

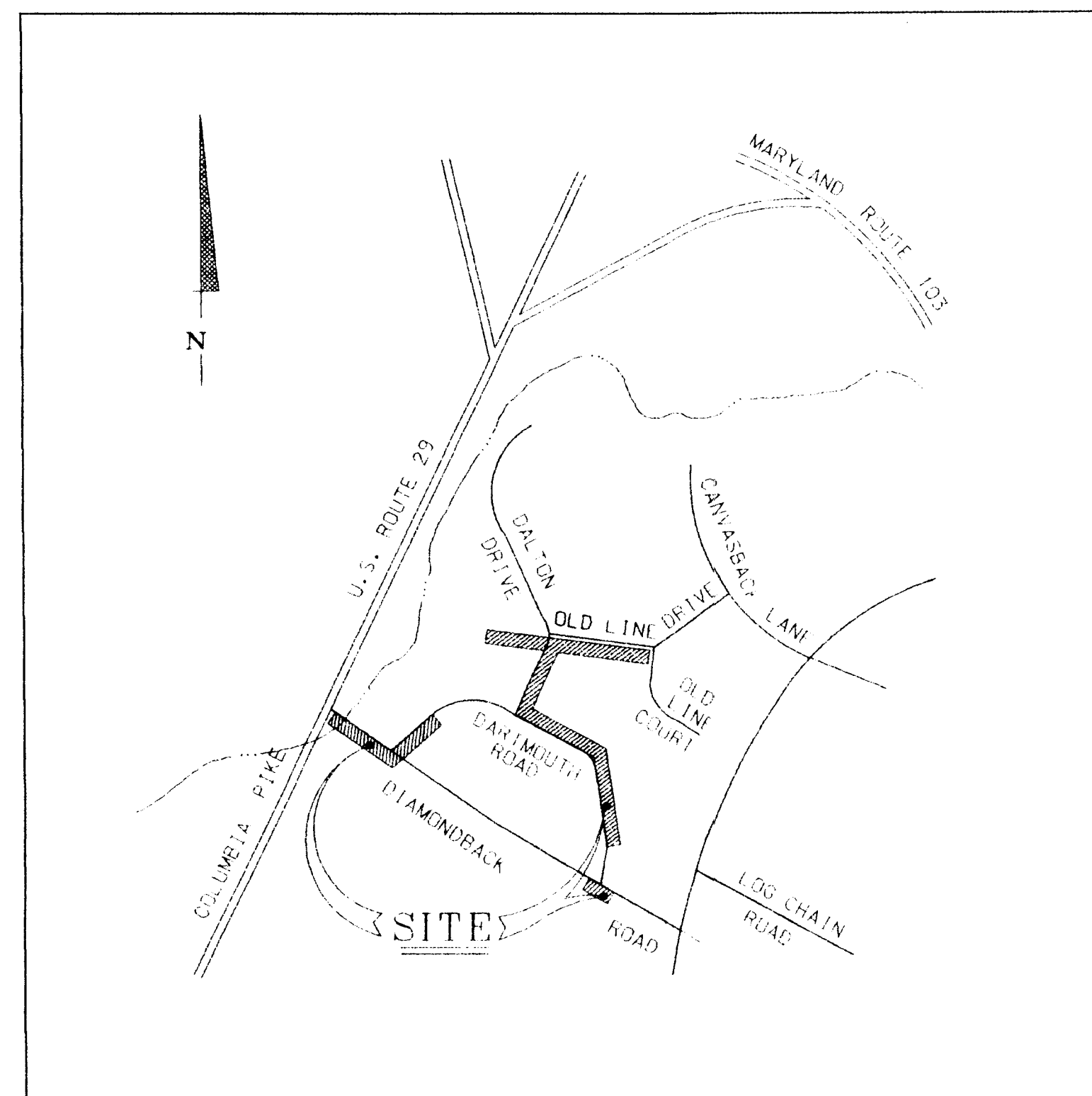
INDEX OF SHEETS

1. TITLE SHEET
2. PLAN (DALTON - DARTMOUTH)
3. PLAN (DIAMONDBACK - DARTMOUTH)
4. EROSION AND SEDIMENT CONTROL DETAILS
5. WETLANDS IMPACT PLAN (DARTMOUTH)
6. WETLANDS IMPACT PLAN (DIAMONDBACK)

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN HEREON:
MISS UTILITY 1-800-257-7777
BALTIMORE GAS & ELECTRIC CO., UNDERGROUND ELECTRICAL DISTRIBUTION ENGINEERING DAMAGE CONTROL 234-6313
BALTIMORE GAS & ELECTRIC CO., UNDERGROUND GAS DISTRIBUTION ENGINEERING 234-5533
CHESAPEAKE AND POTOMAC TELEPHONE CO. 725-9976
COLONIAL PIPELINE COMPANY 781-4641
HOWARD COUNTY BUREAU OF UTILITIES 313-4900
HOWARD COUNTY DIVISION OF CONSTRUCTION INSPECTION 313-1870
HOWARD COUNTY TRAFFIC DIVISION 313-2430
HOWARD COUNTY SURVEYING AND DRAFTING DIVISION 313-2417
3. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
4. SURVEY OF THE SITE WAS PERFORMED BY EBA ENGINEERING IN JUNE, 1991.
5. COORDINATES AND ELEVATIONS ARE BASED ON HOWARD COUNTY CONTROL STATION NOS. 2139003, 2139004 AND 2139005.
6. WETLANDS WERE DELINEATED BY HUMAN & RODHE, INC. ON JUNE 28, 1993.
7. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 FOR UNDERGROUND UTILITY LOCATIONS AT LEAST FIVE (5) DAYS PRIOR TO COMMENCING WORK SHOWN ON THE PLANS.
8. ALL TOP ELEVATIONS FOR THE PROPOSED INLETS AND MANHOLES ARE APPROXIMATE AND ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR AND THE ENGINEER. WHERE THE PROPOSED STORM DRAINS CROSS VEGETATED AREAS, POSITIVE DRAINAGE SHALL BE MAINTAINED AND THE TOP ELEVATIONS ADJUSTED AS DIRECTED BY THE ENGINEER.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ALL EXISTING DRIVEWAYS DAMAGED DURING CONSTRUCTION.
10. TREES ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES LOCATED OUTSIDE THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
11. THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ON THESE PLANS ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION BEFORE STARTING CONSTRUCTION. NEITHER THE ENGINEER NOR THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS WARRANT OR GUARANTEE THE COMPLETENESS OR THE CORRECTNESS OF THE INFORMATION SHOWN.
12. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES. ANY DAMAGE DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. CLEAR ALL UTILITIES BY A MINIMUM OF 6 INCHES.
13. TEST PITS SHALL BE DUG AT ALL UTILITY CROSSINGS TO DETERMINE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF UTILITIES. TEST PITS SHALL BE DUG A SUFFICIENT AMOUNT OF TIME IN ADVANCE OF THE CONSTRUCTION OR TRENCHING OPERATION TO ALLOW FOR NECESSARY ADJUSTMENTS.
14. WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL "X". THE RESULTS TEST PITS ARE INCLUDED ON THE STORM DRAIN PROFILES.
15. ALL UTILITY POLES MUST BE CLEARED BY FIVE (5) FEET. IF THE STORM DRAIN PIPING OR STRUCTURE WORK IS WITHIN FIVE (5) FEET OF A UTILITY POLE, THE POLE IS TO BE BRACED OR THE PROPOSED STORM DRAIN SHALL BE PLACED BY TUNNELING. ALL COSTS FOR TUNNELING ARE TO BE INCLUDED IN THE UNIT PRICE BID FOR FURNISHING AND LAYING THE STORM DRAIN PIPE.
16. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
17. CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR FURNISHING AND LAYING STORM DRAIN PIPE.
18. EXISTING WATER HOUSE SERVICES THAT ARE IN CONFLICT WITH THE PROPOSED STORM DRAINAGE FACILITIES SHALL BE ADJUSTED BY THE CONTRACTOR.
19. FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, THE CONTRACTOR SHALL ABIDE BY THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION" AND THE SPECIAL PROVISIONS. IN THE EVENT OF ANY DISCREPANCY BETWEEN THESE TWO SOURCES, THE LATTER SHALL GOVERN.
20. EXISTING FENCES, MAILBOXES, SIGNS AND SHRUBS DISTURBED BY THE WORK SHALL BE RECONSTRUCTED OR REPLACED IN KIND.
21. ALL SLOPES AND/OR DISTURBED AREAS SHALL RECEIVE TWO (2) INCH DEPTH OF TOPSOIL AND SODDING EXCEPT WHERE OTHERWISE INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
22. LOCATION POINTS FOR INLETS, MANHOLES AND STRUCTURES:

ITEM	HORIZONTAL LOCATION	VERTICAL LOCATION
CURB TYPE INLETS	CENTER FACE OF CURB	TOP OF CURB
GRATE TYPE INLETS	CENTER OF GRATE	TOP OF GRATE
MANHOLES	CENTER OF COVER	TOP OF COVER
ENDWALLS	CENTER OF WALL	TOP OF WALL
23. THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN VICINITY OF UTILITIES. COST SHALL BE INCLUDED IN THE UNIT PRICES BID FOR STORM DRAIN ITEMS.
24. ALL INVERTS SHALL BE FULLY DEVELOPED.
25. LENGTHS OF DISTURBANCE SHALL BE LIMITED TO A MAXIMUM OF 100 FT AT ANY ONE TIME. AT THE END OF EACH WORKING DAY, PROVIDE STABILIZATION ACCORDING WITH PLANS.



SCALE 1" = 600'

DESIGN CERTIFICATE

I HEREBY 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 IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF HOWARD CONSERVATION DISTRICT.

DATE: 2/3/95
 DESIGNER'S SIGNATURE: *[Signature]*
 MARYLAND REGISTRATION NO. 10989
 (P.E., R.L.S., OR R.L.A.)
 PRINTED NAME: Kenneth M. Uchir



OWNER'S/DEVELOPER'S CERTIFICATION

"I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND 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.

DATE: 2/5/95
 OWNER/DEVELOPER SIGNATURE: *[Signature]*
 PRINTED NAME AND TITLE: Ronald G. Lepson, Chief, Bureau of Engineering

QUANTITIES			
ITEM	ESTIMATE	AS-BUILT	MATL. / SUPPLIER
15" RCP, CLASS III	55 L.F.		
18" RCP, CLASS III	100 L.F.		
TYPE 'K' INLET	1 EA.		
TYPE 'S' INLET	2 EA.		
TYPE 'D' INLET	2 EA.		
JUNCTION BOX	1 EA.		

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 Patricia Engler, 9/14/95
 NATURAL RESOURCES CONSERVATION SERVICE DATE

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

APPROVED: *[Signature]* 9/14/95
 HOWARD SOIL CONSERVATION DISTRICT DATE

CAPITAL PROJECT No. D - 1078 S.E.
 DIAMONDBACK
 DARTMOUTH
 DALTON
 HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS

put under Diamondback

C110AZ01

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND James P. Chew, 9/20/95 DIRECTOR OF PUBLIC WORKS DATE Stephen M. ... 9/15/95 CHIEF, BUREAU OF HIGHWAYS DATE	EBA ENGINEERING, INC. 5800 METRO DRIVE BALTIMORE, MARYLAND 21215 (410) 358-7171	DES: L.C.				TITLE SHEET DRAINAGE SYSTEM IMPROVEMENT PROGRAM CAPITAL PROJECT No. D-1078 S.E. HOWARD COUNTY, MARYLAND CONTRACT No. ELECTION DISTRICT No. 6	NO SCALE
		DRN: JDP					SHEET 1 OF 6
		CHK: L.C.					
		DATE: 06/06/1995	BY: NO.	REVISION	DATE	600' SCALE MAP NO.	BLOCK NO.

D/D/D OFFICE COPY

STATION	COORDINATES		ELEVATION
	NORTH	EAST	
P-5	503,806.2835	845,740.4752	347.17
P-6	503,285.4757	845,809.9912	349.92
P-7	503,732.2528	845,785.6201	349.89
P-8	503,627.5077	845,749.0975	359.16
P-9	503,421.3540	846,021.0715	364.91

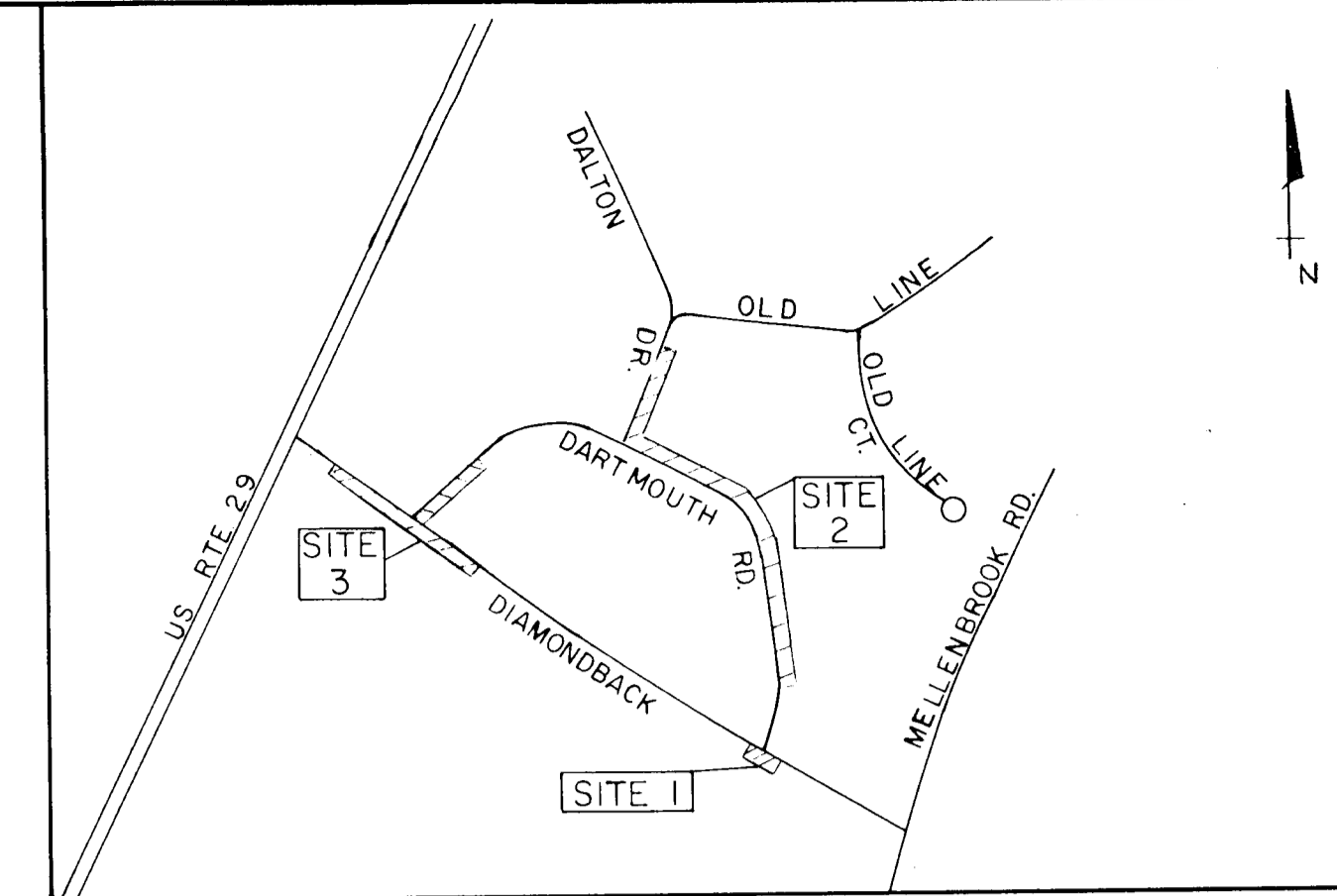
NOTE: COORDINATES ARE BASED ON MARYLAND STATE GRID.

NOTES:

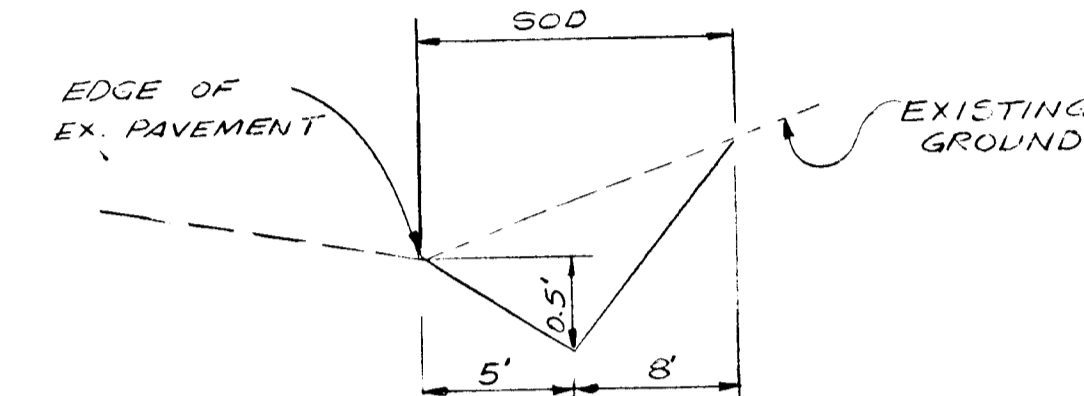
- ALL WORK SHALL COMPLY WITH THE HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS.
- FOR EROSION & SEDIMENT CONTROL DETAILS SEE SHEET 40FG
- WORK AT THE EX 18" CMP OUTFALL (DALTON DR.) SHALL BE PERFORMED ON DRY CONDITIONS.

STRUCTURE		SCHEDULE		LOCATION	HOWARD COUNTY STANDARD NO.
NO.	TYPE	TOP OF STRUCTURE ELEV.	INV. CUI ELEV.		
I-1	15" INLET	353.65	EX 24" CMP INVERT	STA. 4+68.8, 37' LT. @ 'A' (*)	SD-4.22
I-2	10" INLET	MATCH TO EX. INLET	EX 18" CMP INVERT	STA. 2+41.0, 57' RT. @ 'A'	SD-4.11
I-3	10" INLET	SEE DET. SECT. B-B	EX 18" CMP INVERT	AS SHOWN ON PLAN	SD-4.11
S-1	SPRING CONTROL	-	-	AS SHOWN ON PLAN	R-8.02

(*) TO BE INSTALLED ON EXISTING 24" CMP.



