

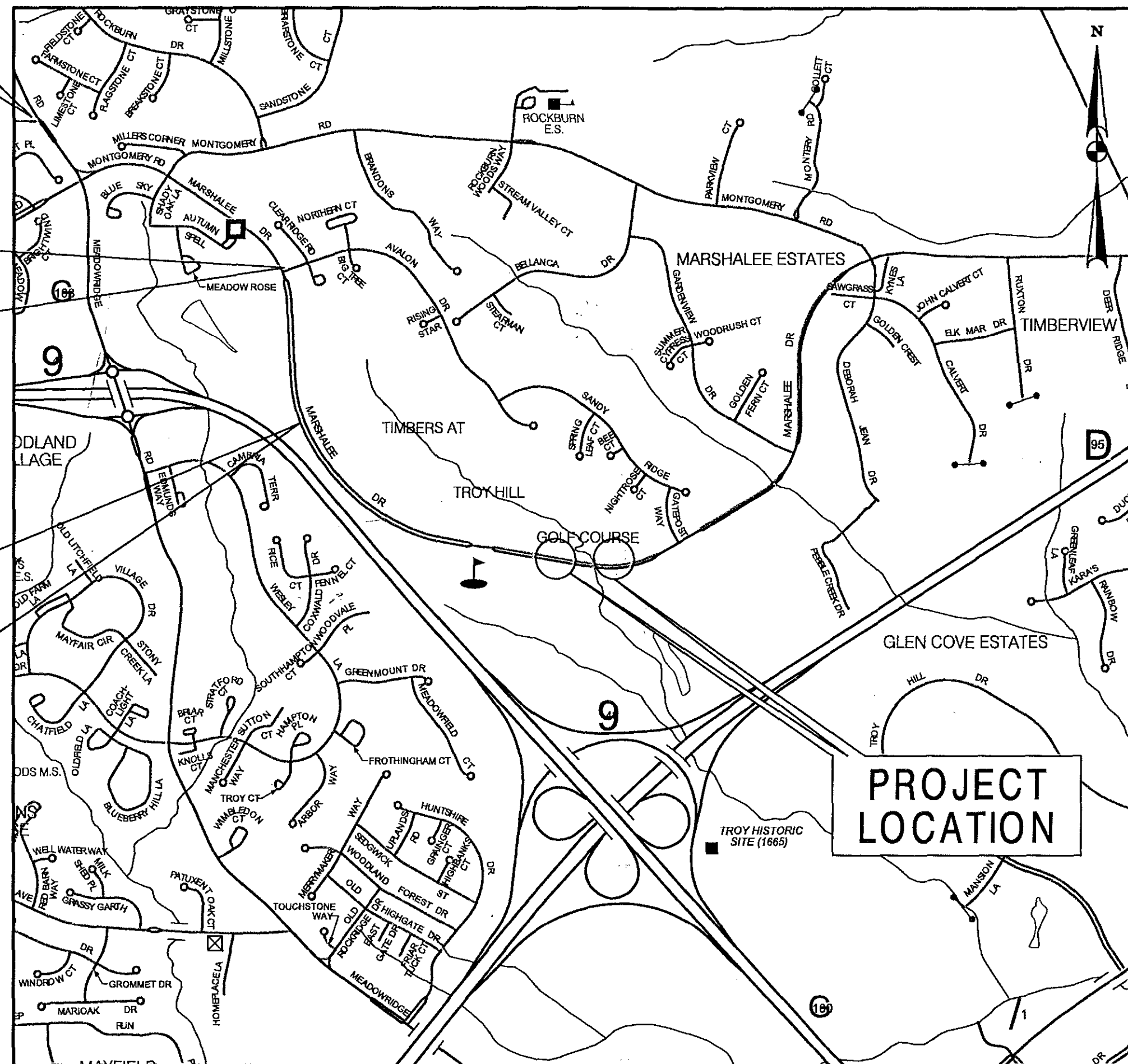
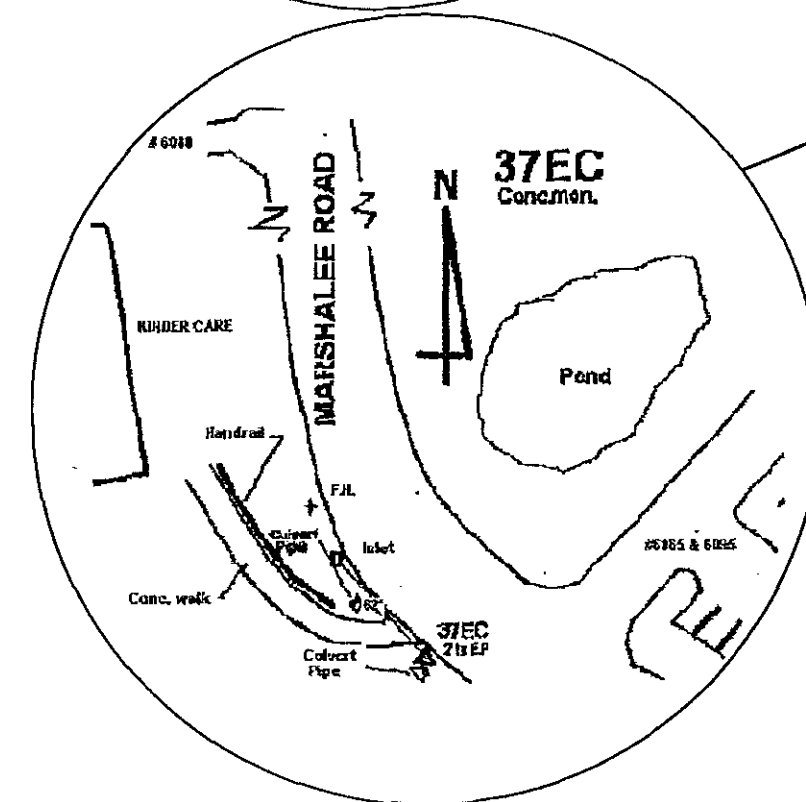
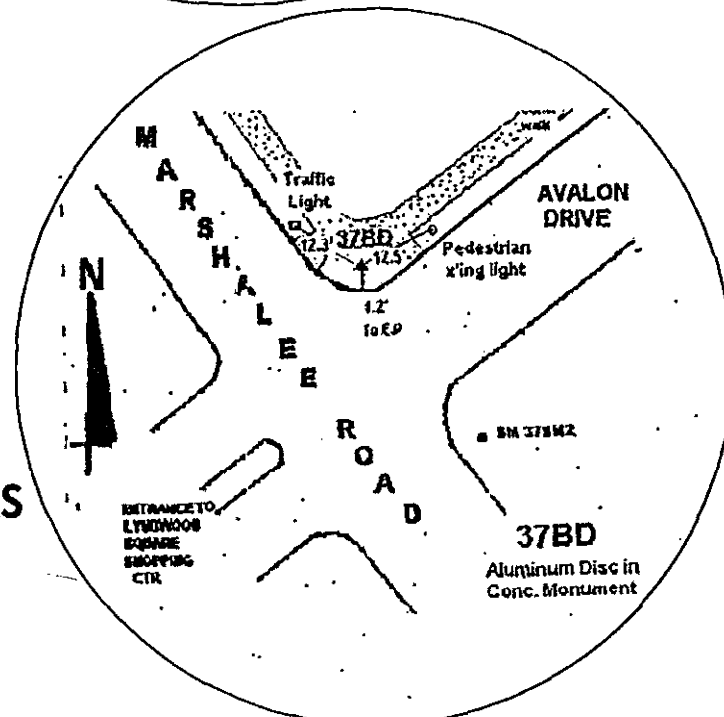
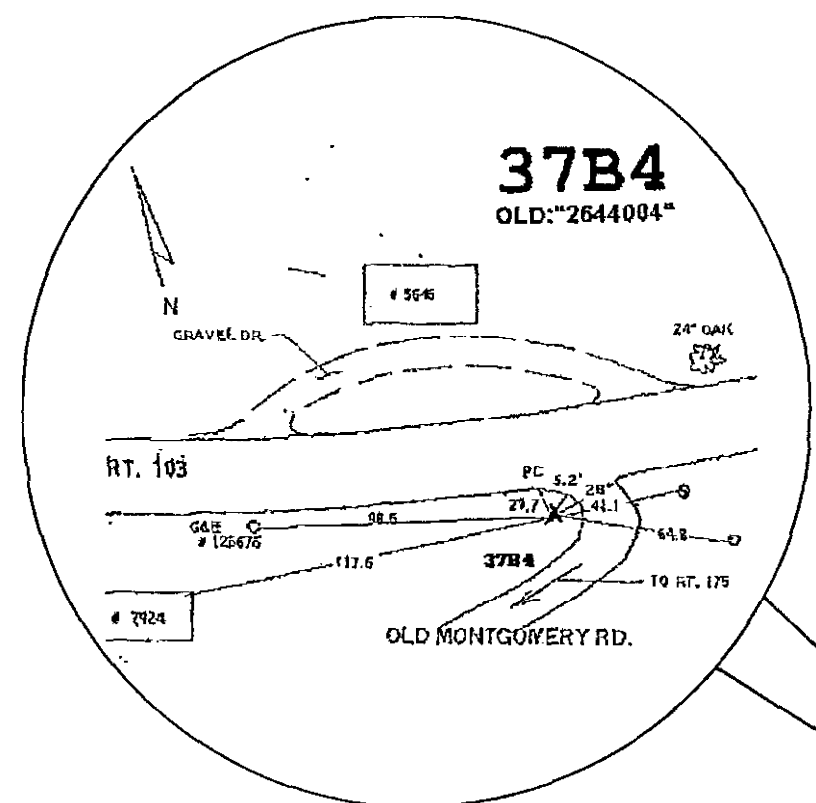
# TIMBERS OF TROY GOLF COURSE

## SLOPE REMEDIATION

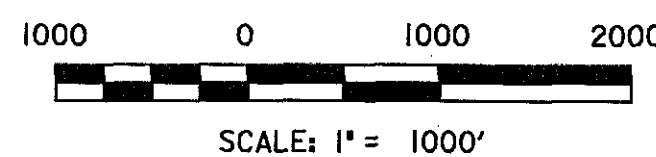
ELECTION DISTRICT 1  
HOWARD COUNTY, MARYLAND

### INDEX OF SHEETS

- 1 TITLE SHEET
- 2 OVERALL SITE PLAN
- 3 SITE PLAN NO.1
- 4 SITE PLAN NO.2
- 5 TYPICAL SECTION AND MISCELLANOUS DETAILS
- 6 EROSION AND SEDIMENT CONTROL PLAN
- 7 EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
- 8-10 CROSS SECTIONS



LOCATION MAP  
HOWARD COUNTY



### GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING CONSTRUCTION INSPECTOR DIVISION AT 410-313-1822, AND MISS UTILITY AT 1-800-257-7777 AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK.
  2. THE SYSTEM OF COORDINATES USED BY HOWARD COUNTY IS BASED IN THE FOLLOWING DATUMS AND PROJECTIONS:  
HORIZONTAL: MARYLAND NAD83 (ADJ. 1991)  
VERTICAL: NAVD88  
HOWARD COUNTY CONTROL:  
37B4 (ELEV. 401.318), N 563,928.5811, E 1,773,109.0962  
37BD (ELEV. 384.9571), N 562,548.0179, E 1,775,437.6980  
37EC (ELEV. 346.153), N 561,053.8288, E 1,772,580.4112
  3. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY.
  4. ALL WORK SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, ISSUED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND THE NATURAL RESOURCES CONSERVATION SERVICE.
  5. TOPOGRAPHIC SURVEYS WERE PERFORMED BY URS CORPORATION IN MAY 2010 IN THE VICINITY OF THE SUPPLEMENTAL TOPOGRAPHIC SURVEY WAS PROVIDED BY HOWARD COUNTY IN FEB. 2013.
  6. THE PROPERTY LINES AND EASEMENT LINES ARE APPROXIMATE.
  7. SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND THE FIELD CONDITIONS, THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THEN THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.
  8. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHOD, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
  9. APPROXIMATE UTILITIES ARE SHOWN FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
  10. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- UTILITY CONTACTS:
- BGE: (410)-297-7835 (ELECTRIC)
  - BGE: (410)-291-5101 (GAS)
  - VERIZON: (410)-224-9285
  - MCI: (302)-728-5901
  - XPELUS: (703)-386-2340
  - ABOVENET: (443)-250-1873
  - COMCAST: (410)-513-3207

### DEVELOPER'S CERTIFICATION

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY 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."

Steve Shaver  
SIGNATURE OF DEVELOPER

12/23/13  
DATE

### ENGINEER'S CERTIFICATION

"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."

David T. Moriconi  
DAVID T. MORICONI  
URS CORPORATION  
4 NORTH PARK DRIVE  
HUNT VALLEY, MD 21030

12-5-2013  
DATE

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

John K. Roberts  
JOHN K. ROBERTS  
HOWARD SOIL CONSERVATION DISTRICT

11/9/14  
DATE

### PROFESSIONAL CERTIFICATION

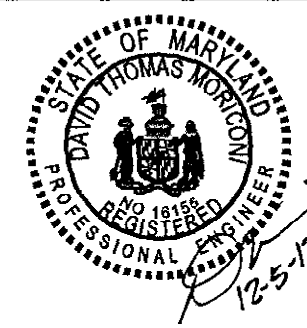
"I HEREBY CERTIFY THAT DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16156 EXPIRATION DATE: 8/28/2014."

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

Steve Shaver 12/23/13  
DIRECTOR OF PUBLIC WORKS DATE  
Steve Shaver 12/23/13  
CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS DATE

Steve Shaver 12/23/13  
CHIEF, BUREAU OF ENGINEERING DATE  
W. J. ... 12-23-13  
CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY  
**URS**  
4 NORTH PARK DRIVE  
HUNT VALLEY, MARYLAND  
TEL: (410) 785-7220



DES: JHY			
DRN: CDF			
CHK: DTM			
DATE: 11/13	BY	NO.	REVISION

TITLE SHEET

SCALE MAP NO. BLOCK NO.

