

THIS IS A NEW SHEET 2  
ADDED TO THE PLAN SET

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 6/15/2017  
 CHIEF, BUREAU OF HIGHWAYS  
 APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 6/21/17  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
*[Signature]* 6/20/17  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

**CENTERLINE ROAD CURVE DATA**

CURVE	RADIUS	ARC LENGTH	DELTA	CHORD BEARING	CHORD LENGTH
C7	350.0'	164.60'	26°56'41"	N17°50'22"E	163.08'
C8	775.00'	103.19'	07°37'43"	S27°29'51"W	103.11'
C9	35.00'	54.98'	90°00'00"	S21°19'01"E	49.50'
C10	35.00'	54.98'	90°00'00"	N88°40'59"E	49.50'
C11	45.00'	45.16'	57°29'49"	N05°03'55"W	43.29'
C12	45.00'	25.53'	32°30'11"	N50°03'55"W	25.19'

**CURVE DATA @ CUL-DE-SAC**

CURVE	STATION
A	PT CL STA. 26+61.90
B	PC CL STA. 26+81.90
C	PT CL STA. 27+38.88
D	PC CL STA. 27+61.15
E	PT CL STA. 28+06.31
F	PC CL STA. 28+17.03
G	PT CL STA. 28+42.55

**FILLET DATA**

CURVE	ROAD NAME	@ STA.	T/C ELEVATION
PC5	VARDON LANE	21+82.35	431.27
PT6	VARDON LANE	22+61.81	446.89
PC7	VARDON LANE	24+78.19	421.31
PT7	VARDON LANE	24+98.76	419.99
PC8	VARDON LANE	26+06.82	417.03
PT8	VARDON LANE	26+61.90	415.96
PC9	VARDON LANE	26+81.90	415.77
PT9	VARDON LANE	27+38.88	446.82
PC10	VARDON LANE	27+61.18	416.11
PT10	VARDON LANE	28+06.31	417.06
PC11	VARDON LANE	26+19.52	416.39
PT11	VARDON LANE	26+61.90	416.24
PC12	VARDON LANE	26+81.90	416.98
PT12	VARDON LANE	27+19.73	416.98
PC13	VARDON LANE	27+79.89	416.72
PT13	VARDON LANE	28+06.31	417.26
PC14	VARDON LANE	28+17.03	417.89
PT14	VARDON LANE	28+42.05	418.85
PC15	VARDON LANE	28+45.51	418.49
PT15	VARDON LANE	25+55.58	418.92

1 5-17-2017 ADD THE PLAN, PROFILE, TYPICAL SECTION AND CHARTS FOR VARDON LANE STA. 17+99.51 TO THE END TO THIS ROAD CONSTRUCTION PLAN SET.

NO. DATE REVISION

**BENCHMARK ENGINEERING, INC.**  
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 A ELICOTT CITY, MARYLAND 21043  
 (P) 410-465-9108 (F) 410-465-6544  
 WWW.BEI-CVLENGINEERING.COM

OWNER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP  
 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093  
 410-825-8400

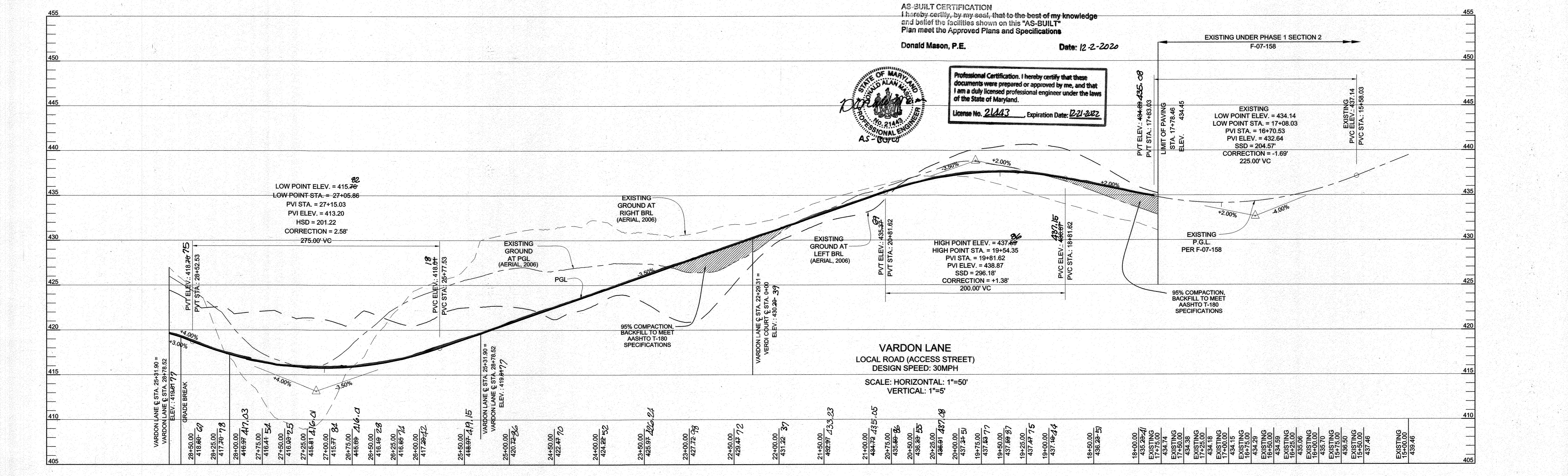
DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP  
 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093  
 410-825-8400

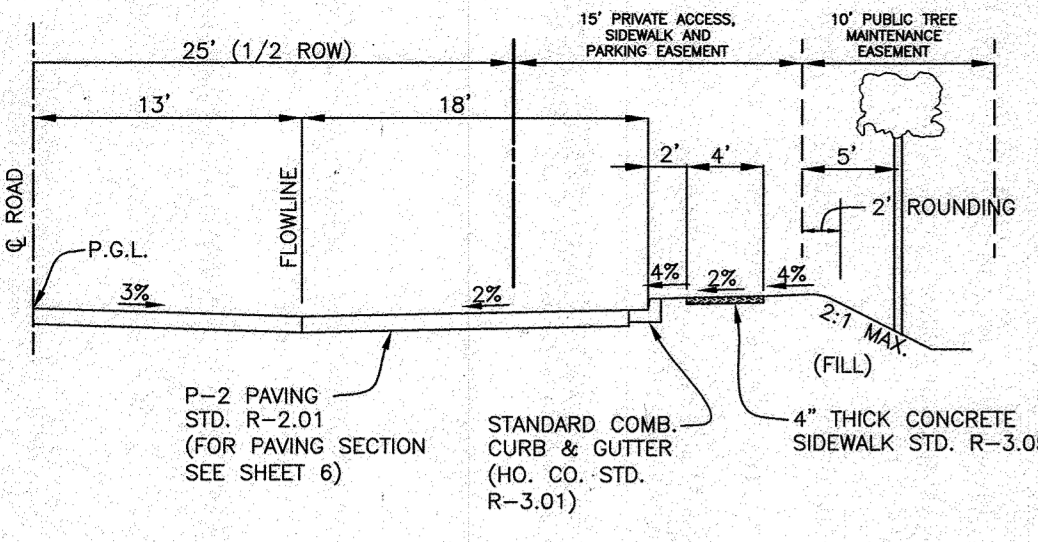
**FAIRWAYS AT TURF VALLEY PHASE 3**  
 LOTS 1-47 AND 95-112, OPEN SPACE LOTS 48, 49, AND 113-115;  
 GOLF SPACE LOT 116

TAX MAP: 16 - GRID: 16 - PARCEL: P/D 8 & 708  
 ZONED: PGCC (RESIDENTIAL SUBDISTRICT)  
 ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND

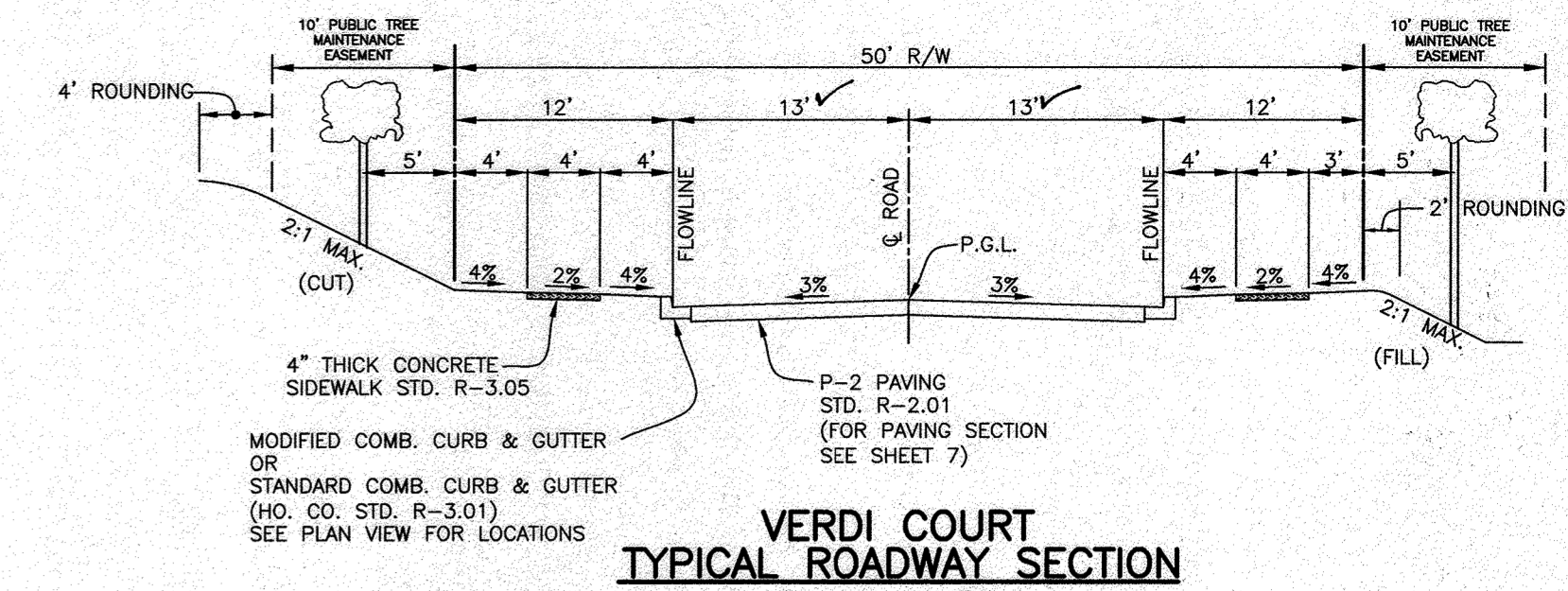
**REVISED ROAD PLAN AND PROFILE VARDON LANE**

