, WHEN VEGETATION REACHES 18" IN HEIGHT OR AS NEEDED.
- FILTERS THAT HAVE A GRASS COVER SHALL BE MOWED A MINIMUM OF THREE (3) TIMES PER GROWING SEASON TO MAINTAIN A MAXIMUM GRASS HEIGHT OF LESS THAN 12 INCHES.
- DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED.
- VISIBLE SIGNS OF EROSION IN THE FACILITY SHALL BE REPAIRED AS SOON AS IT IS NOTICED.
- REMOVE SILT WHEN IT EXCEEDS FOUR (4) INCHES DEEP IN THE FOREBAY.
- WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 72 HOURS, THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REPLACED WITH FRESH MATERIAL. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
- A LOGBOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- THE MAINTENANCE LOGBOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION SYSTEM HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.



SWM Facility #	Facility Type	Ponding Depth (ft.)	Ponding/Grate Elevation (ELEV. A)	Top of Mulch (ELEV. B)	Bottom of Mulch (ELEV. C)	Bottom of Plant Mix (ELEV. D)	Bottom of 4" Sand/Pea gravel Layer (ELEV. E)	Depth of Stone (ESdv) (ft.)	Bottom of Stone (ESdv) (ELEV. F)	Bottom of Additional Stone (ESdv) (ELEV. G)	Invert of 6" Underdrain (INV. ELEV.)	Depth of Stone (Rev) (ft.)	Bottom of Stone (Rev) (ELEV. H)	Surface Area (S.F.)	Approx. Dimensions (at midpoint)	
3	MBR (M-6)	1.00	225.50	224.50	224.25	222.25	221.92	1.00	220.92	0.00	N/A	221.17	0.83	220.09	543	17' x 32'

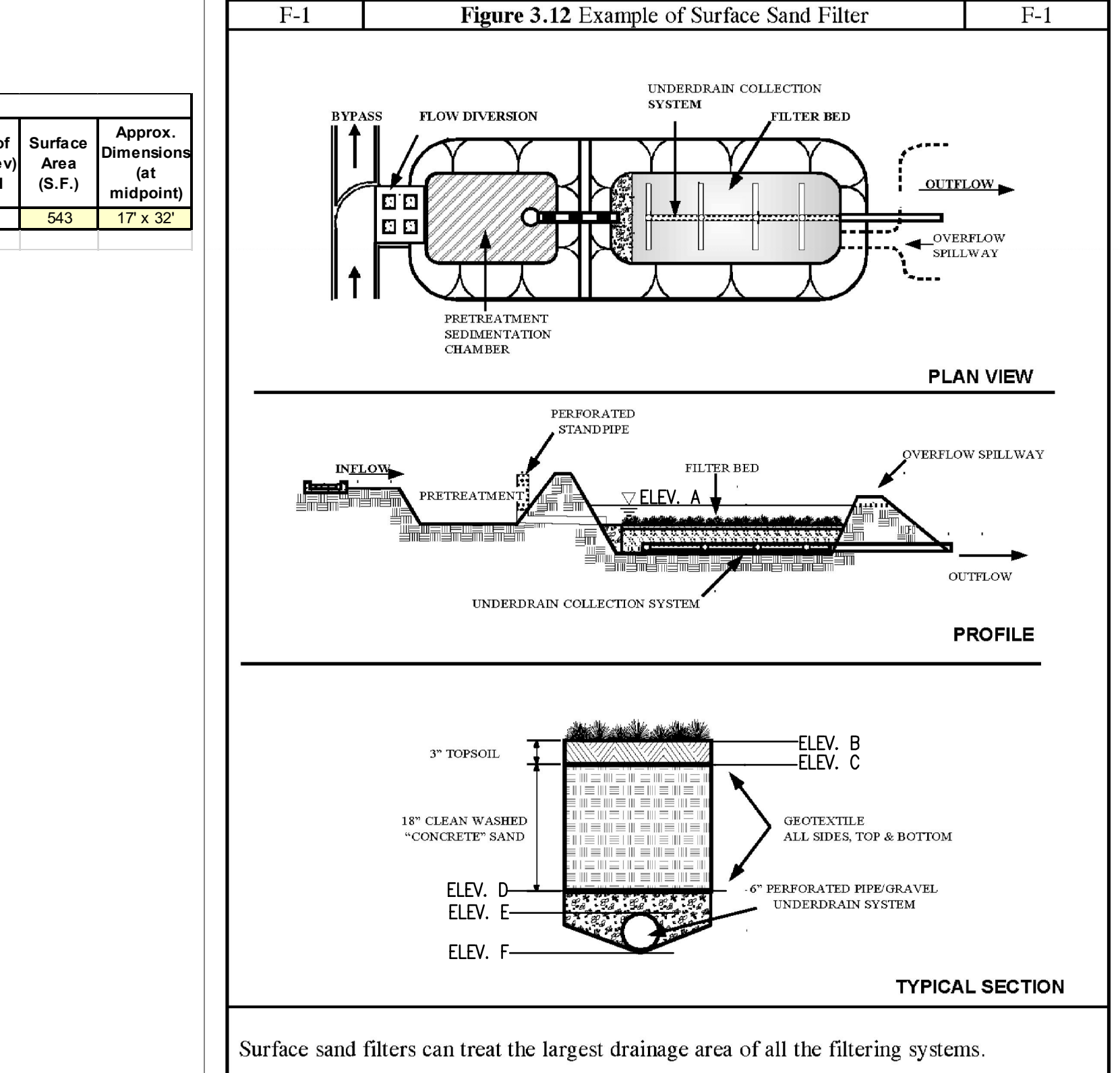
*Refer to Micro-Bioretention Details



Media Cartridge Filtration System Drawing Specifications

- Each rechargeable, media-filled, filter cartridge shall incorporate a protective hood over the media cartridge and a siphon-actuated surface self-cleaning mechanism to increase the effective life of the filter media and to reduce the accumulation of material on the cartridge/media interface.
- Media filter cartridges shall operate at a predetermined flow rate through the use of an integrated flow control orifice located within each filter cartridge outlet manifold.
- The media filled cartridges shall trap particulates (TSS) and have the capacity to adsorb pollutants such as dissolved metals, nutrients and hydrocarbons.
- At the design flow rate the maximum filter hydraulic loading rate is not to exceed 2.1 gallons per minute per square foot of filter surface area and the average contact time shall be no less than 35 seconds.
- The media cartridge filtration system shall consist of no less than 0.12 cubic feet of filter media for each 1-gallon per minute of water quality treatment flow.
- Filter cartridges shall be of a design that has demonstrated a minimum sediment retention capacity of 22 pounds of silt/loam per cartridge in laboratory tests without a reduction in hydraulic capacity. Laboratory data shall be corroborated with field observations and/or data demonstrating equivalent or improved longevity without impacting normal hydraulic performance.
- The filtration system shall have the State of Washington Department of Ecology, General Use Level Designation (GULD) Certification and current approval status from the New Jersey Department of Environmental Protection. (NIDEPI).

Chapter 3. Performance Criteria for Urban BMP Design Stormwater Filtering Systems



SWM Facility #	Facility Type	Ponding Depth (ft.)	Ponding Elevation (ELEV. A)	Top of Topsoil (ELEV. B)	Bottom of Topsoil (ELEV. C)	Bottom of Sand (ELEV. D)	Depth of Stone (ESdv) (ft.)	Bottom of Stone (ESdv) (ELEV. E)	Invert of 6" Underdrain (INV. ELEV. F)	Depth of Stone (Rev) (ft.)	Surface Area (S.F.)	Approx. Dimensions (at midpoint)
1	SSF (F-1)	1.00	212.00	211.00	210.75	209.25	1.00	208.25	208.25	0.83	1767	46' x 211'
2	SSF (F-1)	1.00	217.00	216.00	215.75	214.25	1.00	213.25	213.25	0.83	33503	58' x 112'

*Refer to Surface Sand Filter Details

OWNER/DEVELOPER
TEAM BORSEY LLC
C/O ERIC ROSENBAUM
2308 FORT WILLIAM DRIVE
OLNEY, MD 20832
(301) 787-0220

NO. _____ REVISION _____ DATE _____

SITE DEVELOPMENT PLAN
ESDv STORMWATER MANAGEMENT TABLES, NOTES AND DETAILS
JESSUP PARK PARCEL 108-A
TRAILER PARKING AND STORAGE
7868 DORSEY RUN ROAD
JESSUP, MD 20794
TAX MAP 43 GRID 22
1ST ELECTION DISTRICT

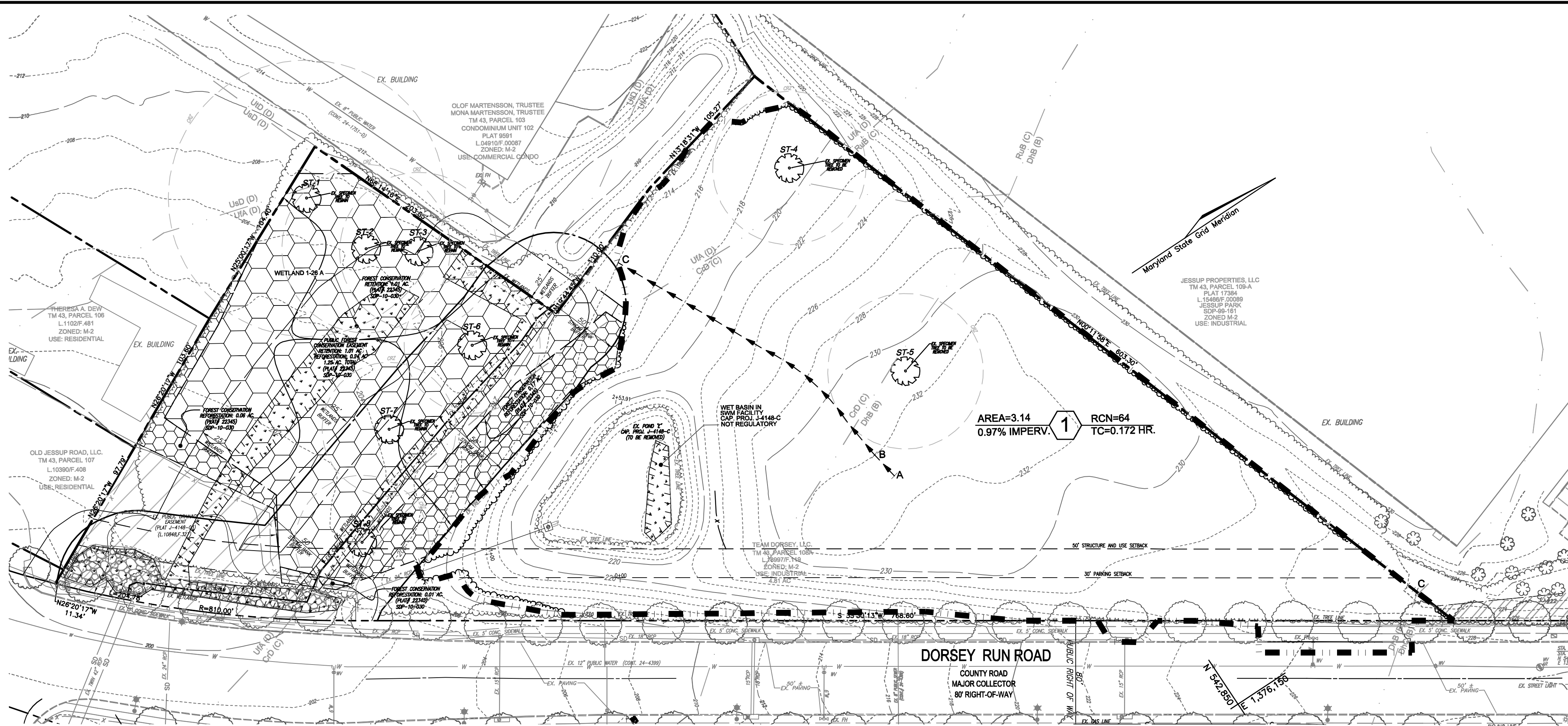
ZONED: M-2
PARCEL 108-A
HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