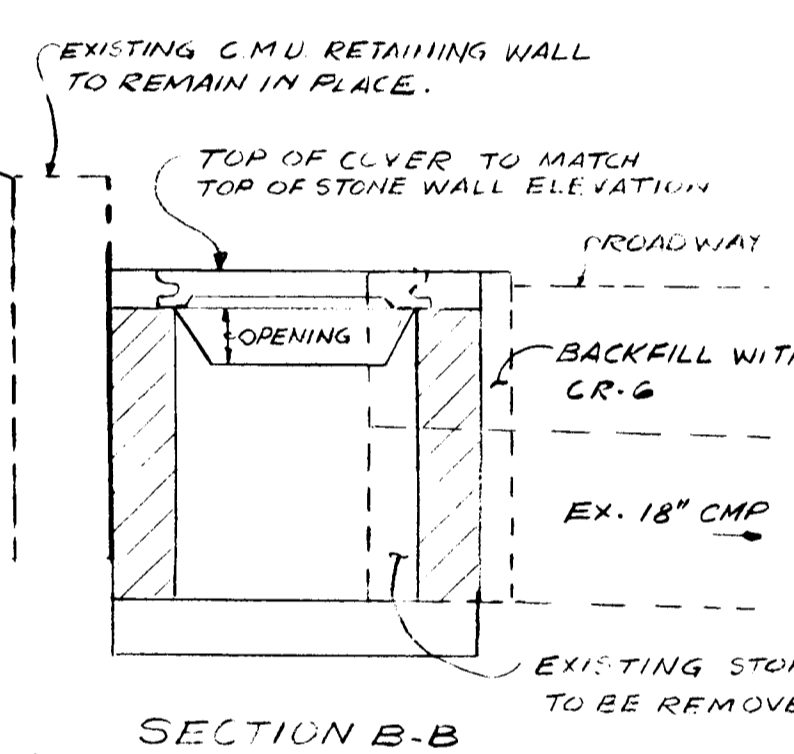
VICINITY MAP
SCALE: 1" = 600'



SECTION A-A
NOTES

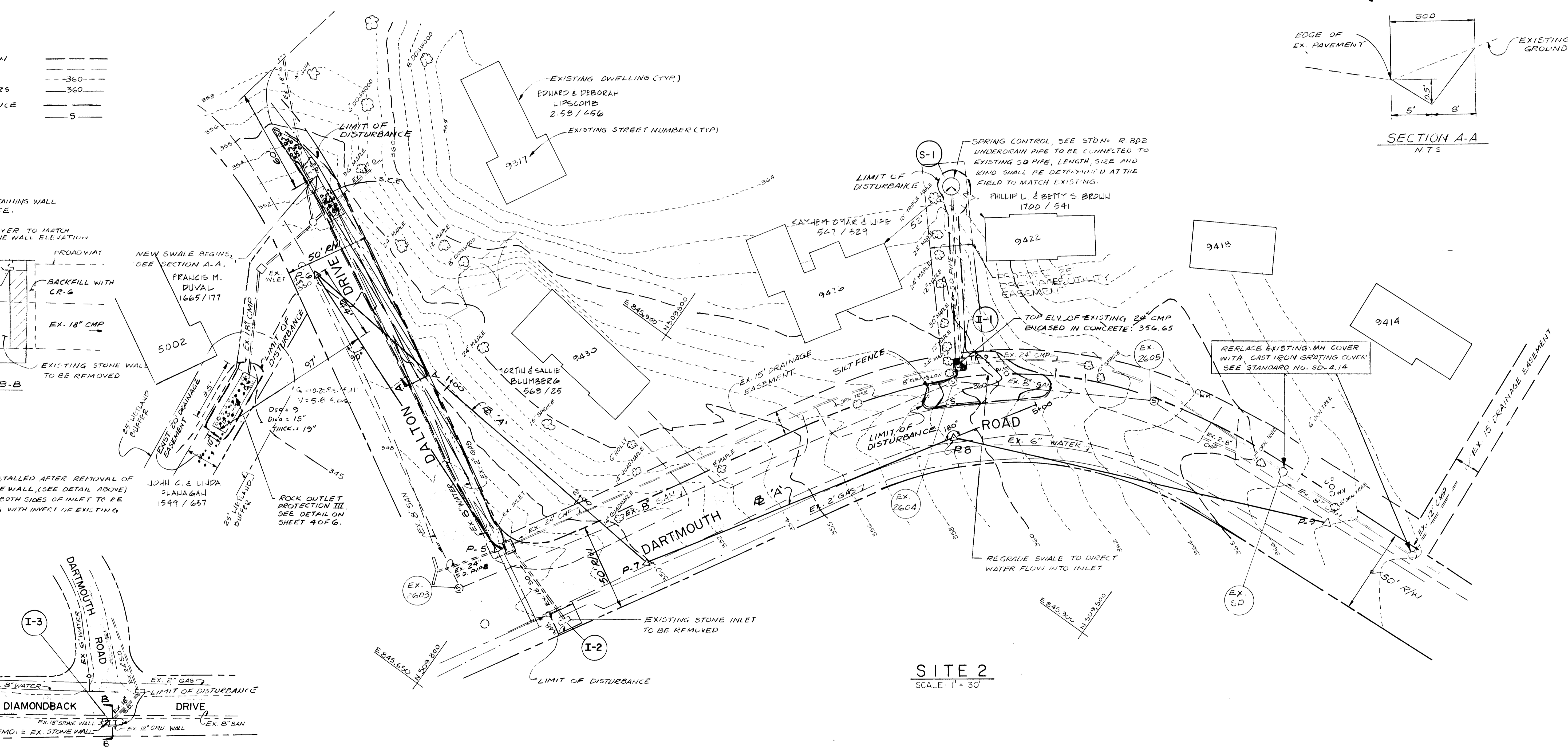
LEGEND

- EXIST. STORM DRAIN
- EXIST. SANITARY
- EXIST. CONTOURS
- PROPOSED CONTOURS
- LIMIT OF DISTURBANCE
- SILT FENCE



SECTION B-B
NOTES

NOTE: I-3 TO BE INSTALLED AFTER REMOVAL OF EXISTING STONE WALL. (SEE DETAIL ABOVE) OPENING: AT BOTH SIDES OF INLET TO BE SET ACCORDING WITH INVERT OF EXISTING SWALES.



SITE 1
SCALE 1" = 50'

SITE 2
SCALE 1" = 30'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND		DES: _____ DRN: _____ CHK: _____ DATE: 06/06/1995		PLAN DARTMOUTH ROAD		DRAINAGE SYSTEM IMPROVEMENT PROGRAM CAPITAL PROJECT NO. D-1078 S.E. HOWARD COUNTY, MARYLAND CONTRACT NO. _____ ELECTION DISTRICT 6		SCALE AS SHOWN SHEET 2 OF 2
DIRECTOR OF PUBLIC WORKS <i>[Signature]</i> 2/23/95	CHIEF, BUREAU OF ENGINEERING <i>[Signature]</i> 9/13/95	CHIEF, BUREAU OF HIGHWAYS <i>[Signature]</i> 9-15-95	CHIEF, DIVISION OF TRANSPORTATION PROJ. AND WATERSHED MANAGEMENT <i>[Signature]</i>	BY NO. _____ REVISION _____ DATE _____	600' SCALE MAP NO. _____ BLOCK NO. _____			

NOTES

- FOR CUTTING AND REPAIRING OPENINGS IN EXISTING ROADWAY PAVING SEE No. CO. STD. No. G-4.01
- CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UNDERGROUND UTILITIES: WATER, SEWER, GAS, ELECTRIC, C/P ETC., IF THERE IS ANY INTERFERENCE (NOT SHOWN ON THIS DRAWING) BETWEEN THESE UTILITIES AND THE PROPOSED STORM DRAIN SYSTEM, CONTACT THE ENGINEER SO A DETERMINATION OF UTILITY RELOCATION OR REDESIGN OF STORM DRAIN CAN BE MADE.
- ALL NON-PAVED AREAS OUTSIDE THE WETLAND BUFFER THAT ARE DISTURBED DURING CONSTRUCTION, TO BE STABILIZED WITH SOD, UNLESS OTHERWISE NOTED.
- EXISTING UTILITIES CALLED ON THIS DRAWING TO BE RELOCATED, MUST BE LOWERED TO PROVIDE 1' CLEARANCE TO PROPOSED STORM DRAIN PIPE.

COORDINATE TABLE

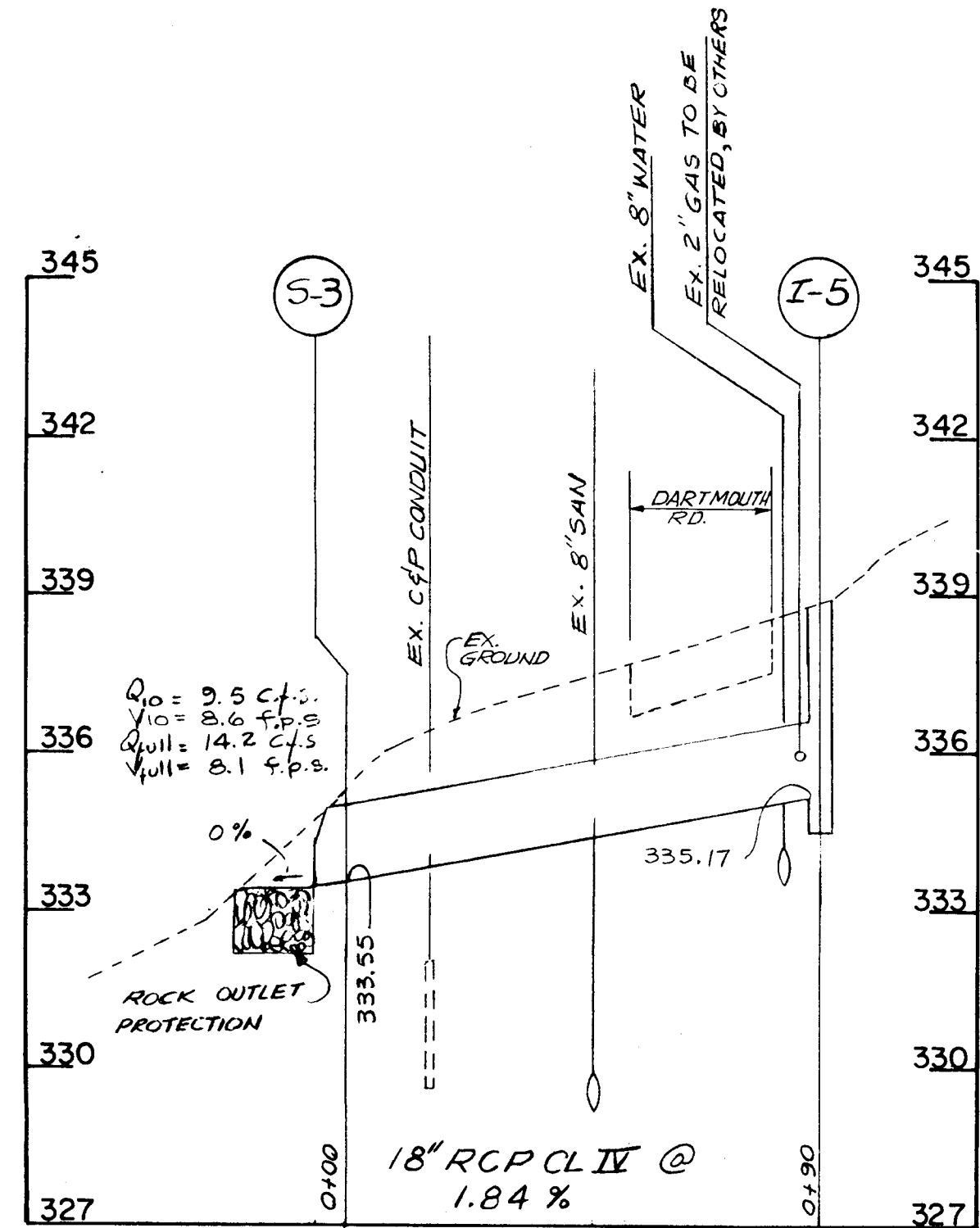
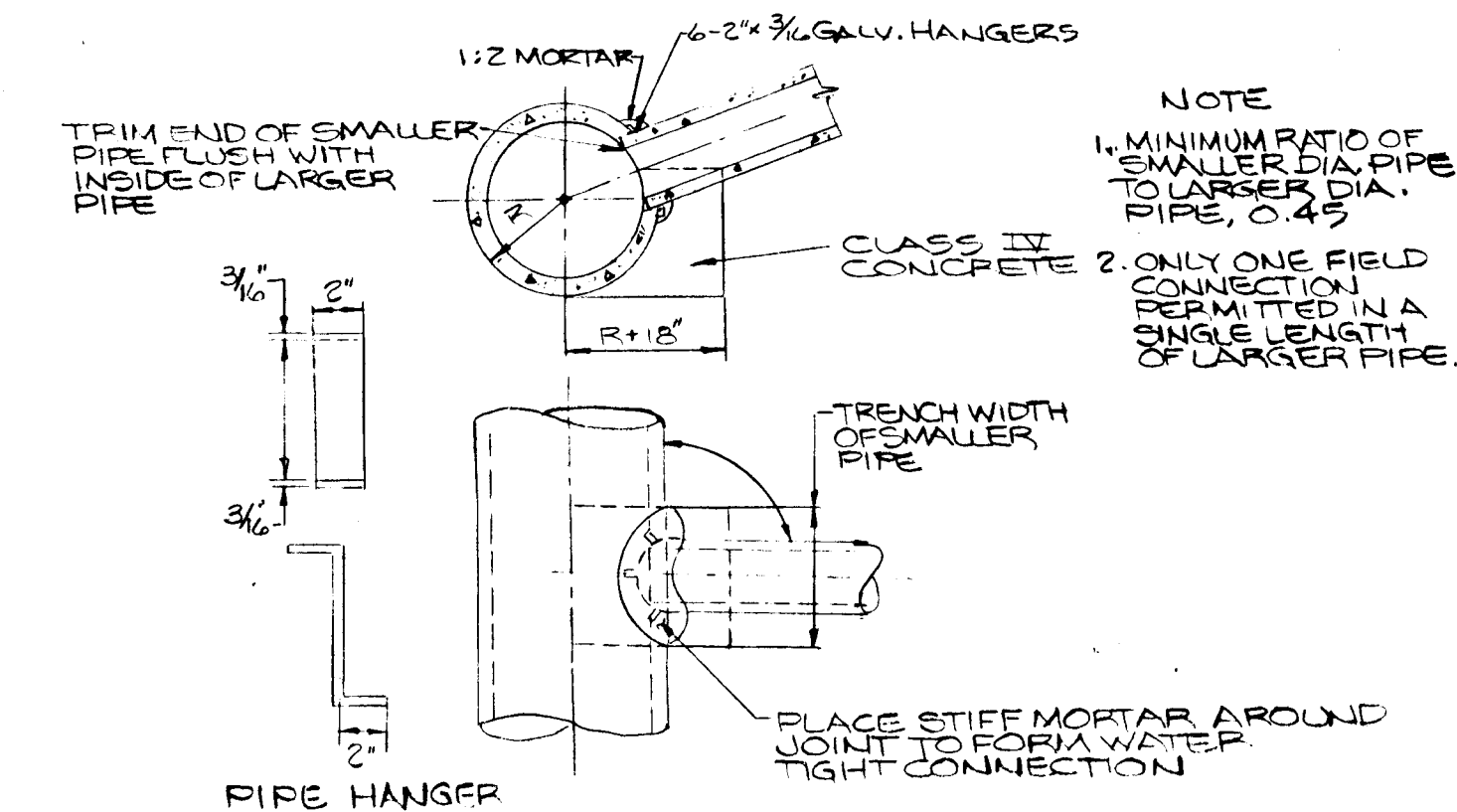
STATION	COORDINATES		ELEVATION
	NORTH	EAST	
P-3	509562.2321	845148.8682	338.47
P-4	509848.8450	845475.3056	350.22
P-11	509201.3261	845685.4911	376.47
P-12	509721.3360	844918.3695	337.15

NOTE: COORDINATES ARE BASED ON MARYLAND STATE GRID.

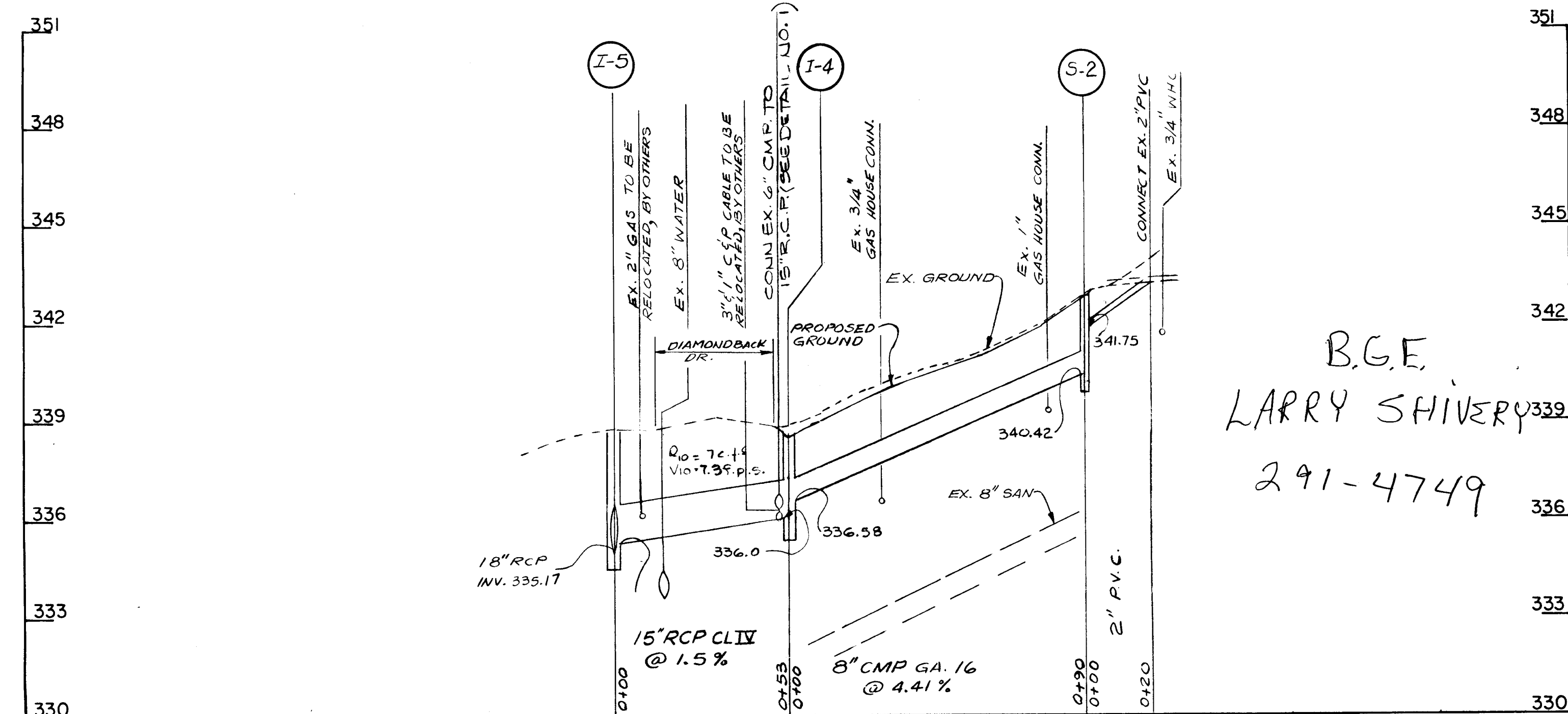
STRUCTURE SCHEDULE

No.	TYPE	TOP GRTE ELEV.	INV. OUT ELEV.	LOCATION	HOWARD CO. STANDARD NO.
I-4	'S' INLET	338.50	336.00	STA. 2+94, 11' RT.	SD-4.22
I-5	'K' INLET	338.85	334.85	STA. 2+94, 42' LT.	SD-4.12 (W)
S-2	JUNCTION BOX	342.75	340.42	STA. 3+83, 13.5' RT.	SEE DET. THIS SMT.
S-3	END SECTION	-	-	STA. 2+95, 62' LT.	SD-5.51