DATE: MAY 17, 2017 BEI PROJECT NO. 2726  
 SCALE: AS SHOWN SHEET 2 OF 13





**TYPICAL HALF PARKING SECTION**  
ALONG VARDON LANE AND VERDI COURT  
SCALE: 1" = 10'

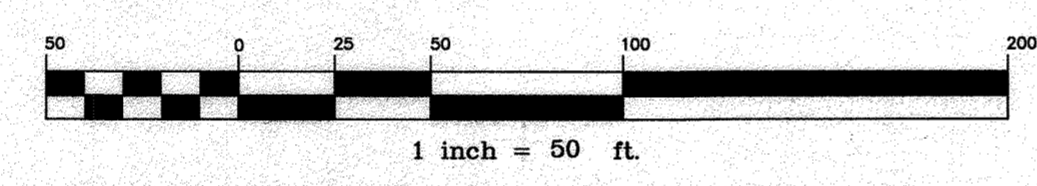
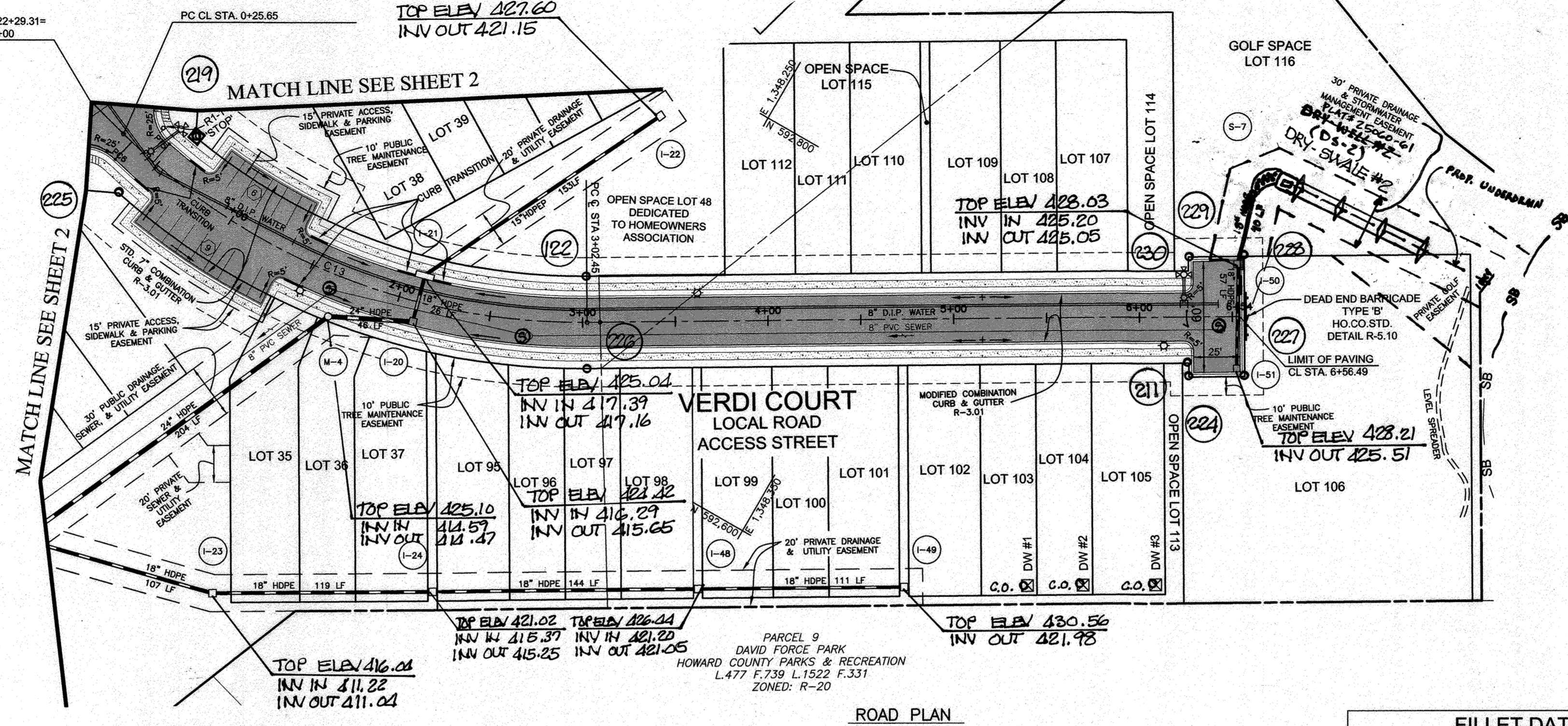


**VERDI COURT TYPICAL ROADWAY SECTION**  
PUBLIC ACCESS STREET  
STA. 0+00 TO STA. 15+00  
DESIGN SPEED: 30 MPH  
SCALE: 1" = 10'

THIS SHEET REPLACES THE PREVIOUS SHEET 2 SIGNED ON 6-21-2017

SEC. NO.	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)									
		3 TO <5 TO <7	>7	3 TO <5 TO <7	>7	3 TO <5 TO <7	>7				
P-2	PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS: ACCESS PLACE, ACCESS STREET CUL-DE-SACS: RESIDENTIAL	PAVEMENT MATERIAL (INCHES)	MIN HMA WITH GAB	HMA WITH CONSTANT GAB	HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5
		HMA SUPERPAVE INTERMEDIATE SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
P-2	LOCAL ROADS: ACCESS PLACE, ACCESS STREET CUL-DE-SACS: RESIDENTIAL	HMA SUPERPAVE BASE 18.0 MM, PG 64-22, LEVEL 1 (ESAL)	2.0	2.0	2.0	3.5	2.0	2.0	2.0	2.0	2.0
		GRADED AGGREGATE BASE (GAB)	8.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0

NOTES:  
1. HEAVY TRUCKS ARE DEFINED AS THOSE WITH SIX (6) WHEELS OR MORE INCLUDING GARbage TRUCKS.  
2. HMA SUPERPAVE LAYERS SHALL BE PLACED IN APPROPRIATE 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 BOND REDUCTION.  
5. IN LIEU OF PLACING THE INTERMEDIATE SURFACE COURSE LAYER FOR COMMERCIAL, INDUSTRIAL ENTRANCE APRONS WITHIN THE COUNTY RIGHT-OF-WAY WHERE AUXILIARY LANES 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 CRB VALUE FOR EACH ROADWAY.



CENTERLINE ROAD CURVE DATA						
CURVE	RADIUS	ARC LENGTH	DELTA	LENGTH	CHORD BEARING	CHORD LENGTH
C13	350.00'	276.80'	45°18'47"	146.10'	N82°12'02"E	289.84'

FILLET DATA			
CURVE	ROAD NAME	Q STA.	T/C ELEVATION
PT5	VERDI COURT	0+47.73	428.85
PC6	VERDI COURT	0+31.89	428.98

3	7-1-2019	REMOVE LOCATION OF DRY SWALE #2 AND S-2 REMOVE EASEMENT ACCORDINGLY
2	10-2-2017	REVISE LOT 106 AND OPEN SPACE LOT 113. DELETE DRY SWALE #1. RELOCATE DRY SWALE #2 AND ESMT.
1	5-17-2017	ADD THE FIRST PORTION OF VERDIO COURT PREVIOUSLY SHOWN ON THE F-07-158 PLAN TO THIS CONTRACT. UPDATE PLAN VIEW, PROFILE VIEW, CHARTS AND TITLE BLOCK.
NO.	DATE	REVISION

**BENCHMARK ENGINEERING, INC.**  
8480 BALTIMORE NATIONAL PIKE SUITE 315 & ELLICOTT CITY, MARYLAND 21043  
(7) 410-485-4105 (7) 410-485-6644  
WWW.BE-CIVILENGINEERING.COM

OWNER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, FENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400	FAIRWAYS AT TURF VALLEY PHASE 3 LOTS 1-47 AND 95-112; OPEN SPACE LOTS 48, 49, AND 113-115; GOLF SPACE LOT 116
DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, FENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400	TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706 ZONED: PCCC (RESIDENTIAL SUBURBIC) ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND
<b>REVISED ROAD PLAN AND PROFILE VERDI COURT</b>	
DATE: OCTOBER 2, 2017	BEI PROJECT NO. 2726
DESIGN: DBT	DRAFT: DBT
SCALE: AS SHOWN	SHEET 3 OF 13