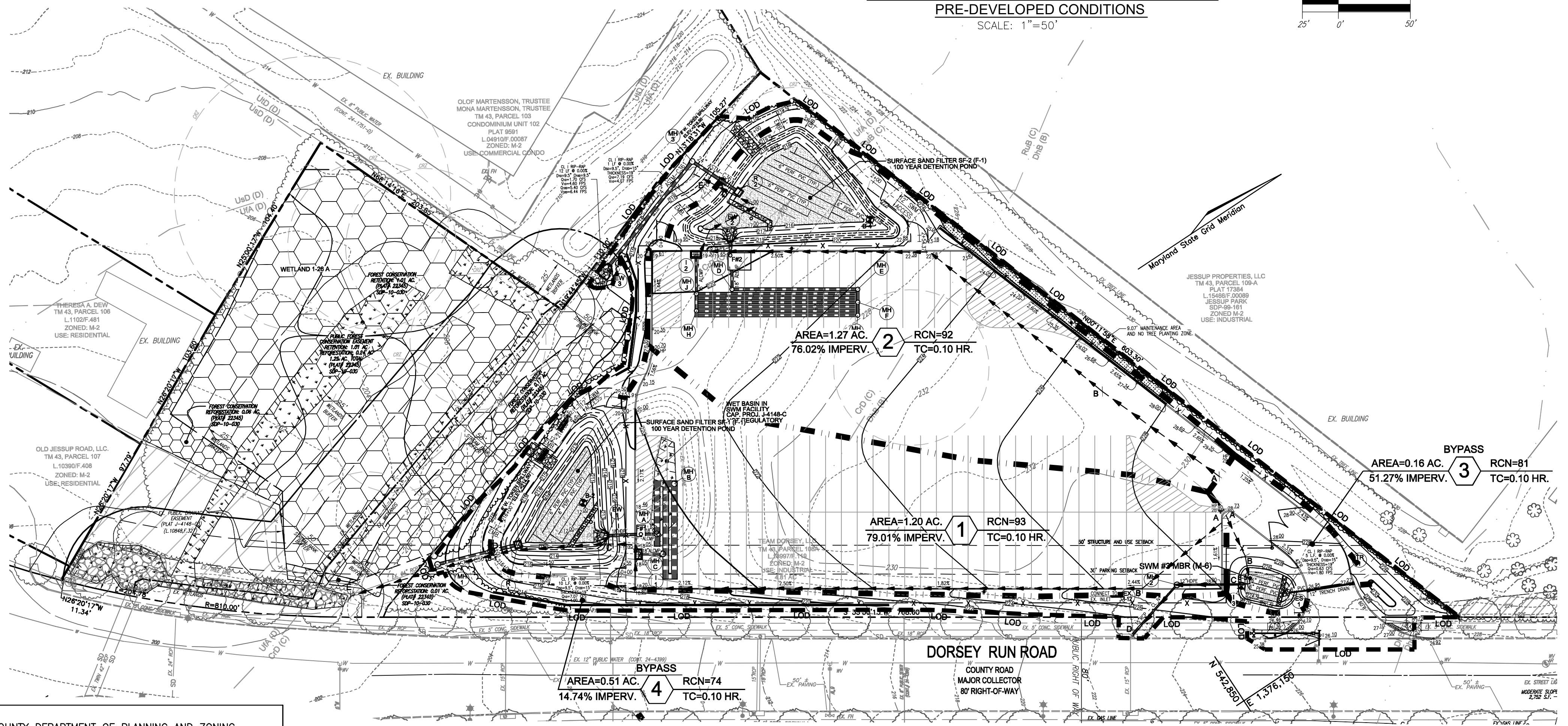
DESIGN BY: RHV/GAH
DRAWN BY: GAH
CHECKED BY: RHV
DATE: MARCH 2022
SCALE: AS SHOWN
W.O. NO.: 04-76

PROFESSIONAL CERTIFICATE
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. 16193 EXPIRATION DATE: 09-27-2022

12 SHEET OF 18



STORMWATER MANAGEMENT DRAINAGE AREA MAP
PRE-DEVELOPED CONDITIONS
SCALE: 1"=50'



STORMWATER MANAGEMENT DRAINAGE AREA MAP
DEVELOPED CONDITIONS
SCALE: 1"=50'

LEGEND

PROPERTY LINE	EXISTING WETLANDS
RIGHT-OF-WAY LINE	EX. FOREST CONSERVATION EASEMENT (RETENTION) (PLAT # 22345)
ADJACENT PROPERTY LINE	EX. FOREST CONSERVATION EASEMENT (RETENTION) (PLAT # 22345)
EXISTING STREAM	EXISTING PUBLIC DRAINAGE EASEMENT (PLAT #1-418-03)
EXISTING STREAM BANK	PROPOSED STORMWATER FACILITY
EXISTING CURB AND GUTTER	9.0' MAINTENANCE EASEMENT AND "NO TREE PLANTING" ZONE
EXISTING MINOR CONTOUR	EXISTING TREES
EXISTING MAJOR CONTOUR	EXISTING TREELINE
PROPOSED MINOR CONTOUR	PROPOSED CURB AND GUTTER
PROPOSED MAJOR CONTOUR	PROPOSED STORM DRAIN
EXISTING TREELINE	PROPOSED STORM INLETS
EXISTING TREES	PROPOSED STORM MANHOLE
EXISTING TREELINE	STORMWATER DRAINAGE DIVIDE
PROPOSED CURB AND GUTTER	STORMWATER DRAINAGE AREA LABEL
PROPOSED STORM DRAIN	TIME OF CONCENTRATION PATH
PROPOSED STORM INLETS	
PROPOSED STORM MANHOLE	
STORMWATER DRAINAGE DIVIDE	
STORMWATER DRAINAGE AREA LABEL	
TIME OF CONCENTRATION PATH	

NOTE: THIS PLAN IS FOR PURPOSES OF STORMWATER QUANTITY MANAGEMENT CALCULATIONS ONLY. THE ORIGINAL, PRE-MASS-GRADED CONTOURS AND COVER CONDITIONS ARE SHOWN FOR PURPOSES OF STORMWATER MANAGEMENT MODELING. NOT FOR CONSTRUCTION.

STORMWATER MANAGEMENT SUMMARY CHART

CONDITION	Q2 (CFS)	Q10 (CFS)	Q100 (CFS)
PRE-DEVELOPED CONDITION	2.04	6.40	18.15
DEVELOPED CONDITION (UNMANAGED)	9.92	17.01	31.93
DEVELOPED CONDITION (MANAGED)	2.2	6.2	15.9

*ADDITIONAL SWM QUANTITY VOLUME PROVIDED IN SWM FACILITY #1 AND #2 TO OFFSET UNMANAGED AREAS SWM #3 AND BYPASS AREA #4. SWM #3 PROVIDES ESDV ONLY.

VOLUME SUMMARY CHART

DESCRIPTION	TOTAL REQUIRED (CU. FT.)	SWM #1 PROVIDED (CU. FT.)	SWM #2 PROVIDED (CU. FT.)	SWM #3 PROVIDED (CU. FT.)	TOTAL PROVIDED (CU. FT.)
ESDV STORAGE	15,110	6,735	**8,798	0	16,258
*100 YEAR STORAGE	20,466	10,518	11,806	0	22,324

*STORAGE VOLUME PROVIDED IS CALCULATED TO TOP OF EMERGENCY SPILLWAY CREST.
**ACTUAL ESDV PROVIDED EXCEEDS THE MAX 2.6 PE. ONLY THE MAX IS CREDITED TOWARD TOTAL ESDV PROVIDED.

MAPPED SOILS TYPES - SAVAGE MAP #25

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	HYDRIC	HYDRIC INCLUSIONS	PRIME FARMLAND	<15% SLOPE W/ EROSION POTENTIAL
D8B	DOWNER-HAMMONTON SANDY LOAM, 2 TO 5 PERCENT	A	.17	NO	NO	NO	NO
D8C	DOWNER-HAMMONTON SANDY LOAM, 5 TO 10 PERCENT	A	.17	NO	NO	NO	NO
C4C	CROOM AND EVESBORD SOILS, 10 TO 15 PERCENT SLOPES	C	.37	NO	NO	NO	YES
R4B	RUSSET AND BELTSVILLE SOILS, 2 TO 5 PERCENT SLOPE	C	.43	NO	NO	NO	YES
L8A	URBAN LAND-SASSAFRAS-BELTSVILLE COMPLEX, 5 TO 15 PERCENT SLOPE	D	.28	YES	YES	NO	NO
L8D	URBAN LAND-SASSAFRAS-BELTSVILLE COMPLEX, 5 TO 15 PERCENT SLOPE	D	-	NO	NO	NO	NO

TAKEN FROM: USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY
NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