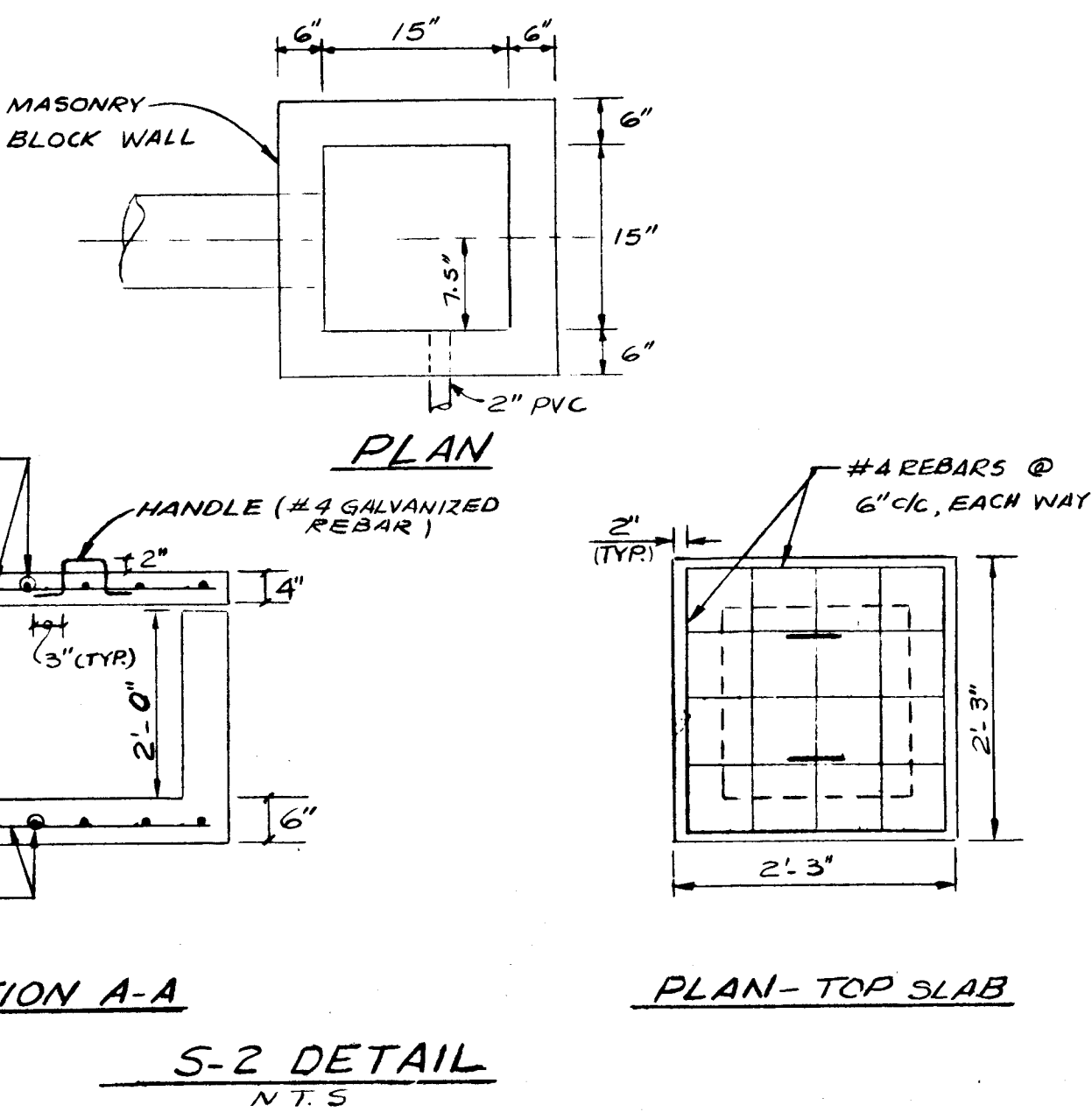
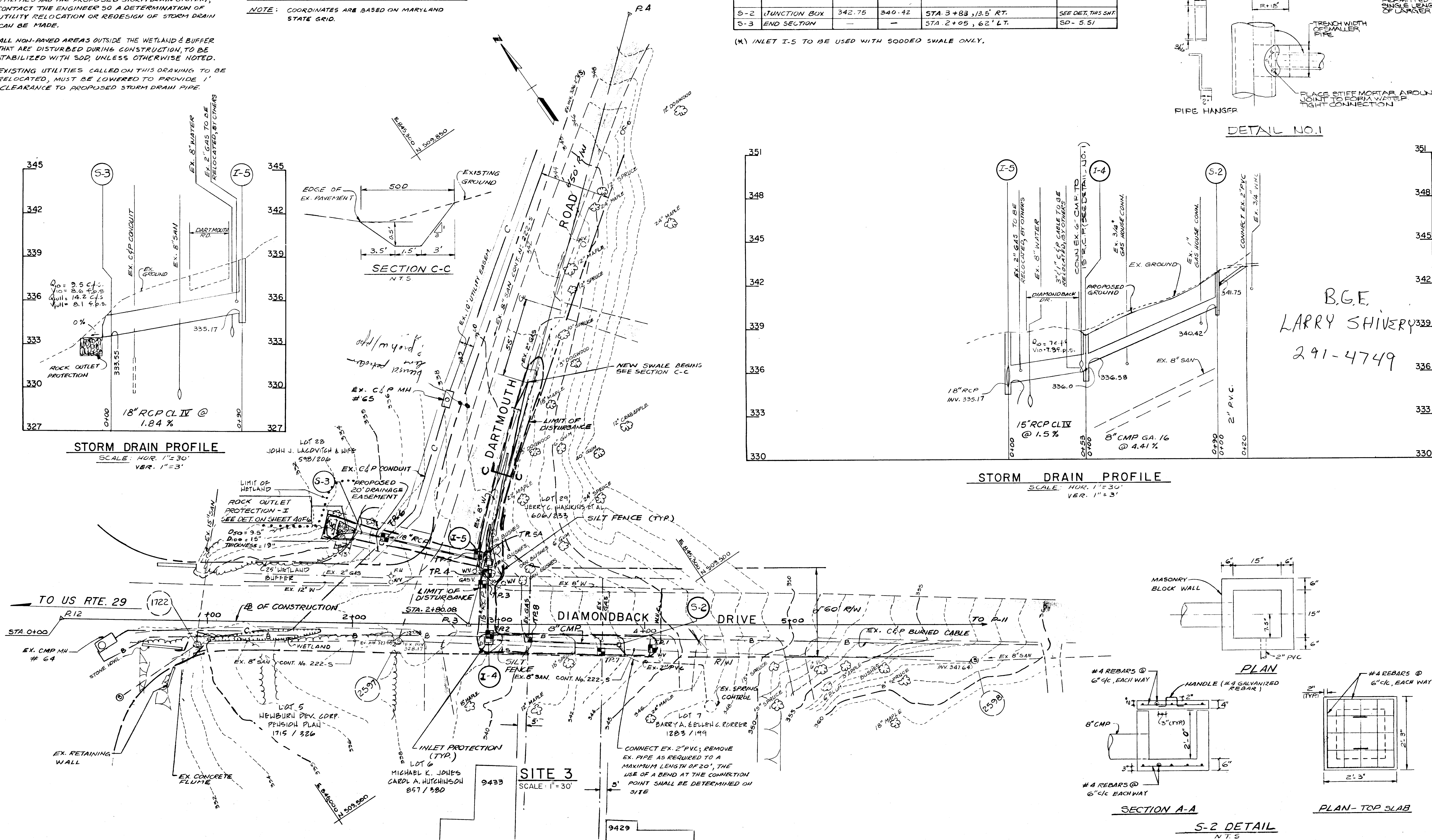
(W) INLET I-5 TO BE USED WITH SODDED SWALE ONLY.



STORM DRAIN PROFILE
SCALE: HOR. 1"=30'
VER. 1"=3'



STORM DRAIN PROFILE
SCALE: HOR. 1"=30'
VER. 1"=3'



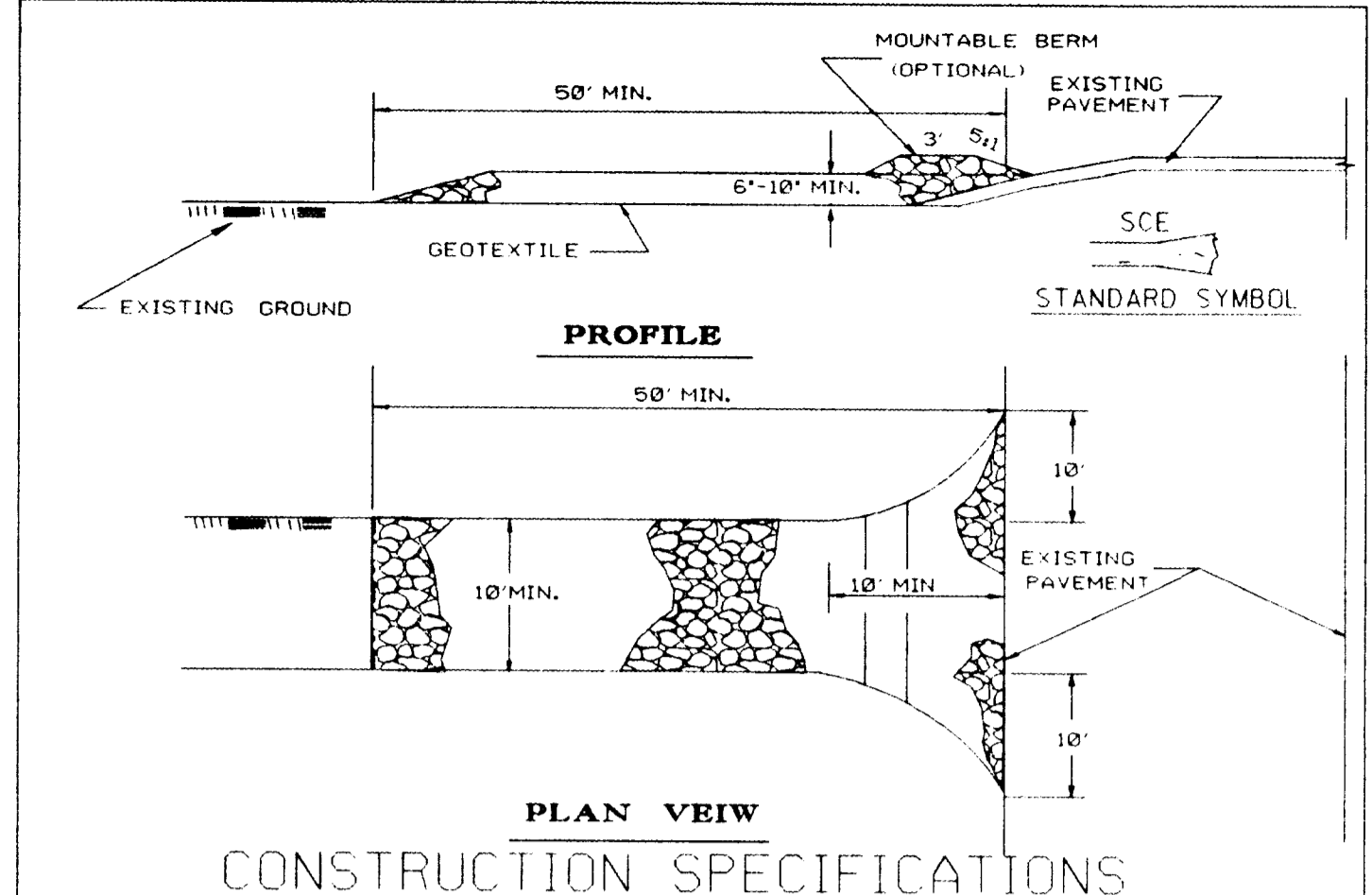
B.G.E.
LARRY SHIVERY
291-4749

GENERAL NOTES FOR SEDIMENT & EROSION CONTROL

- 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. (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 MOST CURRENT "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: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT CONTROL TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN 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:

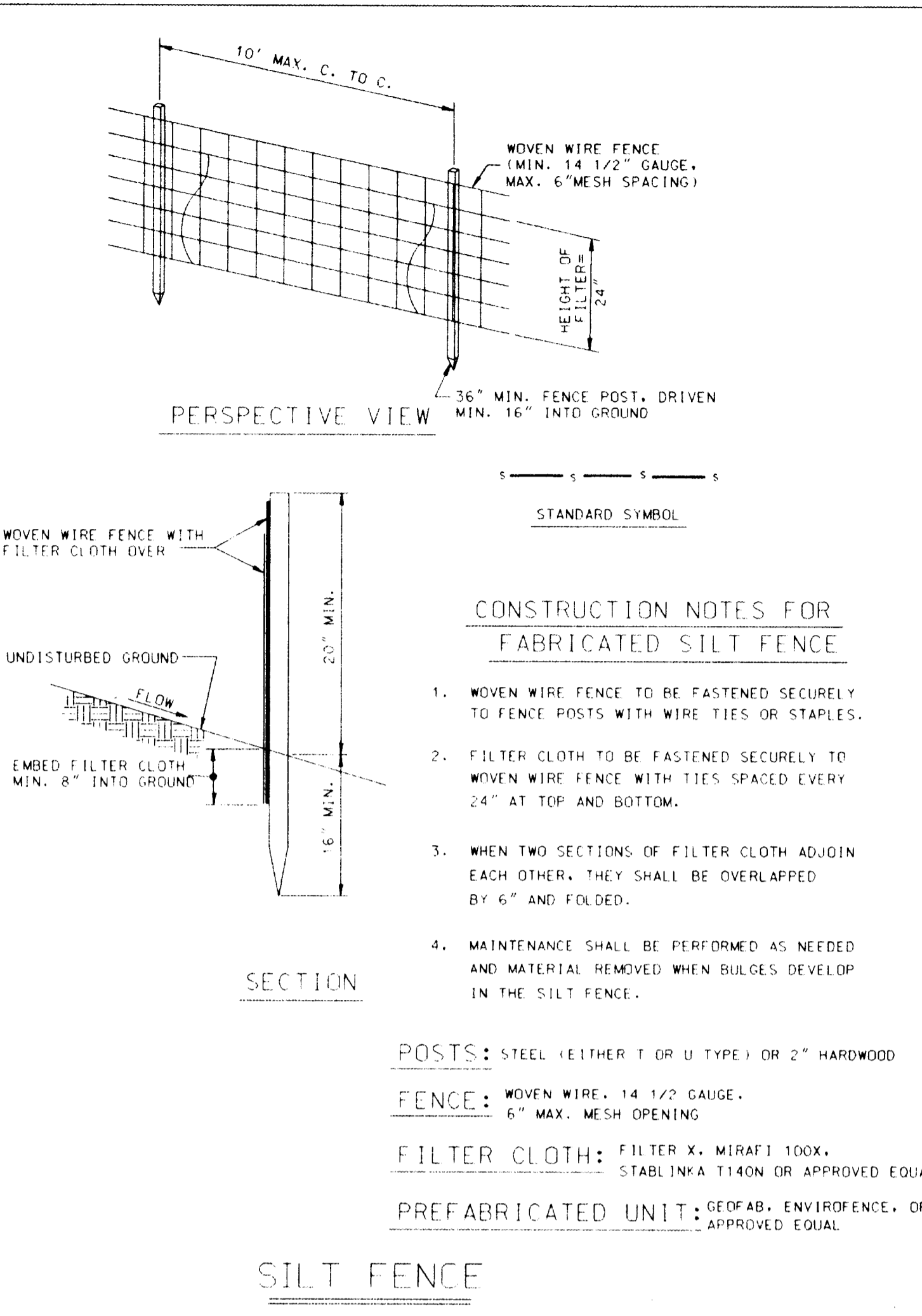
TOTAL AREA OF SITE	1.0 AC.
AREA DISTURBED	0.3 AC.
AREA TO BE ROOFED OR PAVED	0.02 AC.
AREA TO BE VEGETATIVELY STABILIZED	0.28 AC.
TOTAL CUT	200 CU. YDS.
TOTAL FILL	20 CU. YDS.

 OFFSITE WASTE/BORROW AREA LOCATION: FROM A SITE WITH ALL THE GRADING PERMIT TO BE DETERMINED BY THE CONTRACTOR.
- 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 CONTROL 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 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 CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY.



- CONSTRUCTION SPECIFICATIONS**
- STONE SIZE - USE AASHTO M43, SIZE NO. 3 AGGREGATE.
 - LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET.
 - THICKNESS - NOT LESS THAN SIX (6) INCHES, LIGHT DUTY NOT LESS THAN TEN (10) INCHES, HEAVY DUTY.
 - WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
 - GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. GEOTEXTILE TO MEET THE REQUIREMENTS OF CLASS C.
 - SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
 - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
 - WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
 - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER HEAVY USE AND EACH RAIN.
 - THIS ENTRANCE WILL BE CONSTRUCTED AT LOCATIONS SHOWN ON THE PLANS AND/OR WHERE DIRECTED BY THE ENGINEER.