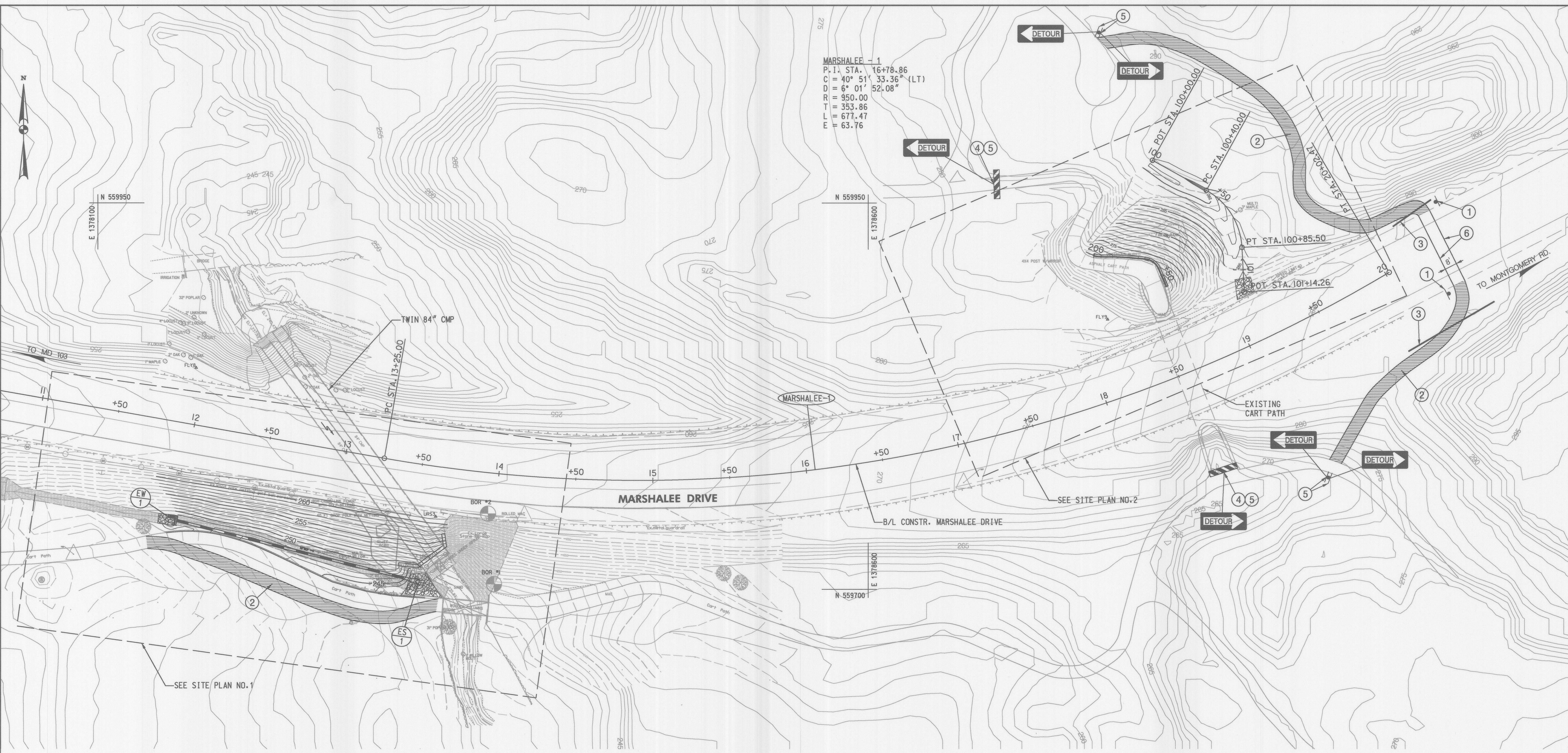
TIMBERS OF TROY GOLF COURSE  
SLOPE REMEDIATION J-4136

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND

SCALE  
AS SHOWN

SHEET  
1 OF 10

EP-14-008



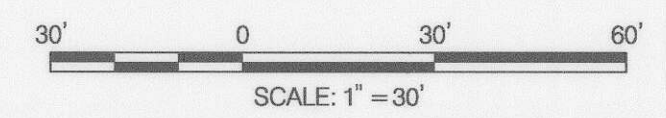
MARSHALEE - 1  
 P.I. STA. 16+78.86  
 C = 40° 51' 33.36" (LT)  
 D = 6° 01' 52.08"  
 R = 950.00  
 T = 353.86  
 L = 677.47  
 E = 63.76

TRAVERSE POINTS			
POINT NO.	NORTH	EAST	ELEVATION
FLY8	559,843.2196	1,378,163.9955	261.23
FLY9	559,874.4123	1,378,755.4005	279.21
URS1	560,323.3977	1,376,190.2199	352.20
URS2	560,001.2595	1,376,901.5809	329.36
URS3	559,746.8567	1,378,319.2746	261.46
URS4	560,101.2341	1,376,724.0620	338.03
URS5	560,247.7086	1,376,404.7443	347.81
URS6	560,603.0883	1,375,968.7021	352.02
URS7	561,141.4925	1,375,627.7577	344.38

MARSHALEE DRIVE BASELINE DATA			
DESIGNATION	STATION	NORTH	EAST
POT	10+00.00	559,841.0681	1,377,965.7907
PC CURVE	13+25.00	559,784.8095	1,377,285.8844
PI CURVE	16+78.86	559,723.5548	1,378,634.4036
PT CURVE	20+02.47	559,905.2292	1,378,938.0682

- NOTES:
- 30" X 30" CART PATH CROSSING SIGN W11-11 ON SINGLE 2" X 2" TUBULAR STEEL POST SET PER COUNTY STANDARDS.
  - PORTABLE ROADWAY MAT BY GREAT MATS OR ACCEPTED EQUAL USED AS A TEMPORARY CART PATH.
  - 6" PVC PIPE AS DIRECTED BY THE COUNTY
  - TYPE III BARRIAGE
  - 12" X 24" DETOUR SIGN ON SINGLE 2" X 2" TUBULAR STEEL POST, RIGHT OR LEFT ARROW PER PLAN.
  - 5" WHITE TEMPORARY PAVEMENT MAKING TAPE.

PROFESSIONAL CERTIFICATION  
 "I HEREBY CERTIFY THAT 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. 16156, EXPIRATION DATE: 8/28/2014."

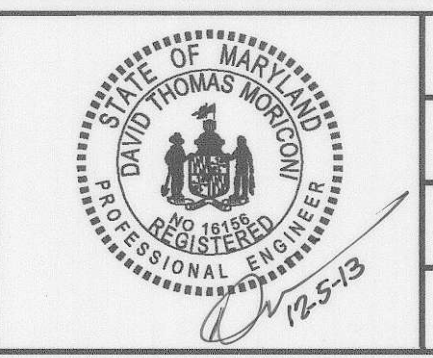


DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

Director of Public Works: *Steve Sharav* 12/23/13  
 Chief, Bureau of Engineering: *Steve Sharav (acting)* 12/23/13

Chief, Division of Transportation and Special Projects: *Steve Sharav* 12/23/13  
 Chief, Bureau of Highways: *W. J. R. O'Neil* 12-23-13

PREPARED BY  
**URS**  
 4 NORTH PARK DRIVE  
 HUNT VALLEY, MARYLAND  
 TEL: (410) 785-7220



DES:	JHY		
DRN:	CDF		
CHK:	DTM		
DATE:	11/13		
BY:	NO.	REVISION	DATE

OVERALL SITE PLAN

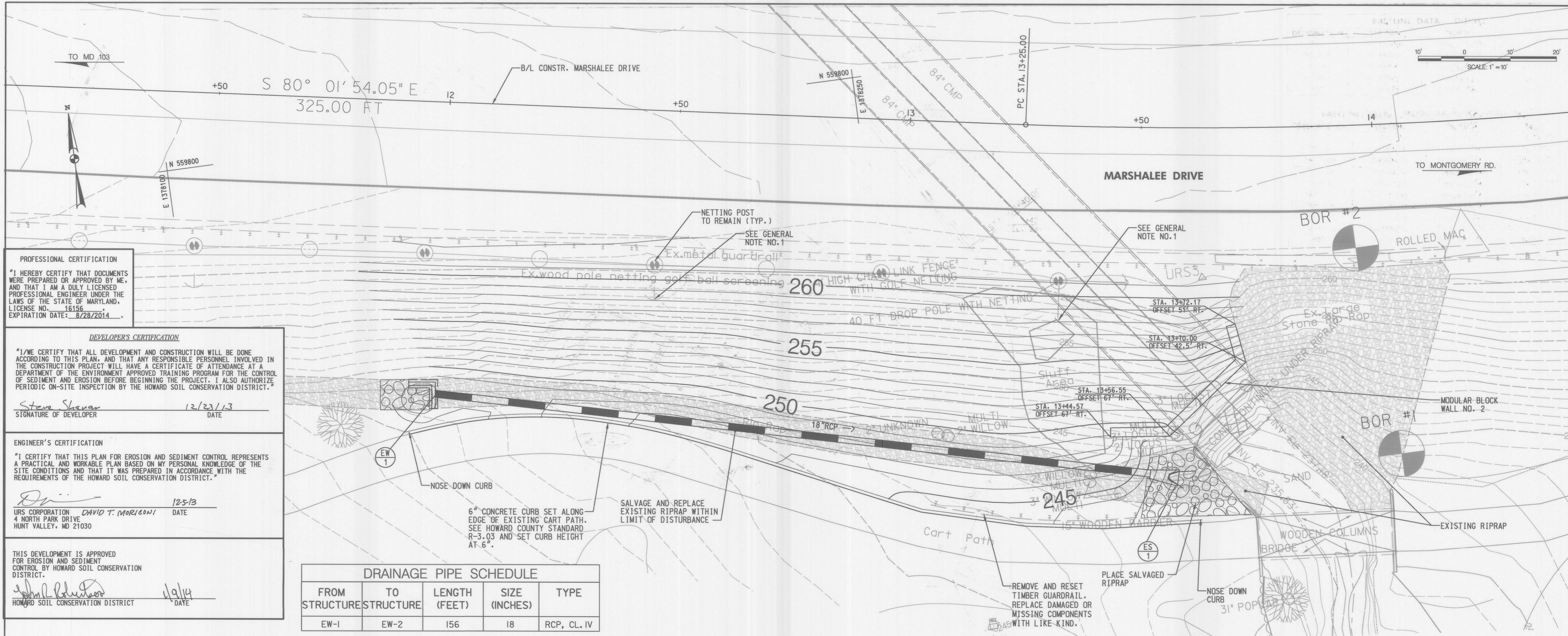
SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

TIMBERS OF TROY GOLF COURSE  
 SLOPE REMEDIATION

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND

SCALE 1" = 30'

SHEET 2 OF 10



**PROFESSIONAL CERTIFICATION**  
 "I HEREBY CERTIFY THAT 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. 16156. EXPIRATION DATE: 8/28/2014."

**DEVELOPER'S CERTIFICATION**  
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY 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."  
 Steve Slawson 12/23/13  
 SIGNATURE OF DEVELOPER DATE

**ENGINEER'S CERTIFICATION**  
 "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."  
 David T. Moriconi 12-5-13  
 URS CORPORATION 4 NORTH PARK DRIVE HUNT VALLEY, MD 21030  
 SIGNATURE DATE

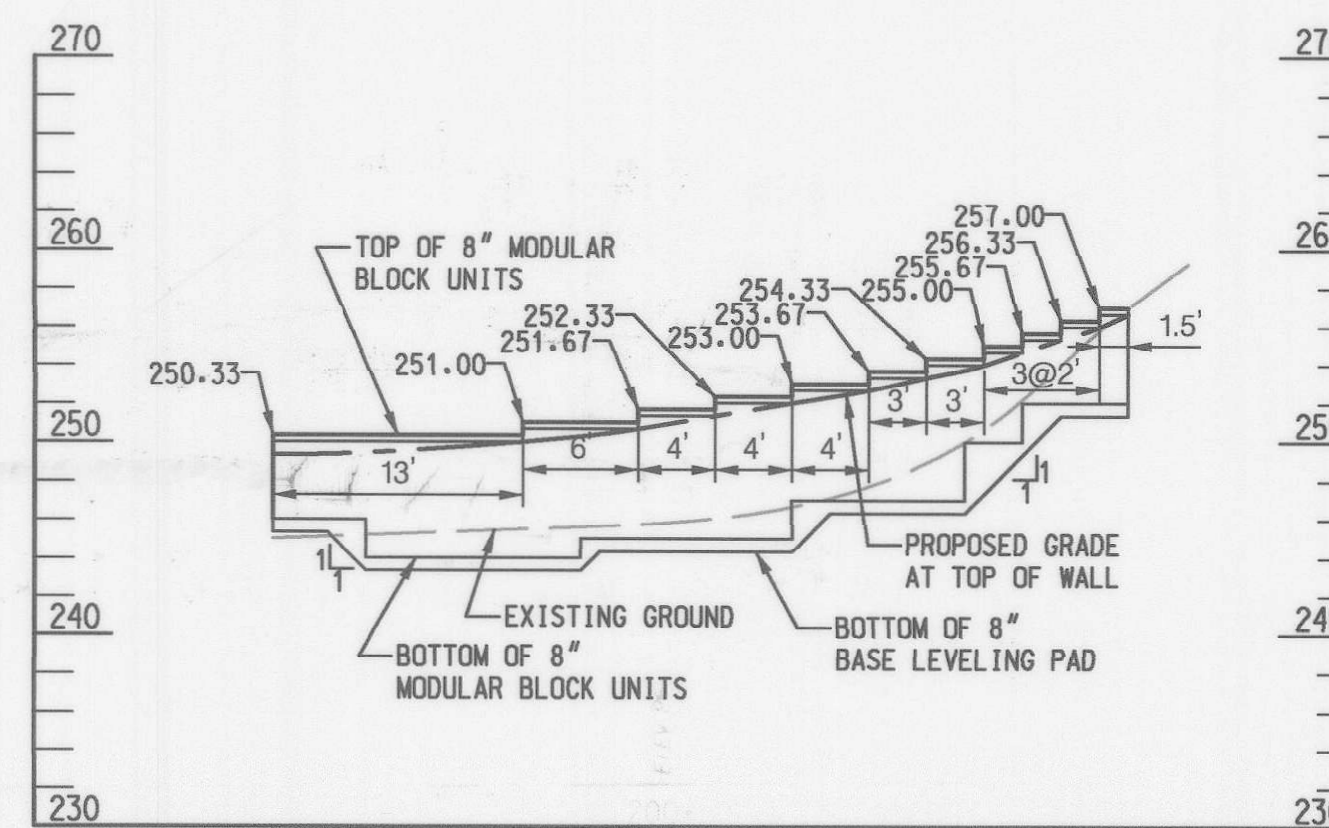
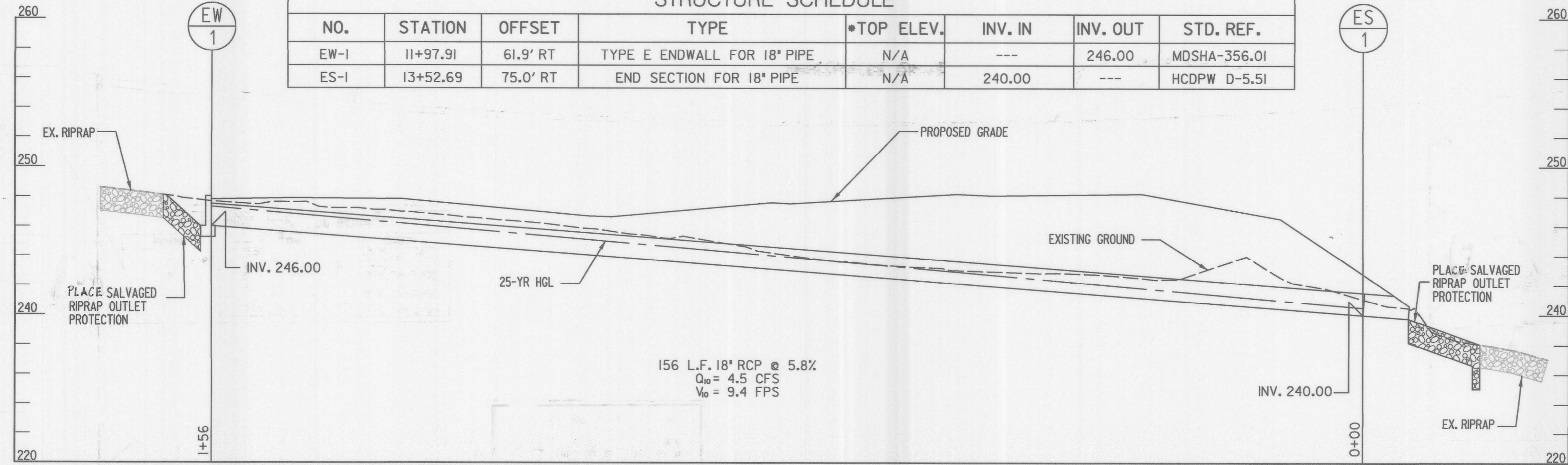
THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.  
 John L. Blanton 11/9/14  
 HOWARD SOIL CONSERVATION DISTRICT DATE