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SITE DEVELOPMENT PLAN
STORMWATER MANAGEMENT
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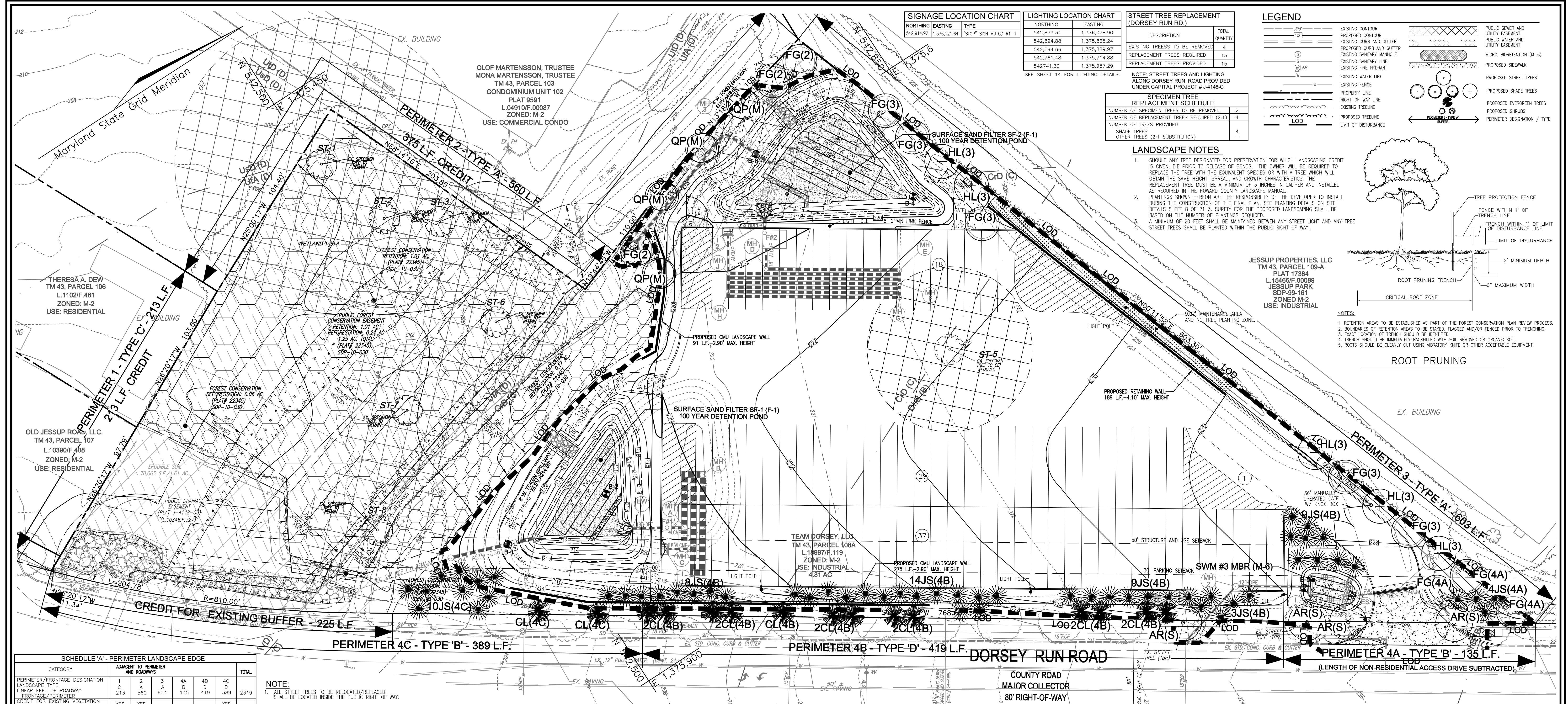
VOGEL ENGINEERING
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SCALE: AS SHOWN
W.O. NO.: 04-76

13 SHEET OF 18

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Submitted by: *Chris Edmondson* 9/9/2022
DATE: 9/9/2022
CHIEF, DEVELOPMENT ENGINEERING DIVISION
RECORDED BY: *Angy Stone* 9/12/2022
DATE: 9/12/2022
CHIEF, DIVISION OF LAND DEVELOPMENT
DIRECTOR: *Angy Stone* 9/12/2022
DATE: 9/12/2022



SIGNAGE LOCATION CHART

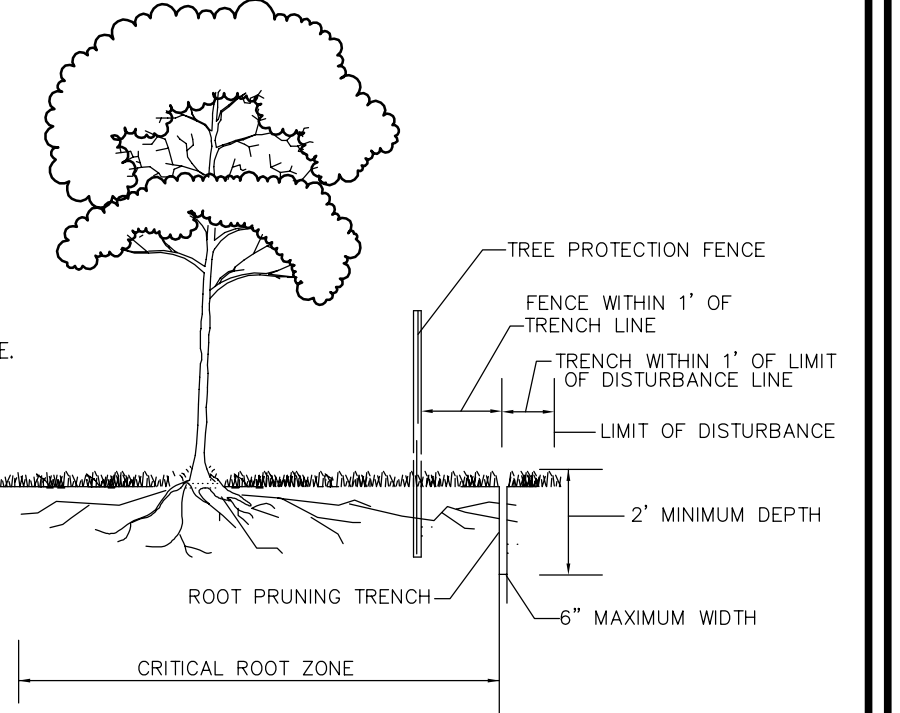
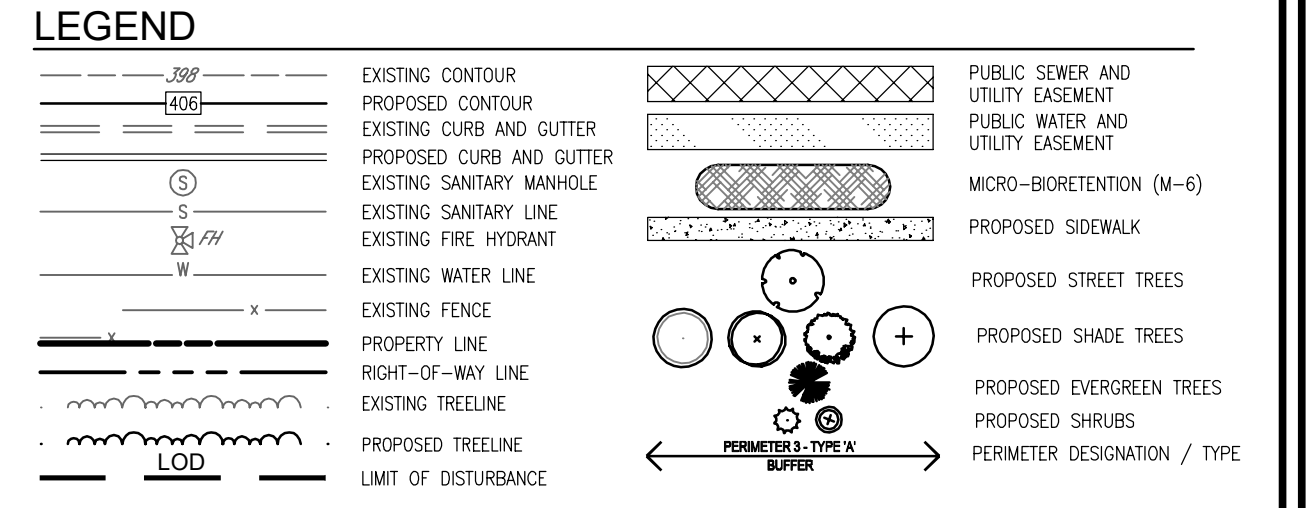
NORTHING	EASTING	TYPE
542,914.92	1,376,121.64	"STOP" SIGN MUTCO R1-1

LIGHTING LOCATION CHART

NORTHING	EASTING
542,879.34	1,376,078.90
542,894.88	1,376,865.24
542,594.66	1,375,889.97
542,761.48	1,375,714.88
542,741.30	1,375,987.29

STREET TREE REPLACEMENT (DORSEY RUN RD.)

DESCRIPTION	TOTAL QUANTITY
EXISTING TREES TO BE REMOVED	4
REPLACEMENT TREES REQUIRED	15
REPLACEMENT TREES PROVIDED	15



SCHEDULE 'A' - PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO PERIMETER AND ROADWAYS	4A	4B	4C	TOTAL
PERIMETER/FRONTAGE DESIGNATION	C	A	B	D	B
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	213	560	603	419	389
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	YES	YES	No	No	YES
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	No	No	No	No	No
NUMBER OF PLANTS REQUIRED	3	10	3	7	4
SHADE TREES	-	-	-	4	2
EVERGREEN TREES	-	-	-	4	2
NUMBER OF PLANTS PROVIDED	3	10	3	-	16
SHADE TREES	-	-	-	4	4
EVERGREEN TREES	-	-	-	4	4
EX SHADE TREES	-	-	-	14	14
*OTHER TREES (2:1 SUBSTITUTION)	-	-	-	14	14
SHRUBS (10:1 SUBSTITUTION)	-	-	-	14	14
DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED	-	-	-	-	-
EVERGREENS SUBSTITUTED FOR SHADE TREES AT A RATIO OF 2:1	-	-	-	-	-

NOTE:
1. ALL STREET TREES TO BE RELOCATED/REPLACED SHALL BE LOCATED INSIDE THE PUBLIC RIGHT OF WAY.