STABILIZED CONSTRUCTION ENTRANCE



- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
 - FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND BOTTOM.
 - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
 - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.
- POSTS: STEEL (EITHER T OR U TYPE) OR 2" HARDWOOD
 FENCE: WOVEN WIRE, 14 1/2 GAUGE, 6" MAX. MESH OPENING
 FILTER CLOTH: FILTER X, MIRAF 100X, STABILINKA 1140N OR APPROVED EQUAL
 PREFABRICATED UNIT: GEOTAB, ENVIROFENCE, OR APPROVED EQUAL

SILT FENCE

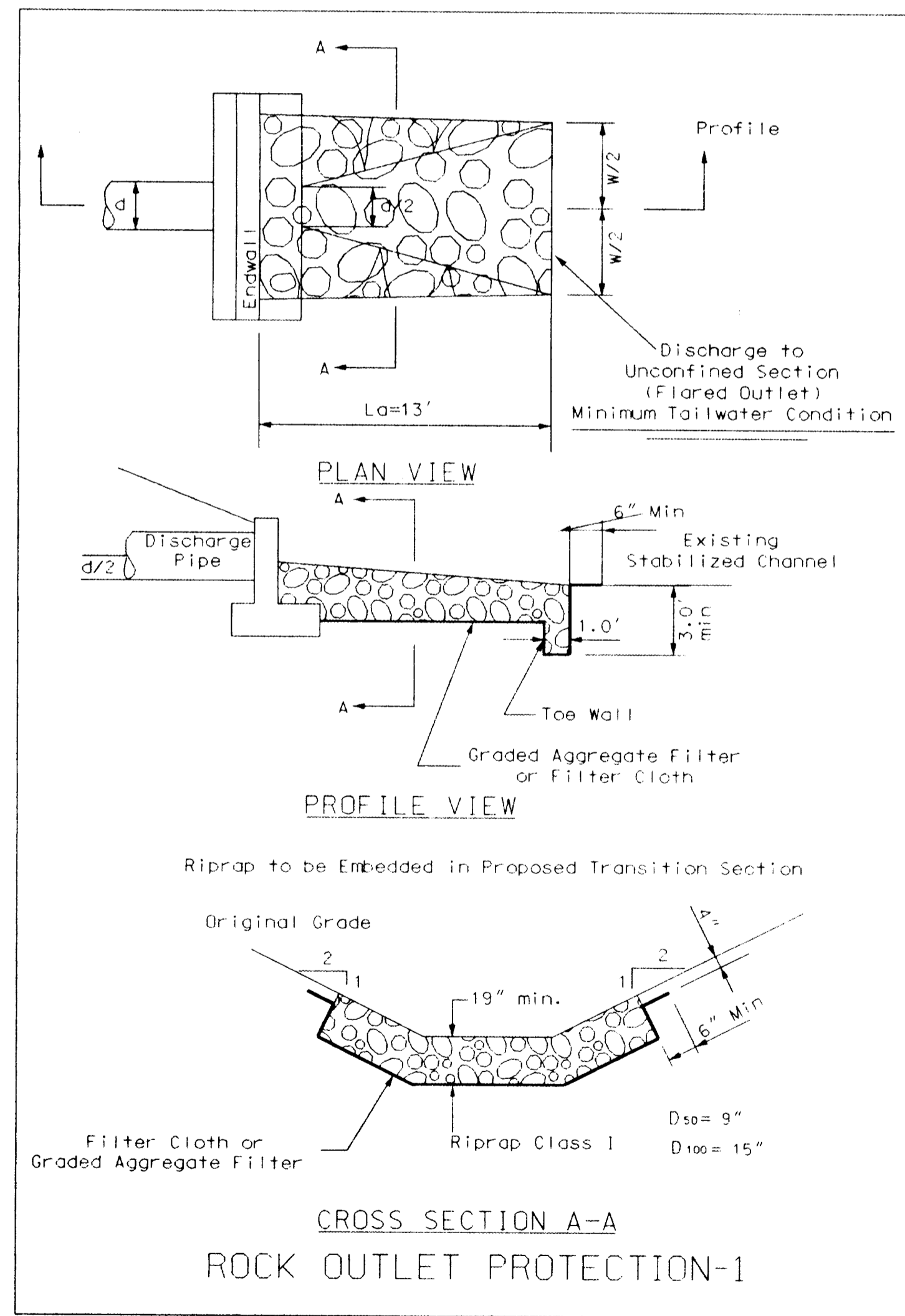
- PERMANENT SEEDING SPECIFICATIONS**
- ALL DISTURBED AREAS - SHALL BE SEEDED AND MULCHED
 - SEEDED BED PREPARATION - THE TOP LAYER OF SOIL SHALL BE LOOSENEED BY DISCING OR RAKING (SHALL BE DONE ON CONTOUR) TO A DEPTH OF AT LEAST 3" BEFORE SEEDING OCCURS. APPLY TWO (2) TON PER ACRE OF LIME AND 1000 LBS. PER ACRE OF 10-10-10 FERTILIZER OR EQUIVALENT. THOROUGHLY MIX INTO SOIL TO A MINIMUM OF 3".
 - SEEDING METHOD OF APPLICATION - APPLY SEED UNIFORMLY WITH A CYCLONE SEED DRILL, CULTIPACKER SEEDER OR HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER).
 - SEEDING - USE 50% KENTUCKY BLUEGRASS, 40% PENNLAWN CREEPING RED FESCUE AND 10% OF RED TOP AT THE RATE OF 90 LBS. PER ACRE. PERMANENT SEEDING TO BE DONE ONLY DURING THE PERIOD OF 2/1 TO 4/30 AND 8/15 TO 10/31.
 - MULCHING - USE CLEAN, UNWEATHERED, UNCHOPPED SMALL GRAIN STRAW AT THE RATE OF 1 1/2 TO 2 TONS PER ACRE ANCHORED DOWN WITH CUTBACK ASPHALT AT THE RATE OF 5-8 GALLONS PER 1000 SQ. FT.

- SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT FROM HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSES AND PERMITS (3 DAYS).
 - INSTALL SEDIMENT CONTROL MEASURES AS SHOWN ON PLANS (1 DAY)
 - PERFORM SWALE GRADING, INSTALL STORM DRAIN SYSTEMS ACCORDING WITH PLANS. MAXIMUM LENGTH OF DISTURBANCE SHALL BE 100' AT ANY ONE TIME PROVIDE PERMANENT STABILIZATION. (30 DAYS)
 - WITH APPROVAL OF THE EROSION/SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT/EROSION CONTROL DEVICES (1 DAY)

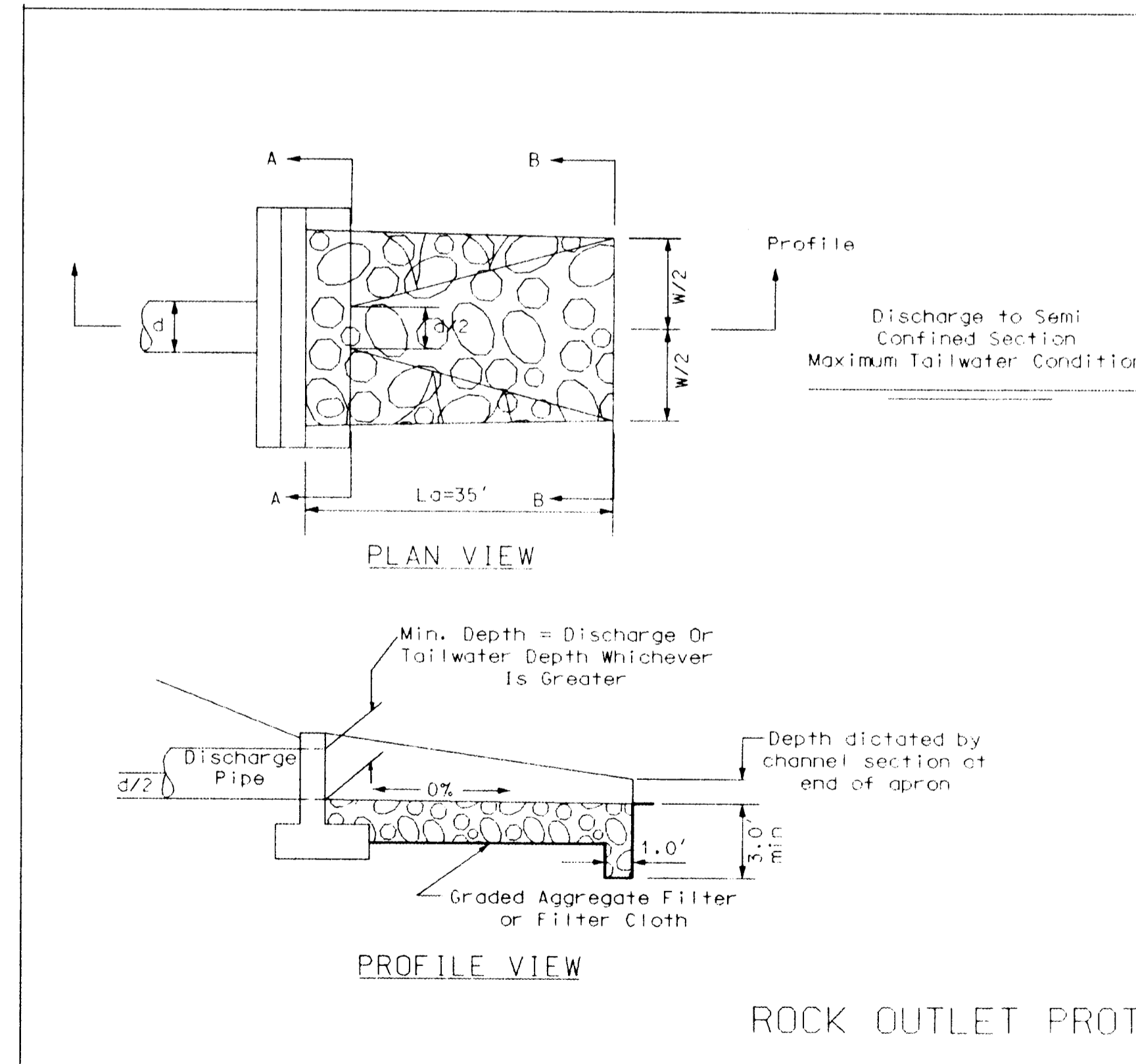
STANDARD STABILIZATION NOTE

"FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN THREE HORIZONTAL TO ONE VERTICAL (3:1); AND FOURTEEN DAYS (14) AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE."

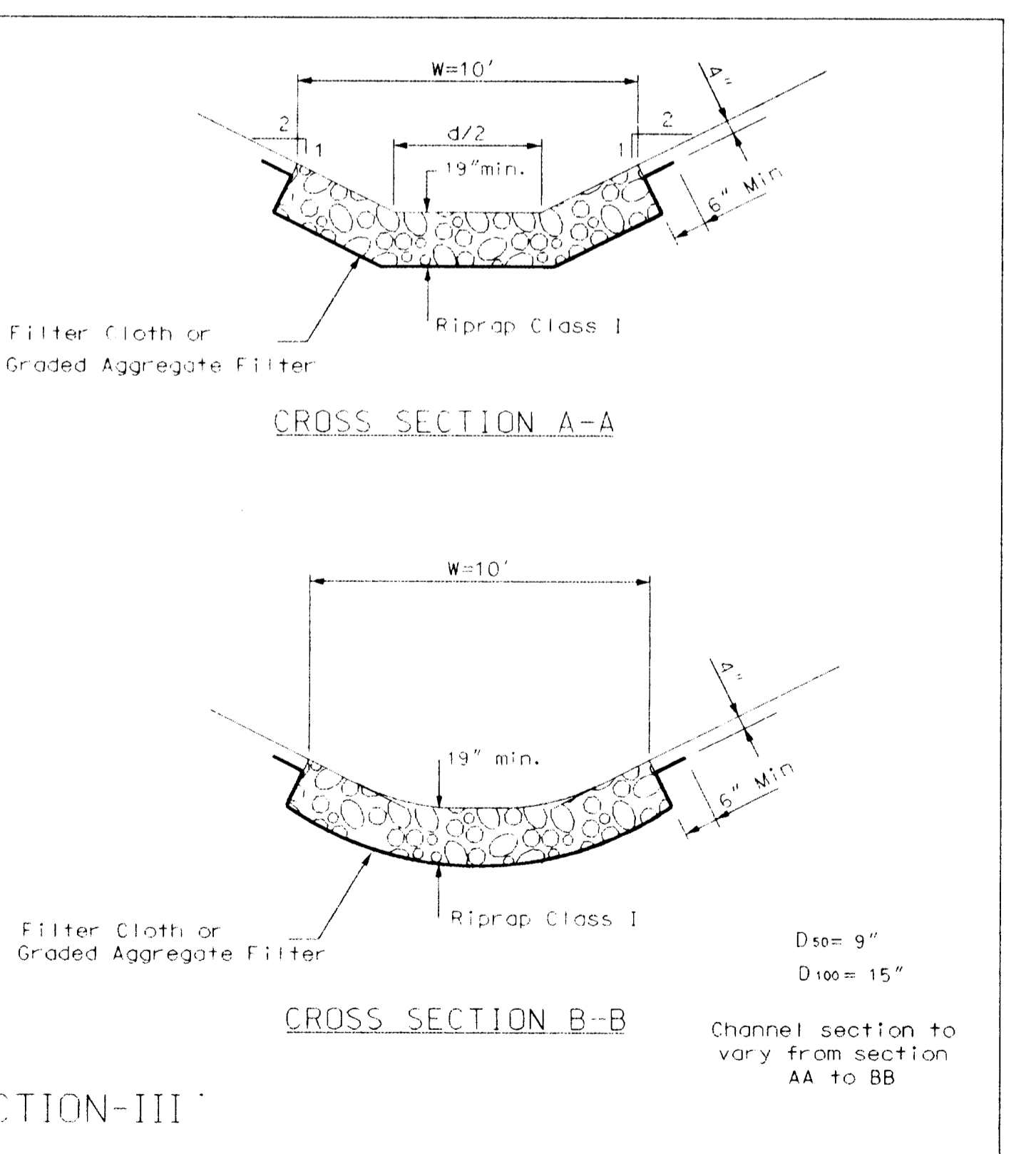
(*) PROPOSED DITCH/DRAINE SECTIONS MUST BE STABILIZED AT THE END OF EACH WORKING DAY.



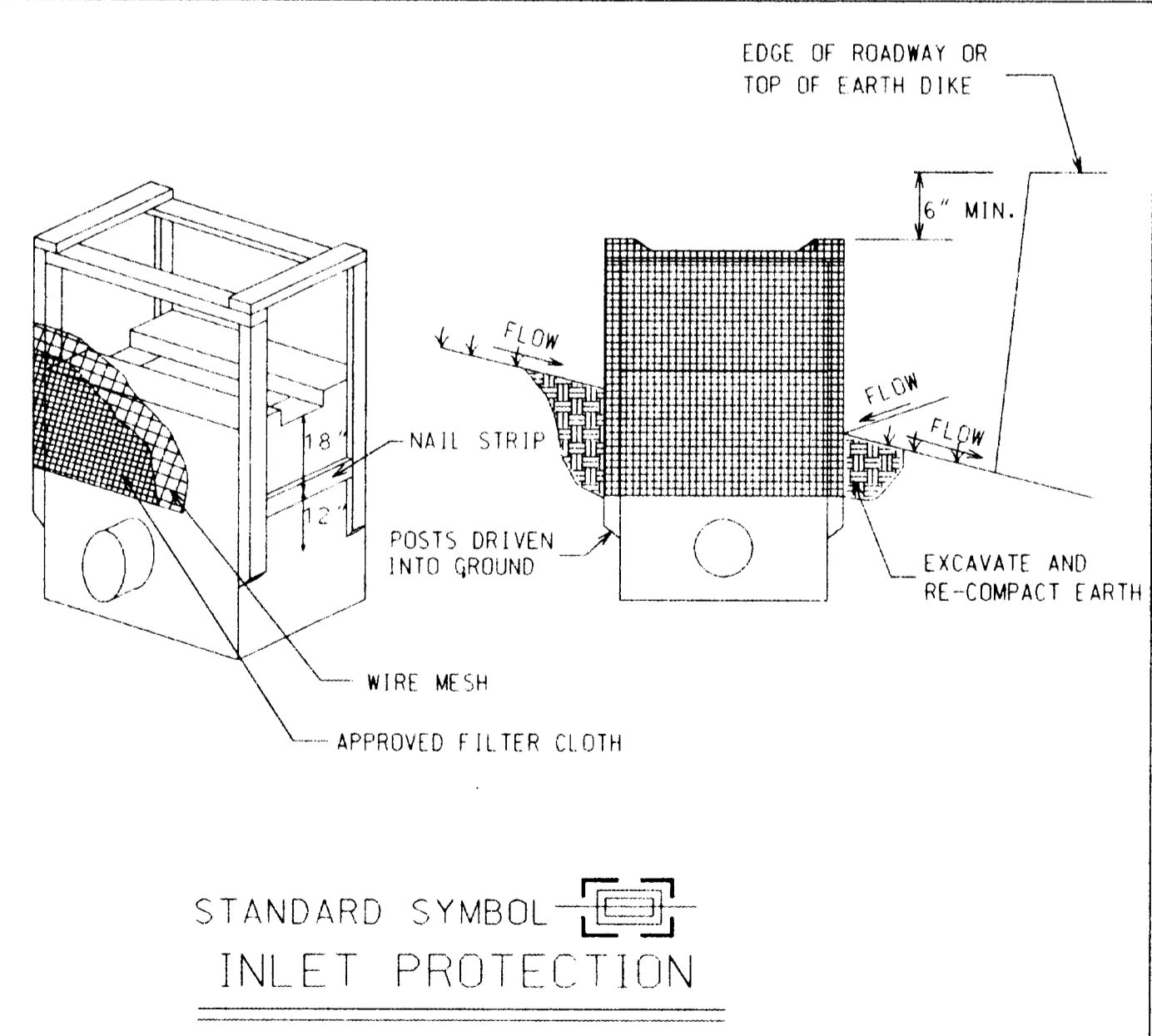
ROCK OUTLET PROTECTION-I



ROCK OUTLET PROTECTION-III



CROSS SECTION A-A
CROSS SECTION B-B



STANDARD SYMBOL INLET PROTECTION

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James M. Shaw 9/13/95
 DIRECTOR OF PUBLIC WORKS DATE

Robert M. Doolittle 9-15-95
 CHIEF, BUREAU OF HIGHWAYS DATE

EBA ENGINEERING, INC.
 5800 METRO DRIVE
 BALTIMORE, MARYLAND 21215
 (410) 358-7171

Robert M. Doolittle 9/13/95
 CHIEF, BUREAU OF ENGINEERING DATE

Robert M. Doolittle 9/13/95
 CHIEF, TRANSPORTATION DISTRICTS DATE

DES: L.C.			
DRN: AOS			
CHK: L.C.			
DATE: 9/16/1995	BY NO.	REVISION	DATE

DIAMONDBACK DRIVE
 DARTMOUTH ROAD
 DALTON DRIVE
 EROSION AND SEDIMENT
 CONTROL DETAILS

600' SCALE MAP NO. _____ BLOCK NO. _____

DRAINAGE SYSTEM IMPROVEMENT PROGRAM
 CAPITAL PROJECT NO. D-1078 S.E.
 HOWARD COUNTY, MARYLAND
 CONTRACT NO. _____
 ELECTION DISTRICT _____

NO SCALE

SHEET 4 OF 6

WETLAND IMPACT (FOR THIS SHEET SITE 2 ONLY)

* PERMANENT DISTURBANCE WETLAND IMPACT	TOTAL	140 SF RIPRAP	140 SF
BUFFER IMPACT	TOTAL	210 SF RIPRAP 36 SF FILL (TOPSOIL)	246 SF
EARTHWORK:			
EARTHWORK IN WETLAND	7	CY CUT	
EARTHWORK IN BUFFER	2	CY FILL (TOPSOIL)	
	13	CY CUT	
TOTAL	16	CY CUT	
	2	CY FILL (TOPSOIL)	
RIPRAP:			
RIPRAP IN WETLAND	9	CY	
RIPRAP IN BUFFER	13	CY	
TOTAL	22	CY RIPRAP	
* TEMPORARY DISTURBANCE WETLAND IMPACT	0	SF	
BUFFER IMPACT	0	SF	
TOTAL	0	SF	
TOTAL WETLAND & BUFFER IMPACT (FOR SITE 2 ONLY) = 386 SF			