**DRAINAGE PIPE SCHEDULE**

FROM STRUCTURE	TO STRUCTURE	LENGTH (FEET)	SIZE (INCHES)	TYPE
EW-1	EW-2	156	18	RCP, CL. IV

**STRUCTURE SCHEDULE**

NO.	STATION	OFFSET	TYPE	*TOP ELEV.	INV. IN	INV. OUT	STD. REF.
EW-1	11+97.91	61.9' RT	TYPE E ENDWALL FOR 18" PIPE	N/A	---	246.00	MDSHA-356.01
ES-1	13+52.69	75.0' RT	END SECTION FOR 18" PIPE	N/A	240.00	---	HCDPW D-5.51



NOTE:  
 1. THE EXISTING GUY WIRE SUPPORT TO REMAIN. DETACH GUY WIRES TO ACCOMMODATE GRADING AND REATTACH ONCE GRADING IS COMPLETE.

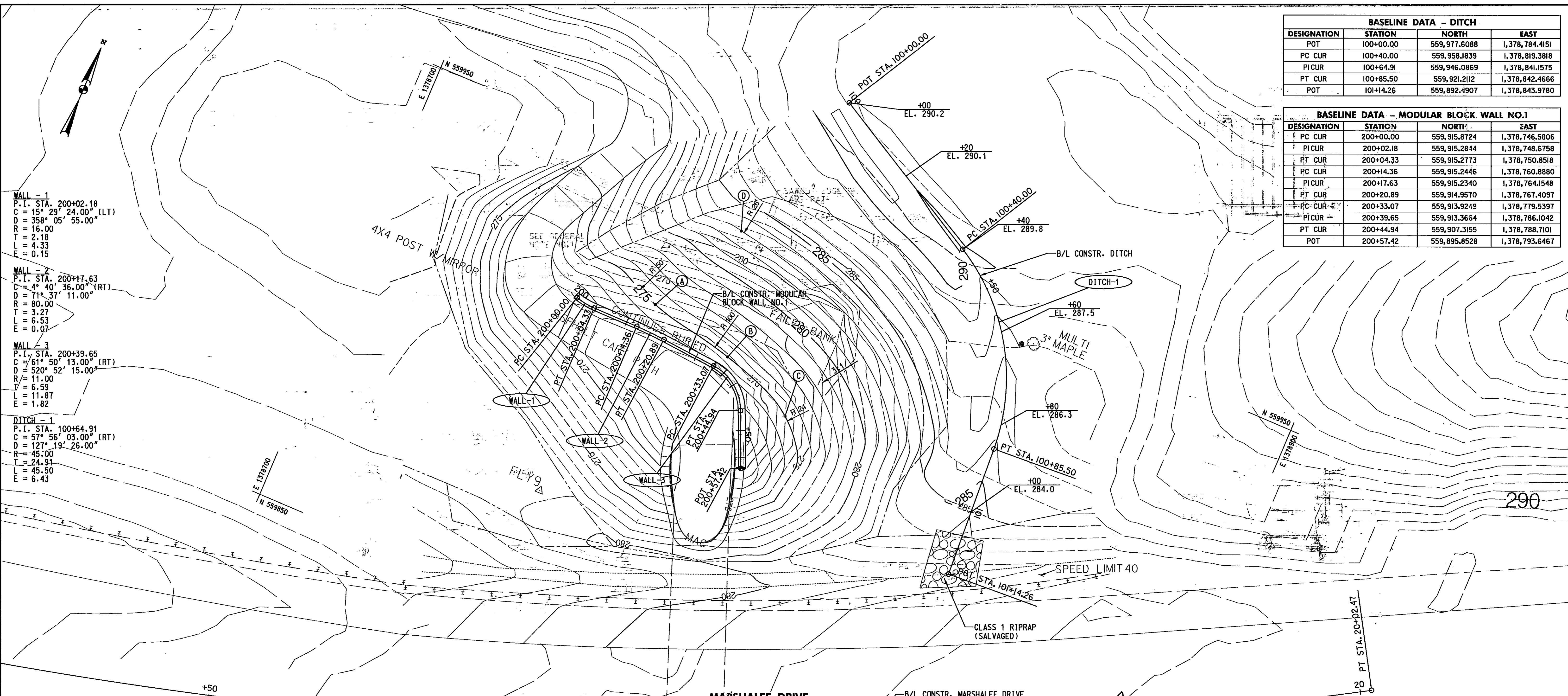
PIPE PROFILE EW-1 TO EW-2  
 SCALE: 1"=10' (HORZ) 1"= 5' (VERT.)

MODULAR BLOCK WALL NO.2 PROFILE  
 SCALE: 1"=10'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>Janet...</i> 12/23/13 Chief, Division of Transportation and Special Projects: <i>Steve Slawson</i> 12/23/13		PREPARED BY <b>URS</b> 4 NORTH PARK DRIVE HUNT VALLEY, MARYLAND TEL: (410) 785-7220 Chief, Bureau of Engineering: <i>Steve Slawson</i> 12/23/13 Chief, Bureau of Highways: <i>Walt Zambelli</i> 12-23-13		DES: JHY DRN: CDF CHK: DTM DATE: 11/13		SCALE MAP NO. _____ BLOCK NO. _____ <b>SITE PLAN NO.1</b>		<b>TIMBERS OF TROY GOLF COURSE          SLOPE REMEDIATION</b> ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND		SCALE 1"=10' SHEET 3 OF 10
--	--	--	--	---	--	--	--	---	--	-------------------------------------

BASELINE DATA - DITCH			
DESIGNATION	STATION	NORTH	EAST
POT	100+00.00	559,977.6088	1,378,784.4151
PC CUR	100+40.00	559,958.1839	1,378,819.3818
PI CUR	100+64.91	559,946.0869	1,378,841.1575
PT CUR	100+85.50	559,921.2112	1,378,842.4666
POT	101+14.26	559,892.4907	1,378,843.9780

BASELINE DATA - MODULAR BLOCK WALL NO.1			
DESIGNATION	STATION	NORTH	EAST
PC CUR	200+00.00	559,915.8724	1,378,746.5806
PI CUR	200+02.18	559,915.2844	1,378,748.6758
PT CUR	200+04.33	559,915.2773	1,378,750.8518
PC CUR	200+14.36	559,915.2446	1,378,760.8880
PI CUR	200+17.63	559,915.2340	1,378,764.1548
PT CUR	200+20.89	559,914.9570	1,378,767.4097
PC CUR	200+33.07	559,913.9249	1,378,779.5397
PI CUR	200+39.65	559,913.3664	1,378,786.1042
PT CUR	200+44.94	559,907.3155	1,378,788.7101
POT	200+57.42	559,895.8528	1,378,793.6467



**WALL - 1**  
P.I. STA. 200+02.18  
C = 15° 29' 24.00" (LT)  
D = 358' 05" 55.00"  
R = 16.00  
T = 2.18  
L = 4.33  
E = 0.15

**WALL - 2**  
P.I. STA. 200+17.63  
C = 4° 40' 36.00" (RT)  
D = 71° 37' 11.00"  
R = 80.00  
T = 3.27  
L = 6.53  
E = 0.07

**WALL - 3**  
P.I. STA. 200+39.65  
C = 61° 50' 13.00" (RT)  
D = 520' 52" 15.00"  
R = 11.00  
T = 6.59  
L = 11.87  
E = 1.82

**DITCH - 1**  
P.I. STA. 100+64.91  
C = 57° 56' 03.00" (RT)  
D = 127' 19" 26.00"  
R = 45.00  
T = 24.91  
L = 45.50  
E = 6.43

**DEVELOPER'S CERTIFICATION**  
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Steve Sharav 12/23/13  
SIGNATURE OF DEVELOPER DATE

**ENGINEER'S CERTIFICATION**  
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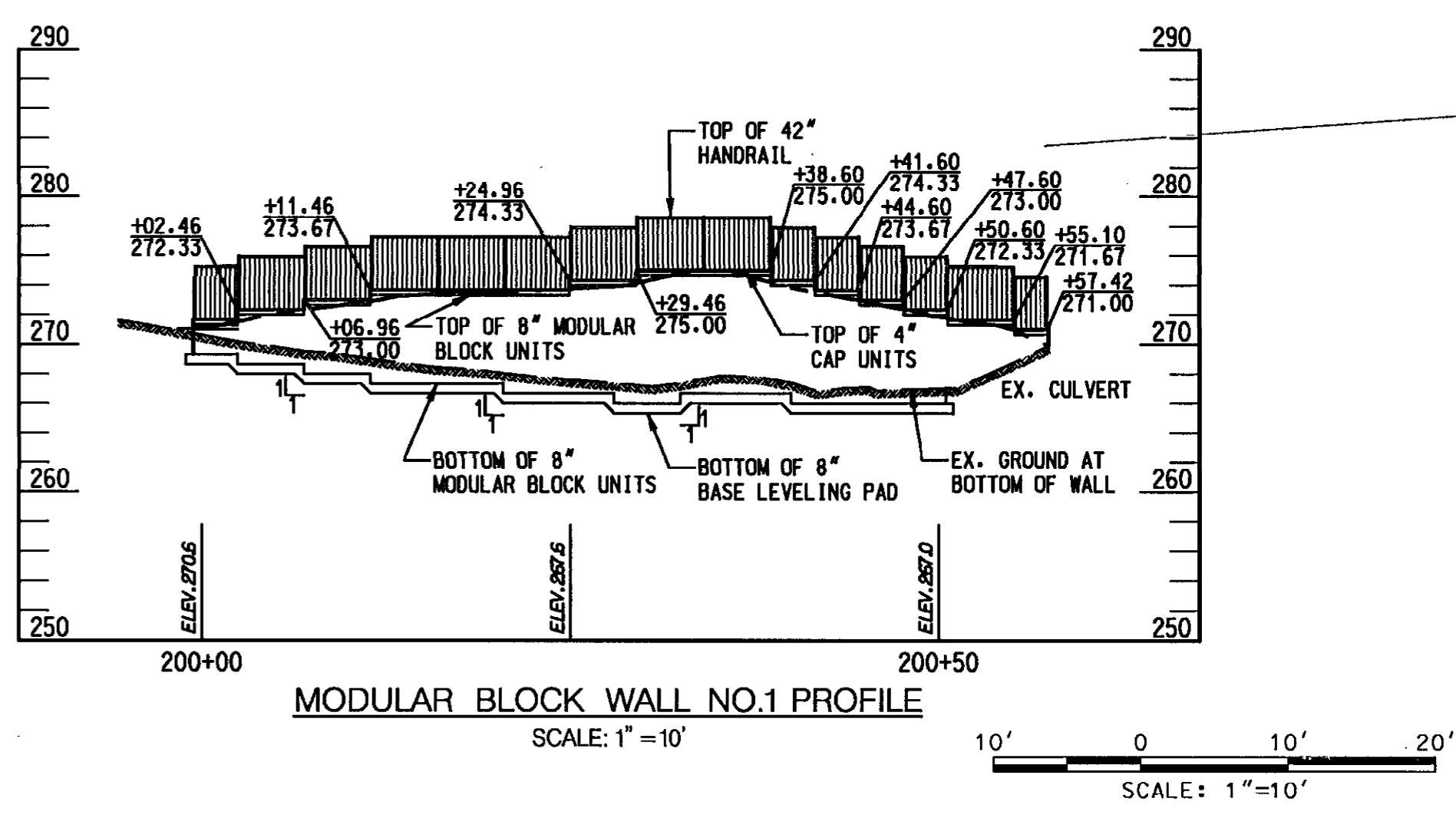
URS CORPORATION 12-5-13  
DAVID T. MORILAWI DATE  
4 NORTH PARK DRIVE  
HUNT VALLEY, MD 21030

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

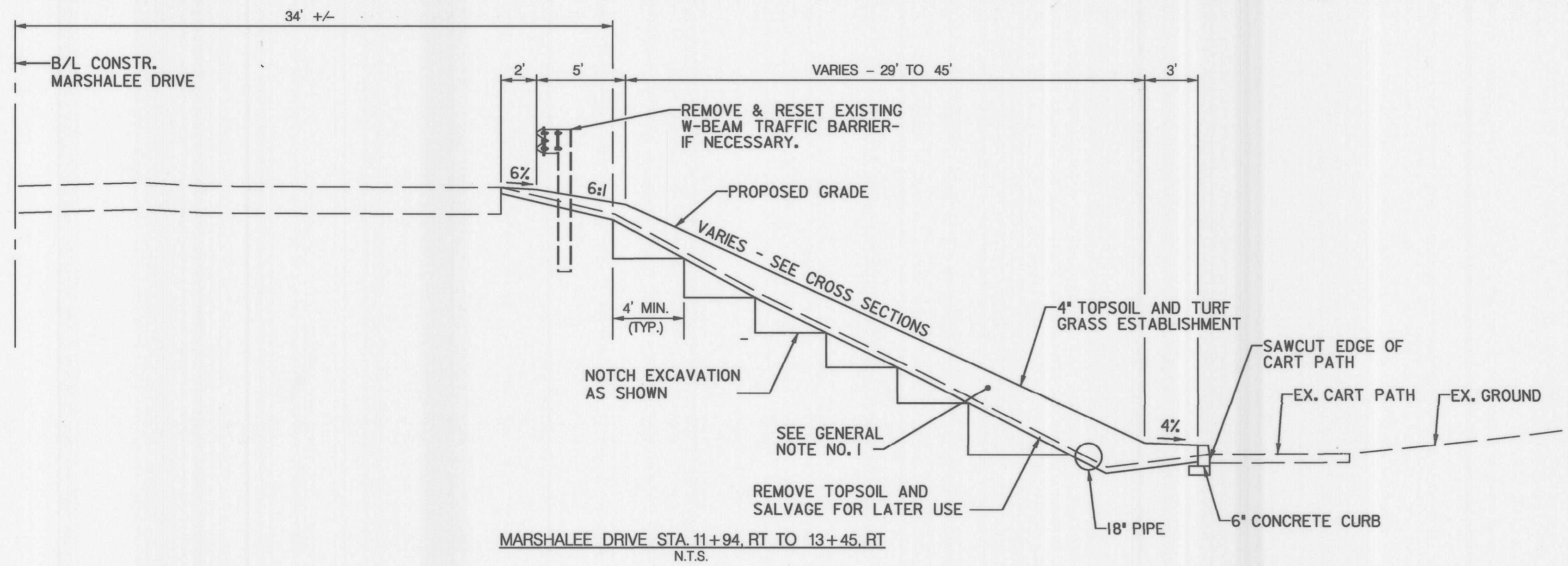
1/9/14  
HOWARD SOIL CONSERVATION DISTRICT DATE