GENERAL NOTES:

- PUBLIC STREET TREES ALONG DORSEY RUN ROAD WERE PROVIDED UNDER CAPITAL PROJECT # J-4148-C, IN ACCORDANCE WITH SECTION 16.124(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL. ANY STREET TREES DAMAGED OR DAMAGED IN CONVICTION WITH CONSTRUCTION OF THIS PLAN WILL BE REPLACED IN KIND. THERE IS NO FINAL PLAN ASSOCIATED WITH THIS PROJECT. FINANCIAL SURETY IN THE AMOUNT OF \$1,200 FOR THE REQUIRED FOUR (4) STREET TREES TO BE REPLACED AND ADDITIONAL SURETY IN THE AMOUNT OF \$3,300 FOR THE EXISTING ELEVEN (11) TREES THAT ARE ADJACENT TO THE LIMITS OF DISTURBANCE TO INSURE REPLACEMENT OF ANY DAMAGED OR COMPROMISED STREET TREES PROPOSED TO REMAIN. THE TOTAL AMOUNT OF \$4,500 SHALL BE POSTED WITH THE OPEN PUBLIC COST ESTIMATE.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY AND THE LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF (\$15,600) SHALL BE POSTED AS PART OF THE SITE DEVELOPMENT PLAN DEVELOPER'S AGREEMENT FOR THE REQUIRED TWENTY-SEVEN (27) SHADE TREES (\$6,000) AND FIFTY (50) EVERGREENS (\$7,500).
- THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS, FENCES, AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPAIRED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- AT THE TIME OF INSTALLATION, ALL SHRUBS AND OTHER PLANTINGS LISTED HERETOBY AND APPLIED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY OF THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
- THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.124 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION. THE FOREST CONSERVATION OBLIGATION FOR THIS PLAN HAS BEEN ADDRESSED UNDER SDP-10-CREDIT(1) PLAT NUMBER 22345, BY PROVIDING ON-SITE RETENTION OF 1.01 AC., ON-SITE RESTORATION OF 0.24 AC., AND A FEE IN LIEU PAYMENT OF \$41,817.75 TO THE HOLD. FOREST CONSERVATION FUND FOR THE REMAINING 1.28 AC. OF RESTORATION OBLIGATION (1.28 AC. x \$0.75=41,817.75). FOREST CONSERVATION SURETY IN THE AMOUNT OF \$6,228.00 FOR THE ON-SITE FOREST CONSERVATION RESTORATION EASEMENT HAS BEEN PROVIDED AS A PART OF THE DEVELOPER'S AGREEMENT. NO SURETY WAS REQUIRED FOR THE ON-SITE FOREST RETENTION.
- THE SITE WAS FIELD INVESTIGATED BY ECO-SCIENCE PROFESSIONALS, INC. ON MARCH 29, 2017. THERE ARE NO STREAMS OR THEIR BUFFERS ON-SITE AT THE SMALL AREA OF WETLANDS SHOWN WITHIN THE PROPERTY BOUNDARY WAS FOUND TO BE MAN-MADE AND NON-REGULATORY.
- EFFECTIVE 10/22/2017 PER CONGRESS BILL 75-2003
- THE SUBJECT PROPERTY IS ZONED "M-2" IN ACCORDANCE WITH THE 10/6/13 ZONING REGULATIONS, AND IS SUBJECT TO THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT INTERVALS, PREPARED BY SHAMBERGER AND LANE DATED OCTOBER 30, 2001.
- ADDITIONAL EXISTING TOPOGRAPHY SHOWN TAKEN FROM AN AERIAL TOPOGRAPHICAL SURVEY PREPARED BY POTOMAC AERIAL SURVEYS, DATED JANUARY 2008 AND FROM RECENTLY APPROVED EXISTING TOPOGRAPHY. ADDITIONAL FIELD RUN TOPOGRAPHICAL DATA COLLECTION HAS BEEN PERFORMED BY VOGEL + TIMMONS IN NOVEMBER 2019.
- THE REMOVAL OF TREES 30" OR GREATER DBH IS PROHIBITED WITHOUT COUNTY APPROVAL.

CONSTRUCTION PERIOD PROTECTION AND MANAGEMENT NOTES FOR STREET TREES

PRE-CONSTRUCTION PHASE

- FOR RETENTION AREAS, INSTALL BLAZE ORANGE FENCE AND RETENTION SIGNS BEFORE CONSTRUCTION BEGINS.
- FENCING SHALL BE MAINTAINED IN GOOD CONDITION AND PROMPTLY REPAIRED OR RESTORED AS THE SITUATION WARRANTS.
- A QUALIFIED TREE CARE EXPERT SHALL DETERMINE IF ROOT PRUNING IS REQUIRED ALONG THE LIMIT OF DISTURBANCE. ROOT PRUNE TREES AS REQUIRED. WATER ANY ROOT-PRUNED TREES IMMEDIATELY AFTER ROOT-PRUNING AND MONITOR FOR SIGNS OF STRESS DURING CONSTRUCTION.

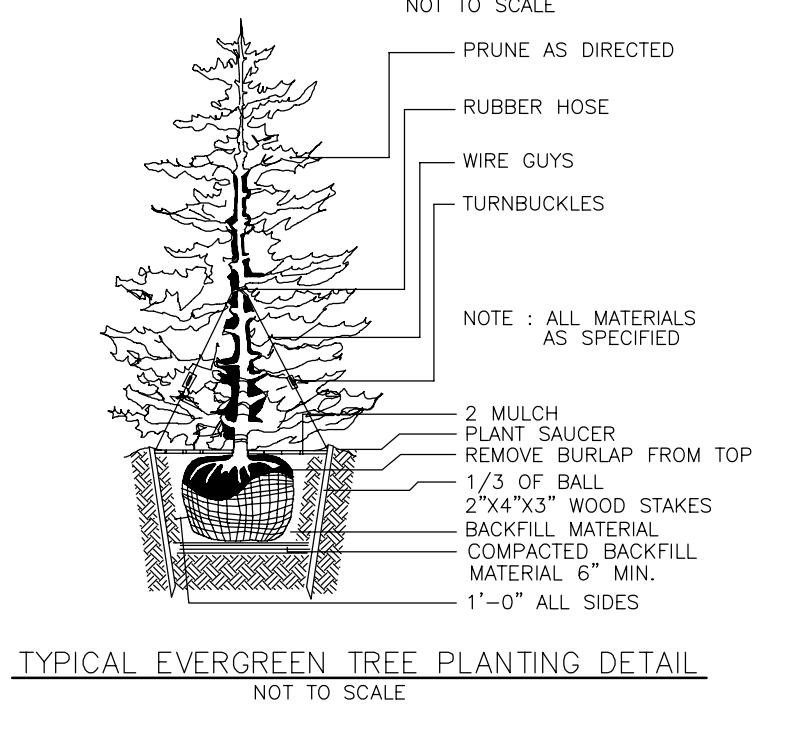
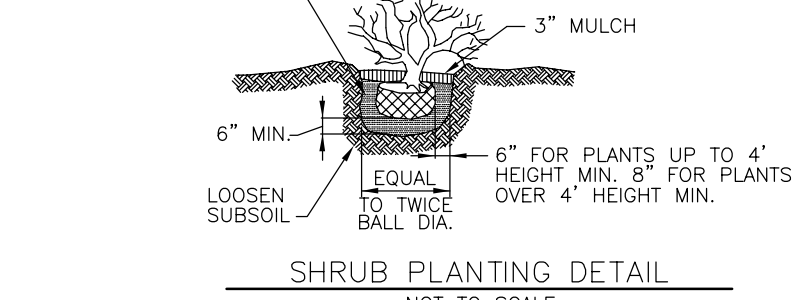
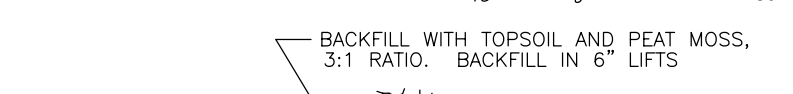
CONSTRUCTION PHASE

- NO DISTURBANCE OR DUMPING IS ALLOWED INSIDE THE TREE RETENTION AREA.
- NO EQUIPMENT SHALL BE OPERATED INSIDE THE TREE RETENTION AREA INCLUDING TREE CANOPIES.
- IN THE EVENT OF DROUGHT, THE PROTECTED TREES SHALL BE MONITORED FOR SIGNS OF STRESS AND WATERED AS NEEDED.

POST-CONSTRUCTION PHASE

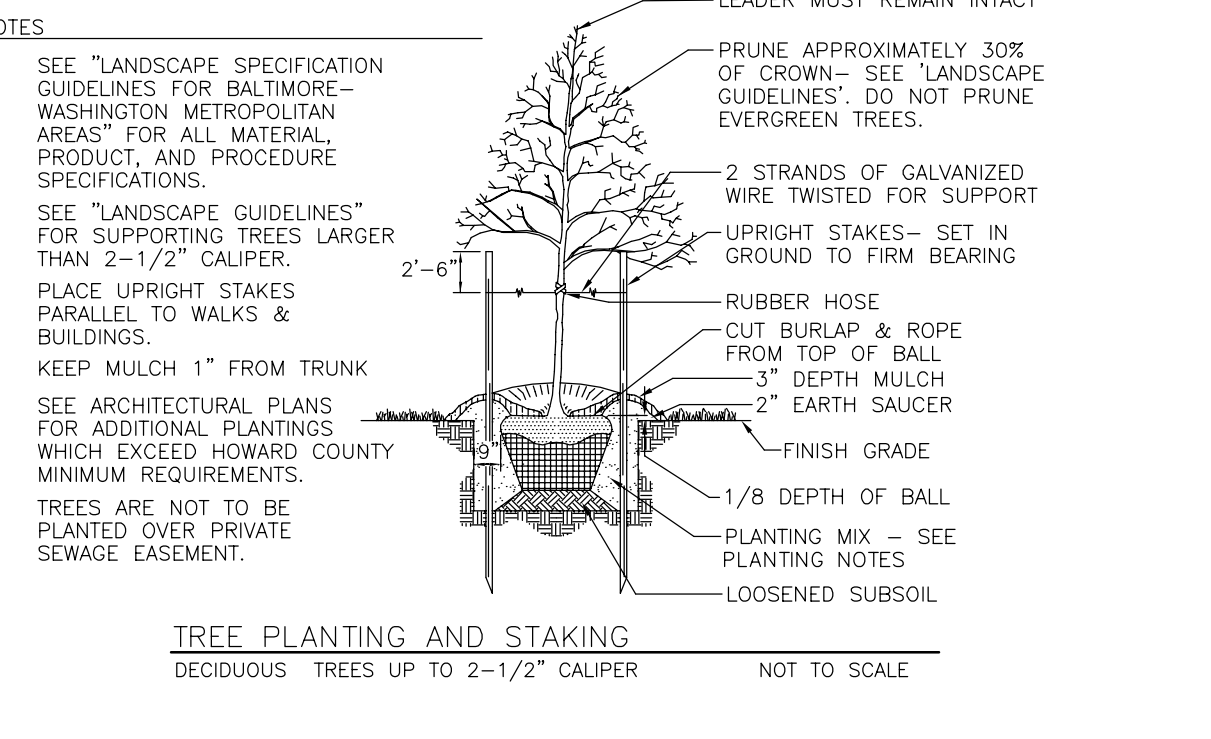
- AT THE DISCRETION OF A QUALIFIED TREE CARE EXPERT, DAMAGES TO RETAINED TREES SHALL BE REPAIRED BY THE CONTRACTOR.
- FENCE REMOVAL AND STABILIZATION SHALL BE AS PER THE SEDIMENT AND EROSION CONTROL PLAN.
- DO NOT REMOVE SIGNS.