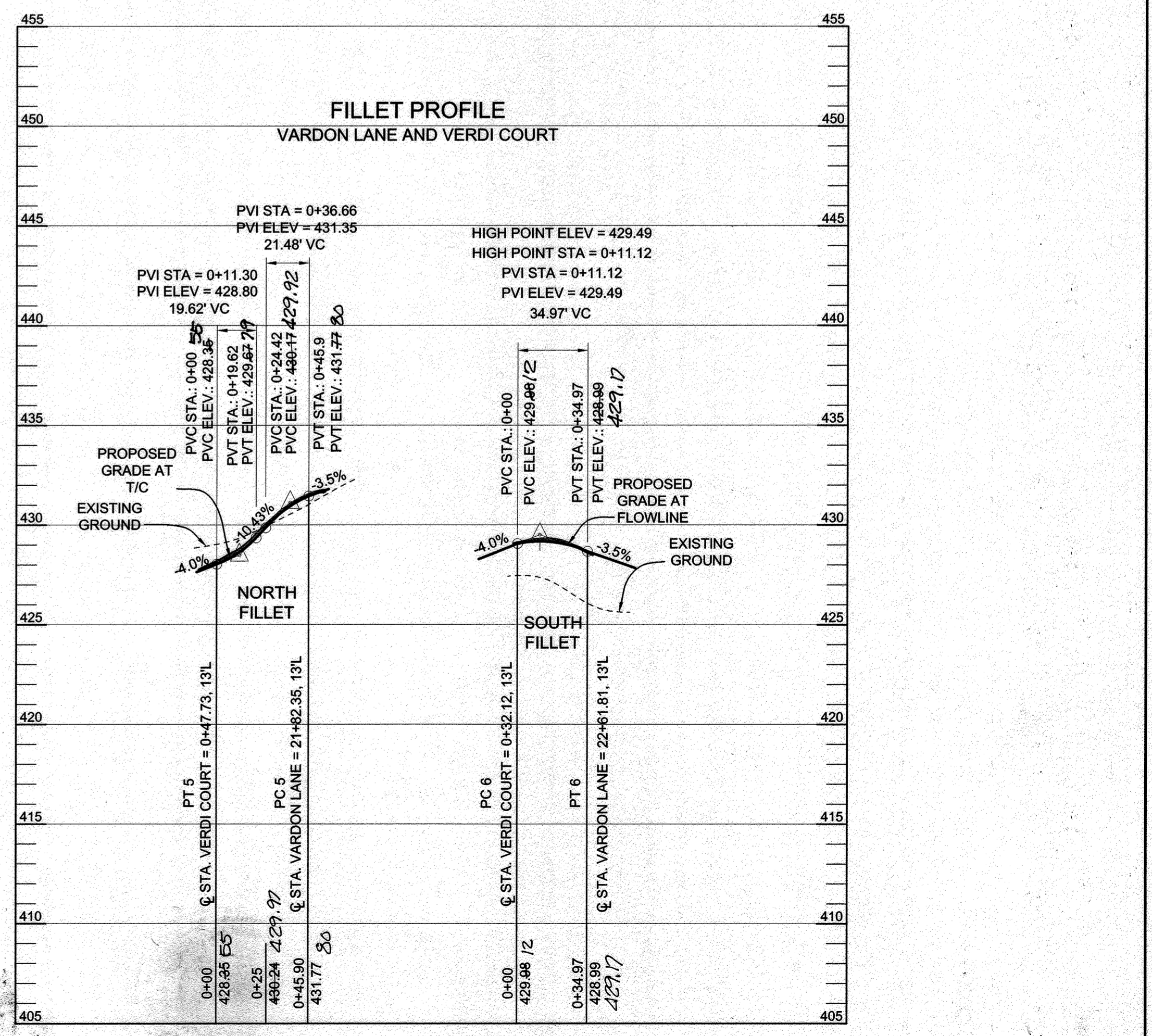
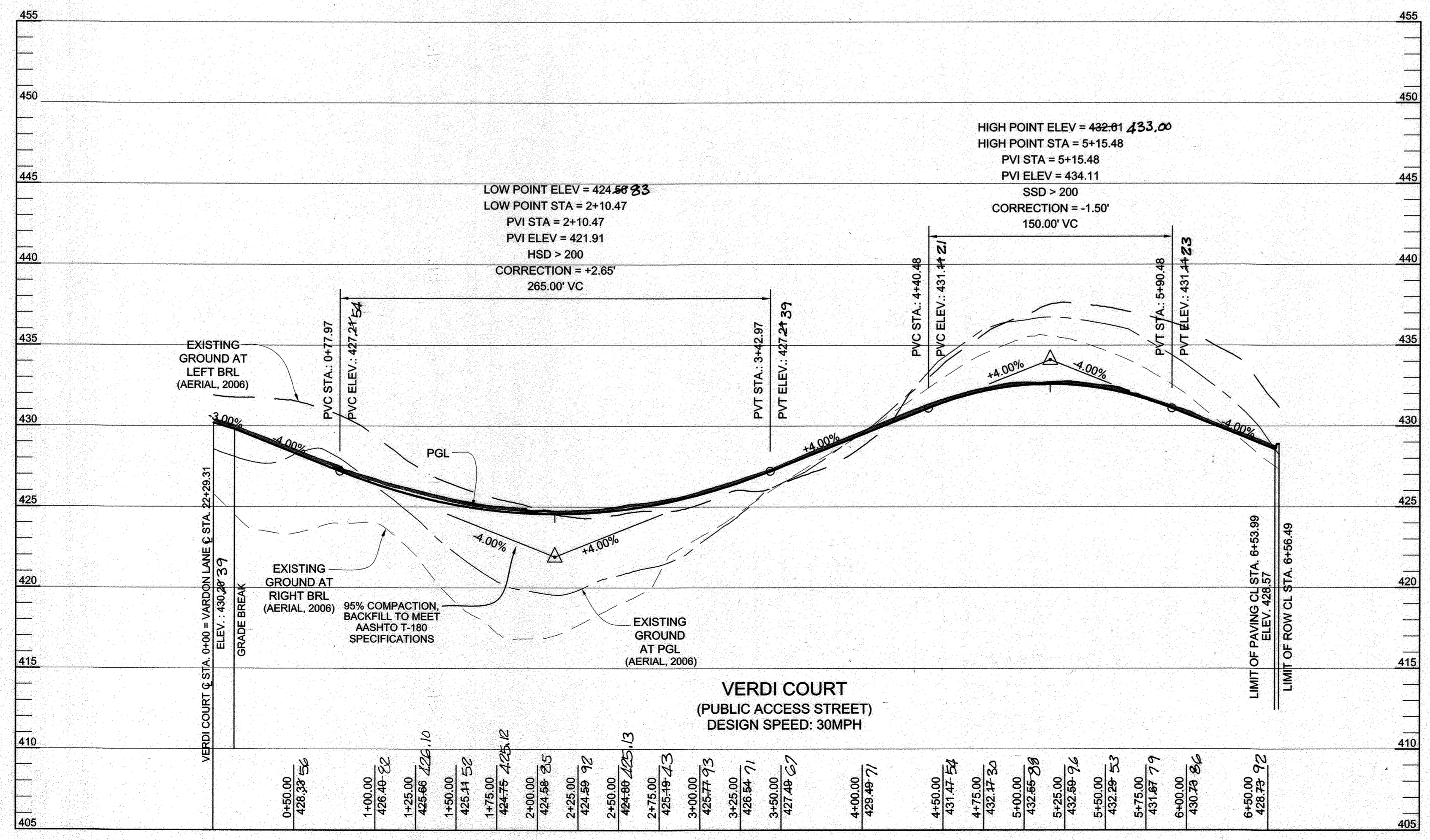
**AS-BUILT CERTIFICATION**  
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications  
Donald Mason, P.E. Date: 12-2-2020

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443, Expiration Date: 12-21-2022

APPROVED: DEPARTMENT OF PUBLIC WORKS  
CHIEF, DIVISION OF HIGHWAYS  
DATE: 10/24/2017

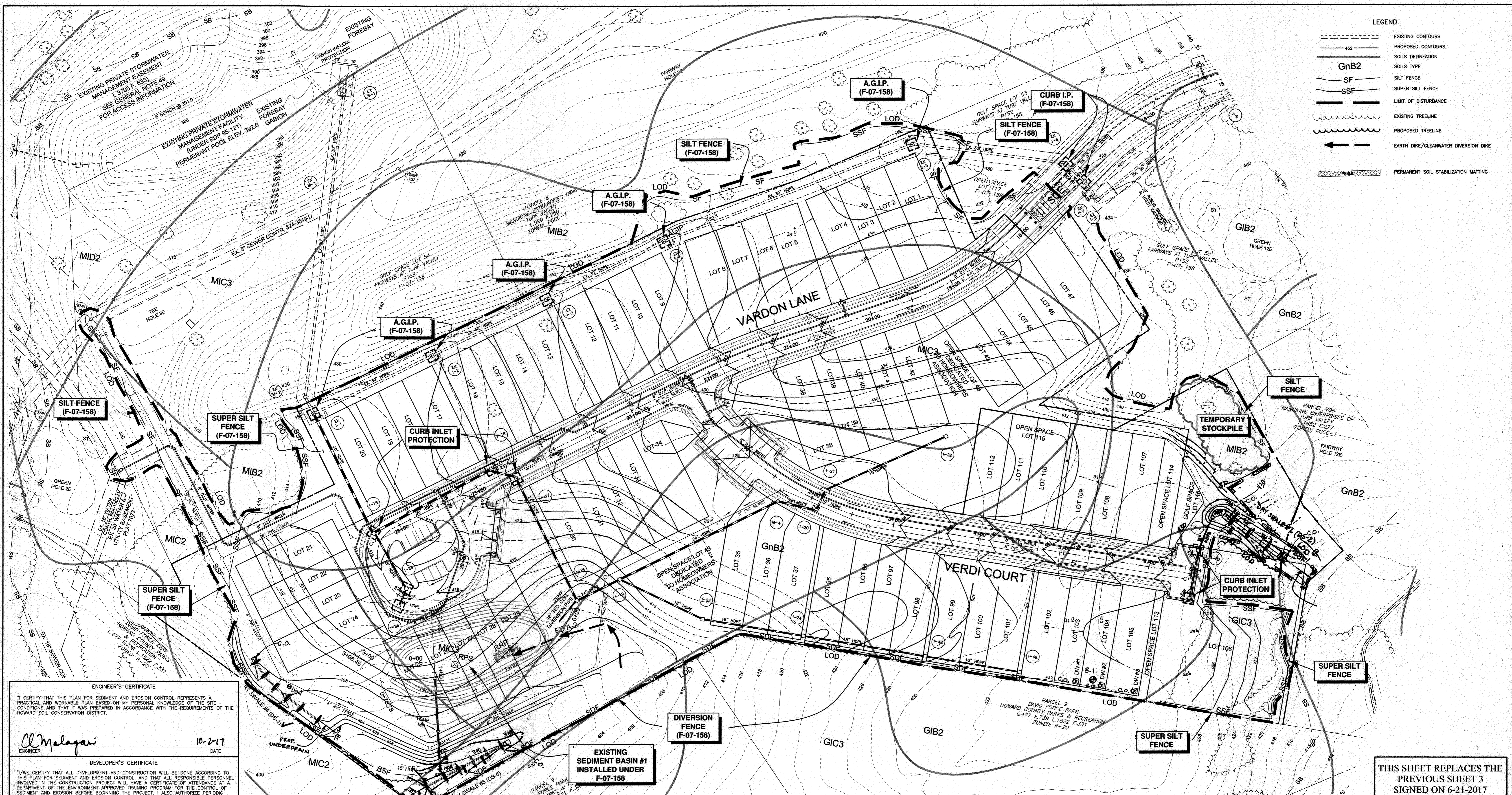
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE: 11-02-17

CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 10-31-17



LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- SOILS DELINEATION
- GnB2 SOILS TYPE
- SF SILT FENCE
- SSF SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- EXISTING TREELINE
- PROPOSED TREELINE
- ← EARTH DIKE/CLEANWATER DIVERSION DIKE
- PSM PERMANENT SOIL STABILIZATION MATTING



**ENGINEER'S CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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.  
 Al Malagari 10-2-17  
 ENGINEER DATE

**DEVELOPER'S CERTIFICATE**  
 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.  
 [Signature] 10/3/17  
 DEVELOPER DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 [Signature] 10/17/17  
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS  
 [Signature] 10/24/2017  
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 11-02-17  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

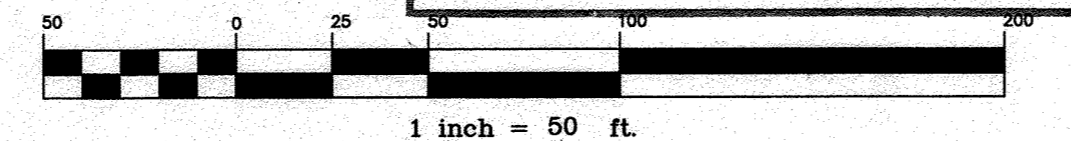
[Signature] 10-31-17  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**AS-BUILT CERTIFICATION**  
 I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications  
 Donald Mason, P.E.  
 Date: 12-2-2020

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21A43 Expiration Date: 12-31-2022