GRADING CONTROL POINTS		
POINT	NORTH	EAST
A	559,921.1226	1,378,762.7540
B	559,916.8943	1,378,781.5802
C	559,910.0049	1,378,798.0493
D	559,943.0221	1,378,773.6783

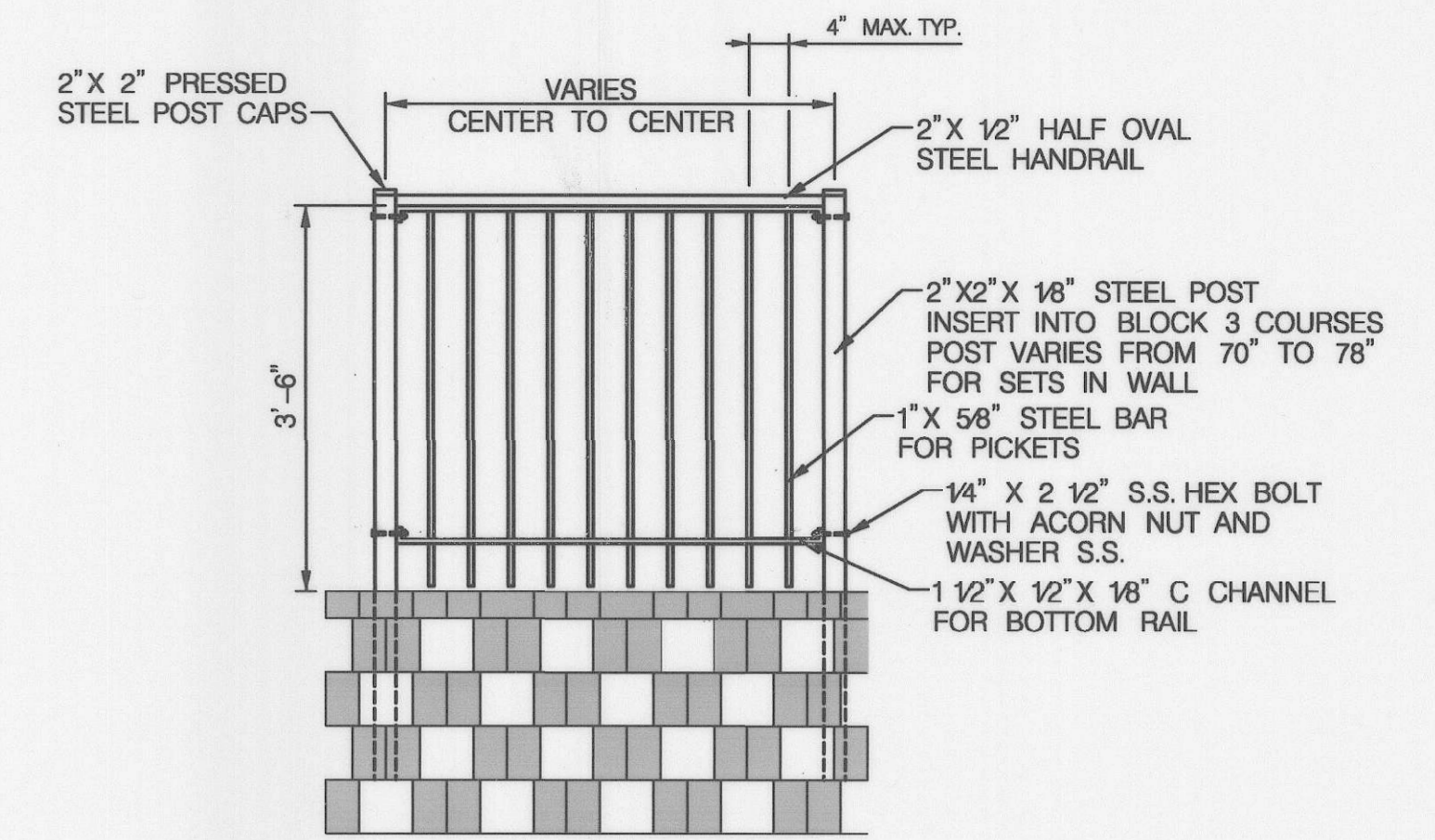
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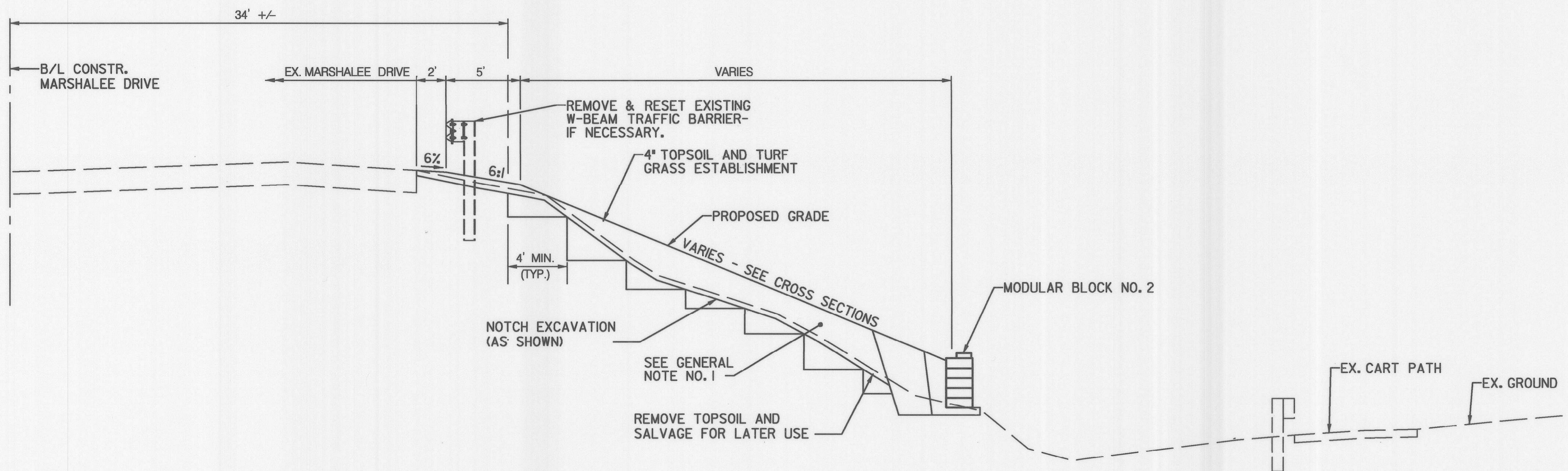
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 12/23/13 DIRECTOR OF PUBLIC WORKS DATE		PREPARED BY <b>URS</b> 4 NORTH PARK DRIVE HUNT VALLEY, MARYLAND TEL: (410) 785-7220		STATE OF MARYLAND DAVID THOMAS HOWARD PROFESSIONAL ENGINEER 12-5-13		DES: DRN: CHK: DATE: 11/13		<b>SITE PLAN NO.2</b>		<b>TIMBERS OF TROY GOLF COURSE SLOPE REMEDIATION</b>		SCALE 1"=10' SHEET 4 OF 10	
12/23/13 CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS DATE		11/23/13 CHIEF, BUREAU OF ENGINEERING DATE		12-23-13 CHIEF, BUREAU OF HIGHWAYS DATE		BY NO. REVISION DATE		SCALE MAP NO. BLOCK NO.		ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND			



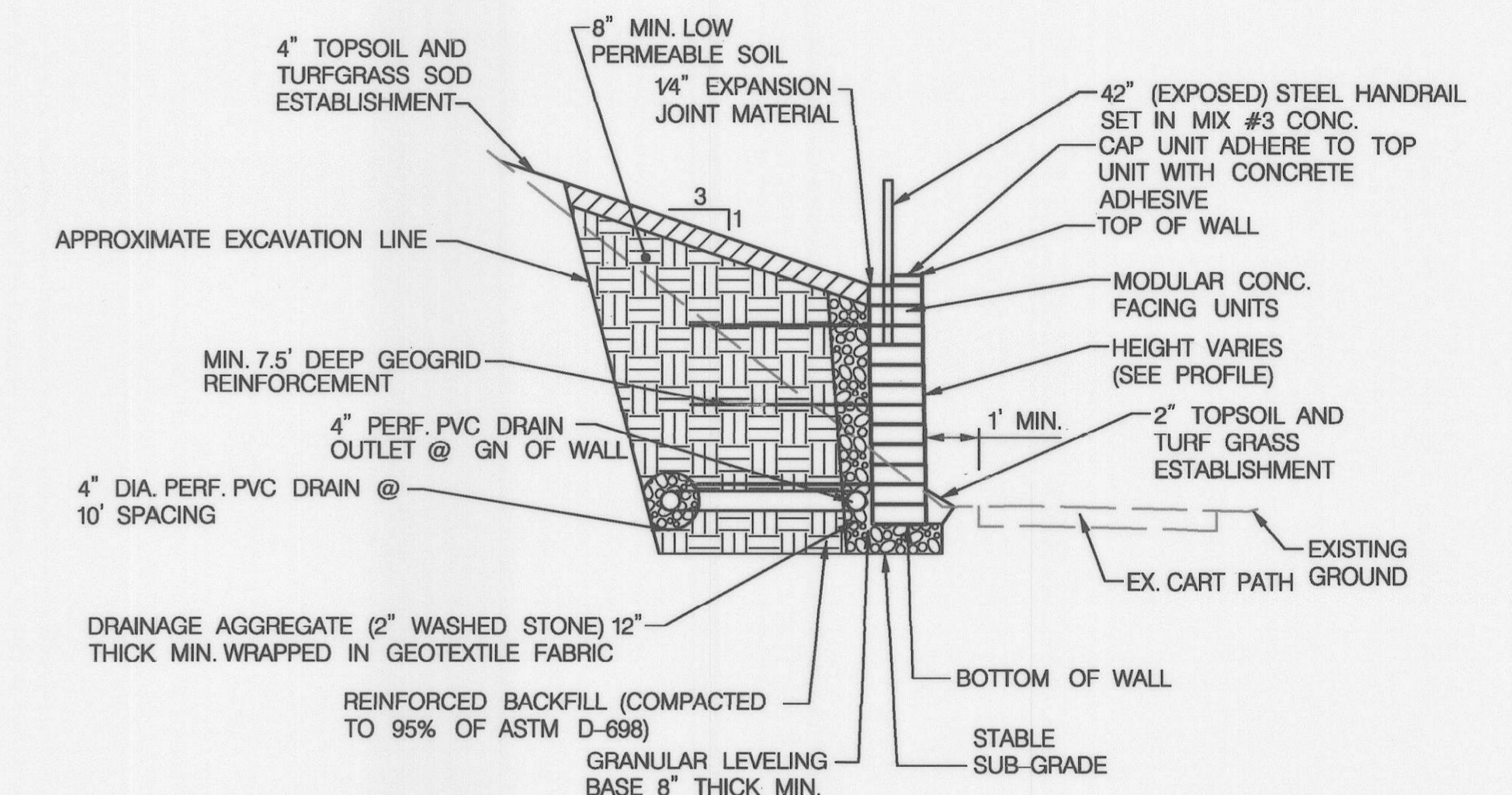
MARSHALEE DRIVE STA. 11+94, RT TO 13+45, RT  
N.T.S.



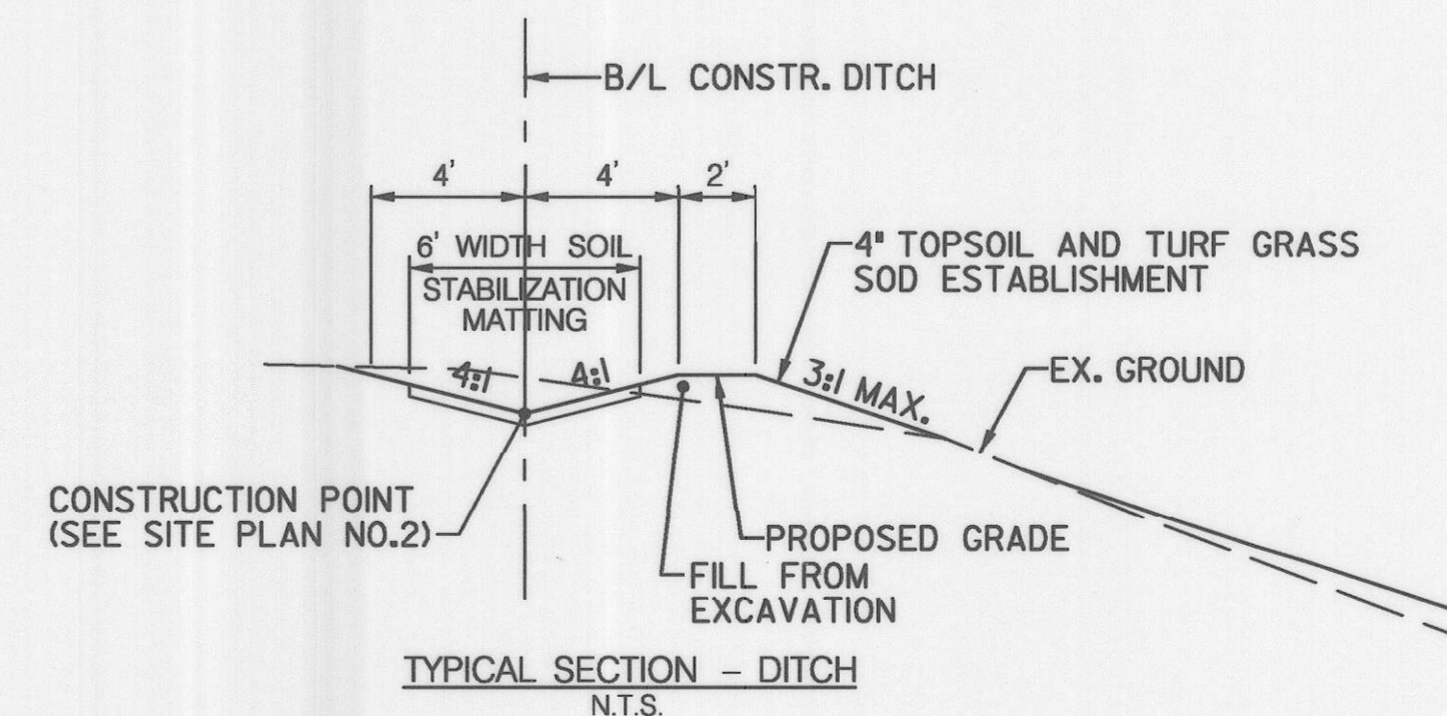
42" HANDRAIL DETAIL  
N.T.S.