LANDSCAPE PLAN



B & E NOTES:

- BGE RESERVES THE RIGHT TO TRIM, TOP OR CUT DOWN ANY TREE IN PROXIMITY TO THE LINE THAT IN THE OPINION OF BGE SHALL BE DEEMED A HAZARD TO THE SAFE AND RELIABLE DELIVERY OF ELECTRICITY.
- THE DEPARTMENT OF PLANNING AND ZONING MAY AUTHORIZE THE TRIMMING OR REMOVAL OF TREES OR VEGETATION IMMEDIATELY ADJACENT TO THE BGE R/W OR EASEMENT, IF BGE DETERMINES THE TREES ARE COMPROMISING THE SAFETY OR A TRANSMISSION LINE LOCATED WITHIN THEIR UTILITY R/W OR EASEMENT. IF BGE INTENDS TO TRIM OR REMOVE TREES WITHIN A FOREST CONSERVATION EASEMENT, A LETTER SPECIFYING THE LOCATION AND SCOPE OF WORK, NEEDS TO BE SENT TO DPZ AT LEAST 30 DAYS IN ADVANCE OF UNDERTAKING THE WORK. DPZ UNDERSTANDS CONSULTATION ENERGY'S NEED TO PROTECT ITS TRANSMISSION LINES AND WILL NOT UNREASONABLY WITHHOLD PERMISSION.
- CALL MISS UTILITY TO MARK UP THE LOCATION OF EXISTING GAS LINE BEFORE PLANTING STREET TREES ALONG HANOVER ROAD & PLANT STREET TREES 10' AWAY FROM EXISTING GASLINE AS REQUIRED.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE: 9/9/2022

CHIEF, DIVISION OF LAND DEVELOPMENT

DATE: 9/12/2022

DIRECTOR

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DATE: 8/29/2022

SIGNATURE OF DEVELOPER

SITE DEVELOPMENT PLAN

LANDSCAPE, LIGHTING AND SIGNAGE PLAN

JESSUP PARK PARCEL 108-A

TRAILER PARKING AND STORAGE

7868 DORSEY RUN ROAD

JESSUP, MD 20794

L. 18997 / F. 00119

HOWARD COUNTY, MARYLAND

ZONED: M-2

PARCEL: 108-A

TAX MAP 43 GRID 22

1ST ELECTION DISTRICT

VOGEL ENGINEERING

TIMMONS GROUP

3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043

P: 410.461.7666 F: 410.461.8961 www.timmons.com

DESIGN BY: RHW/GAH

DRAWN BY: GAH

CHECKED BY: RHW

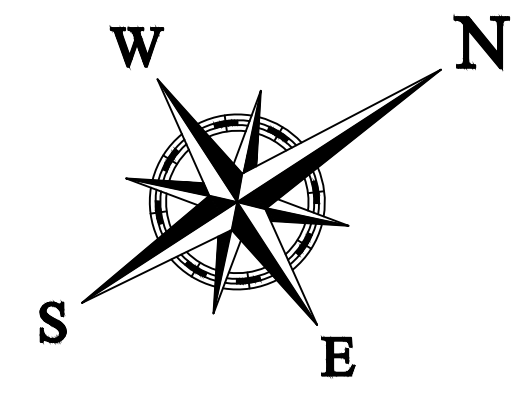
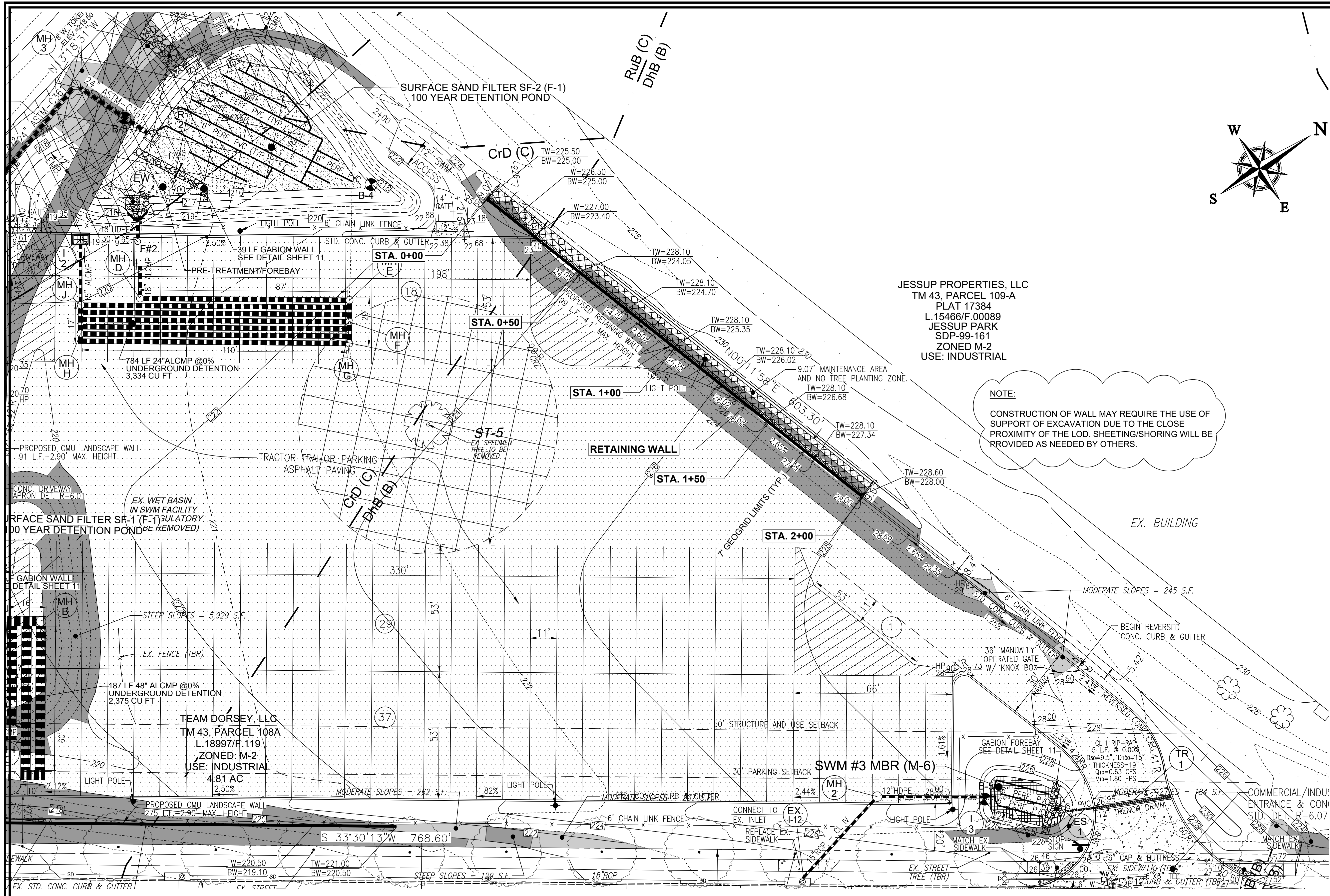
DATE: MARCH, 2022

SCALE: AS SHOWN

W.O. NO.: 04-76

15 SHEET OF 18

SDP-21-048



JESSUP PROPERTIES, LLC
 TM 43, PARCEL 109-A
 PLAT 17384
 L.15466/F.00089
 JESSUP PARK
 SDP-99-161
 ZONED M-2
 USE: INDUSTRIAL

NOTE:
 CONSTRUCTION OF WALL MAY REQUIRE THE USE OF SUPPORT OF EXCAVATION DUE TO THE CLOSE PROXIMITY OF THE LOD. SHEETING/SHORING WILL BE PROVIDED AS NEEDED BY OTHERS.

TEAM DORSEY, LLC
 TM 43, PARCEL 108A
 L.18997/F.119
 ZONED: M-2
 USE: INDUSTRIAL
 4.81 AC

WALL LOCATION PLAN
 1" = 20'

NO.	REVISION	DATE
1	ADDED NOTE FOR SUPPORT OF EXCAVATION	12/2/21
1	NEW SDP & TITLE BLOCK	12/2/21

**SITE DEVELOPMENT PLAN
 RETAINING WALL
 LOCATION PLAN
 JESSUP PARK PARCEL 108-A
 TRAILER PARKING AND STORAGE
 7868 DORSEY RUN ROAD
 JESSUP, MD 20794
 L. 18997 / F. 00119**

ZONED: M-2
 PARCEL 108-A
 1ST ELECTION DISTRICT

**HILLIS-CARNES
 ENGINEERING ASSOCIATES**
 10975 Guilford Road, Suite A Annapolis Junction, Maryland
 Phone: (410) 880-4788 www.hcea.com Fax: (410) 880-4098

SCALE: 1" = 20'

OWNER/DEVELOPER
 TEAM DORSEY, LLC
 C/O ERIC ROSENBAUM
 2308 FORT WILLIAM DRIVE
 OLNEY, MD 20832
 (301) 787-0220



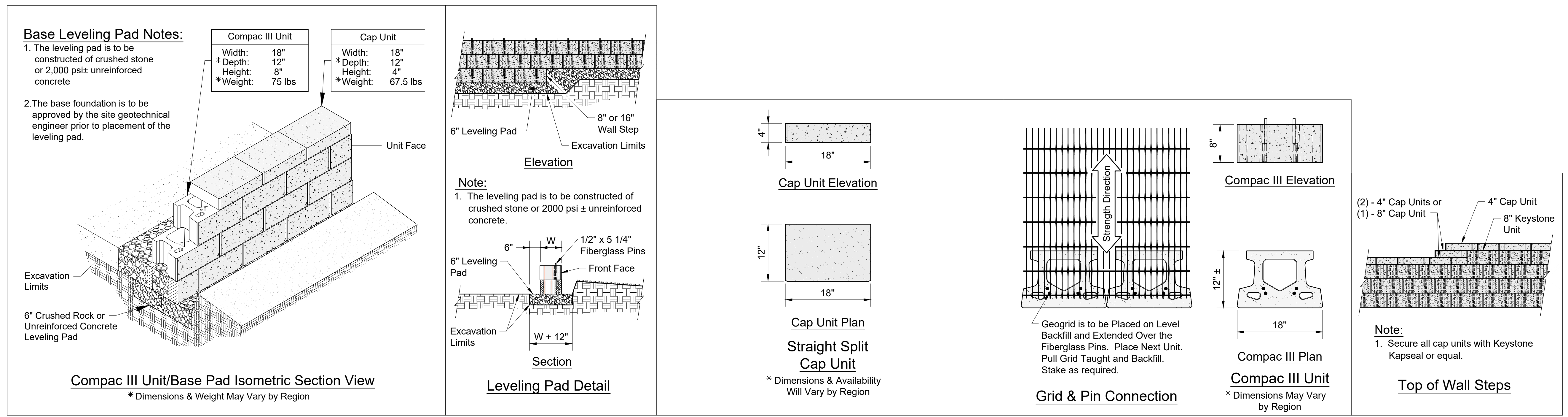
PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 14808, EXPIRATION DATE: 02-27-2024.