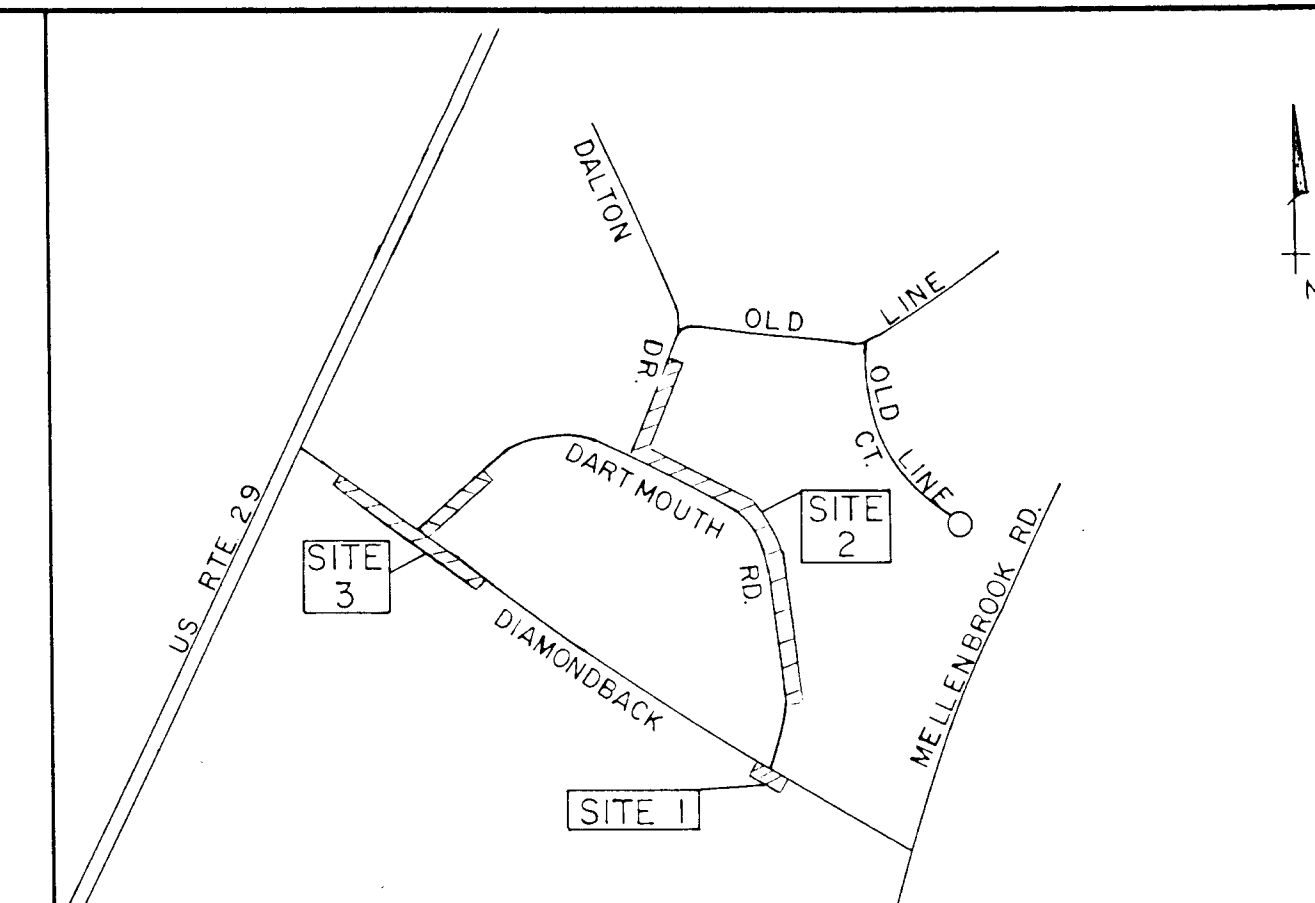
* QUANTITIES SHOWN ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR SHALL VERIFY QUANTITIES TO OWN SATISFACTION.

NOTES:

- ALL WORK SHALL COMPLY WITH THE HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS.
- FOR EROSION & SEDIMENT CONTROL DETAILS SEE SHEET 4 OF 6

NOTES:

1. SEE SHEET 6 OF 6 FOR WETLAND IMPACT NOTES.
2. SEE SHEET 6 OF 6 FOR WETLAND IMPACTS SUMMARY (TOTAL FOR SITE 2 & 3)



VICINITY MAP
SCALE: 1" = 600'

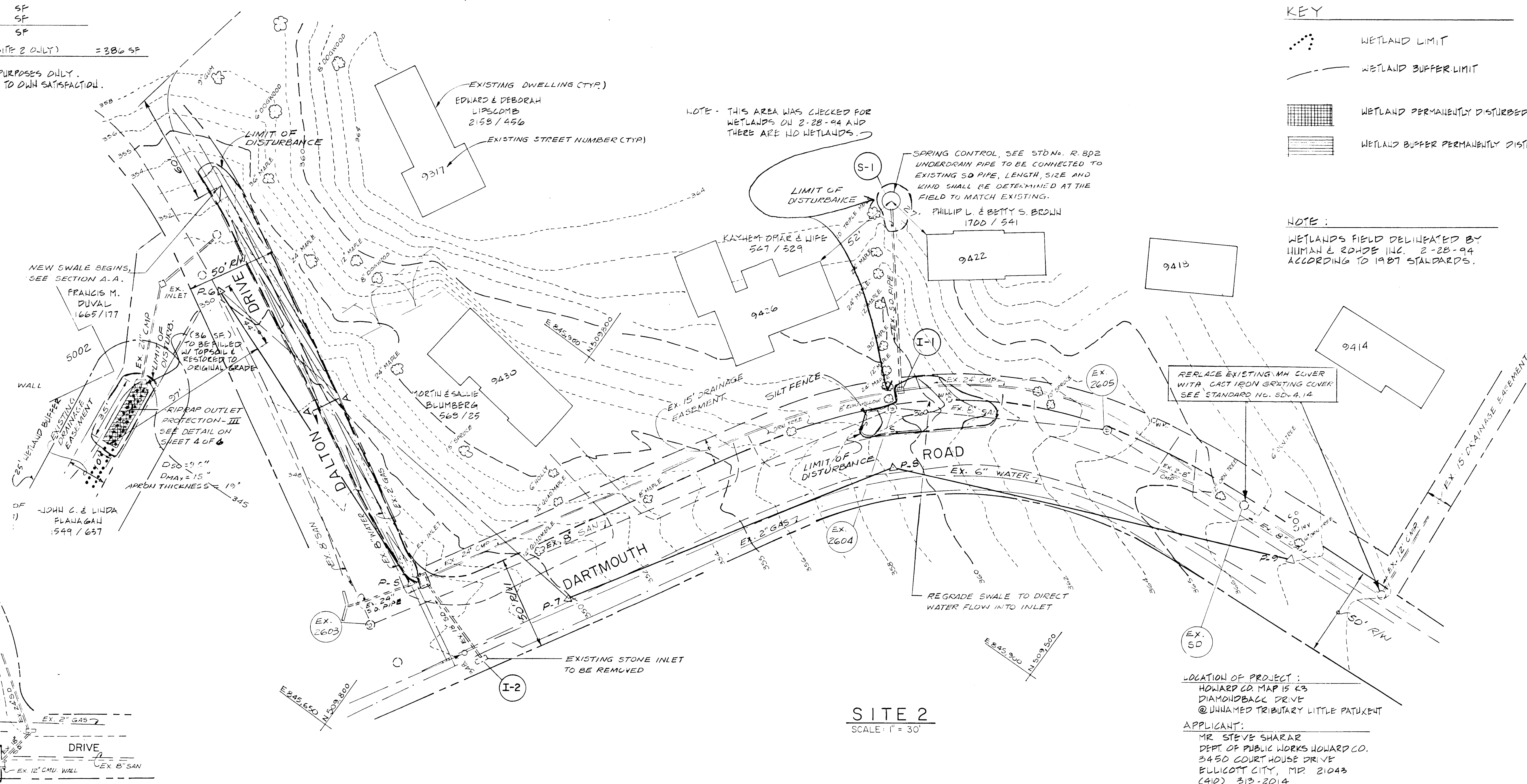
KEY

- WETLAND LIMIT
- WETLAND BUFFER LIMIT
- WETLAND PERMANENTLY DISTURBED
- WETLAND BUFFER PERMANENTLY DISTURBED

NOTE:

WETLANDS FIELD DELINEATED BY HUMAN & ROHDE INC. 2-28-94 ACCORDING TO 1987 STANDARDS.

NOTE FOR RIPRAP DETAILS SEE SHEET 2 OF 6 STORM DRAIN PLAN & PROFILE DIAMONDBACK DRIVE



SITE 1
SCALE: 1" = 50'

SITE 2
SCALE: 1" = 30'

LOCATION OF PROJECT:
HOWARD CO. MAP 15 K3
DIAMONDBACK DRIVE
@ UNWAMED TRIBUTARY LITTLE PATUXENT

APPLICANT:
MR. STEVE SHARAR
DEPT. OF PUBLIC WORKS HOWARD CO.
3450 COURT HOUSE DRIVE
BELLGOTT CITY, MD 21043
(410) 313-2014

PREPARED BY:
HUMAN & ROHDE, INC.
Landscape Architects
110 E. Pennsylvania Avenue
Towson, Maryland 21286
(410) 825-3885

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS DATE: 9/13/95 CHIEF, BUREAU OF ENGINEERING DATE: 9/13/95		DES: [] DRN: [] CHK: [] DATE: 08/14/1995 BY NO. REVISION DATE		WETLAND IMPACTS PLAN DATE 3-8-94 DARTMOUTH ROAD 600' SCALE MAP NO. BLOCK NO.		DRAINAGE SYSTEM IMPROVEMENT PROGRAM CAPITAL PROJECT NO. D-1078 S.E. HOWARD COUNTY, MARYLAND CONTRACT NO. ELECTION DISTRICT 6		SCALE AS SHOWN SHEET 5 OF 6
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NOTE

- FOR CUTTING AND REPAIRING OPENINGS IN EXISTING ROADWAY PAVING SEE NO. CO. STD. No. G.4.01
- CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES (WATER, SEWER, GAS, C&P, ELEC. ETC.) IF THERE IS ANY INTERFERENCE BETWEEN THESE UTILITIES AND THE PROPOSED STORM DRAIN SYSTEM, CONTACT THE ENGINEER SO A DETERMINATION OF UTILITY RELOCATION OR REDESIGN OF STORM DRAIN CAN BE MADE.
- ALL NON-PAVED AREAS OUTSIDE THE WETLAND & BUFFER THAT ARE DISTURBED DURING CONSTRUCTION, TO BE STABILIZED WITH SOD, UNLESS OTHERWISE NOTED.

WETLAND IMPACT SUMMARY (TOTAL FOR SITES 2 & 3)

* PERMANENT DISTURBANCE WETLAND IMPACT	TOTAL	140 SF RIPRAP	140 SF
BUFFER IMPACT	TOTAL	330 SF RIPRAP 36 SF FILL	366 SF
EARTHWORK:			
IN WETLAND		9.0 CY CUT	
IN BUFFER		21.0 CY CUT	
	TOTAL	2 CY FILL (TOPSOIL)	
		30.0 CY CUT	
		2 CY FILL (TOPSOIL)	
RIPRAP:			
IN WETLAND		9.0 CY	
IN BUFFER		21.0 CY	
	TOTAL	30.0 CY RIPRAP	
* TEMPORARY DISTURBANCE WETLAND IMPACT		0 SF	
BUFFER IMPACT		0 SF	
TOTAL WETLAND & BUFFER IMPACT (FOR SITE 2 & 3)			= 506 SF

WETLAND IMPACT SITE 3 (FOR THIS SHEET ONLY)

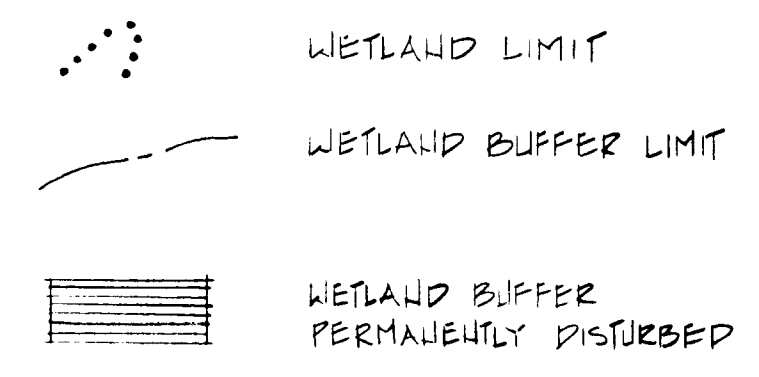
* PERMANENT DISTURBANCE WETLAND IMPACT	TOTAL	0 SF	0 SF
BUFFER IMPACT	TOTAL	120 SF RIPRAP	120 SF
EARTHWORK:			
EARTHWORK IN WETLAND		0 CY CUT	
EARTHWORK IN BUFFER		8 CY CUT	
	TOTAL	8 CY CUT	
RIPRAP:			
RIPRAP IN WETLAND		0 CY	
RIPRAP IN BUFFER		8 CY	
	TOTAL	8 CY	
* TEMPORARY DISTURBANCE WETLAND IMPACT		0 SF	
BUFFER IMPACT		0 SF	
TOTAL WETLAND & BUFFER IMPACT (FOR SITE 3 ONLY)			120 SF

* QUANTITIES SHOWN ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR SHALL VERIFY QUANTITIES TO OWN SATISFACTION.

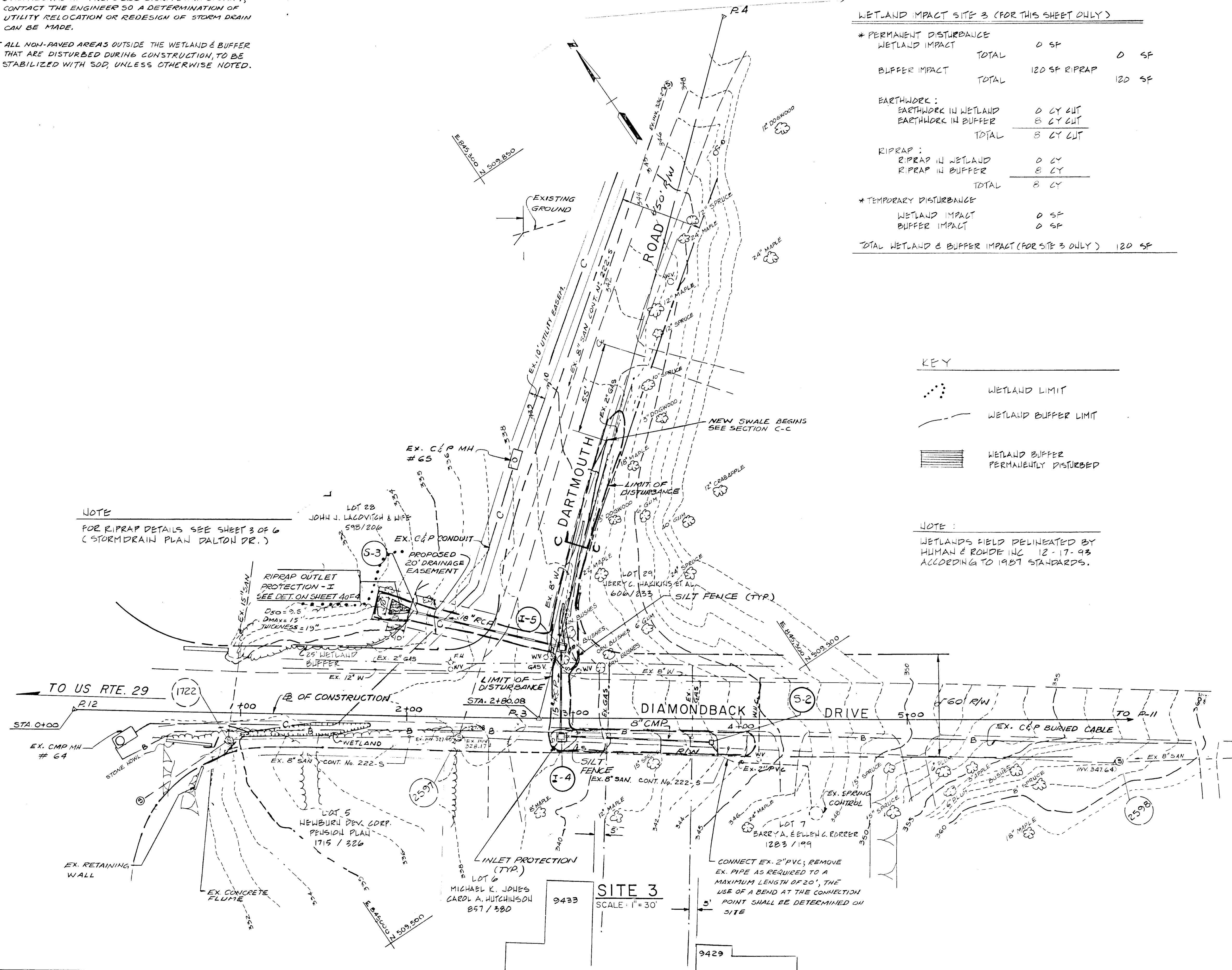
WETLAND IMPACT NOTES

- The following best management practices shall be used during construction:
 - Remove excess debris to an upland disposal area.
 - Make post construction grades and elevations the same as shown on plan.
- For permanently disturbed areas:
 - Use previously excavated material as backfill unless it contains waste metal products, unsightly debris, toxic material, or any other deleterious substance.
 - Use clean borrow material.
 - All disturbed areas are to be restored. Rake area smooth and seed with annual rye grass at the rate of 5 lbs. per 1000 sf.
- For temporary disturbed areas:
 - Strip, stockpile and maintain separately the top 6" of soil material, to be replaced as the top layer of the backfilled material.
 - Use previously excavated material as backfill, unless it contains waste metal products, unsightly debris, toxic material, or any other deleterious substance. Use clean borrow material when excavated material is not suitable for use as backfill.
 - Remove excess debris to an upland disposal area.
 - Make post construction grades and elevations the same as the original.
 - All disturbed areas are to be restored to their existing conditions within 24 hours. Rake area smooth and seed with annual rye grass at the rate of 5 lbs. per 1000 sf.
- Place materials in a location and manner which does not adversely impact surface or subsurface water flow into or out of the nontidal wetland.
- Work must comply with all conditions of the Water Quality Certification issued for this project.

KEY



NOTE: WETLANDS FIELD DELINEATED BY HUMAN & ROHDE INC. 12-17-93 ACCORDING TO 1987 STANDARDS.



NOTE FOR RIPRAP DETAILS SEE SHEET 3 OF 6 (STORM DRAIN PLAN DALTON DR.)

LOCATION OF PROJECT:
HOWARD CO. ADC MAP 15 K3
DIAMONDBACK DRIVE @
UNNAMED TRIANGULAR LITTLE PATENT R.