MARSHALEE DRIVE STA. 13+45, RT TO 13+72, RT  
N.T.S.



MODULAR BLOCK WALL  
N.T.S.



TYPICAL SECTION - DITCH  
N.T.S.

GENERAL NOTES:

1. THE EMBANKMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 204 OF THE MDSA STANDARD SPECIFICATION FOR CONSTRUCTION AND MATERIALS (JULY 2008). THE SOIL MIXTURE MUST MEET SECTION 916 OF THE MDSA STANDARD SPECIFICATIONS AND MATERIALS.
2. 42" HANDRAIL SHALL BE PLACED AT WALL NO. 1 ONLY.

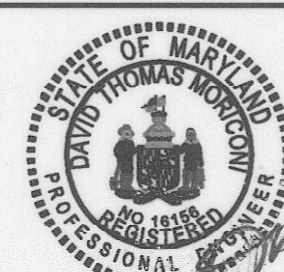
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 LICENSE NO. 16156  
 EXPIRATION DATE: 8/28/2014"

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

Director of Public Works  
 Steve Shavar  
 Chief, Division of Transportation and Special Projects

Chief, Bureau of Engineering  
 Steve Shavar (acting)  
 Chief, Bureau of Highways  
 Mike R. M...  
 DATE: 12/23/13

PREPARED BY  
**URS**  
 4 NORTH PARK DRIVE  
 HUNT VALLEY, MARYLAND  
 TEL: (410) 785-7220



DES: JHY			
DRN: CDF			
CHK: DTM			
DATE: 11/13	BY NO.	REVISION	DATE

TYPICAL SECTION AND  
 MISCELLANEOUS DETAILS

TIMBERS OF TROY GOLF COURSE  
 SLOPE REMEDIATION

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND

SCALE AS SHOWN  
 SHEET 5 OF 10



MARSHALEE - 1  
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 D = 6° 01' 52.08"  
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*Steve Shavar* 12/23/13  
 SIGNATURE OF DEVELOPER DATE

**ENGINEER'S CERTIFICATION**

"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."

*DM* 12-5-13  
 URS CORPORATION DAVID T. MORICINI DATE  
 4 NORTH PARK DRIVE  
 HUNT VALLEY, MD 21030

**PROFESSIONAL CERTIFICATION**

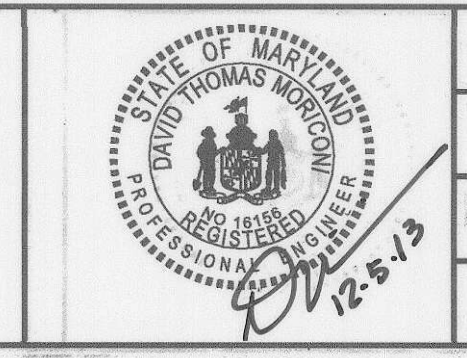
"I HEREBY CERTIFY THAT DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16156 EXPIRATION DATE: 8/28/2014"

*John P. Robertson* 11/9/14  
 HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND

*Ray Sh...* 12/23/13  
 DIRECTOR OF PUBLIC WORKS DATE  
*Steve Shavar* 12/23/13  
 CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS DATE

PREPARED BY  
**URS**  
 4 NORTH PARK DRIVE  
 HUNT VALLEY, MARYLAND  
 TEL: (410) 785-7220



DES: JHY			
DRN: CDF			
CHK: DTM			
DATE: 11/13	BY NO.	REVISION	DATE

**EROSION AND SEDIMENT CONTROL PLAN**  
 STA 13+25 TO STA 15+00  
 SCALE MAP NO. BLOCK NO.

**TIMBERS OF TROY GOLF COURSE SLOPE REMEDIATION**  
 ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND  
 SCALE 1"=30'  
 SHEET 6 OF 10

**SEQUENCE OF CONSTRUCTION**

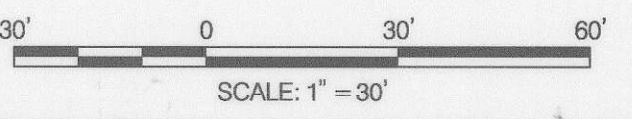
- OBTAIN THE GRADING PERMIT PRIOR TO CONSTRUCTION (1 DAY).
- INSTALL PERIMETER SEDIMENT CONTROL MEASURES (1 DAY).
- CONSTRUCT EW1 TO ES1 WORKING DOWNSTREAM TO UPSTREAM WITH SAME DAY STABILIZATION. THIS STORM DRAIN SYSTEM WILL BE USED TO DIVERT OFF-SITE CLEARWATER FROM THE WORK ZONE (3 DAYS).
- INSTALL SANDBAG BERM AT EW1. INSTALL SANDBAG BERM AND PIPE SLOPE DRAIN AT MARSHALEE DRIVE STATION 11+73, RT (1 DAY).
- INSTALL SANDBAG BERM DIVERSION AND PUMP AROUND PRACTICE AT MARSHALEE DRIVE, STATION 18+50, LT.
- REMOVE MINIMUM OF 4 INCH OF TOPSOIL AND/OR SUBSOIL WITHIN THE PROPOSED GRADING LIMITS. SALVAGEABLE TOPSOIL SHALL BE TEMPORARILY STOCKPILED AT AN APPROVED LOCATION TO BE USED FOR PERMANENT STABILIZATION (5 DAYS).
- INSTALL 6 INCH CURB FROM MARSHALEE DRIVE STA. 11+94, RT. TO STA. 13+63, RT. INSTALL MODULAR BLOCK WALL NO.1 (5 DAYS).
- CONSTRUCT MODULAR BLOCK WALL NO.2 AND THE SLOPE AS SHOWN ON SITE PLAN NO.2 (5 DAYS).
- INSTALL NEW UNDERDRAIN SYSTEM AND STONE TRENCH AS INDICATED ON THE PLAN SET. CONSTRUCT SLOPE AS SHOWN ON SITE PLAN NO.1 (5 DAYS).
- UPON THE HOWARD COUNTY INSPECTOR'S APPROVAL, REMOVAL ALL EROSION AND SEDIMENT CONTROL DEVICES AND STABILIZE THE REMAINING DISTURBED AREAS WITH PERMANENT TURFGRASS ESTABLISHMENT (1 DAY).

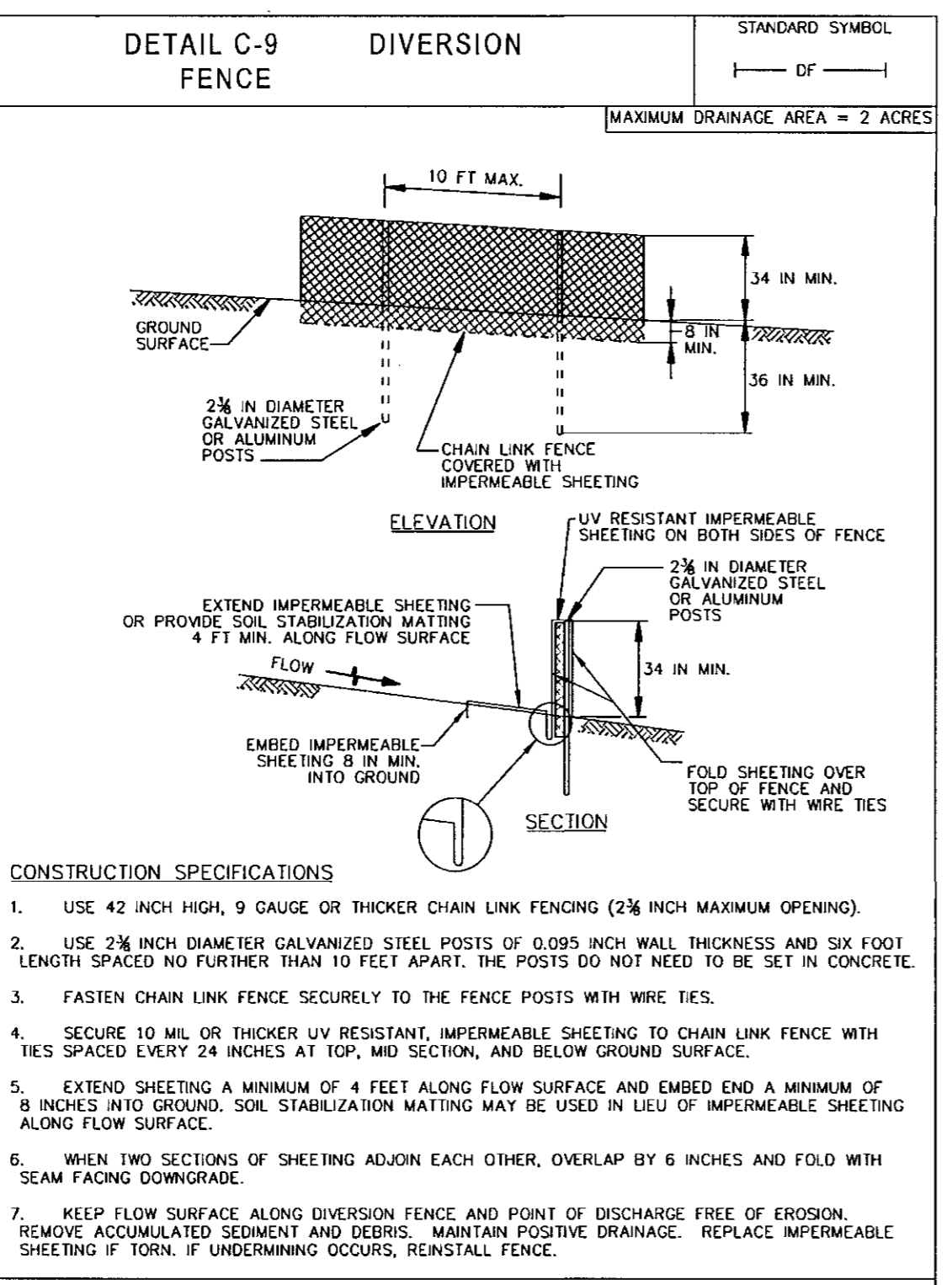
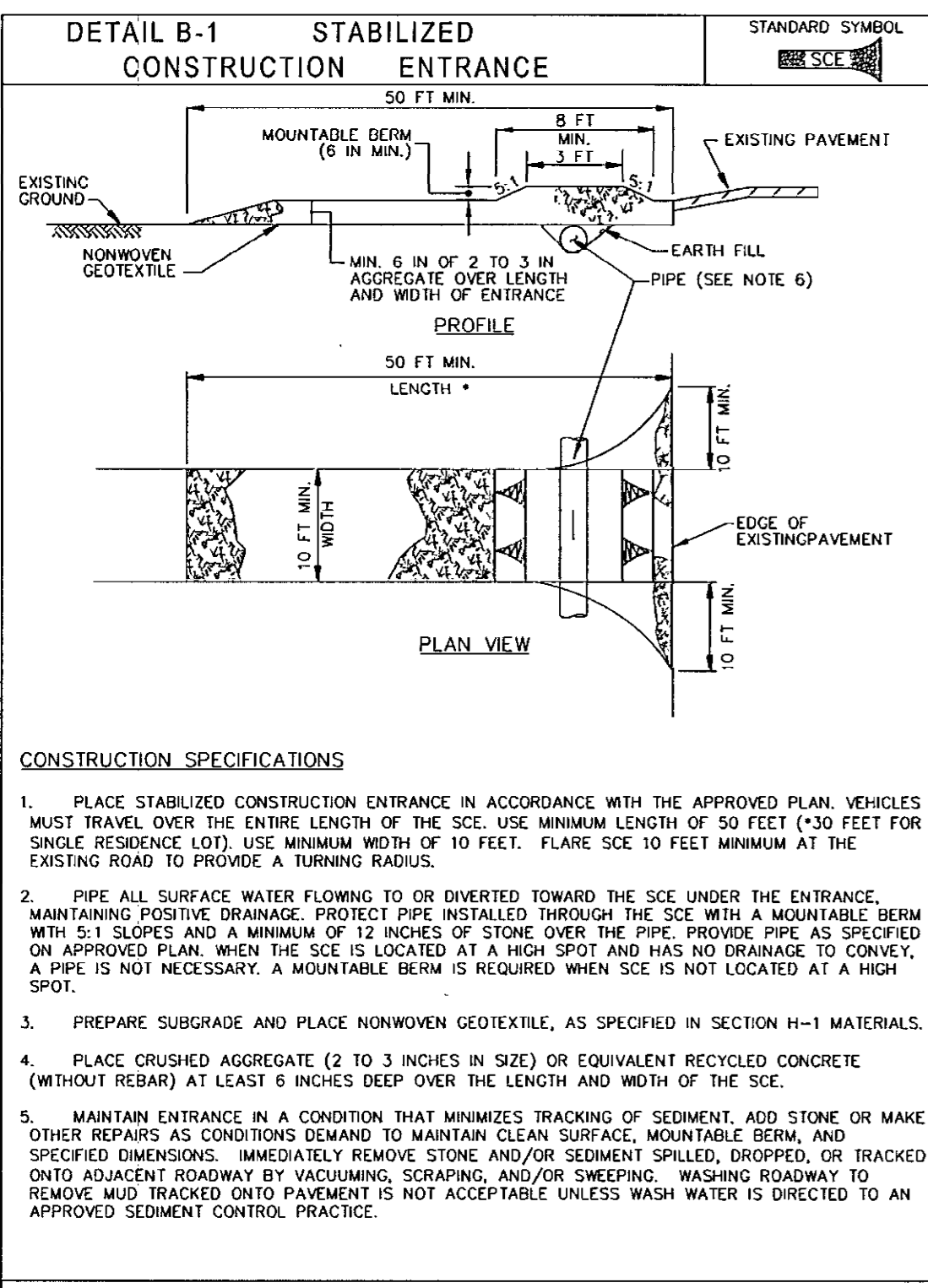
NOTE: THE TIME LINE EXCLUDES WEATHER RELATED DELAYS.

NOTE: NO DISTURBED AREAS SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS RUN-OFF IS DIRECTED TO AN APPROVED SEDIMENT CONTROL DEVICE.