DESIGN BY: JE/AM
 DRAWN BY: AM
 CHECKED BY: HM
 DATE: NOVEMBER, 2021
 SCALE: AS SHOWN
 HCEA NO.: 21101B

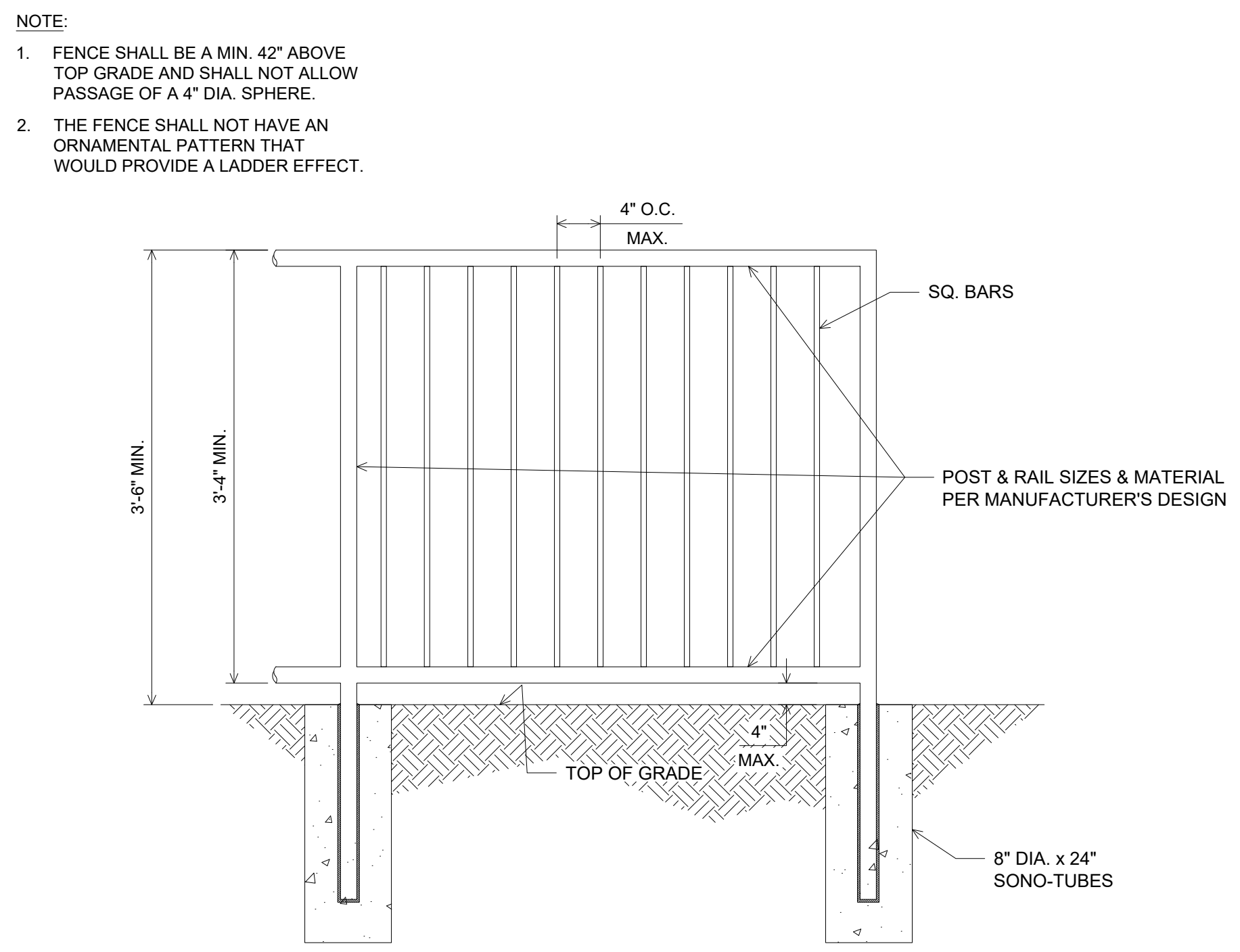
16 SHEET OF 18

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

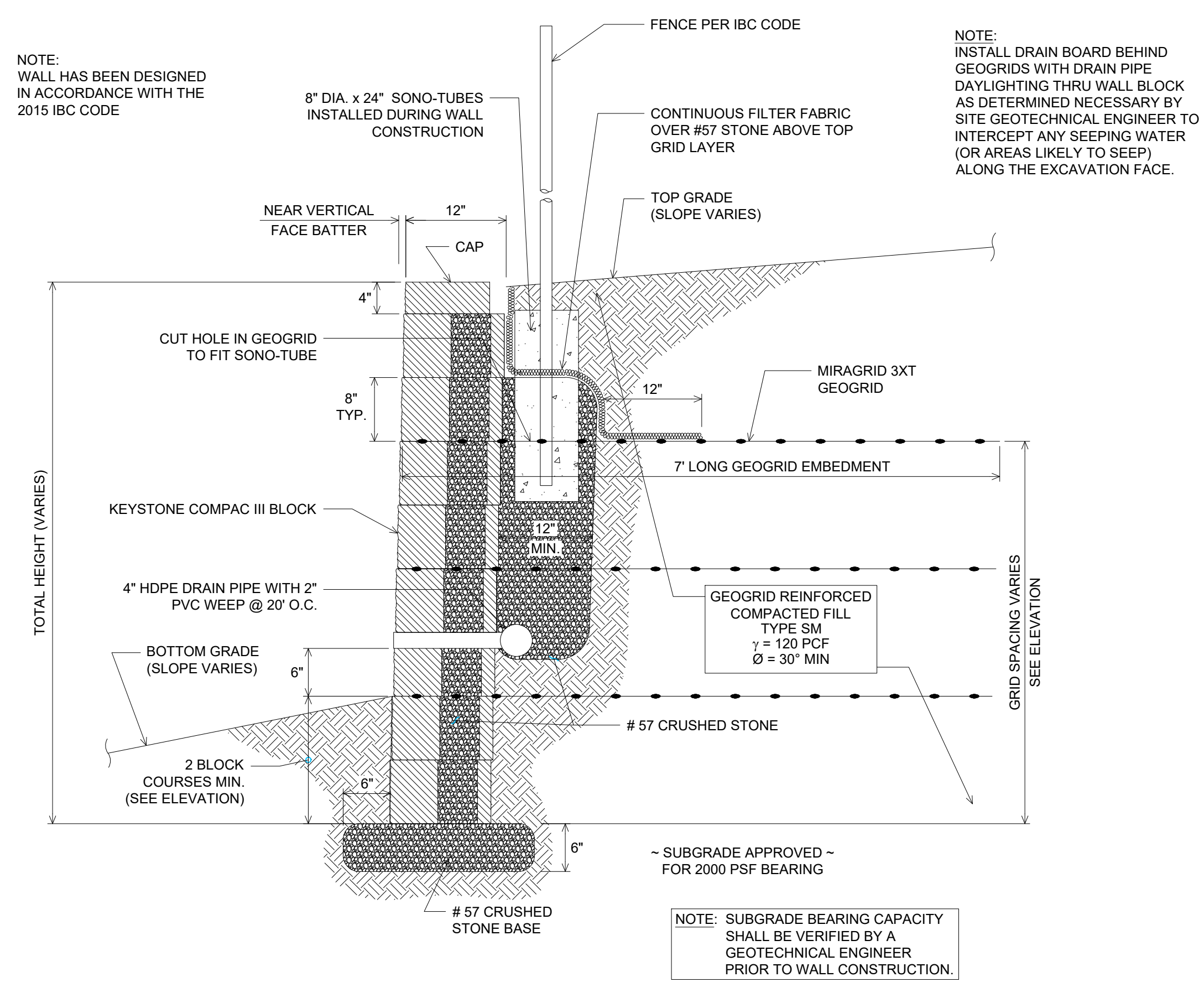
Chief, Development Engineering Division: Chad Edmondson, 9/9/2022
 Chief, Division of Land Development: Amy Gorman, 9/12/2022
 Director: [Signature], [Date]



COMPAC III UNIT - STRAIGHT FACE DETAILS



TYPICAL FENCE DETAIL
NOT TO SCALE



TYPICAL WALL SECTION
N.T.S.

1	NEW TITLE BLOCK	12/2/21
NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
RETAINING WALL
CONSTRUCTION DETAILS
JESSUP PARK PARCEL 108-A
 TRAILER PARKING AND STORAGE
 7868 DORSEY RUN ROAD
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TAX MAP 43 GRID 22
 1ST ELECTION DISTRICT