APPLICANT:
MR. STEVE SHARAR
DEPT. OF PUBLIC WORKS HOWARD CO.
3450 COURT HOUSE DRIVE
ELLICOTT CITY, MD 21043
(410) 313-2014

PREPARED BY:
HUMAN & ROHDE, INC.
Landscape Architects
110 E. Pennsylvania Avenue
Towson, Maryland 21286
(410) 825-3885

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS: [Signature] DATE: 3/13/95 CHIEF, BUREAU OF ENGINEERING		CHIEF, DIVISION OF TRANSPORTATION PROJ. AND WATERSHED MANAGEMENT		DES: [Signature] DRN: CHK: DATE: 02/06/1995		WETLAND IMPACTS PLAN DATE: 3-8-94 DIAMONDBACK DRIVE		DRAINAGE SYSTEM IMPROVEMENT PROGRAM CAPITAL PROJECT NO. D-1078 S.E. HOWARD COUNTY, MARYLAND CONTRACT NO. ELECTION DISTRICT 6		SCALE AS SHOWN SHEET 6 OF 6
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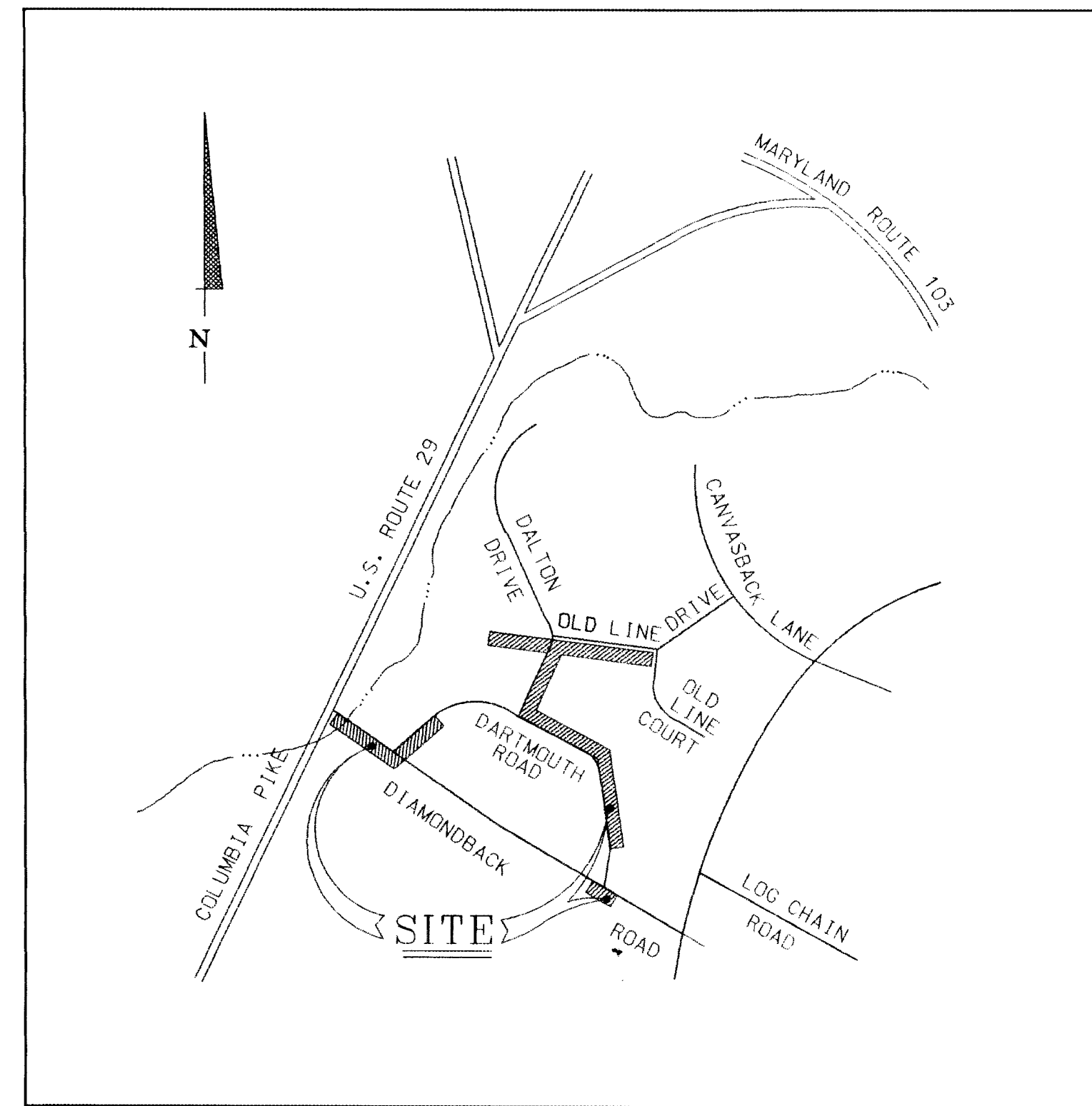
INDEX OF SHEETS

1. TITLE SHEET
2. PLAN (DALTON - DARTMOUTH)
3. PLAN (DIAMONDBACK - DARTMOUTH)
4. EROSION AND SEDIMENT CONTROL DETAILS
5. WETLANDS IMPACT PLAN (DARTMOUTH)
6. WETLANDS IMPACT PLAN (DIAMONDBACK)

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN HEREON:
MISS UTILITY 1-800-257-7777
BALTIMORE GAS & ELECTRIC CO., UNDERGROUND ELECTRICAL DISTRIBUTION ENGINEERING DAMAGE CONTROL 234-6313
BALTIMORE GAS & ELECTRIC CO., UNDERGROUND GAS DISTRIBUTION ENGINEERING 234-5533
CHESAPEAKE AND POTOMAC TELEPHONE CO. 725-9976
COLONIAL PIPELINE COMPANY 781-4641
HOWARD COUNTY BUREAU OF UTILITIES 313-4900
HOWARD COUNTY DIVISION OF CONSTRUCTION INSPECTION 313-1870
HOWARD COUNTY TRAFFIC DIVISION 313-2430
HOWARD COUNTY SURVEYING AND DRAFTING DIVISION 313-2417
3. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
4. SURVEY OF THE SITE WAS PERFORMED BY EBA ENGINEERING IN JUNE, 1991.
5. COORDINATES AND ELEVATIONS ARE BASED ON HOWARD COUNTY CONTROL STATION NOS. 2139003, 2139004 AND 2139005.
6. WETLANDS WERE DELINEATED BY HUMAN & RODHE, INC. ON JUNE 28, 1993.
7. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 FOR UNDERGROUND UTILITY LOCATIONS AT LEAST FIVE (5) DAYS PRIOR TO COMMENCING WORK SHOWN ON THE PLANS.
8. ALL TOP ELEVATIONS FOR THE PROPOSED INLETS AND MANHOLES ARE APPROXIMATE AND ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR AND THE ENGINEER. WHERE THE PROPOSED STORM DRAINS CROSS VEGETATED AREAS, POSITIVE DRAINAGE SHALL BE MAINTAINED AND THE TOP ELEVATIONS ADJUSTED AS DIRECTED BY THE ENGINEER.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ALL EXISTING DRIVEWAYS DAMAGED DURING CONSTRUCTION.
10. TREES ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES LOCATED OUTSIDE THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
11. THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ON THESE PLANS ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION BEFORE STARTING CONSTRUCTION. NEITHER THE ENGINEER NOR THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS WARRANT OR GUARANTEE THE COMPLETENESS OR THE CORRECTNESS OF THE INFORMATION SHOWN.
12. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES. ANY DAMAGE DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. CLEAR ALL UTILITIES BY A MINIMUM OF 6 INCHES.
13. TEST PITS SHALL BE DUG AT ALL UTILITY CROSSINGS TO DETERMINE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF UTILITIES. TEST PITS SHALL BE DUG A SUFFICIENT AMOUNT OF TIME IN ADVANCE OF THE CONSTRUCTION OR TRENCHING OPERATION TO ALLOW FOR NECESSARY ADJUSTMENTS.
14. WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL THE RESULTS TEST PITS ARE INCLUDED ON THE STORM DRAIN PROFILES.
15. ALL UTILITY POLES MUST BE CLEARED BY FIVE (5) FEET. IF THE STORM DRAIN PIPING OR STRUCTURE WORK IS WITHIN FIVE (5) FEET OF A UTILITY POLE, THE POLE IS TO BE BRACED OR THE PROPOSED STORM DRAIN SHALL BE PLACED BY TUNNELING. ALL COSTS FOR TUNNELING ARE TO BE INCLUDED IN THE UNIT PRICE BID FOR FURNISHING AND LAYING THE STORM DRAIN PIPE.
16. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
17. CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR FURNISHING AND LAYING STORM DRAIN PIPE.
18. EXISTING WATER HOUSE SERVICES THAT ARE IN CONFLICT WITH THE PROPOSED STORM DRAINAGE FACILITIES SHALL BE ADJUSTED BY THE CONTRACTOR.
19. FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, THE CONTRACTOR SHALL ABIDE BY THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION" AND THE SPECIAL PROVISIONS. IN THE EVENT OF ANY DISCREPANCY BETWEEN THESE TWO SOURCES, THE LATTER SHALL GOVERN.
20. EXISTING FENCES, MAILBOXES, SIGNS AND SHRUBS DISTURBED BY THE WORK SHALL BE RECONSTRUCTED OR REPLACED IN KIND.
21. ALL SLOPES AND/OR DISTURBED AREAS SHALL RECEIVE TWO (2) INCH DEPTH OF TOPSOIL AND SODDING EXCEPT WHERE OTHERWISE INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
22. LOCATION POINTS FOR INLETS, MANHOLES AND STRUCTURES:

ITEM	HORIZONTAL LOCATION	VERTICAL LOCATION
CURB TYPE INLETS	CENTER FACE OF CURB	TOP OF CURB
GRATE TYPE INLETS	CENTER OF GRATE	TOP OF GRATE
MANHOLES	CENTER OF COVER	TOP OF COVER
ENDWALLS	CENTER OF WALL	TOP OF WALL
23. THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN VICINITY OF UTILITIES. COST SHALL BE INCLUDED IN THE UNIT PRICES BID FOR STORM DRAIN ITEMS.
24. ALL INVERTS SHALL BE FULLY DEVELOPED.
25. LENGTHS OF DISTURBANCE SHALL BE LIMITED TO A MAXIMUM OF 100 FT. AT ANY ONE TIME. AT THE END OF EACH WORKING DAY, PROVIDE STABILIZATION ACCORDING WITH PLANS.



SCALE 1" = 600'

DESIGN CERTIFICATE

I HEREBY 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 IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF HOWARD CONSERVATION DISTRICT.

8/2/95 DATE
 [Signature] DESIGNER'S SIGNATURE
 MARYLAND REGISTRATION NO. 10989 Kenneth M. Velites
 (P.E.) R.L.S., OR R.L.A. PRINTED NAME



OWNER'S/DEVELOPER'S CERTIFICATION

"I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND 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.

9/5/95 DATE
 [Signature] OWNER/DEVELOPER SIGNATURE
 Ronald G. Lepson, Chief, Bureau of Engineering
 PRINTED NAME AND TITLE

QUANTITIES			
ITEM	ESTIMATE	AS-BUILT	MATL./ SUPPLIER
15" RCP, CLASS III	55 L.F.		
18" RCP, CLASS III	100 L.F.		
TYPE 'K' INLET	1 EA.		
TYPE 'S' INLET	2 EA.		
TYPE 'D' INLET	2 EA.		
JUNCTION BOX	1 EA.		

CAPITAL PROJECT No. D - 1078 S.E.

DIAMONDBACK
 DARTMOUTH
 DALTON

HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 [Signature] 9/11/95
 NATURAL RESOURCES CONSERVATION SERVICE DATE

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

APPROVED:
 [Signature] 9/11/95
 HOWARD SOIL CONSERVATION DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND [Signature] 9/20/95 DIRECTOR OF PUBLIC WORKS DATE [Signature] 9/13/95 CHIEF, BUREAU OF ENGINEERING DATE	EBA ENGINEERING, INC. 5800 METRO DRIVE BALTIMORE, MARYLAND 21215 (410) 358-7171	DES: L.C. DRN: JDP CHK: L.C. DATE: 06/06/1995	TITLE SHEET	DRAINAGE SYSTEM IMPROVEMENT PROGRAM CAPITAL PROJECT No. D-1078 S.E. HOWARD COUNTY, MARYLAND CONTRACT No. ELECTION DISTRICT No. 6	NO. SCALE SHEET 1 OF 6
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STATION	COORDINATES		ELEVATION
	NORTH	EAST	
P-5	509,806.9835	845,740.4752	347.17
P-6	509,985.4757	845,809.9912	349.92
P-7	509,732.2528	845,785.6601	349.89
P-8	509,627.5077	845,749.0975	359.16
P-9	509,421.3240	846,035.0725	366.93

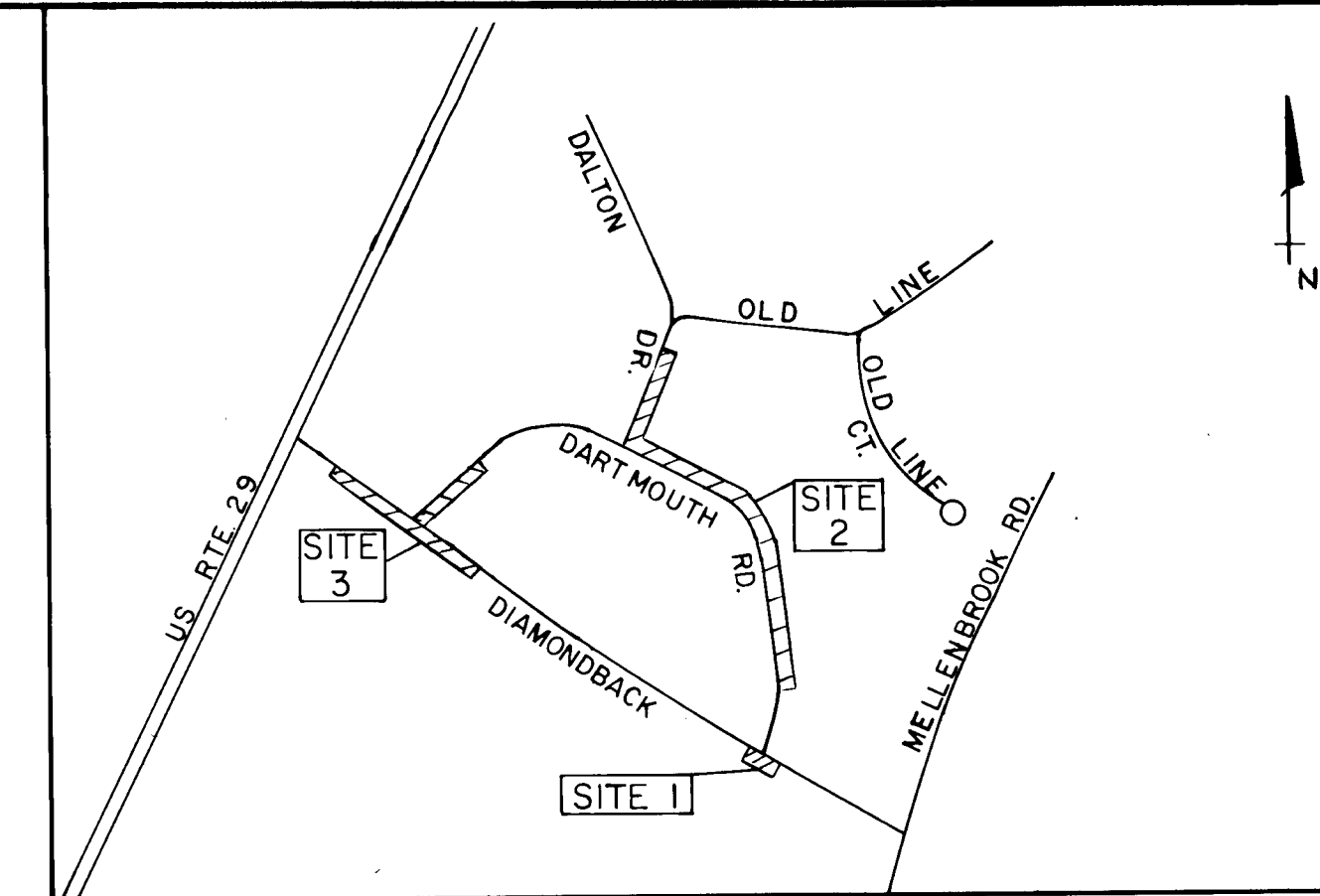
NOTE: COORDINATES ARE BASED ON MARYLAND STATE GRID.

NOTES:

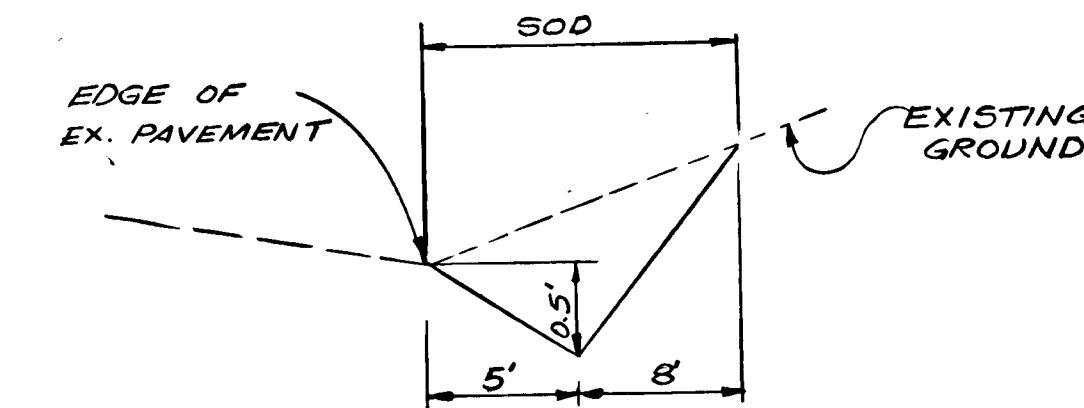
- ALL WORK SHALL COMPLY WITH THE HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS.
- FOR EROSION & SEDIMENT CONTROL DETAILS SEE SHEET 40F6
- WORK AT THE EX. 18" CMP OUTRAIL (DALTON DR.) SHALL BE PERFORMED ON DRY CONDITIONS.

STRUCTURE SCHEDULE				HOWARD CO STANDARD NO.
No.	TYPE	TOP OF GTE/CON. ELV.	INV. OUT ELV.	
I-1	'S' INLET	359.20	EX. 24" CMP INVERT	SD-4.22
I-2	'D' INLET	MARK TOP OF EX. INLET	EX. 18" CMP INVERT	SD-4.11
I-3	'D' INLET	SEE DET. SECT. B-B	EX. 18" CMP INVERT	SD-4.11
S-1	SPRING CONTROL	-	-	R-8.02

(X) TO BE INSTALLED ON EXISTING 24" CMP.