**LEGEND**

- SANDBAG BERM
- SSF SUPER SILT FENCE
- DF DIVERSION FENCE
- LOD LIMIT OF DISTURBANCE
- SCE STABILIZED CONSTRUCTION ENTRANCE
- PUMP
- FB FILTER BAG





**CONSTRUCTION SPECIFICATIONS**

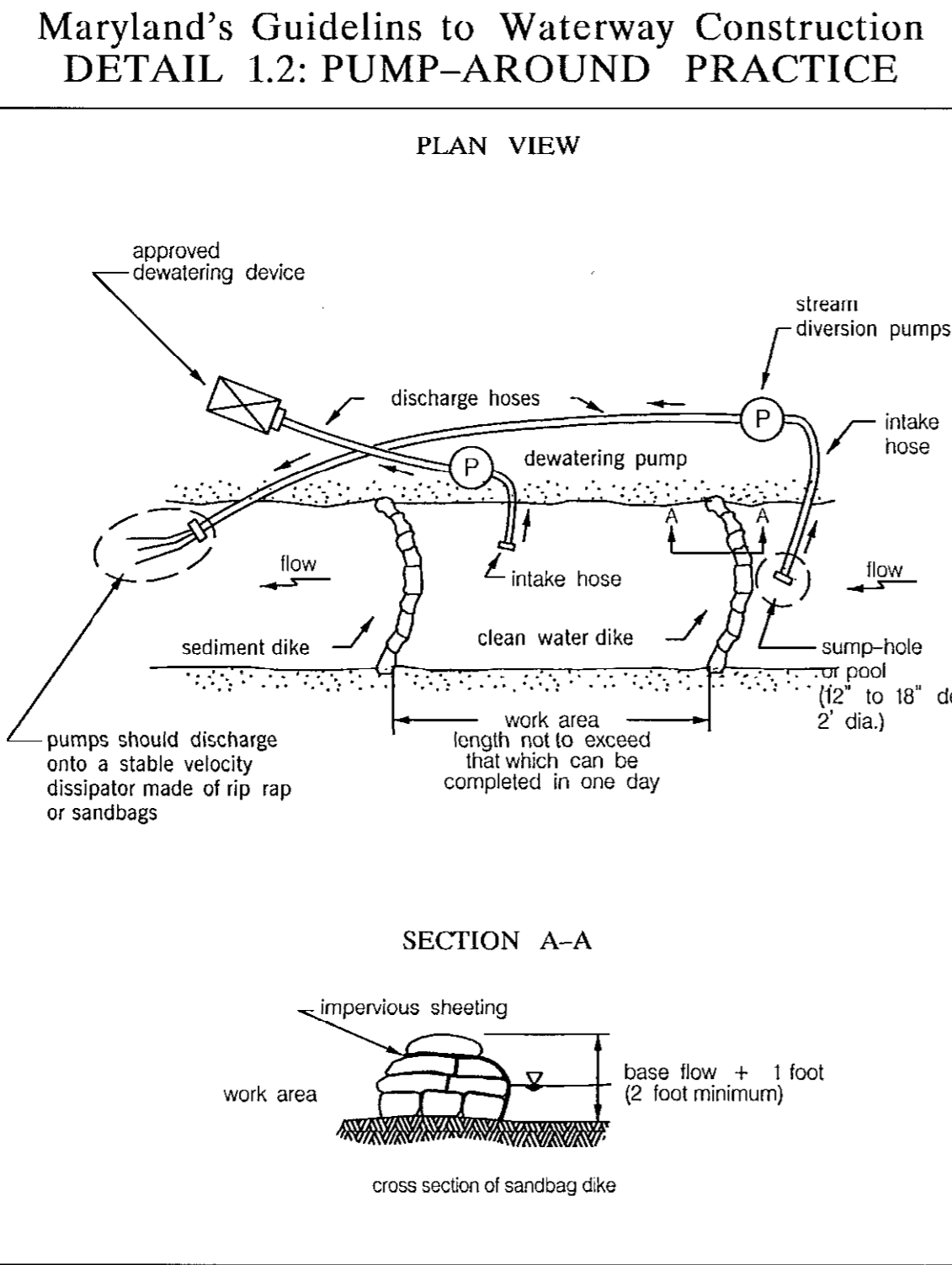
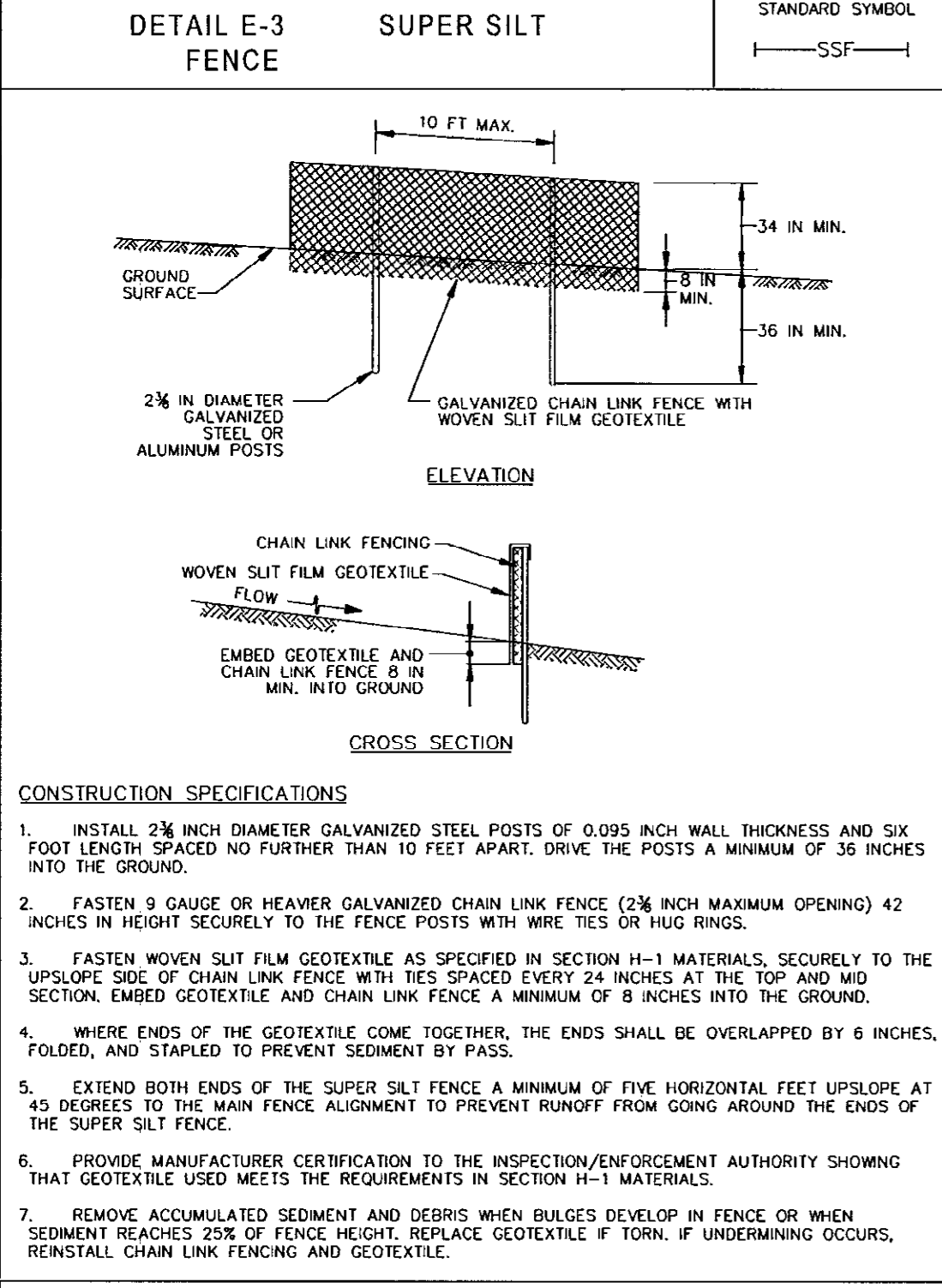
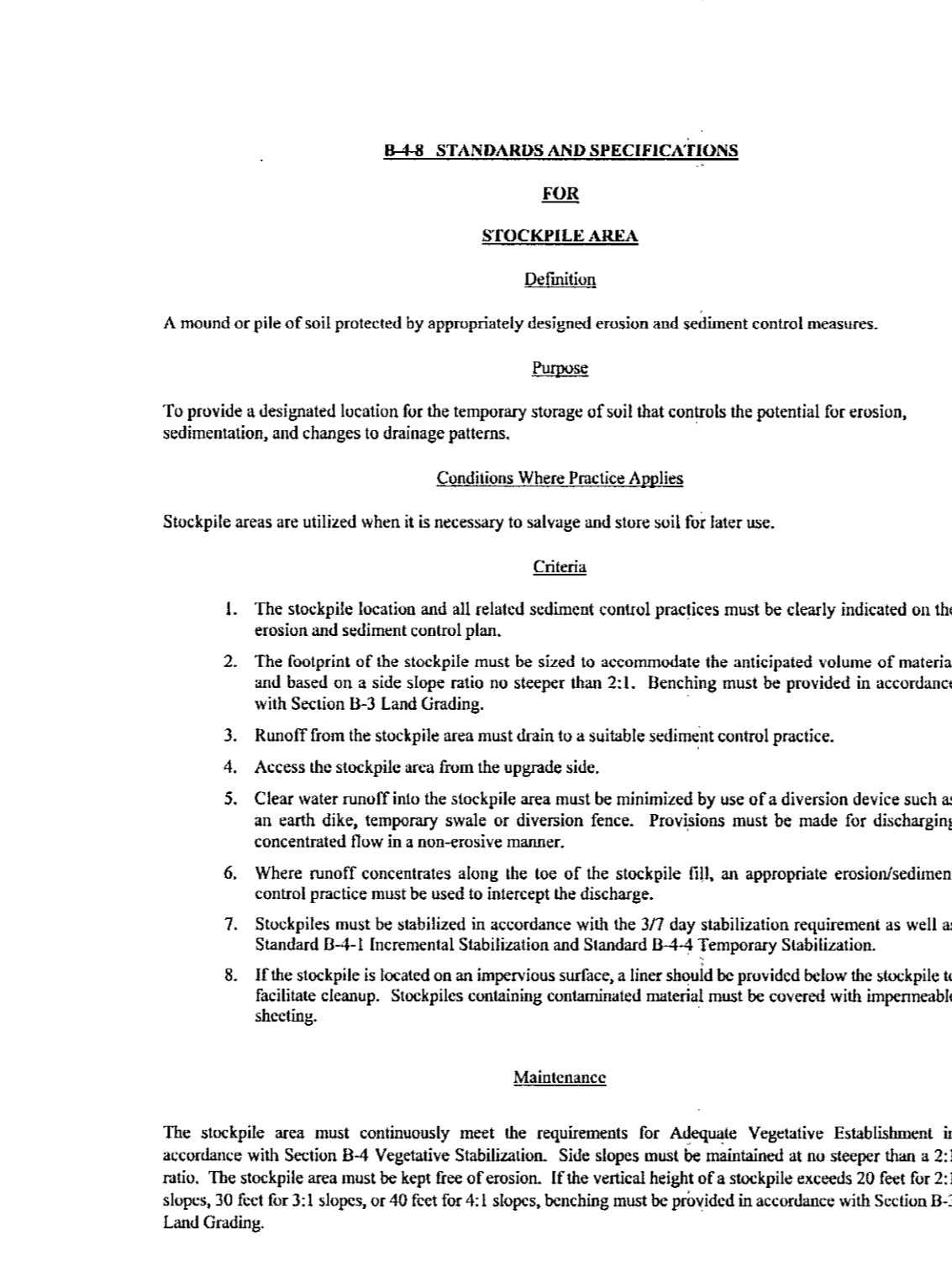
- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (\*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE TO FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED THROUGH THE SCE UNDER THE ENTRANCE. MAINTAIN POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 2:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
- PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
- PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED MATERIALS (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
- MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

**CONSTRUCTION SPECIFICATIONS**

- USE 42 INCH HIGH, 9 GAUGE OR THICKER CHAIN LINK FENCING (2 1/2 INCH MAXIMUM OPENING).
- USE 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. THE POSTS DO NOT NEED TO BE SET IN CONCRETE.
- FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES.
- SECURE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING TO CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT TOP, MID SECTION, AND BELOW GROUND SURFACE.
- EXTEND SHEETING A MINIMUM OF 4 FEET ALONG FLOW SURFACE AND EMBED END A MINIMUM OF 8 INCHES INTO GROUND. SOIL STABILIZATION MATING MAY BE USED IN LIEU OF IMPERMEABLE SHEETING ALONG FLOW SURFACE.
- WHEN TWO SECTIONS OF SHEETING ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM FACING DOWNGRADE.
- KEEP FLOW SURFACE ALONG DIVERSION FENCE AND POINT OF DISCHARGE FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE. REPLACE IMPERMEABLE SHEETING IF TORN, IF UNDERMINING OCCURS, REINSTALL FENCE.