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17 SHEET OF 18

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

9/9/2022

CHIEF, DEVELOPMENT ENGINEERING DIVISION

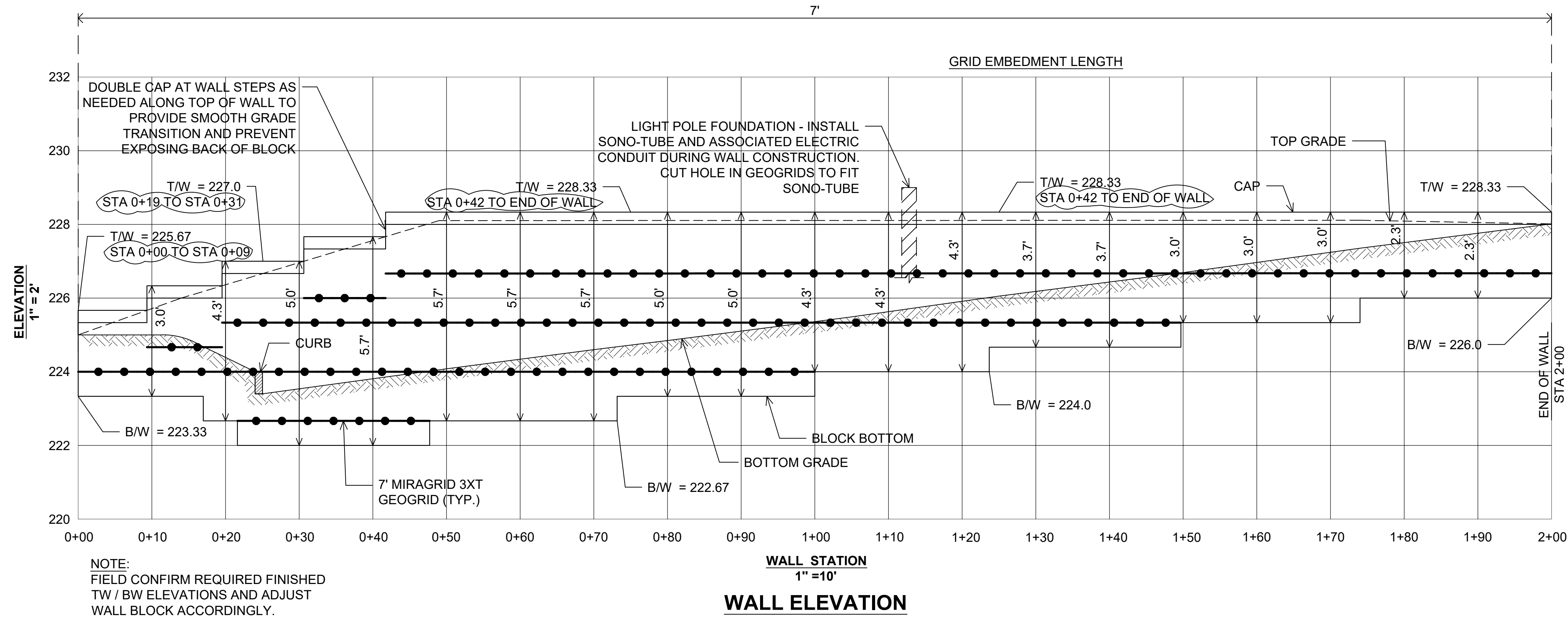
9/9/2022

CHIEF, DIVISION OF LAND DEVELOPMENT

9/12/2022

DIRECTOR

OWNER/DEVELOPER
 TEAM DORSEY, LLC
 C/O ERIC ROSENBAUM
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 OLNEY, MD 20832
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SPECIFICATIONS SEGMENTAL CONCRETE BLOCK RETAINING WALL

NOTES:

- NO TREES SHALL BE PLANTED WITHIN 10 FEET OF THE TOP OF THE RETAINING WALL.
- RETAINING WALLS SHALL ONLY BE CONSTRUCTED UNDER THE OBSERVATION OF A REGISTERED PROFESSIONAL ENGINEER AND A (NICET, WACEL, OR EQUIV.) CERTIFIED SOILS TECHNICIAN.
- ONE SOIL BORING SHALL BE REQUIRED EVERY ONE HUNDRED FEET ALONG THE ENTIRE LENGTH OF THE WALL. COPIES OF ALL BORING REPORTS SHALL BE PROVIDED TO THE HOWARD COUNTY INSPECTOR PRIOR TO THE START OF CONSTRUCTION.
- THE REQUIRED BEARING PRESSURE BENEATH THE WALL SYSTEM SHALL BE VERIFIED IN THE FIELD BY A CERTIFIED SOILS TECHNICIAN. TESTING DOCUMENTATION MUST BE PROVIDED TO THE HOWARD COUNTY INSPECTOR PRIOR TO START OF CONSTRUCTION. THE REQUIRED BEARING TEST SHALL BE THE DYNAMIC CONE PENETROMETER TEST ASTM 399.
- THE SUITABILITY OF FILL MATERIAL SHALL BE CONFIRMED BY THE ON-SITE SOILS TECHNICIAN. EACH 8' LIFT MUST BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AND THE TESTING REPORT SHALL BE MADE AVAILABLE TO THE HOWARD COUNTY INSPECTOR UPON COMPLETION OF CONSTRUCTION.
- WALLS SHALL NOT BE CONSTRUCTED ON UNCERTIFIED FILL MATERIALS.
- WALLS SHALL NOT BE CONSTRUCTED WITHIN A HOWARD CO. RIGHT-OF-WAY OR EASEMENT.
- CONSTRUCTION OF WALL WILL REQUIRE THE USE OF SUPPORT OF EXCAVATION DUE TO THE CLOSE PROXIMITY OF THE LOD. SHEETING/SHORING WILL BE PROVIDED AS NEEDED BY OTHERS.

PART 1: GENERAL

1.01 DESCRIPTION

- WORK SHALL CONSIST OF FURNISHING AND CONSTRUCTION OF A SEGMENTAL RETAINING WALL SYSTEM IN ACCORDANCE WITH THESE SPECIFICATIONS AND IN REASONABLY CLOSE CONFORMITY WITH THE LINES, GRADES, DESIGN, AND DIMENSIONS SHOWN ON THE PLANS.
- WORK INCLUDES PREPARING FOUNDATION SOIL, FURNISHING AND INSTALLING LEVELING PAD, UNIT FACING SYSTEM, UNIT DRAINAGE FILL AND REINFORCED BACKFILL TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS.
- WORK INCLUDES FURNISHING AND INSTALLING GEOGRID SOIL REINFORCEMENT OF THE TYPE, SIZE, LOCATION, AND LENGTHS DESIGNATED ON THE CONSTRUCTION DRAWINGS.

1.02 DELIVERY, STORAGE AND HANDLING

- CONTRACTOR SHALL CHECK ALL MATERIALS UPON DELIVERY TO ASSURE THAT THE PROPER TYPE, GRADE, COLOR, AND CERTIFICATION HAS BEEN RECEIVED.
- CONTRACTOR SHALL PROTECT ALL MATERIALS FROM DAMAGE DUE TO JOB SITE CONDITIONS AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DAMAGED MATERIALS SHALL NOT BE INCORPORATED INTO THE WORK.

PART 2: PRODUCTS

2.01 SEGMENTAL CONCRETE RETAINING WALL UNITS

- SEGMENTAL CONCRETE UNITS SHALL CONFORM TO THE FOLLOWING ARCHITECTURAL REQUIREMENTS:
FACE COLOR - COLOR MAY BE SPECIFIED BY THE OWNER.
FACE FINISH - HARD SPLIT IN ANGULAR TRI-PLANE OR STRAIGHT FACE CONFIGURATION. OTHER FACE FINISHES WILL NOT BE ALLOWED WITHOUT WRITTEN APPROVAL OF OWNER.

- BOND CONFIGURATION - RUNNING WITH BONDS NOMINALLY LOCATED AT MIDPOINT IN VERTICALLY ADJACENT UNITS, IN BOTH STRAIGHT AND CURVED ALIGNMENTS.
- EXPOSED SURFACES OF UNITS SHALL BE FREE OF CHIPS, CRACKS OR OTHER IMPERFECTIONS WHEN VIEWED FROM A DISTANCE OF 20 FEET UNDER DIFFUSED LIGHTING.

- SEGMENTAL CONCRETE UNITS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C1372 - STANDARD SPECIFICATIONS FOR SEGMENTAL RETAINING WALL UNITS.
- SEGMENTAL CONCRETE UNITS SHALL CONFORM TO THE FOLLOWING STRUCTURAL AND GEOMETRIC REQUIREMENTS MEASURED IN ACCORDANCE WITH ASTM C140 SAMPLING & TESTING CONCRETE MASONRY UNITS.

COMPRESSIVE STRENGTH = 3000 PSI MINIMUM; ABSORPTION = 8% MAXIMUM (8% MAXIMUM IN NORTHERN STATES) FOR STANDARD WEIGHT AGGREGATES.
DIMENSIONAL TOLERANCES = ±1/8" FROM NOMINAL UNIT DIMENSIONS NOT INCLUDING ROUGH SPLIT FACE ± 1/8" FROM NOMINAL UNIT HEIGHT. UNIT SIZE - 8" (H) X 18" (W) X 12" (D) MINIMUM FOR COMPAC III UNITS; UNIT SIZE - 8" (H) X 18" (W) X 18" (D) MINIMUM FOR STANDARD UNITS.]

- INTER-UNIT SHEAR STRENGTH - 1000 PLF MINIMUM AT 2 PSI NORMAL PRESSURE; AT 2 PSI NORMAL FORCE.
[GEOGRID/UNIT PEAK CONNECTION STRENGTH - 1000 PLF MINIMUM.]
- SEGMENTAL CONCRETE UNITS SHALL CONFORM TO THE FOLLOWING CONSTRUCTABILITY REQUIREMENTS:

VERTICAL SETBACK = 1/8" PER COURSE (NEAR VERTICAL) OR (1/4" PER COURSE) PER TYPICAL WALL SECTION; ALIGNMENT AND GRID ATTACHING MECHANISM - FIBERGLASS PINS, TWO PER UNIT MINIMUM. MAXIMUM HORIZONTAL GAP BETWEEN ERECTED UNITS SHALL BE 1/2 INCH.

2.02 SHEAR AND REINFORCEMENT PIN CONNECTORS

- SHEAR AND REINFORCEMENT PIN CONNECTORS SHALL BE 1/2 INCH DIAMETER THERMOSET ISOPHTHALIC POLYESTER RESIN PULTRUDED FIBERGLASS REINFORCEMENT RODS OR EQUIVALENT TO PROVIDE CONNECTION BETWEEN VERTICALLY AND HORIZONTALLY ADJACENT UNITS AND GEOSYNTHETIC REINFORCEMENT WITH THE FOLLOWING REQUIREMENTS: FLEXURAL STRENGTH IN ACCORDANCE WITH ASTM D4476; 128,000 PSI MINIMUM; SHORT BEAM SHEAR IN ACCORDANCE WITH ASTM D4475; 6,400 PSI MINIMUM.
- SHEAR CONNECTORS SHALL BE CAPABLE OF HOLDING THE GEOGRID IN THE PROPER DESIGN POSITION DURING GRID PRE-TENSIONING AND BACKFILLING.

2.03 BASE LEVELING PAD MATERIAL

- MATERIAL SHALL CONSIST OF A COMPACTED #57 CRUSHED STONE BASE OR CONCRETE AS SHOWN ON THE CONSTRUCTION DRAWINGS.

2.04 UNIT DRAINAGE FILL

- UNIT DRAINAGE FILL SHALL CONSIST OF #57 CRUSHED STONE.

2.05 REINFORCED BACKFILL

- REINFORCED BACKFILL SHALL BE TYPE SM, FREE OF DEBRIS AND MEET THE FOLLOWING GRADATION TESTED IN ACCORDANCE WITH ASTM D422 AND MEET OTHER PROPERTIES SHOWN ON THE PLAN:

SIEVE SIZE	PERCENT PASSING
1 1/2 INCH	100
3/4 INCH	100-75
NO. 40	0-60
NO. 200	0-35

PLASTICITY INDEX (PI) <15 AND LIQUID LIMIT <40, PER ASTM D4318.