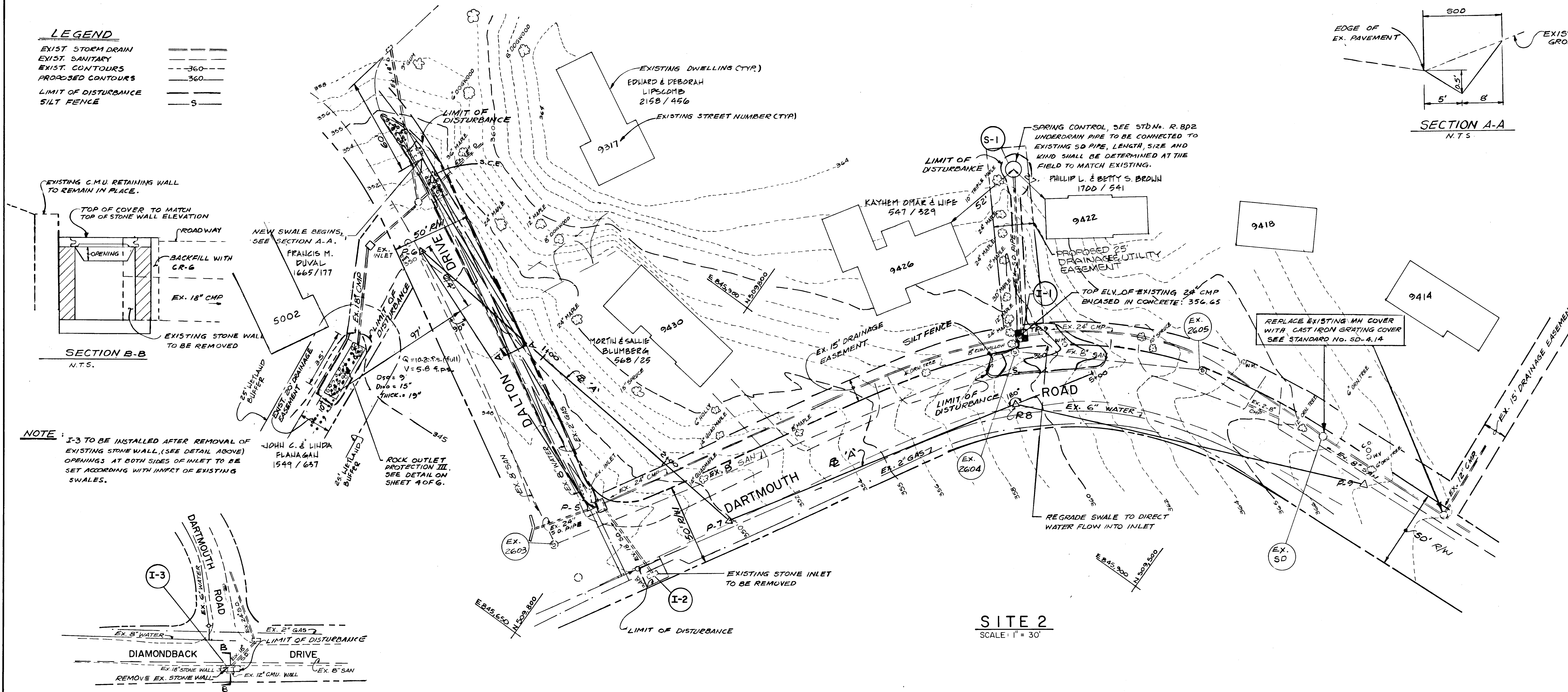
VICINITY MAP
SCALE: 1" = 600'



SECTION A-A
N.T.S.

LEGEND

- EXIST. STORM DRAIN
- EXIST. SANITARY
- EXIST. CONTOURS
- PROPOSED CONTOURS
- LIMIT OF DISTURBANCE
- SILT FENCE



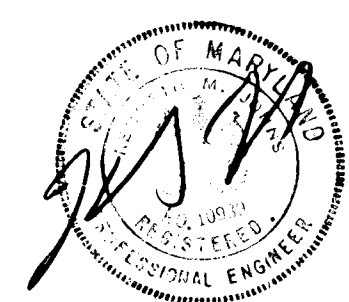
SITE 2
SCALE: 1" = 30'

SITE 1
SCALE: 1" = 50'

NOTE: I-3 TO BE INSTALLED AFTER REMOVAL OF EXISTING STONE WALL. (SEE DETAIL ABOVE) OPENINGS AT BOTH SIDES OF INLET TO BE SET ACCORDING WITH INVERT OF EXISTING SWALES.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: James P. Lewis 9/20/95
 Chief, Bureau of Engineering: Paul J. Seaman 9/13/95
 Chief, Bureau of Highways: Andrew M. Quaker 9-15-95
 Chief, Division of Transportation Planning and Watershed Management: [Signature] 9/15/95



DES:					
DRN:					
CHK:					
DATE:	06/06/1995	BY NO.		REVISION	

PLAN
DARTMOUTH ROAD

DRAINAGE SYSTEM IMPROVEMENT PROGRAM
CAPITAL PROJECT NO. D-1078 S.E.
HOWARD COUNTY, MARYLAND
CONTRACT NO.
ELECTION DISTRICT 6

SCALE AS SHOWN
SHEET 2 OF 6

NOTES

- FOR CUTTING AND REPAIRING OPENINGS IN EXISTING ROADWAY PAVING SEE No. CO. STD. No. G-4.01
- CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UNDERGROUND UTILITIES: WATER, SEWER, GAS, ELECTRIC, C/P ETC., IF THERE IS ANY INTERFERENCE (NOT SHOWN ON THIS DRAWING), BETWEEN THESE UTILITIES AND THE PROPOSED STORM DRAIN SYSTEM, CONTACT THE ENGINEER SO A DETERMINATION OF UTILITY RELOCATION OR REDESIGN OF STORM DRAIN CAN BE MADE.
- ALL NON-PAVED AREAS OUTSIDE THE WETLAND BUFFER THAT ARE DISTURBED DURING CONSTRUCTION, TO BE STABILIZED WITH SOD, UNLESS OTHERWISE NOTED.
- EXISTING UTILITIES CALLED ON THIS DRAWING TO BE RELOCATED, MUST BE LOWERED TO PROVIDE 1' CLEARANCE TO PROPOSED STORM DRAIN PIPE.

COORDINATE TABLE

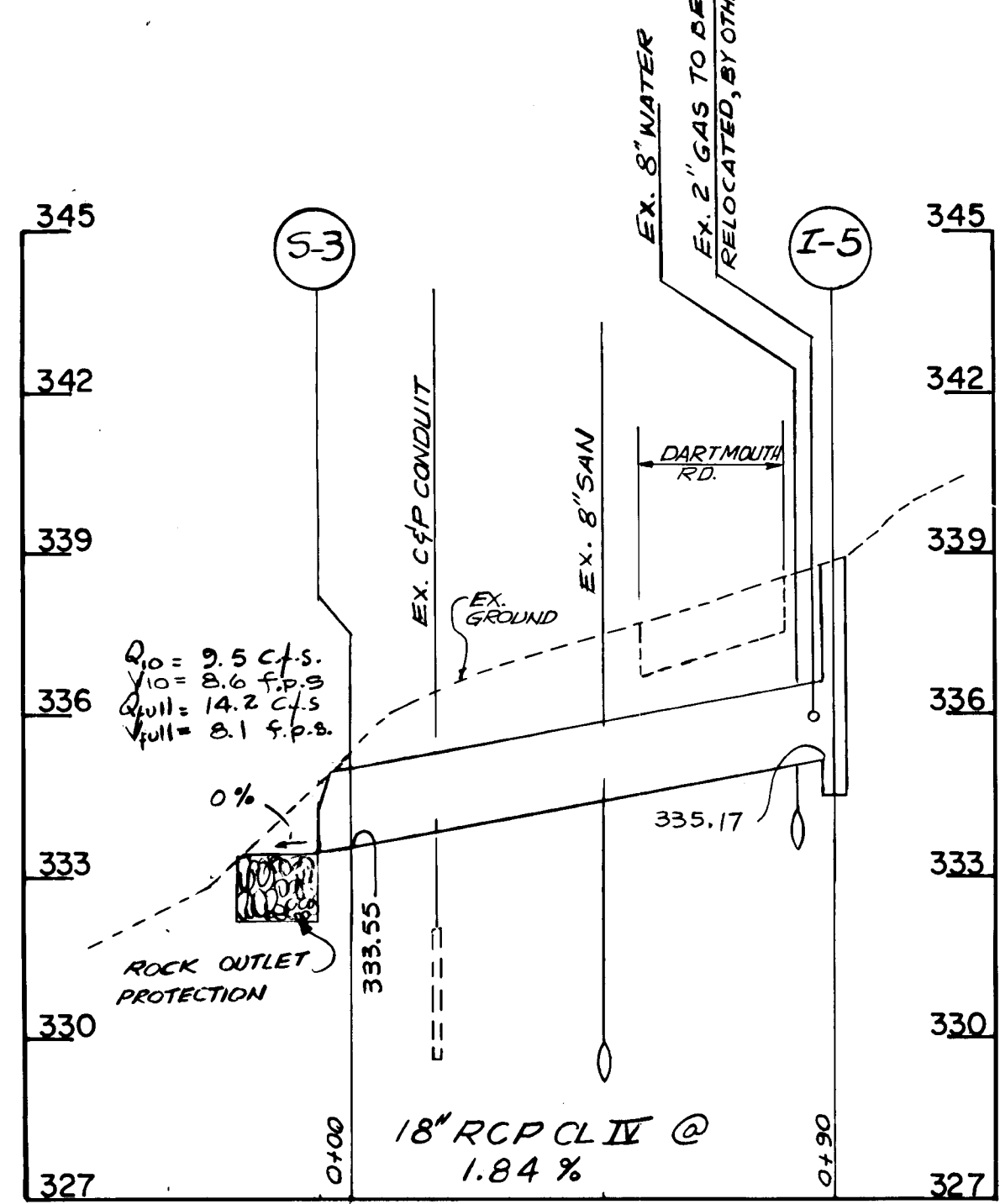
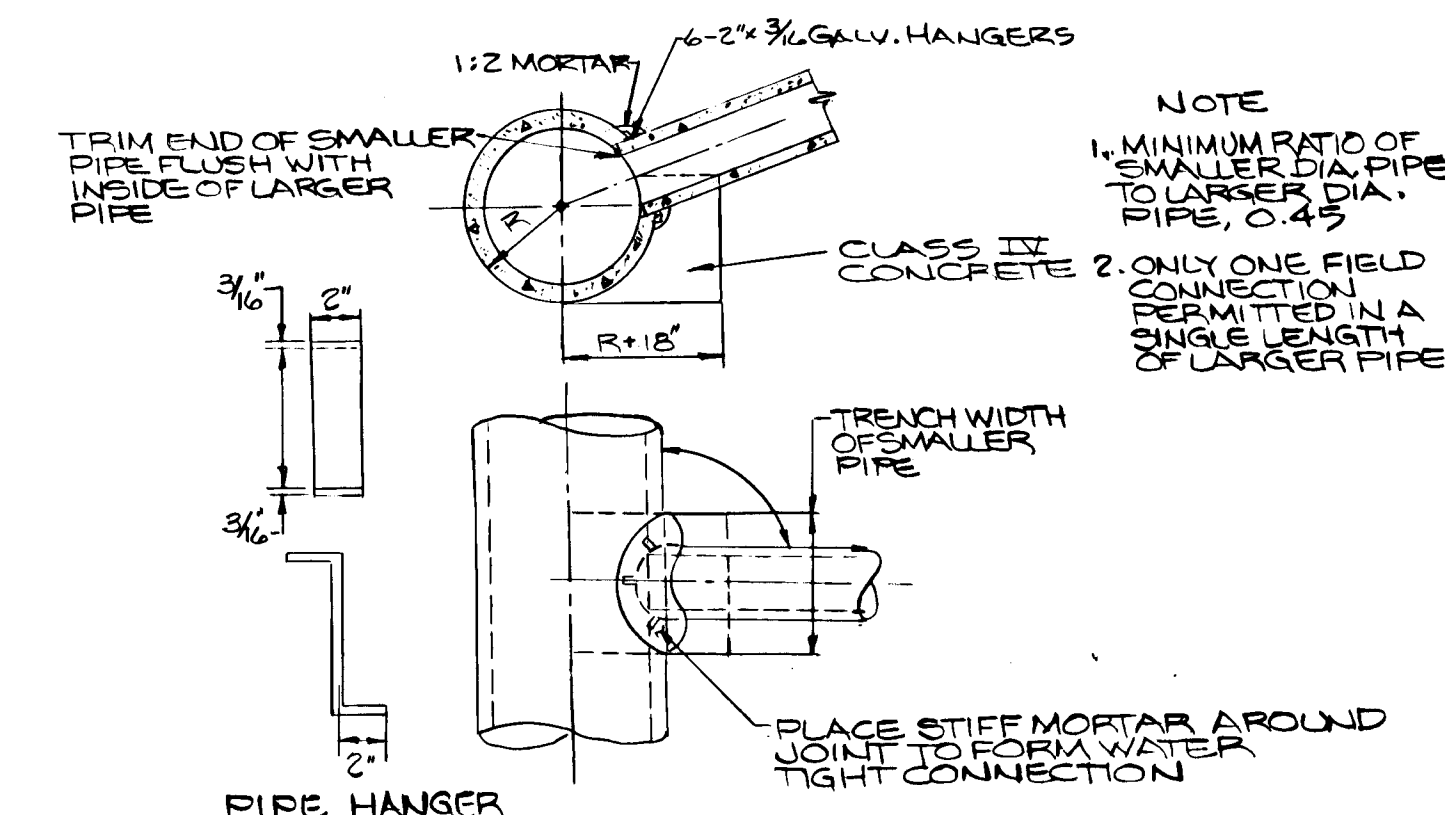
STATION	COORDINATES		ELEVATION
	NORTH	EAST	
P-3	509,562.2331	845,148.8682	338.47
P-4	509,848.8450	845,475.3056	350.22
P-11	509,201.3261	845,685.4911	376.47
P-12	509,721.3360	844,718.3695	337.15

NOTE: COORDINATES ARE BASED ON MARYLAND STATE GRID.

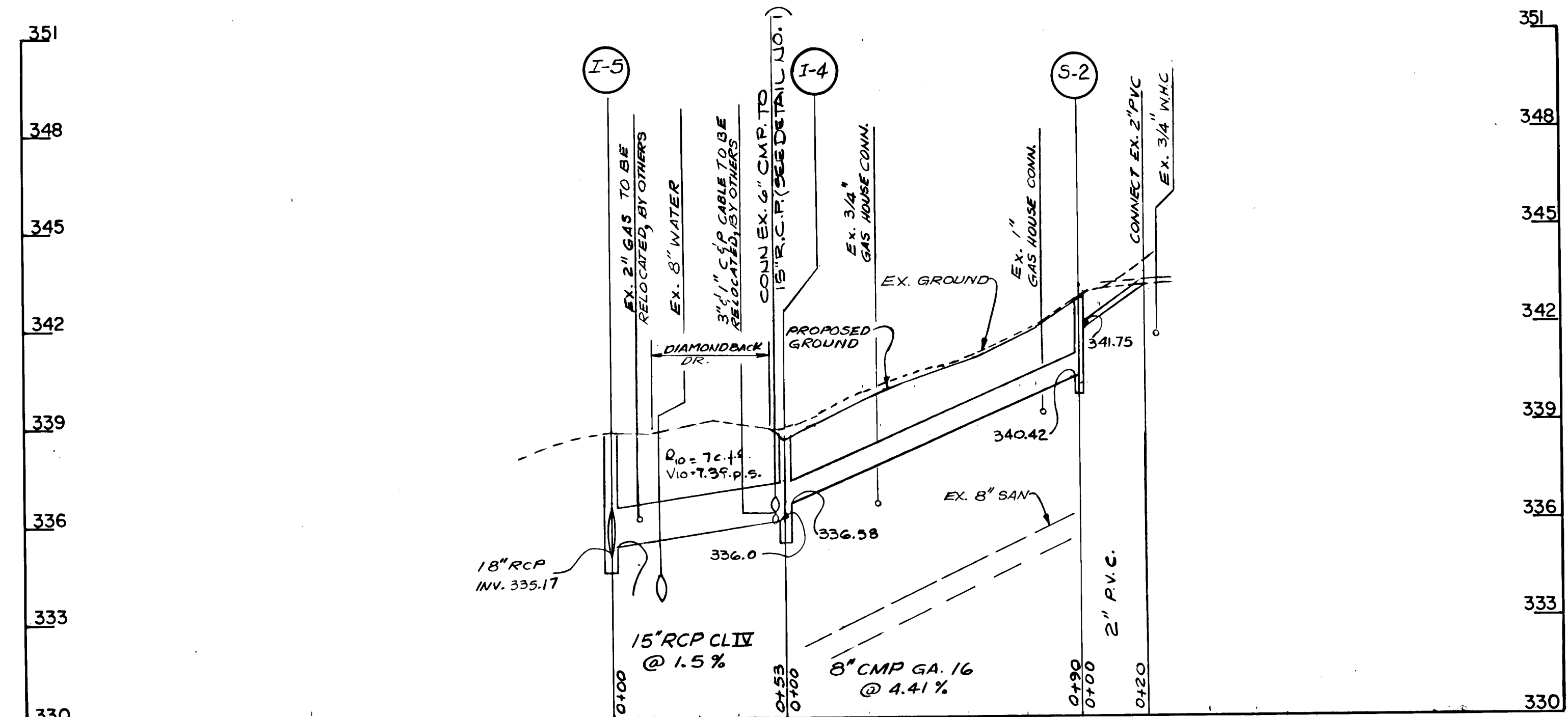
STRUCTURE SCHEDULE

No.	TYPE	TOP GRTE ELEV.	INV. OUT ELEV.	LOCATION	HOWARD CO. STANDARD NO.
I-4	'S' INLET	338.50	336.00	STA. 2+94, 11' RT.	SD-4.22
I-5	'K' INLET	338.85	334.85	STA. 2+94, 42' LT.	SD-4.12 (W)
S-2	JUNCTION BOX	342.75	340.42	STA. 3+83, 13.5' RT.	SEE DET. THIS SH. P.
S-3	END SECTION	-	-	STA. 2+05, 62' LT.	SD-5.51