**THIS PLAN IS FOR SEDIMENT AND EROSION CONTROL ONLY**

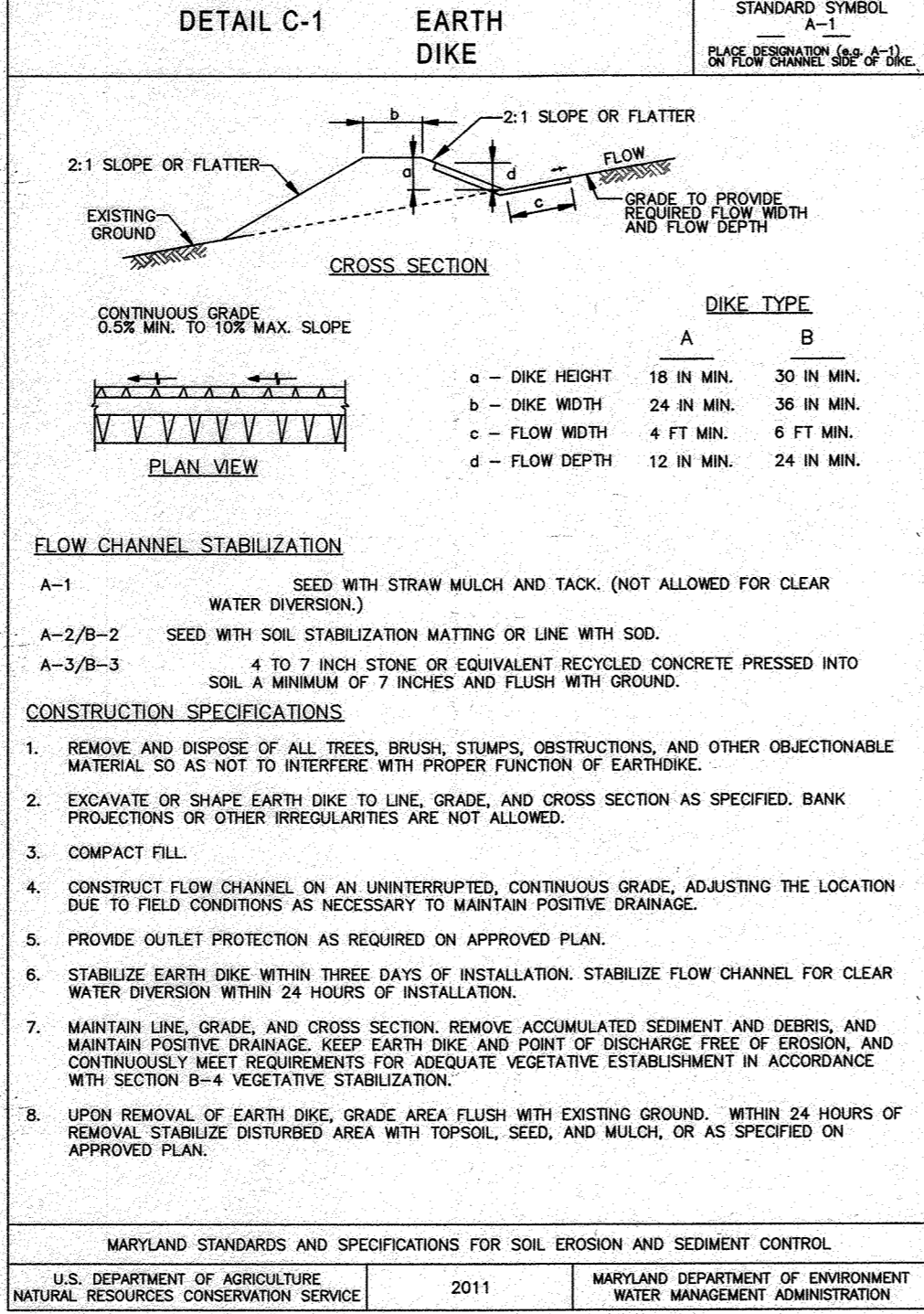
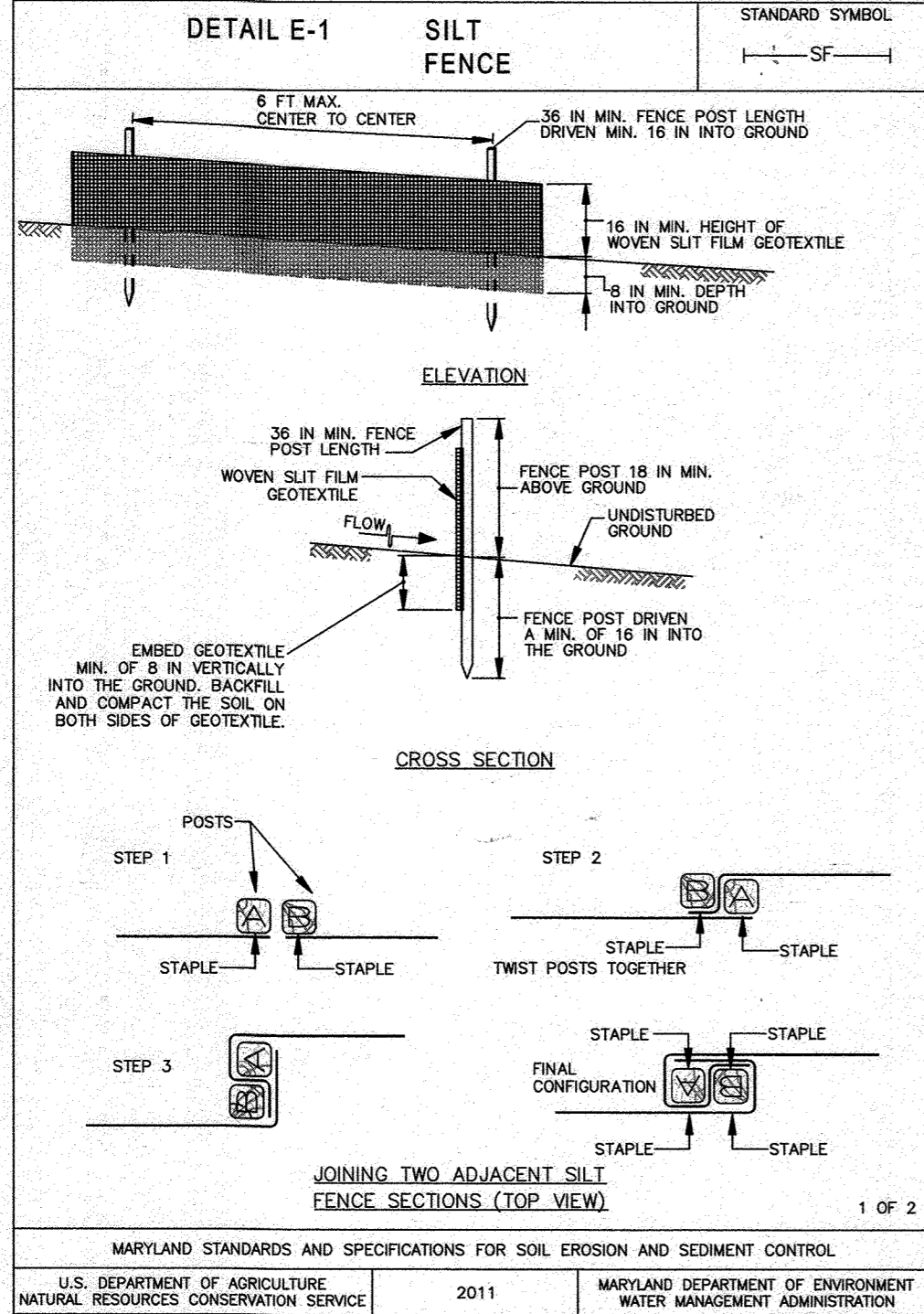
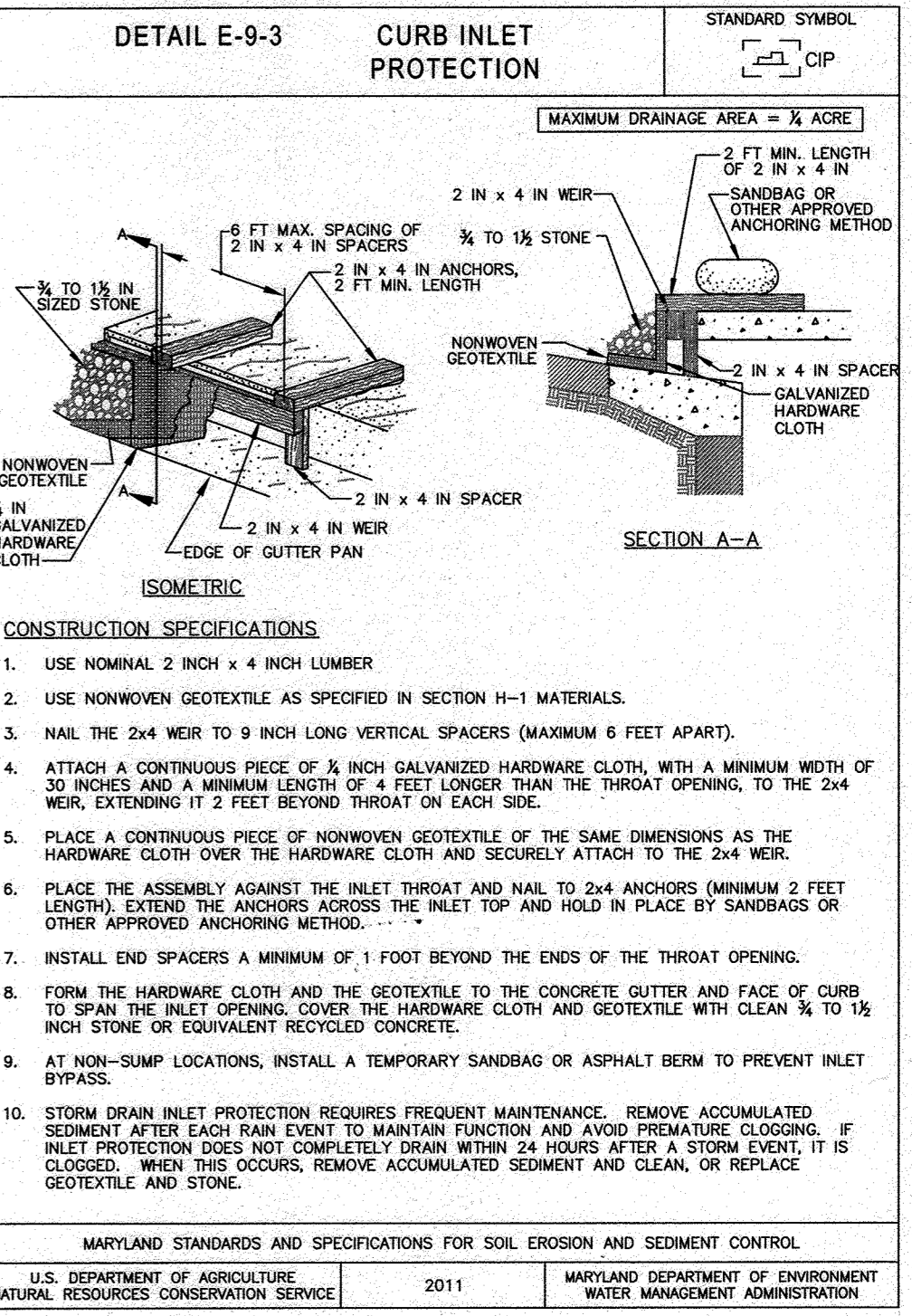
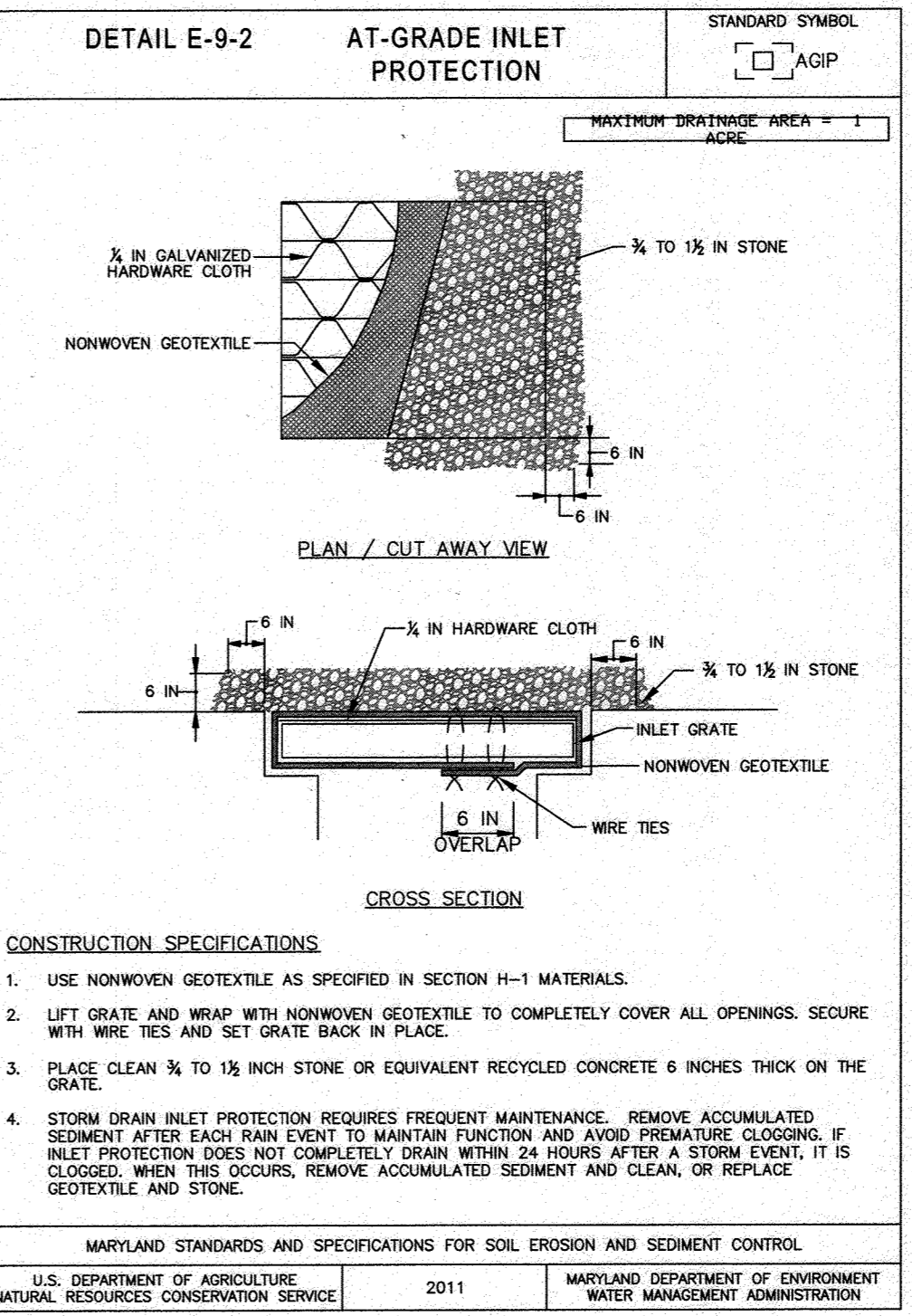
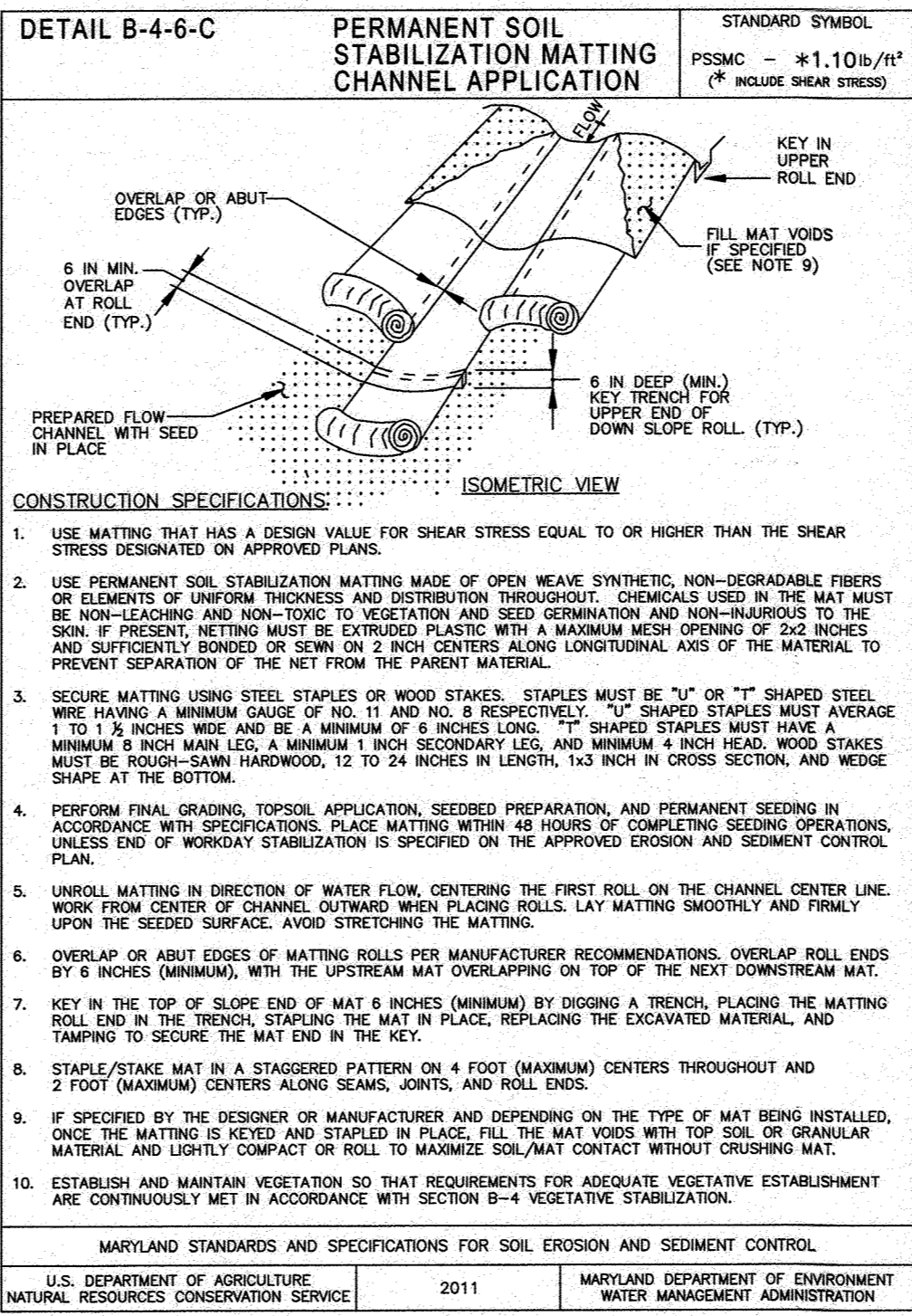
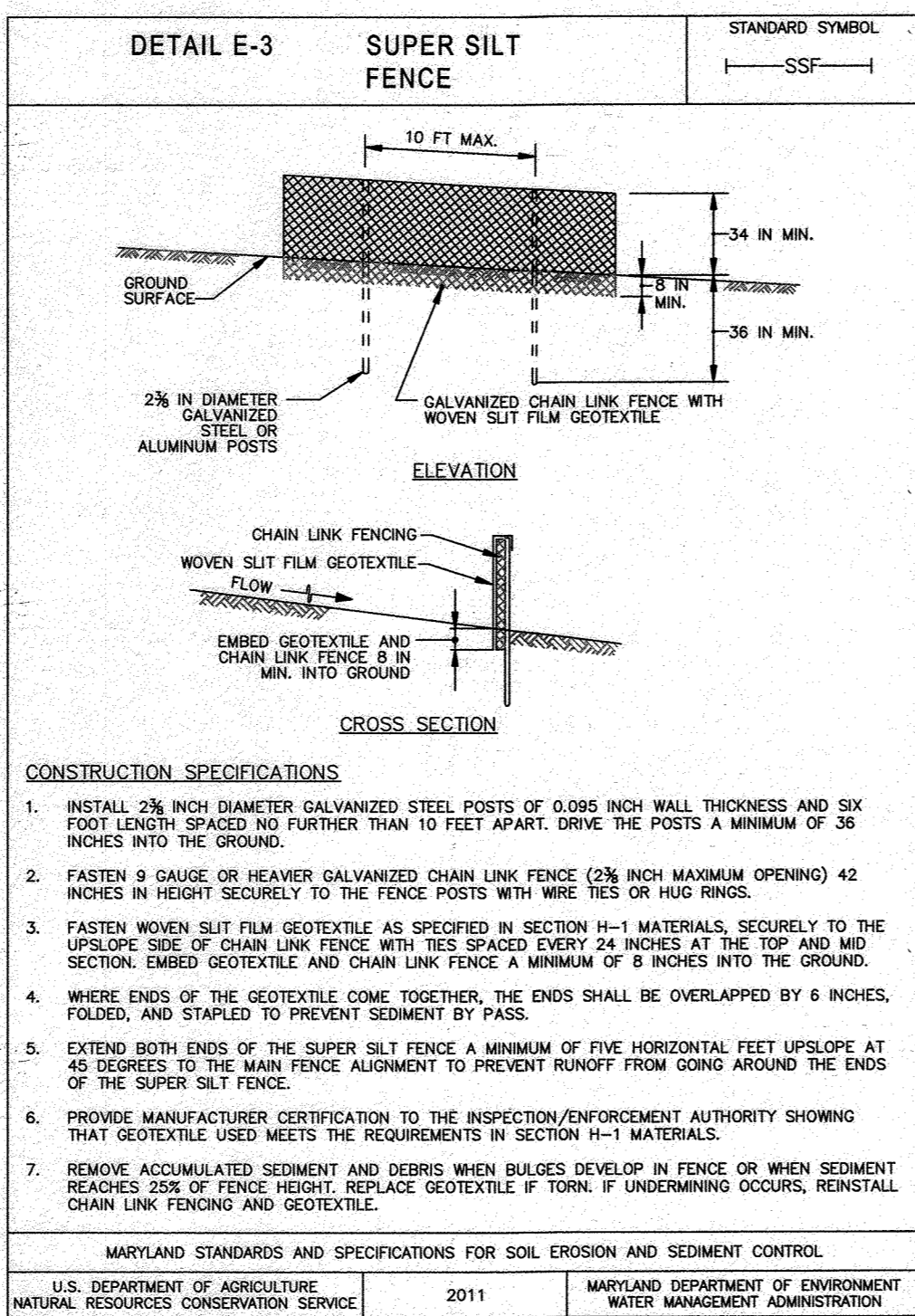
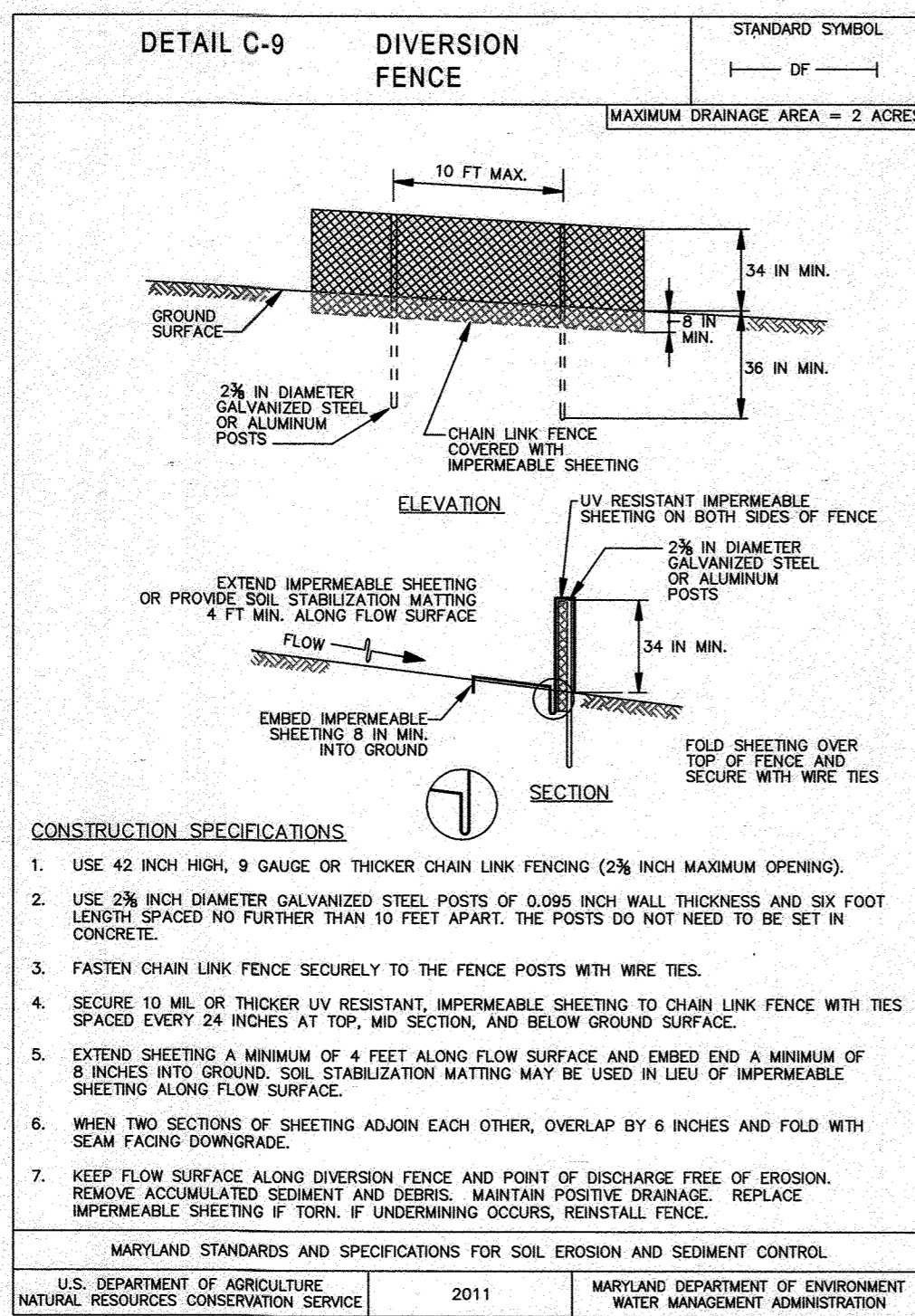
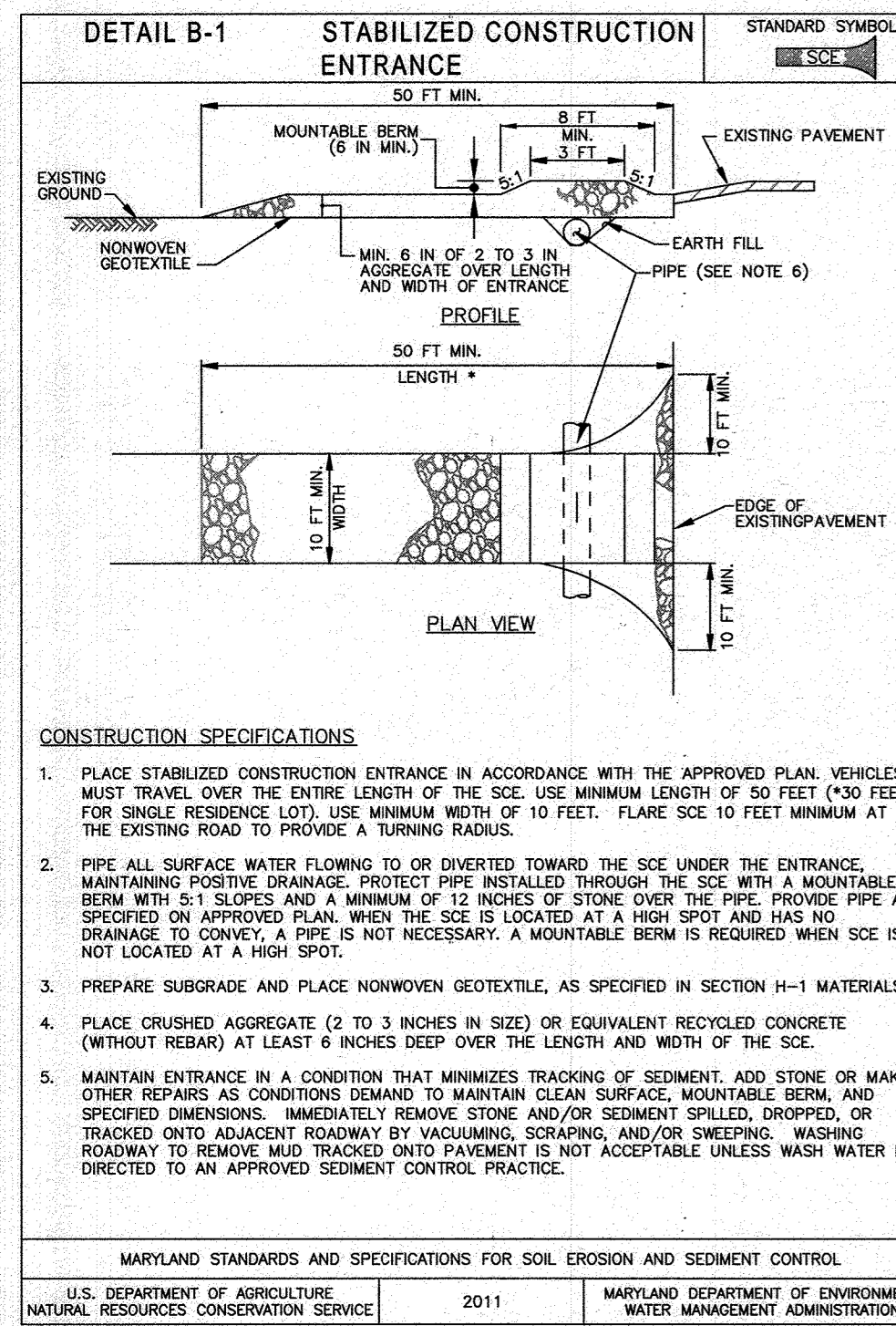
4	7-1-2014	REVISE D-2, REVISE STORM DRAIN 1-60 TO 5-7, REVISE 2-0 & 3-5
3	10-2-2017	REVISE LOT 106 AND OS LOT 113. DELETE DRY SWALE #1. ADD DRY WELLS #1, #2, & #3. ADJUST GRADING AND LOD ON LOT 106.
2	5-17-2017	REVISE PLAN TO INCLUDE LOTS 1-47 AND SHOW PROPOSED CONTROLS UNDER F-07-158 AS EXISTING FOR THIS PHASE.
1	7-14-2016	REVISE STORM DRAIN STRUCTURE NUMBERS, REVISE LOT NUMBERS & REMOVE LOT AREAS.
NO.	DATE	REVISION
OWNER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		
DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		
<b>FAIRWAYS AT TURF VALLEY PHASE 3</b> LOTS 1-47 AND 95-112; OPEN SPACE LOTS 48, 49, AND 113-115; GOLF SPACE LOT 116 TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706 ZONED: PGCC (RESIDENTIAL SUBDISTRICT) ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND		
<b>GRADING, SEDIMENT AND EROSION CONTROL PLAN</b> DATE: OCTOBER 2, 2017 BEI PROJECT NO. 2726 SCALE: AS SHOWN SHEET 4 OF 13		
DESIGN: DBT	DRAFT: DBT	