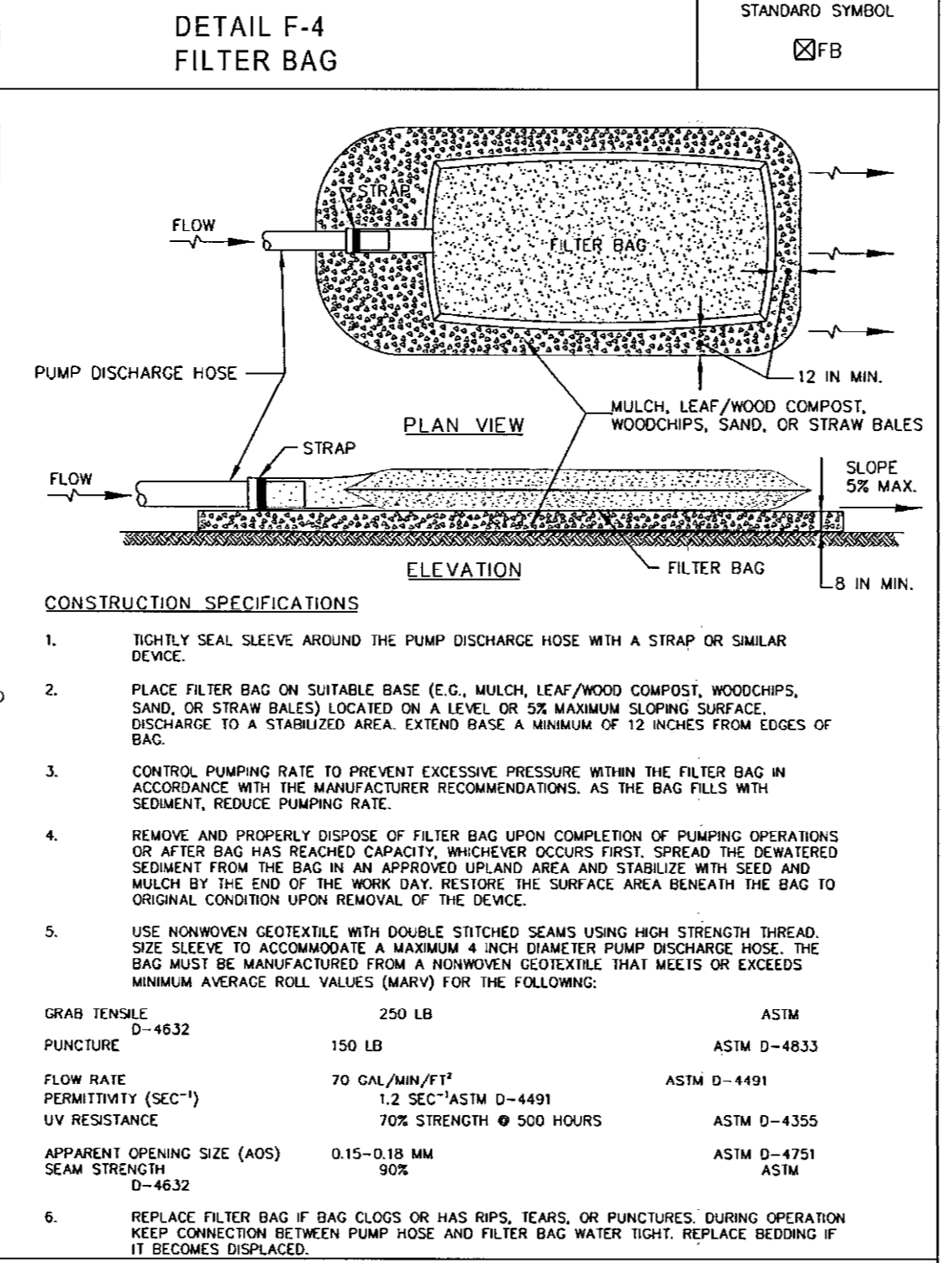
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



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**DEVELOPER'S CERTIFICATION**

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY 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."

*Steve Shogan* 12/23/13  
SIGNATURE OF DEVELOPER DATE

**ENGINEER'S CERTIFICATION**

"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."

*John R. Roberts* 12-19-2013  
DATE

URS CORPORATION  
4 NORTH PARK DRIVE  
HUNT VALLEY, MD 21030

**PROFESSIONAL CERTIFICATION**

"I HEREBY CERTIFY THAT 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. 16156, EXPIRATION DATE: 8/28/2014."

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

*John R. Roberts* 1/9/14  
DATE

HOWARD SOIL CONSERVATION DISTRICT

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*John P. Adams* 12/23/13  
DIRECTOR OF PUBLIC WORKS DATE

*Steve Shogan* 12/23/13  
CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS

PREPARED BY  
**URS**  
4 NORTH PARK DRIVE  
HUNT VALLEY, MARYLAND  
TEL: (410) 785-7220

*Steve Shogan* 12/23/13  
CHIEF, BUREAU OF ENGINEERING DATE

*Walter R. Adams* 12-23-13  
CHIEF, BUREAU OF HIGHWAYS DATE

DES: JHY  
DRN: CDF  
CHK: DTM  
DATE: 11/13

BY NO. REVISION DATE

### B-4-4 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA

**Definition:**  
A mound or pile of soil protected by appropriately designed erosion and sediment control measures.

**Purpose:**  
To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.

**Conditions Where Practice Applies:**  
Stockpile areas are utilized when it is necessary to salvage and store soil for later use.

**Criteria:**

- The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.
- The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a 1:3 slope ratio no steeper than 2:1. Benching must be provided in accordance with Section B-3 Land Grading.
- Runoff from the stockpile area must drain to a suitable sediment control practice.
- Access the stockpile area from the upgrade side.
- Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence. Provisions must be made for discharging concentrated flow in a non-erosive manner.
- Where runoff concentrates along the top of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge.
- Stockpiles must be stabilized in accordance with the 37 day stabilization requirement as well as Standard B-4-1 Incremental Stabilization and Standard B-4-4 Temporary Stabilization.
- If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpiles containing contaminated material must be covered with impermeable sheeting.

**Maintenance:**  
The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B-4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 slope. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section B-3 Land Grading.

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### PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

**SEEDBED PREPARATION:** LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED.

**SOIL AMENDMENTS:** IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. PER 1,000 SQUARE FEET) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. PER 1,000 SQUARE FEET) BEFORE SEEDING. HARROW OR DISC INTO UPPER 3 INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS. PER 1,000 SQUARE FEET).
- ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. PER 1,000 SQUARE FEET) AND 1,000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS. PER 1,000 SQUARE FEET) BEFORE SEEDING. HARROW OR DISC INTO UPPER 3 INCHES OF SOIL.

**SEEDING:** FOR THE PERIOD MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS. PER ACRE (14 LBS. PER 1,000 SQUARE FEET) OF KENTUCKY 31 TALL FESCUE; FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS. PER ACRE OF TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (0.05 LBS. PER 1,000 SQUARE FEET) OF WEEPING LOVEGRASS. DURING THE PERIOD OCTOBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY ONE OF THE FOLLOWING OPTIONS:

- 2 TONS PER ACRE OF WELL-ANCHORED MULCH STRAW AND SEED AS SOON AS POSSIBLE IN THE SPRING.
- SEED WITH 60 LBS. PER ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE WELL-ANCHORED STRAW.

**MULCHING:** APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS. PER 1,000 SQUARE FEET) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 2 1/2 GALLONS PER ACRE (5 GALLONS PER 1,000 SQUARE FEET) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES, 8 FEET OR HIGHER, USE 347 GALLONS PER ACRE (8 GALLONS PER 1,000 SQUARE FEET) FOR ANCHORING.

**MAINTENANCE:** INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS, AND RESEEDINGS.

### TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTRIBUTED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

**SEEDBED PREPARATION:** LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

**SOIL AMENDMENTS:** APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. PER 1,000 SQUARE FEET).

**SEEDING:** FOR PERIODS MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS. PER 1,000 SQUARE FEET). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (0.07 LBS. PER 1,000 SQUARE FEET). FOR THE PERIOD NOVEMBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL-ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OR USE SOD.

**MULCHING:** APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS. PER 1,000 SQUARE FEET) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 2 1/2 GALLONS PER ACRE (5 GALLONS PER 1,000 SQUARE FEET) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES, 8 FEET OR HIGHER, USE 347 GALLONS PER ACRE (8 GALLONS PER 1,000 SQUARE FEET) FOR ANCHORING.

REFER TO THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR ADDITIONAL RATES AND METHODS NOT COVERED.

### GENERAL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
  - THREE (3) CALENDAR DAYS FOR ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3:1.
  - SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOLUME 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOIL TEMPORARY SEEDING, AND MULCHING (SECTION G). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
  - TOTAL AREA OF SITE - 2.2 ACRES
  - AREA DISTURBED - 0.74 ACRES
  - AREAS TO BE ROOFED OR PAVED - 0.00 ACRES (INCLUDES OVERLAY AREA)
  - AREA TO BE VEGETATIVELY STABILIZED - 0.00 ACRES
  - TOTAL CUT - 253 CY\*
  - TOTAL FILL - 789 CY\*
  - OFF-SITE WASTE SITE - HOWARD COUNTY LANDFILL
  - OFF-SITE BORROW SITE - APPROVED SITE WITH AN ACTIVE GRADING PERMIT
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
- SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
- CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY AFFECT THE WORK.
- CONSTRUCTION WITHIN, ALONG OR ACROSS STREAM CHANNELS SHALL, AS A MINIMUM, CONFIRM TO CRITERIA DESCRIBED UNDER "MARYLAND'S WATERWAY CONSTRUCTION GUIDELINES."

\* APPROXIMATE

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

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### SEQUENCE OF CONSTRUCTION - GENERAL NOTES

- THE CONTRACTOR SHALL NOTIFY THE HOWARD SOIL CONSERVATION DISTRICT AT (410) 489-7987 AT LEAST SEVEN (7) DAYS PRIOR TO ANY EARTH DISTURBANCE TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE INSPECTOR.
- UTILITIES AND STORM DRAINS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS ARE FOR THE GUIDANCE OF THE CONTRACTOR ONLY. CONTRACTOR SHALL CALL "MISS UTILITY" AT 1-800-257-7777 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND UTILITIES IN THE AREA OF THE PROPOSED EXCAVATION AND HAVE THOSE UTILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION.
- THE EROSION AND SEDIMENT CONTROL MEASURES MUST BE IN PLACE AND FUNCTIONING PRIOR TO CLEARING THE ENTIRE SITE, CLEAR AND GRUB WORK, EROSION AND SEDIMENT CONTROL MEASURES OR DEVICES ONLY ON COMMENCEMENT OF CONSTRUCTION.
- INSTALL STABILIZED CONSTRUCTION ENTRANCES, SILT FENCE, AND OTHER EROSION SEDIMENT CONTROL DEVICES AS PER THE EROSION AND SEDIMENT CONTROL PLANS. THE LOCATIONS FOR STABILIZED CONSTRUCTION ENTRANCES SHOWN ON THE PLANS ARE APPROXIMATE, AND EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD WITH APPROVAL FROM THE ENGINEER AND INSPECTOR.
- MAINTAIN ALL SEDIMENT CONTROL PRACTICES ACCORDING TO THE MARYLAND 2011 STANDARDS UNTIL THE ENTIRE SITE IS STABILIZED.
- CONTRACTOR SHALL LOCATE THE STAGING AND STOCKPILE AREA AND IS RESPONSIBLE FOR PROVIDING ANY ADDITIONAL EROSION CONTROL FOR STAGING AND STOCKPILE AREAS AS REQUIRED BY THE MDE INSPECTOR.
- CLEAR AND GRUB AND PROCEED TO CONSTRUCTION ACCORDING TO THE SEQUENCE SPECIFIED ON THE TRAFFIC CONTROL SHEETS. STORM DRAIN SYSTEMS SHALL ALWAYS BE CONSTRUCTED FROM THE DOWNSTREAM ENDS. INLET PROTECTIONS SHALL BE INSTALLED AT EXISTING INLETS BEFORE ANY DISTURBANCE IN THE WORK AREA. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS THE RUN OFF IS DIRECTED TO AN MDE APPROVED SEDIMENT CONTROL DEVICE. CONTRACTOR SHALL USE PORTABLE SEDIMENT TANK TO DEWATER THE WORKING AREA DURING CONSTRUCTION.
- CONSTRUCTION SHALL BE COMPLETED IN THE SEQUENCE NOTED ON SHEET 6.

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U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

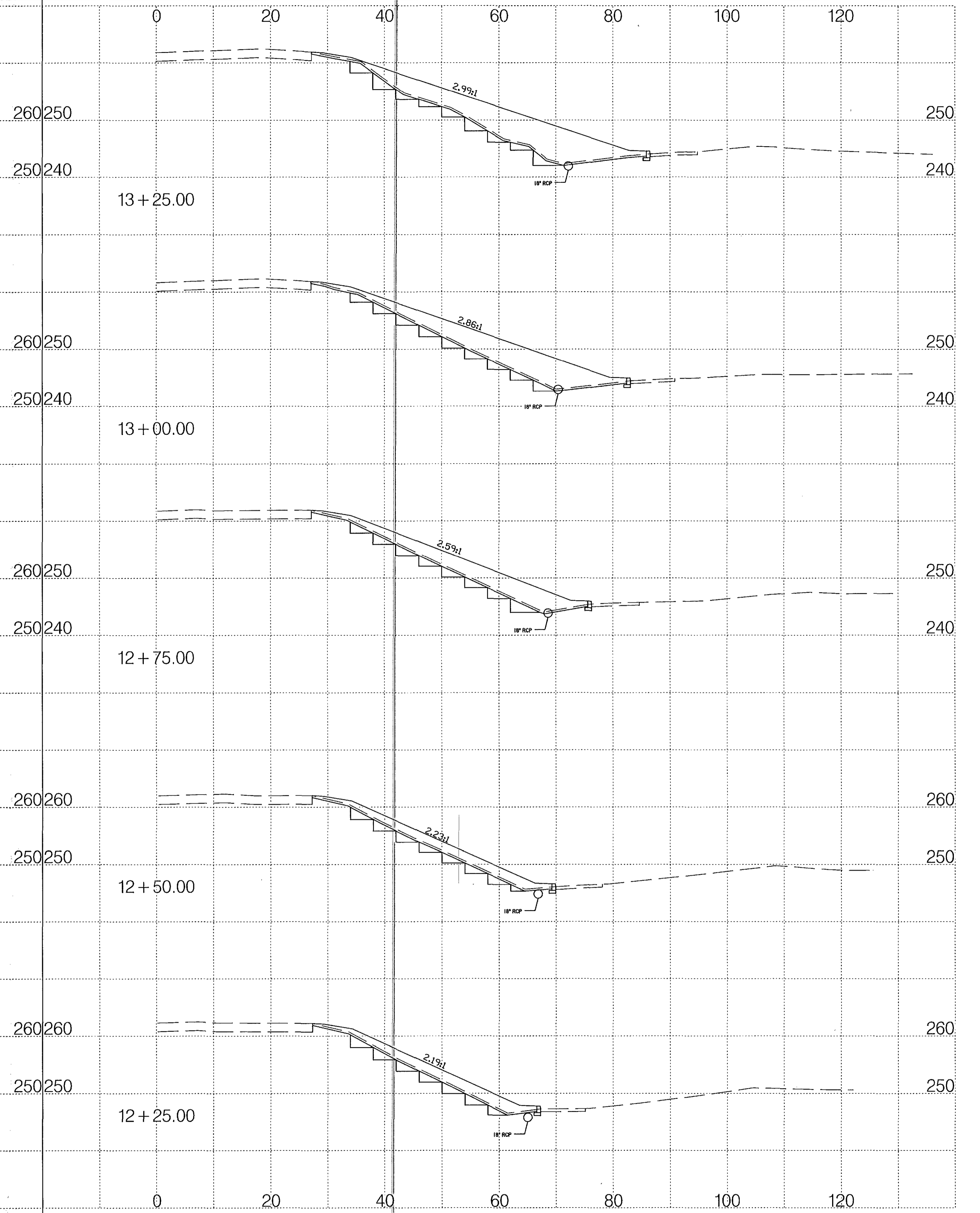
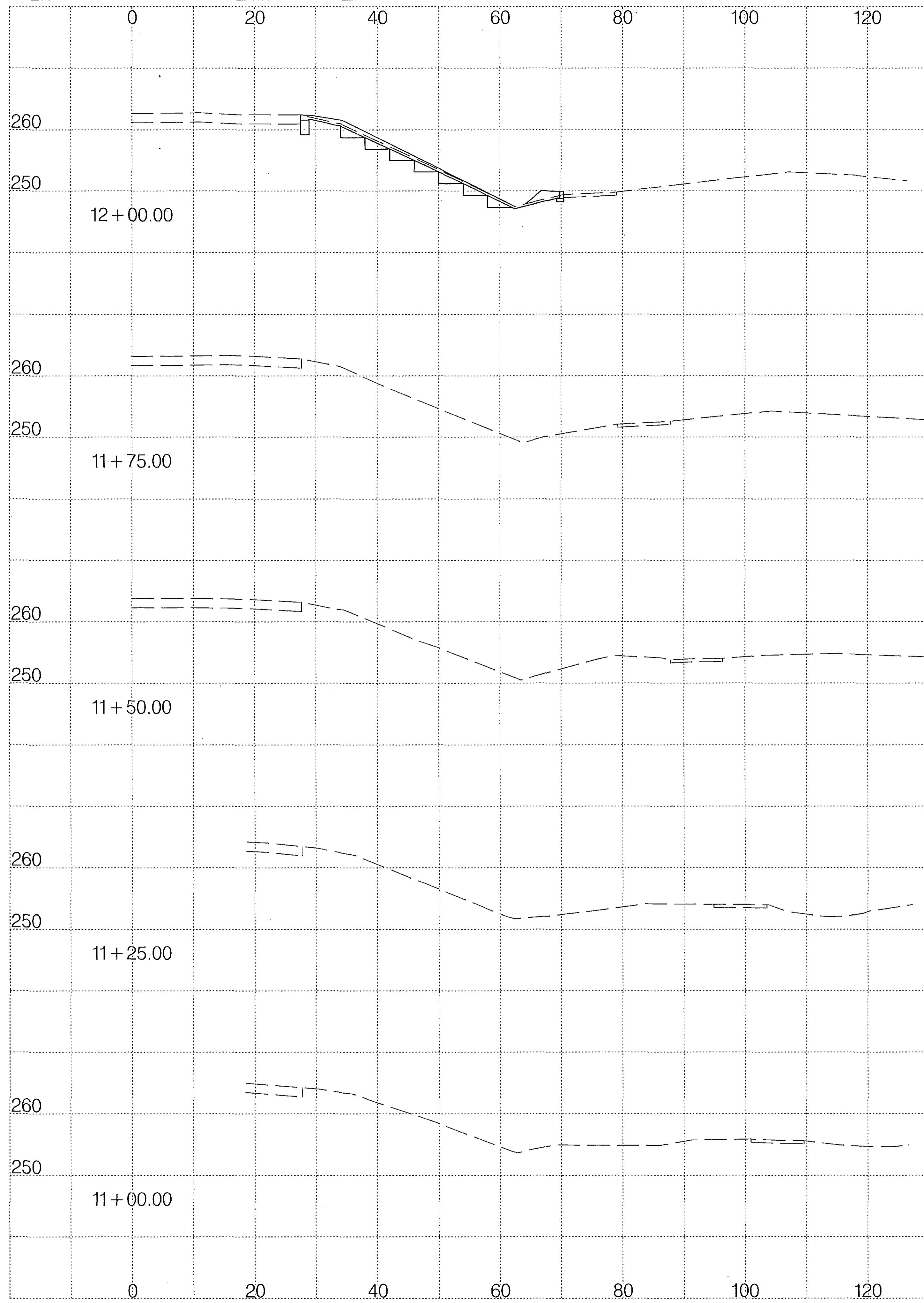
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