- MATERIAL CAN BE SITE EXCAVATED SOILS WHERE THE ABOVE REQUIREMENTS CAN BE MET. UNSUITABLE SOILS FOR BACKFILL (HIGHLY PLASTIC CLAYS OR ORGANIC SOILS) SHALL NOT BE USED IN THE REINFORCED SOIL MASS.

- CONTRACTOR SHALL SUBMIT REINFORCED FILL SAMPLE AND LABORATORY TEST RESULTS FOR APPROVAL PRIOR TO THE USE OF ANY REINFORCED BACKFILL MATERIAL.

2.06 GEOGRID SOIL REINFORCEMENT

- GEOSYNTHETIC REINFORCEMENT SHALL CONSIST OF GEOGRIDS MANUFACTURED SPECIFICALLY FOR SOIL REINFORCEMENT APPLICATIONS AND SHALL BE MANUFACTURED FROM HIGH TENACITY POLYESTER (PET) YARN.

2.07 DRAINAGE PIPE

- THE DRAINAGE PIPE SHALL BE PERFORATED CORRUGATED HDPE PIPE MANUFACTURED IN ACCORDANCE WITH ASTM D1248.

2.08 GEOTEXTILE FILTER FABRIC

- WHEN REQUIRED, FILTER FABRIC SHALL BE A NEEDLE-PUNCHED NONWOVEN FABRIC MEETING

REQUIREMENTS OF AASHTO M288.

PART 3 EXECUTION

3.01 EXCAVATION

- CONTRACTOR SHALL EXCAVATE TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS. OWNER'S REPRESENTATIVE SHALL BE RESPONSIBLE FOR INSPECTING AND APPROVING THE SUBGRADE PRIOR TO PLACEMENT OF LEVELING MATERIAL OR FILL SOILS.
- RETAINING WALL EXCAVATIONS SHALL BE PERFORMED IN COMPLIANCE WITH MOSH AND OSHA REQUIREMENTS. CARE SHALL BE EXERCISED TO PROPERLY SHORE OR SLOPE BACK EXCAVATIONS TO MAINTAIN STABILITY. IF SLOPE FLATTENING IS NOT ACHIEVABLE, TEMPORARY SUPPORT OF EXCAVATION FOR THE RETAINING WALL CONSTRUCTION SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AND PERFORMED IN ACCORDANCE WITH ANY JURISDICTIONAL SAFETY STANDARDS.

3.02 BASE LEVELING PAD

- LEVELING PAD MATERIAL SHALL BE PLACED TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS, TO A MINIMUM THICKNESS OF 6 INCHES AND EXTEND Laterally A MINIMUM OF 6" IN FRONT AND BEHIND THE SEGMENTAL WALL UNIT.
- LEVELING PAD SHALL BE PREPARED TO INSURE FULL CONTACT TO THE BASE SURFACE OF THE CONCRETE UNITS.
- COMPACT TO MINIMUM 95% OF STANDARD PROCTOR DENSITY PER ASTM D698.

3.03 SEGMENTAL UNIT INSTALLATION

- FIRST COURSE OF UNITS SHALL BE PLACED ON THE LEVELING PAD AT THE APPROPRIATE LINE AND GRADE. ALIGNMENT AND LEVEL SHALL BE CHECKED IN ALL DIRECTIONS AND INSURE THAT ALL UNITS ARE IN FULL CONTACT WITH THE BASE AND PROPERLY SEATED.
- PLACE THE FRONT OF UNITS SIDE-BY-SIDE. DO NOT LEAVE GAPS BETWEEN ADJACENT UNITS. LAYOUT OF CORNERS AND CURVES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- INSTALL SHEAR/CONNECTING DEVICES PER MANUFACTURER'S RECOMMENDATIONS.
- PLACE AND COMPACT DRAINAGE FILL WITHIN AND BEHIND WALL UNITS, NOT LESS THAN 1.3 CU. FT. OF DRAINAGE FILL SHALL BE USED FOR EACH SQ. FT. OF WALL FACE, UNLESS NOTED OTHERWISE.
- PLACE AND COMPACT REINFORCED BACKFILL SOIL BEHIND DRAINAGE FILL. FOLLOW WALL ERECTION AND DRAINAGE FILL CLOSELY WITH BACKFILL.
- MAXIMUM STACKED VERTICAL HEIGHT OF WALL UNITS, PRIOR TO UNIT DRAINAGE FILL AND BACKFILL PLACEMENT AND COMPACTATION, SHALL NOT EXCEED TWO COURSES.

3.04 STRUCTURAL GEOGRID INSTALLATION

- GEOGRID SHALL BE ORIENTED WITH THE HIGHEST STRENGTH AXIS PERPENDICULAR TO THE WALL ALIGNMENT.
- GEOGRID REINFORCEMENT SHALL BE PLACED AT THE STRENGTHS, LENGTHS, AND ELEVATIONS SHOWN ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE ENGINEER.
- THE GEOGRID SHALL BE LAID HORIZONTALLY ON COMPACTED BACKFILL AND ATTACHED TO THE SEGMENTAL WALL UNIT PINS AND WITHIN 1 INCH OF THE FACE OF THE UNITS. PLACE THE NEXT COURSE OF SEGMENTAL CONCRETE UNITS OVER THE GEOGRID. THE GEOGRID SHALL BE PULLED TAUT, AND ANCHORED PRIOR TO BACKFILL

PLACEMENT ON THE GEOGRID.

- GEOGRID REINFORCEMENTS SHALL BE CONTINUOUS THROUGHOUT THEIR EMBEDMENT LENGTHS AND PLACED SIDE-BY-SIDE TO PROVIDE 100% COVERAGE AT EACH LEVEL. SPLICED CONNECTIONS BETWEEN SHORTER PIECES OF GEOGRID OR GAPS GREATER THAN 2 INCHES BETWEEN ADJACENT PIECES OF GEOGRID ARE NOT PERMITTED.

3.05 REINFORCED BACKFILL PLACEMENT

- REINFORCED BACKFILL SHALL BE PLACED, SPREAD, AND COMPACTED IN SUCH A MANNER THAT MINIMIZES THE DEVELOPMENT OF SLACK IN THE GEOGRID AND INSTALLATION DAMAGE TO GEOGRID.
- REINFORCED BACKFILL SHALL BE PLACED AND COMPACTED IN LIFTS NOT TO EXCEED 6 INCHES WHERE HAND OPERATED COMPACTION EQUIPMENT IS USED, OR 8 - 10 INCHES WHERE HEAVY COMPACTION EQUIPMENT IS USED. LIFT THICKNESS SHALL BE DECREASED TO ACHIEVE THE REQUIRED DENSITY AS REQUIRED.
- REINFORCED BACKFILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D698. THE MOISTURE CONTENT OF THE BACKFILL MATERIAL PRIOR TO AND DURING COMPACTION SHALL BE UNIFORMLY DISTRIBUTED THROUGHOUT EACH LAYER AND SHALL BE + 0% TO - 3% OF OPTIMUM.
- ONLY LIGHTWEIGHT HAND-OPERATED COMPACTION EQUIPMENT SHALL BE ALLOWED WITHIN 3 FEET FROM THE BACK OF THE SEGMENTAL CONCRETE UNIT.
- TRACKED CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED DIRECTLY UPON THE GEOGRID REINFORCEMENT. A MINIMUM FILL THICKNESS OF 6 INCHES IS REQUIRED PRIOR TO OPERATION OF TRACKED VEHICLES OVER THE GEOGRID. TRACKED VEHICLE TURNING SHOULD BE KEPT TO A MINIMUM TO PREVENT TRACKS FROM DISPLACING THE FILL AND DAMAGING OR DISPLACING THE SEGMENTAL CONCRETE UNITS OR GEOGRID.
- RUBBER Tired EQUIPMENT MAY PASS OVER GEOGRID REINFORCEMENT AT SLOW SPEEDS, LESS THAN 10 MPH. SUDDEN BRAKING AND TURNING SHALL BE AVOIDED.
- AT THE END OF EACH DAY'S OPERATION, THE CONTRACTOR SHALL SLOPE THE LAST LIFT OF REINFORCED BACKFILL AWAY FROM THE WALL UNITS TO DIRECT RUNOFF AWAY FROM WALL FACE. THE CONTRACTOR SHALL NOT ALLOW SURFACE RUNOFF FROM ADJACENT AREAS TO ENTER THE WALL CONSTRUCTION SITE.

3.06 CAP INSTALLATION

- PRIOR TO PLACEMENT OF CAP UNITS, THE UPPER SURFACE OF THE TOP COURSE WALL UNITS SHALL BE CLEANED OF SOIL AND ANY OTHER MATERIAL.
- CAP UNITS SHALL BE GLOUED TO UNDERLYING UNITS WITH AN ALL-WEATHER EXTERIOR CONSTRUCTION ADHESIVE RECOMMENDED BY THE MANUFACTURER.

3.07 FIELD QUALITY CONTROL

- THE OWNER SHALL ENGAGE INSPECTION AND TESTING SERVICES, INCLUDING INDEPENDENT LABORATORIES, TO PROVIDE QUALITY ASSURANCE AND TESTING SERVICES DURING CONSTRUCTION.
- AS A MINIMUM, QUALITY ASSURANCE TESTING SHOULD INCLUDE FOUNDATION SOIL INSPECTION, RETAINED SOIL AND BACKFILL TESTING, VERIFICATION OF DESIGN PARAMETERS, AND OBSERVATION OF CONSTRUCTION FOR GENERAL COMPLIANCE WITH DESIGN DRAWINGS AND SPECIFICATIONS.

NO.	REVISION	DATE
1	ADDED NOTE FOR SUPPORT OF EXCAVATION	12/2/21
1	ADDED STATION LOCATIONS FOR ELEVATIONS	12/2/21
1	NEW TITLE BLOCK	12/2/21

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 9/9/2022
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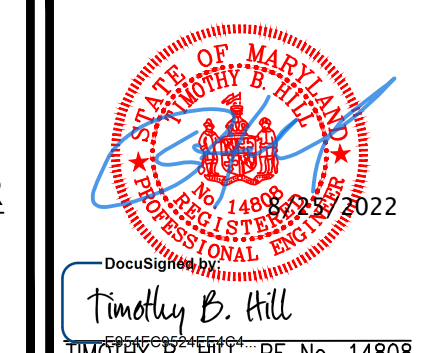
**SITE DEVELOPMENT PLAN
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TRAILER PARKING AND STORAGE
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