**BENCHMARK ENGINEERING, INC.**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
 6480 BALTIMORE NATIONAL PIKE SUITE 315 A ELICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 (F) 410-465-6644  
 WWW.BEI-ONLINEENGINEERING.COM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 22A43 Expiration Date: 6-30-2019





**ENGINEER'S CERTIFICATE**

I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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.

*CE Molegani* 5-22-17  
ENGINEER DATE

**DEVELOPER'S CERTIFICATE**

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.

*[Signature]* 5/22/17  
DEVELOPER DATE

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

*[Signature]* 5/30/17  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 6/15/2017  
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 6-21-17  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 6-20-17  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

THIS IS A NEW SHEET 6  
ADDED TO THE PLAN SET

NO.	DATE	REVISION
1	5-17-2017	RELOCATE THE SEDIMENT CONTROL DETAILS TO THIS SHEET AND UPDATE TO 2011 SPECS.

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
Expiration Date: 6-30-2017

**BENCHMARK ENGINEERING, INC.**  
8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-8105 (F) 410-465-8644  
WWW.BEI-ONLINEENGINEERING.COM

**FAIRWAYS AT TURF VALLEY PHASE 3**  
LOTS 1-47 AND 95-112; OPEN SPACE LOTS 48, 49, AND 113-115; GOLF SPACE LOT 116

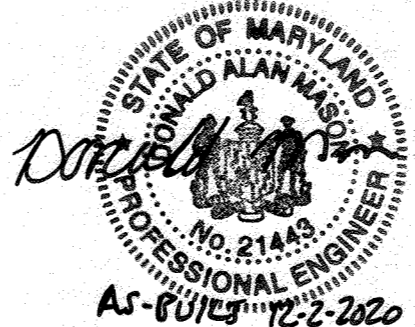
TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706  
ZONED: PGCC (RESIDENTIAL SUBDISTRICT)  
ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND

**GRADING, SEDIMENT, AND EROSION CONTROL DETAILS**

DATE: MAY 17, 2017 BEI PROJECT NO. 2726  
DESIGN: DBT DRAFT: DBT SCALE: AS SHOWN SHEET 6 OF 13

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443 Expiration Date: 12-21-2022

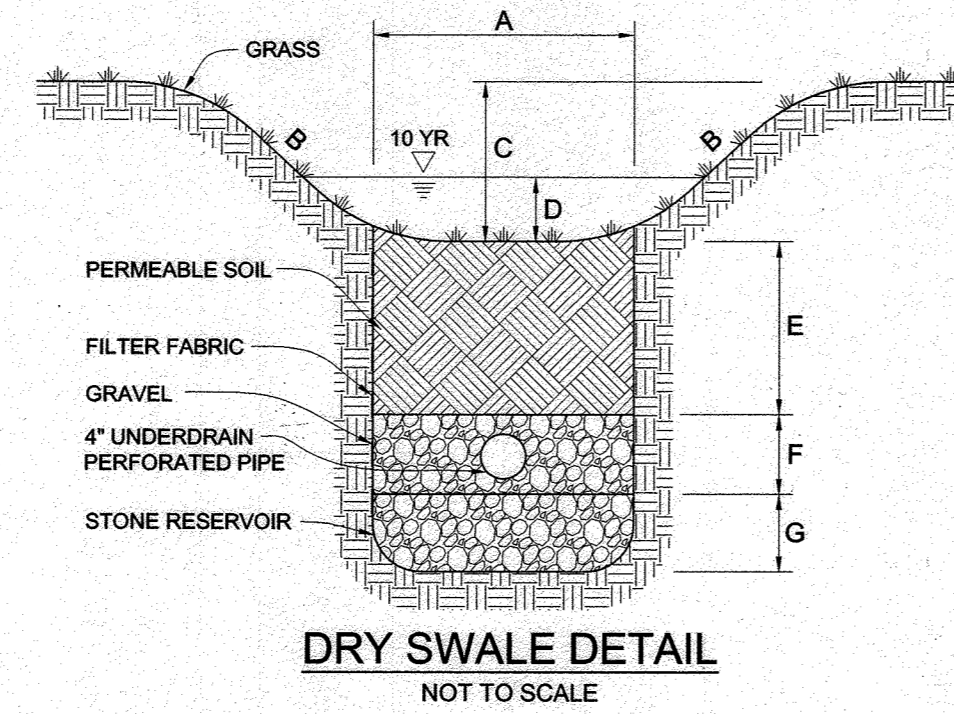
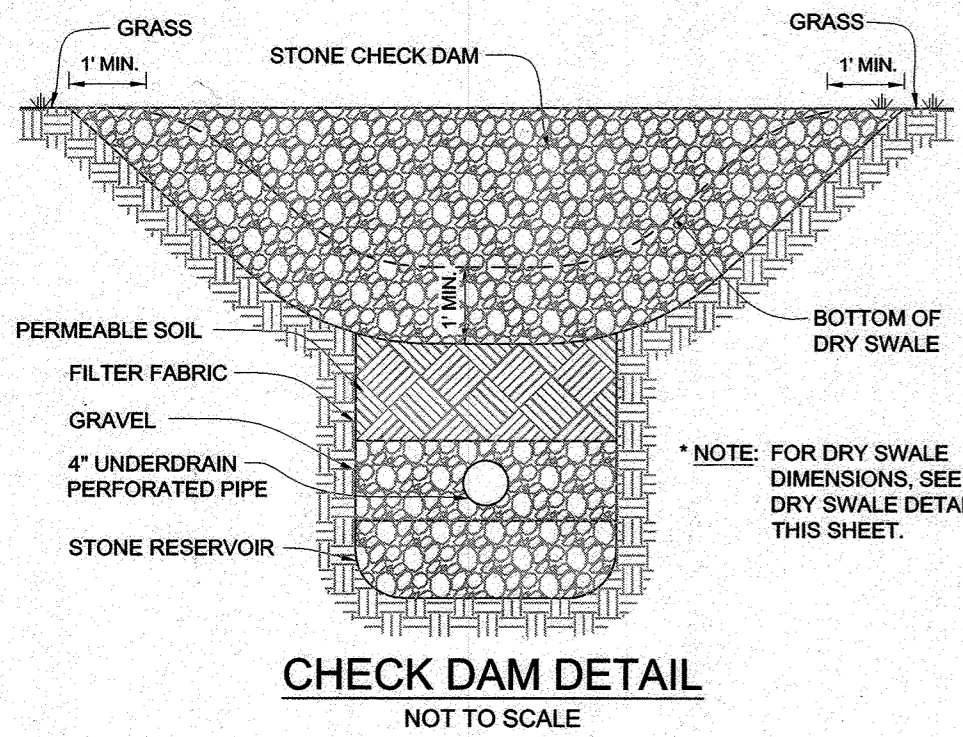


**OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED OPEN CHANNEL SYSTEMS (O-1 AND O-2)**

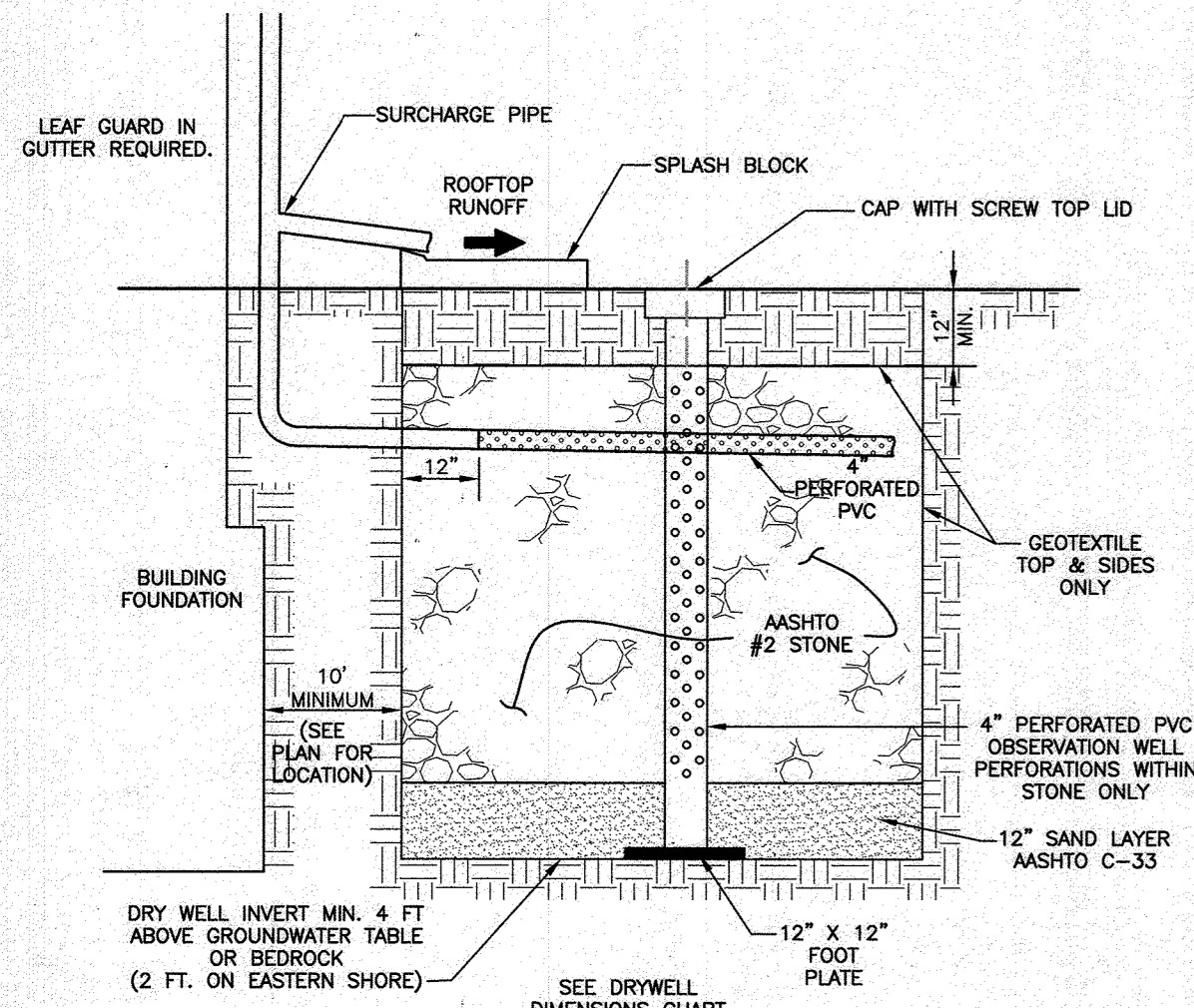
1. THE OPEN CHANNEL SYSTEM SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE FACILITY IS FUNCTIONING PROPERLY.
2. THE OPEN CHANNEL SHALL BE MOVED A MINIMUM OF ONCE A YEAR OR AS NEEDED DURING THE GROWING SEASON TO MAINTAIN A MAXIMUM GRASS HEIGHT OF LESS THAN 6 INCHES.
3. DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED.
4. VISIBLE SIGNS OF EROSION IN THE OPEN CHANNEL SYSTEM SHALL BE REPAIRED AS SOON AS IT IS NOTICED.
5. REMOVE SILT IN THE OPEN CHANNEL SYSTEM WHEN IT EXCEEDS 25% OF THE ORIGINAL WQV.

MATERIALS SPECIFICATION FOR DRY SWALES			
MATERIAL	SPECIFICATION	SIZE	NOTES
DRY SWALE SOIL	SAND 35% - 60% SILT 0% - 25% GROUND COMPOST 40%-50%	N/A	SOIL WITH A HIGHER PERCENT ORGANIC CONTENT IS PREFERRED.
CHECK DAMS (STONE)	AASHTO M-43	0.375" TO 0.75"	
UNDERDRAIN GRAVEL	AASHTO M-43	0.375" TO 0.75"	
UNDERDRAIN PIPING	F 758, TYPE PS 28 OR AASHTO M-278	4" TO 6" RIGID SCHEDULE 40 PVC OR SDR35	3/8" PERF. @ 6" ON CENTER, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES. SEE PROFILES FOR DEPTHS OF GRAVEL OVER AND UNDER PIPING
GEOTEXTILE	CLASS "SE" - APPARENT OPENING SIZE (ASTM-D-4751) GRASS TENSILE STRENGTH (ASTM-D-4832), PUNCTURE RESISTANCE (ASTM-D-4853)	N/A	FOR USE AS NECESSARY BENEATH UNDERDRAINS ONLY

DRY SWALE CHART								
SWALE NO.	A	B	C	D	E	F	G	PHASE UTILIZED
2	8.0'	3:1	2.00'	1.69'	2.5'	0.5'	1.25'	III
4	2.0'	3:1	2.00'	0.18'	2.5'	0.5'	1.52'	III
5	2.0'	3:1	2.50'	0.42'	2.5'	0.5'	1.85'	III



Dry Well Dimension Chart								
Dry Well	Lot	Length (ft)	Width (ft)	Ground	Top of	Depth of	Bottom of	
				Elevation	Stone	Stone (ft)	Stone Elevation	Sand Elevation
#1	Lot 103	7.2	7.2	432.0	431.0	5.0	427.00	426.00
#2	Lot 104	7.2	7.2	431.0	430.0	5.0	426.00	425.00
#3	Lot 105	7.2	7.2	430.0	429.0	5.0	425.00	424.00