TIMBERS OF TROY GOLF COURSE SLOPE REMEDIATION

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND

SCALE AS SHOWN

SHEET 7 OF 10



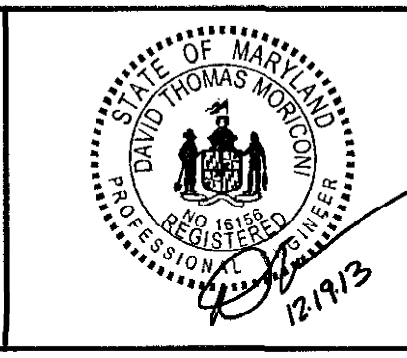
DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Ray J. Shuman* 12/23/13  
DIRECTOR OF PUBLIC WORKS DATE

*Steve Shawa (Acting)* 12/23/13  
CHIEF, BUREAU OF ENGINEERING DATE

*Steve Shawa* 12/23/13  
CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS DATE

*Will R. Smith* 12-23-13  
CHIEF, BUREAU OF HIGHWAYS DATE



DES: JHY			
DRN: CDF			
CHK: DTM			
DATE: 11/13	BY: NO.	REVISION	DATE

**CROSS SECTIONS**  
STA. 11+00 TO STA. 13+25

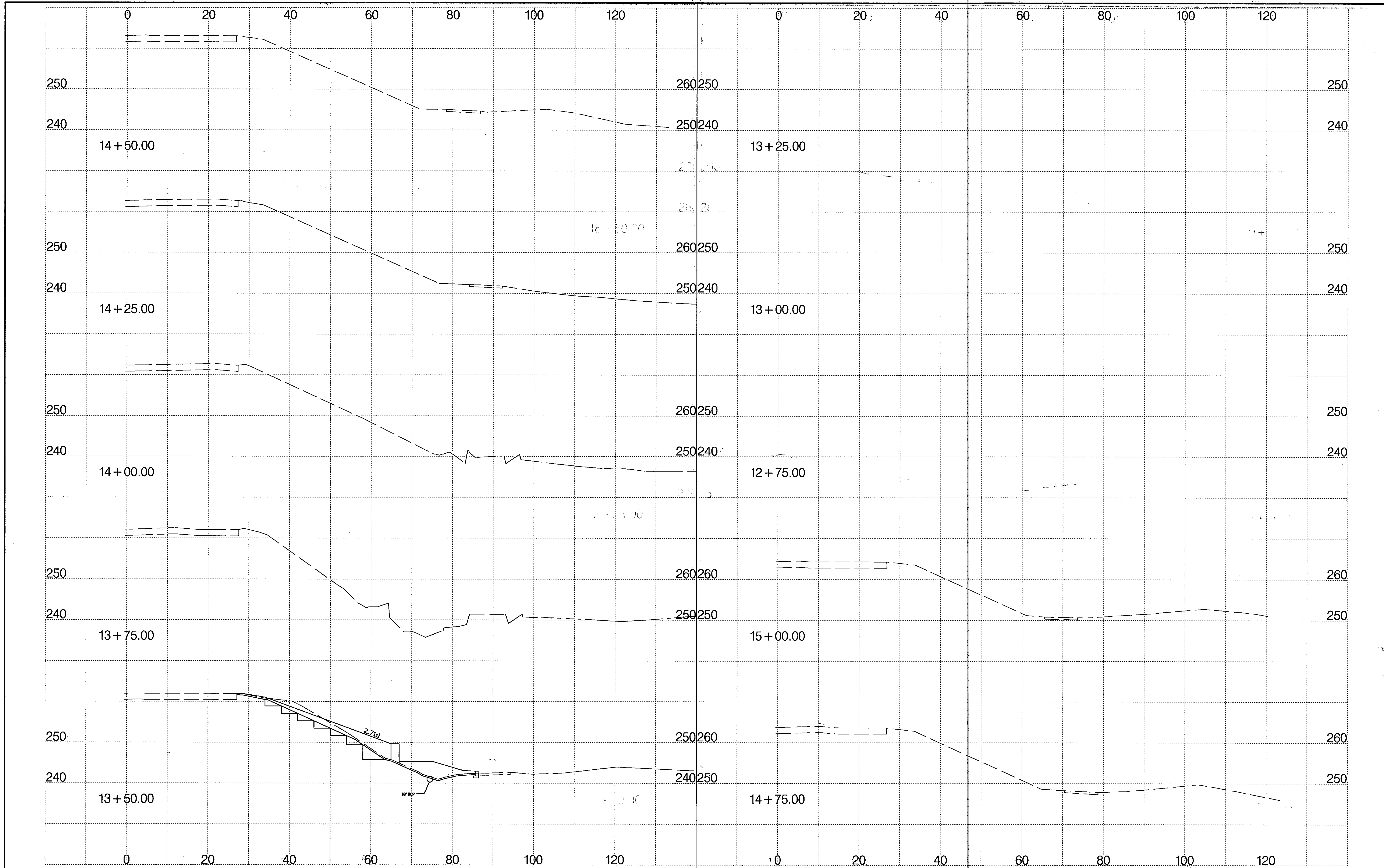
SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

**TIMBERS OF TROY GOLF COURSE**  
SLOPE REMEDIATION

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND

SCALE 1"=10'  
SHEET 8 OF 10





DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

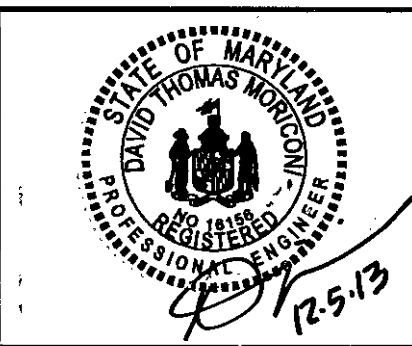
*Jay V...* 12/23/13  
DIRECTOR OF PUBLIC WORKS DATE

*Steve Shaver* 12/23/13  
CHIEF, BUREAU OF ENGINEERING DATE

*Steve Shaver* 12/23/13  
CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS DATE

*Steve Shaver* 12-23-13  
CHIEF, BUREAU OF HIGHWAYS DATE

PREPARED BY  
**URS**  
4 NORTH PARK DRIVE  
HUNT VALLEY, MARYLAND  
TEL: (410) 785-7220



DES: JHY			
DRN: CDF			
CHK: DTM			
DATE: 11/13	BY NO.	REVISION	DATE

**CROSS SECTIONS**  
STA. 13+25 TO STA. 15+00

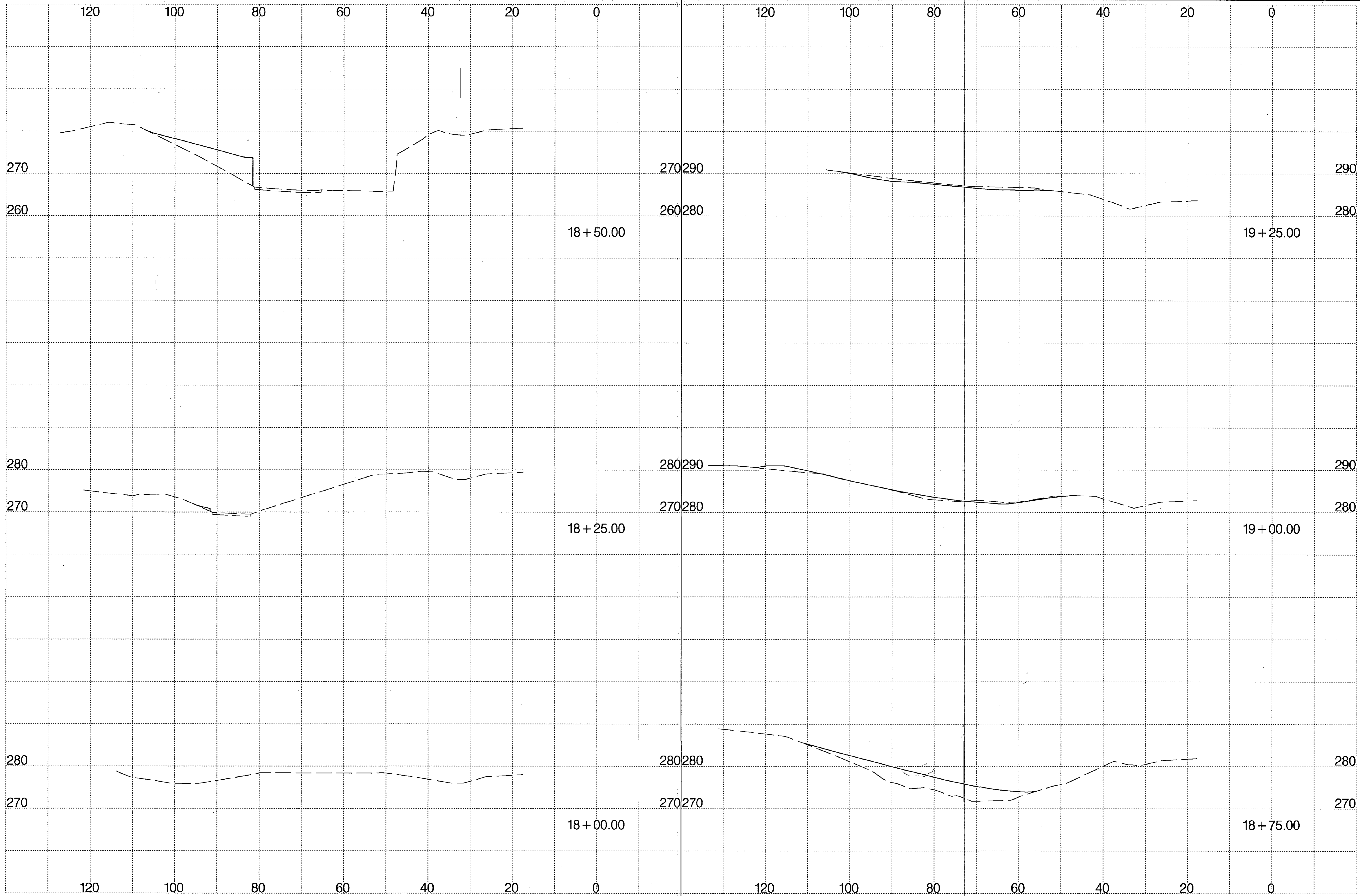
SCALE MAP NO. BLOCK NO.

**TIMBERS OF TROY GOLF COURSE**  
SLOPE REMEDIATION

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND

SCALE 1"=10'

SHEET 9 OF 10



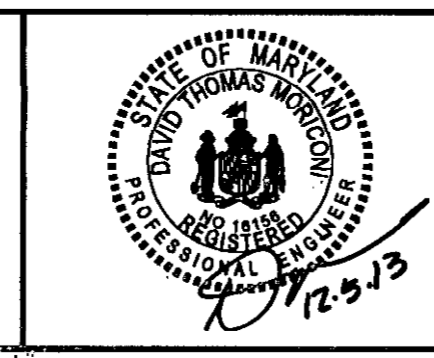
DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

*Ray* 12/23/13  
DIRECTOR OF PUBLIC WORKS DATE

*Steve Shaver* 12/23/13  
CHIEF, BUREAU OF ENGINEERING DATE

*Steve Shaver* 12/23/13  
CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS DATE

*W. J. Z. M. H.* 12-23-13  
CHIEF, BUREAU OF HIGHWAYS DATE



DÉS: JHY				
DRN: CDF				
CHK: DTM				
DATE: 11/13	BY	NO.	REVISION	DATE

**CROSS SECTIONS**  
STA. 18+00 TO STA. 19+25

SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

**TIMBERS OF TROY GOLF COURSE**  
SLOPE REMEDIATION

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND

SCALE 1"=10'  
SHEET 10 OF 10