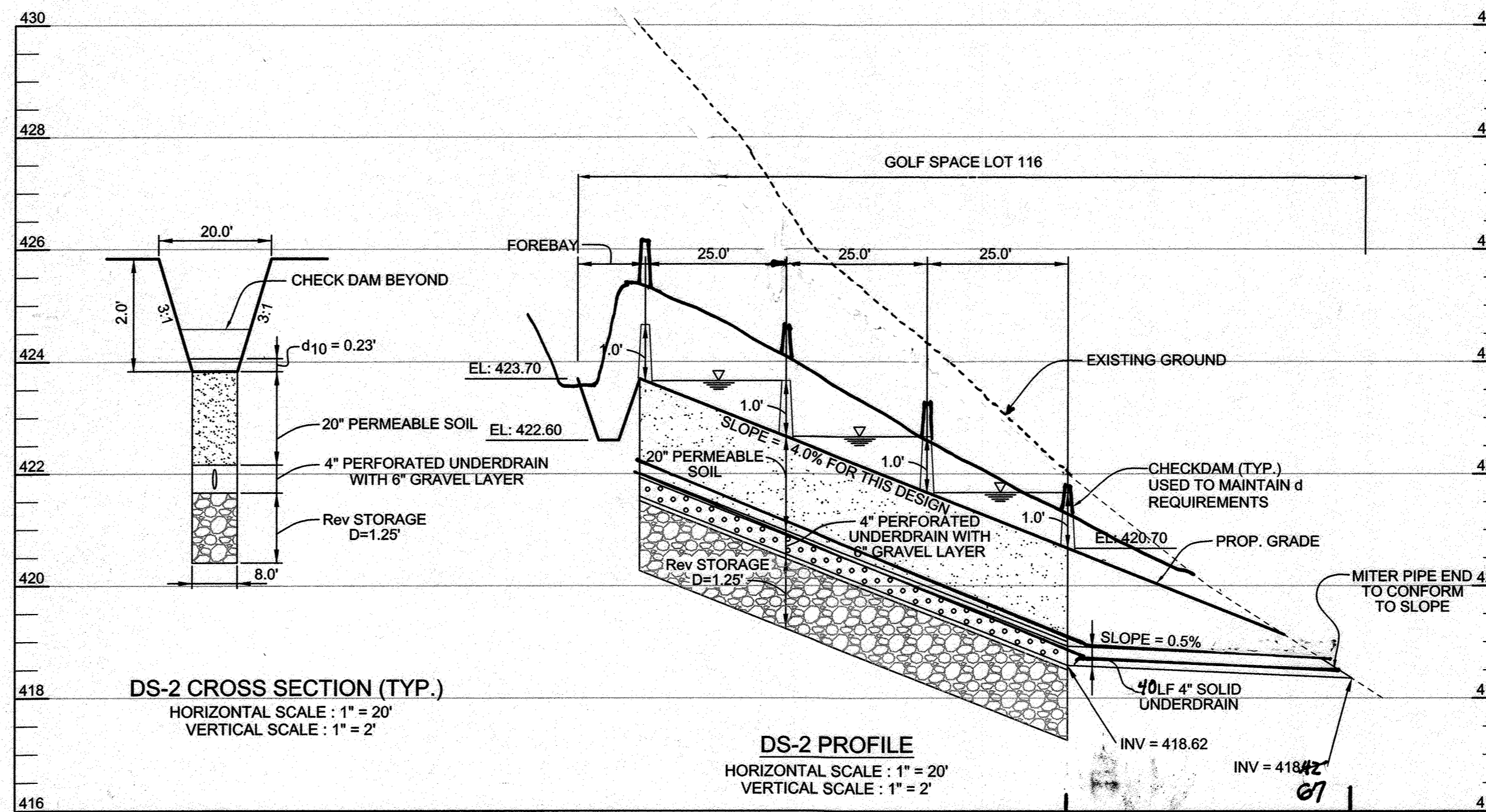
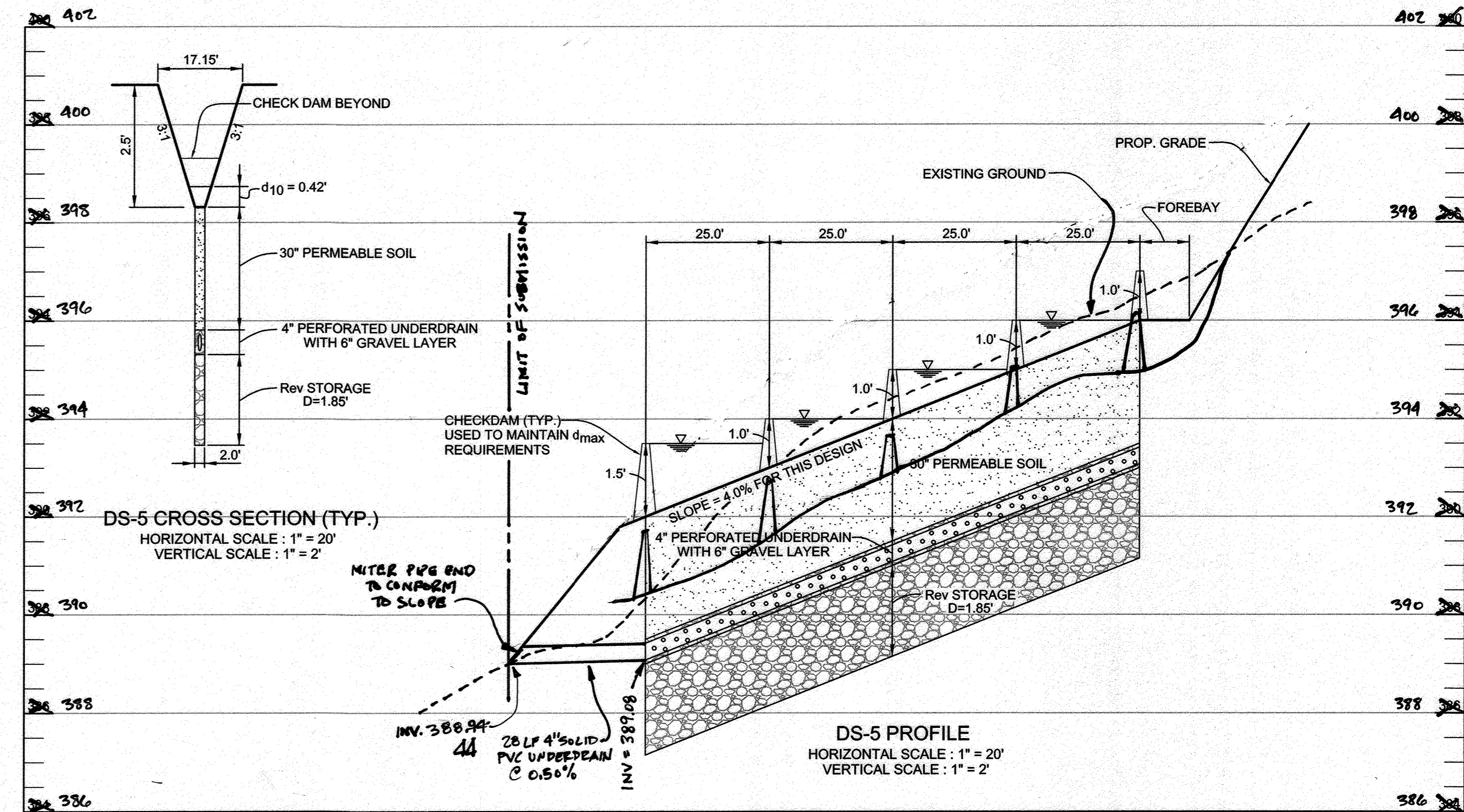
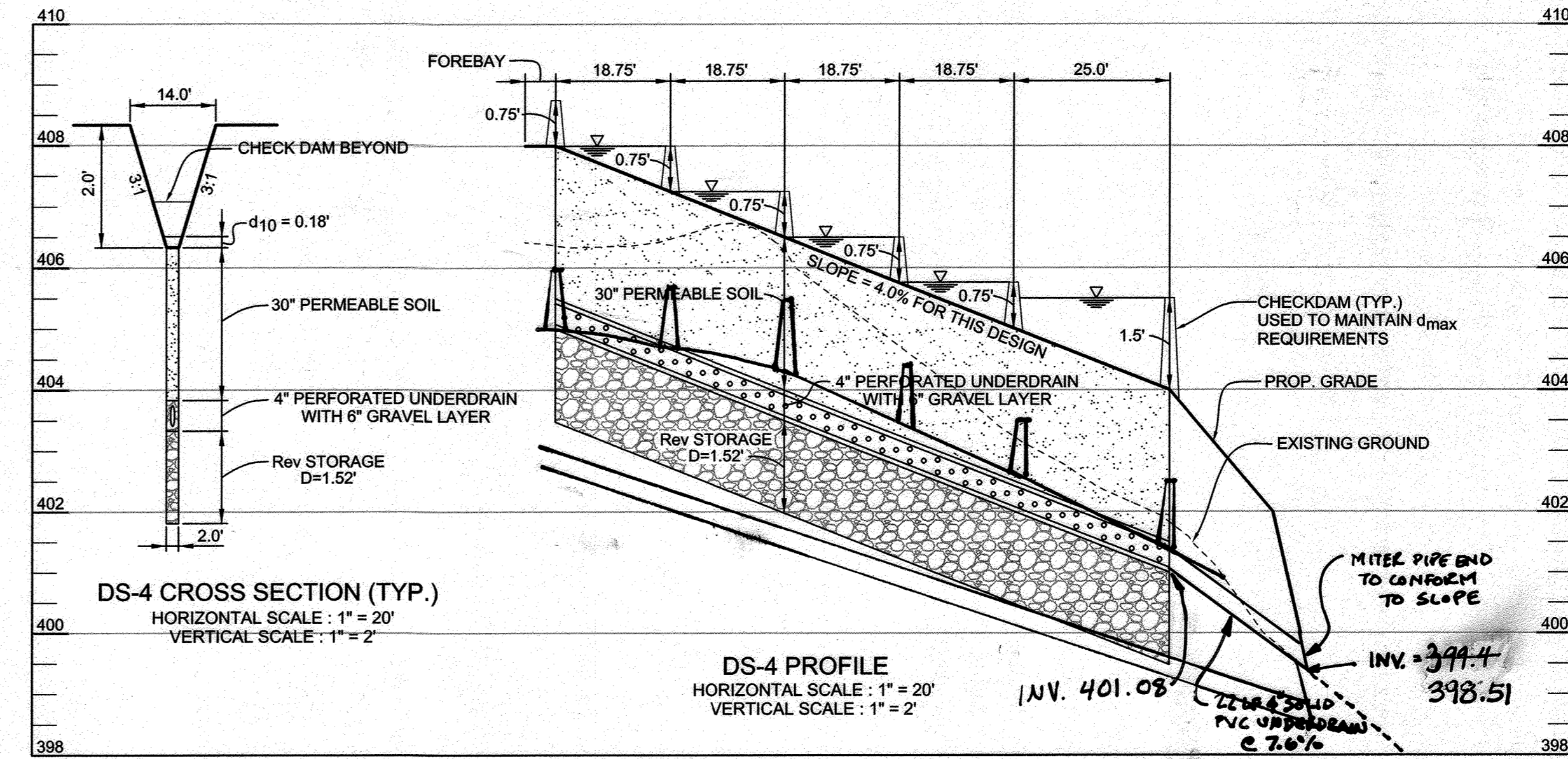


- OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED (M-5) DRY WELLS**
1. The monitoring wells and structures shall be inspected on a quarterly basis and after every large storm event.
  2. Water levels and sediment build up in the monitoring wells shall be recorded over a period of several days to insure trench drainage.
  3. A log book shall be maintained to determine the rate at which the facility drains.
  4. When the facility becomes clogged so that it does not drain down within the 72 hour time period, corrective action shall be taken.
  5. The maintenance log book shall be available to Howard County for inspection to insure compliance with operation and maintenance criteria.
  6. Once the performance characteristics of the infiltration facility 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.

**AS-BUILT CERTIFICATION**  
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications  
Donald Mason, P.E. Date: 12-2-2020

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443, Expiration Date: 12-21-2022

THIS SHEET REPLACES THE PREVIOUS SHEET 6 SIGNED ON 6-21-2017



NO.	DATE	REVISION
4	7-1-2014	CORRECT ERRORS AT DS-4 PROFILE CORRECT LENGTH OF DS-2 UNDERDRAIN.
3	10-2-2017	DELETE DRY SWALE #1. LOWER DRY SWALE #2 BY 1 FOOT AND REVISE EX. GROUND BASED ON REVISED LOCATION. ADD DRY WELL DETAILS AND O&M CHART.
2	5-17-2017	RELOCATE LOTS 1-47, A PORTION OF VARDON LANE, REMAINDER OF VERD COURT FROM F-07-158 TO THIS PLAN. ADD DS-1 AND DS-2 PROFILES AND DETAILS TO THIS PHASE.
1	7-14-2016	REVISE LOT NUMBERS

**BENCHMARK ENGINEERING, INC.**  
8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BE-CIVILENGINEERING.COM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 43880, Expiration Date: 6-30-2019.

APPROVED: DEPARTMENT OF PUBLIC WORKS  
10/24/2017  
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
11-02-17  
10-31-17

**OWNER:** MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP  
**DEVELOPER:** MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP  
**FAIRWAYS AT TURF VALLEY PHASE 3**  
LOTS 1-47 AND 95-112; OPEN SPACE LOTS 48, 49, AND 113-115; GOLF SPACE LOT 116  
TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706  
ZONED: PGCC (RESIDENTIAL SUBDISTRICT)  
ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND  
**REVISED SWM OPEN CHANNEL PROFILES AND DETAILS**  
DATE: OCTOBER 2, 2017 BEI PROJECT NO. 2726  
DESIGN: DBT DRAFT: DBT SCALE: AS SHOWN SHEET 7 OF 13