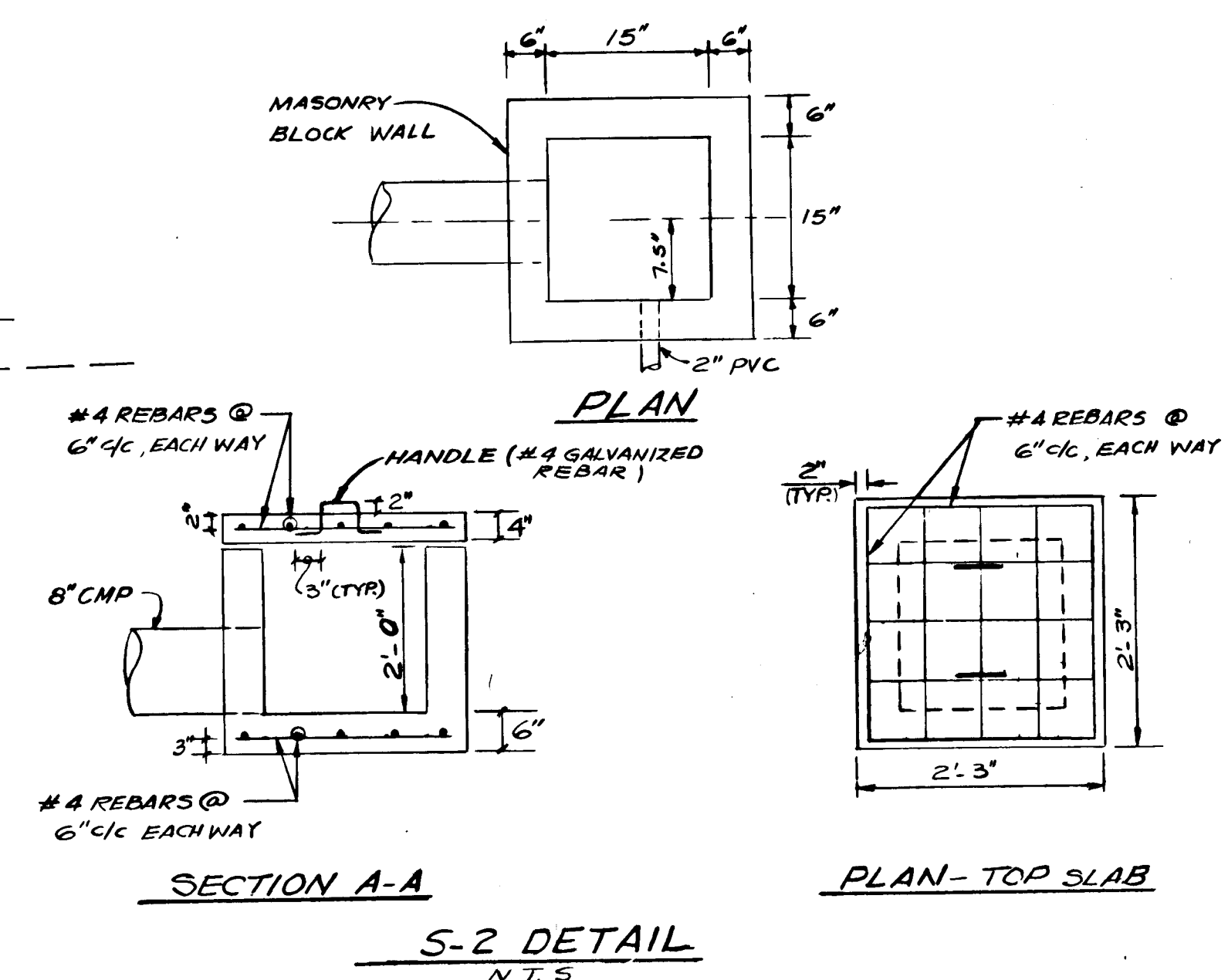
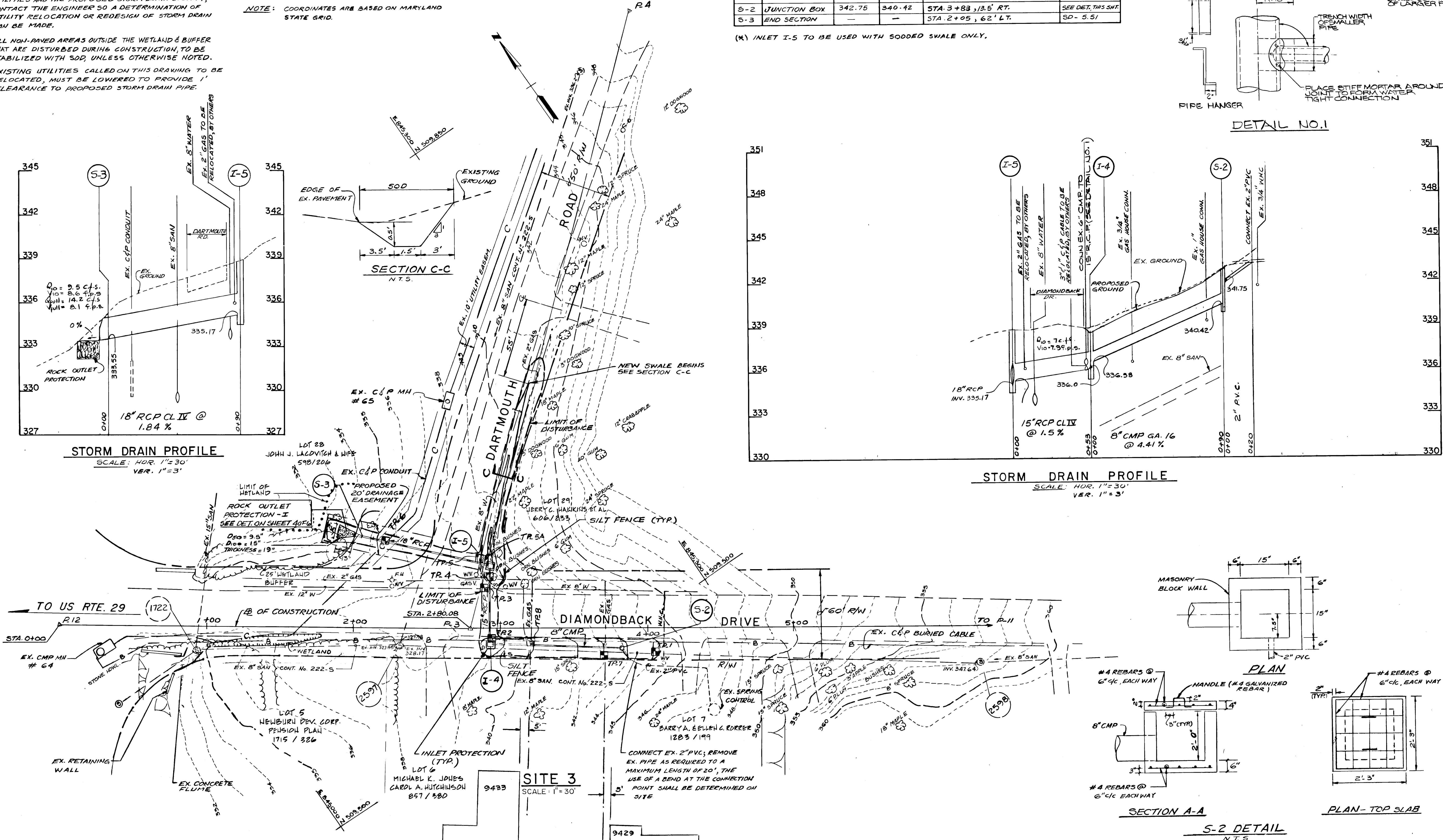
(*) INLET I-5 TO BE USED WITH SODDED SWALE ONLY.



STORM DRAIN PROFILE
SCALE: HOR. 1"=30'
VER. 1"=3'



STORM DRAIN PROFILE
SCALE: HOR. 1"=30'
VER. 1"=3'

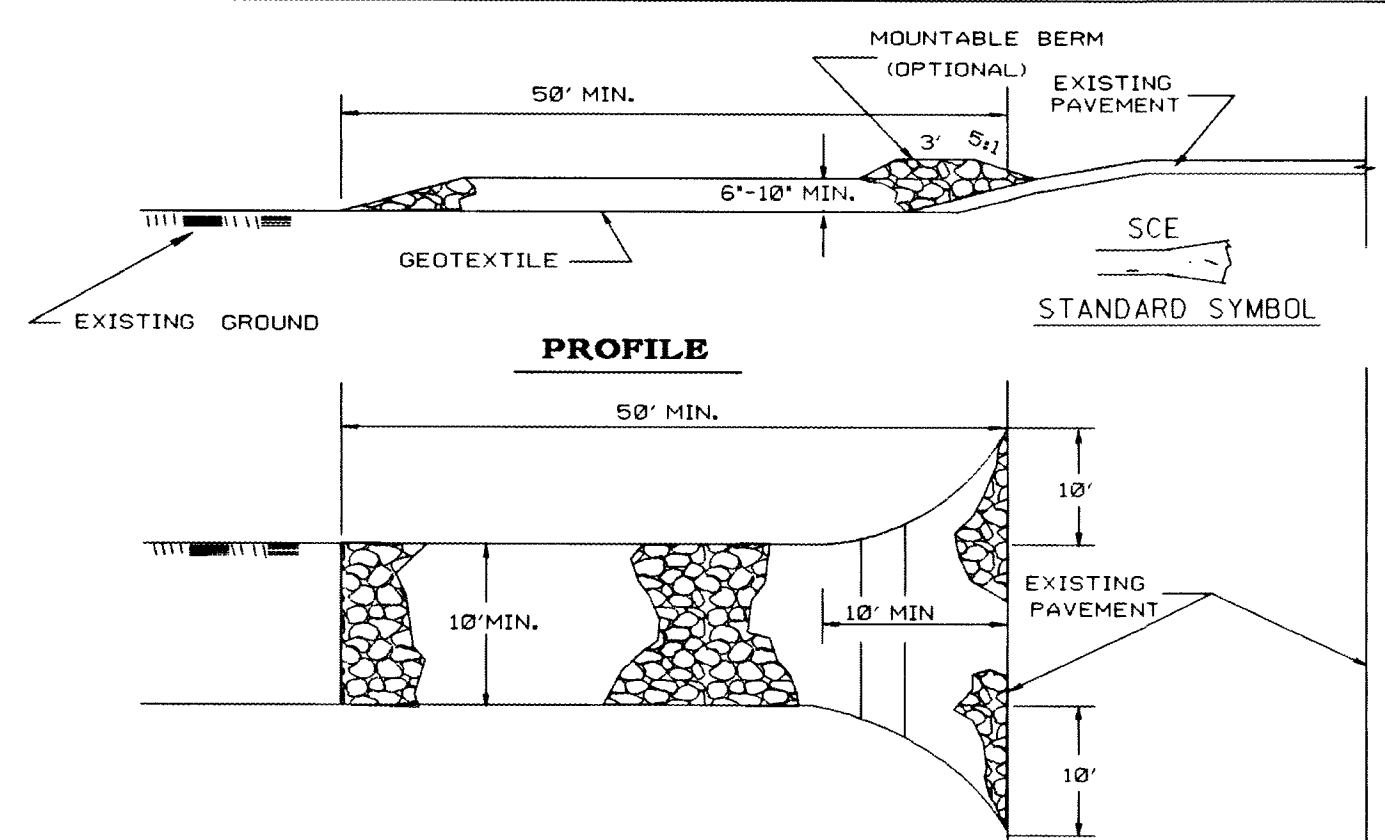


<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>[Signature]</i> 9/20/95 DIRECTOR OF PUBLIC WORKS DATE</p> <p><i>[Signature]</i> 9/13/95 CHIEF, BUREAU OF ENGINEERING DATE</p>	<p>STATE OF MARYLAND ENGINEER</p> <p><i>[Signature]</i></p>	DES:		<p>STORM DRAIN PLAN & PROFILE DIAMONDBACK DRIVE</p>	<p>DRAINAGE SYSTEM IMPROVEMENT PROGRAM CAPITAL PROJECT NO. D-1078 S.E. HOWARD COUNTY, MARYLAND CONTRACT NO. ELECTION DISTRICT 6</p>	SCALE AS SHOWN
		DRN:				600' SCALE MAP NO. _____
<p><i>[Signature]</i> 9/15/95 CHIEF, BUREAU OF HIGHWAYS DATE</p> <p><i>[Signature]</i> 9/13/95 CHIEF, DIVISION OF TRANSPORTATION PROJ. AND WATERSHED MANAGEMENT DATE</p>		CHK:				
		DATE: 08/06/1995	BY NO.	REVISION	DATE	

GENERAL NOTES FOR SEDIMENT & EROSION CONTROL

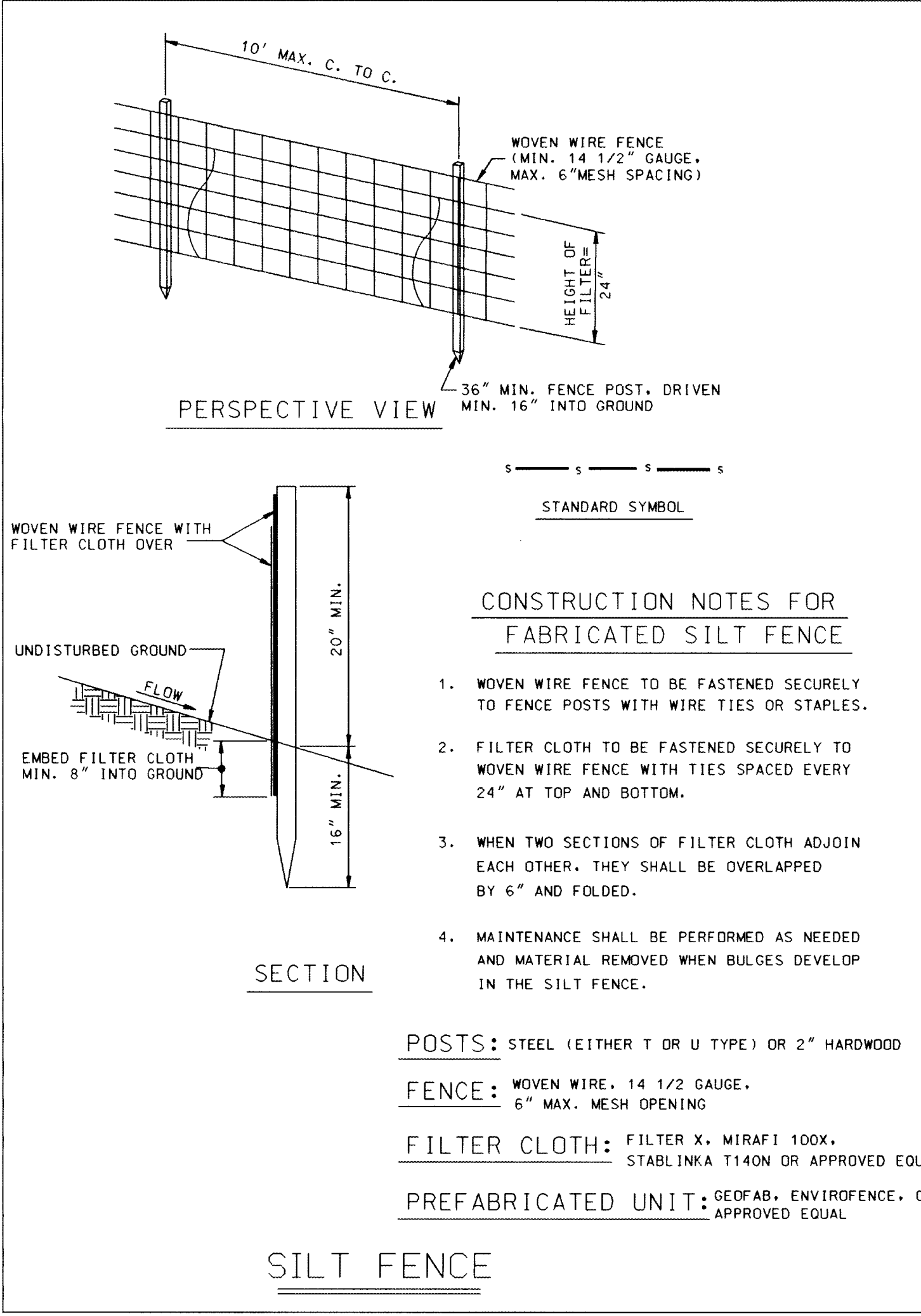
1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION. (313-1855).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERE TO.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT CONTROL TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. 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.
7. SITE ANALYSIS:

TOTAL AREA OF SITE	1.0 AC.
AREA DISTURBED	0.3 AC.
AREA TO BE ROOFED OR PAVED	0.02 AC.
AREA TO BE VEGETATIVELY STABILIZED	0.28 AC.
TOTAL CUT	200 CU. YDS.
TOTAL FILL	20 CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION	FROM SITE WITH AN ACTIVE GRADING PERMIT, TO BE DETERMINED BY THE CONTRACTOR
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10. 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 APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY.



- CONSTRUCTION SPECIFICATIONS**
1. STONE SIZE - USE AASHTO M43, SIZE NO. 3 AGGREGATE.
 2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET.
 3. THICKNESS - NOT LESS THAN SIX (6) INCHES, LIGHT DUTY NOT LESS THAN TEN (10) INCHES, HEAVY DUTY.
 4. WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
 5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. GEOTEXTILE TO MEET THE REQUIREMENTS OF CLASS G....
 6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
 7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
 8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER HEAVY USE AND EACH RAIN.
 10. THIS ENTRANCE WILL BE CONSTRUCTED AT LOCATIONS SHOWN ON THE PLANS AND/OR WHERE DIRECTED BY THE ENGINEER.

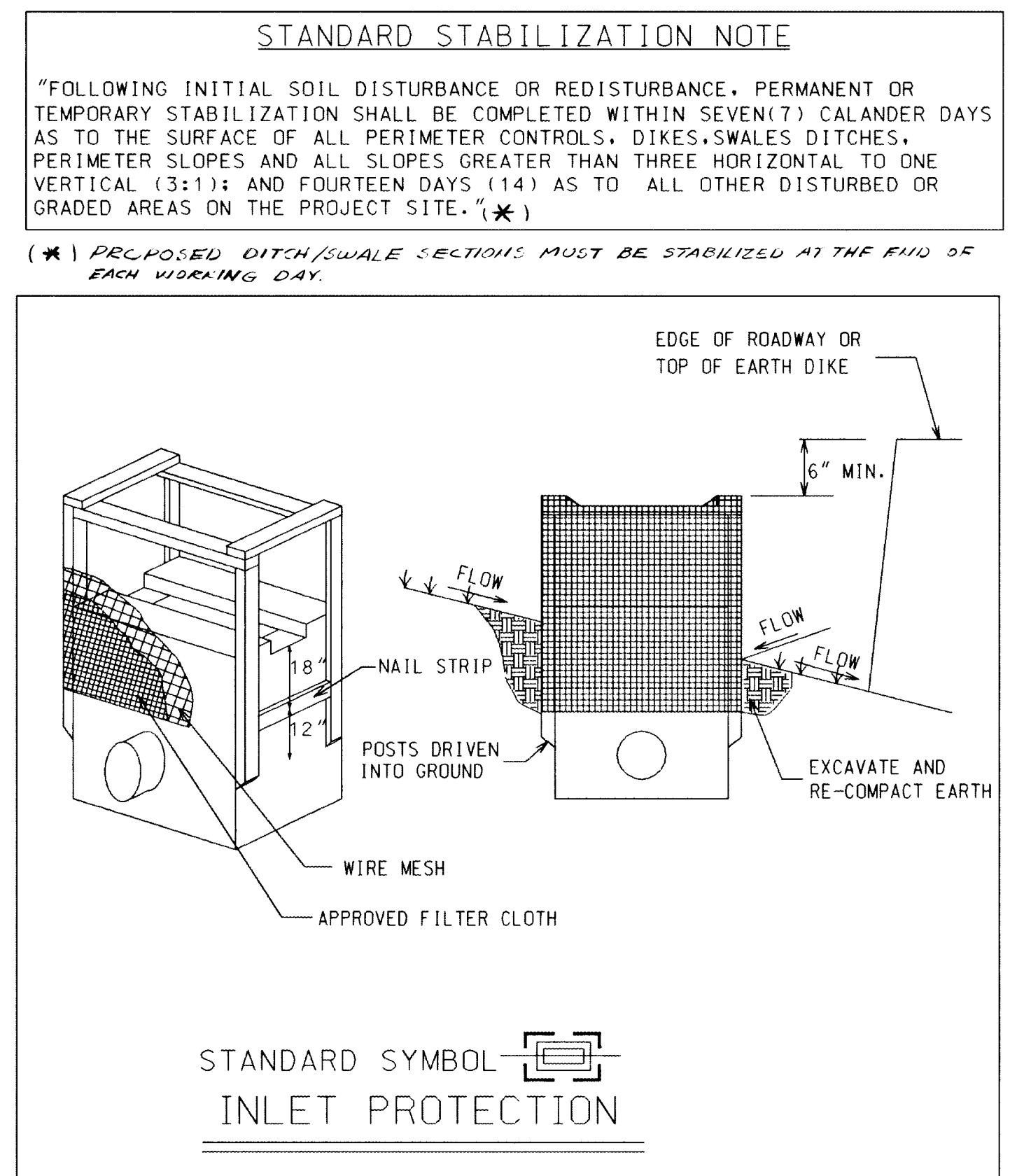
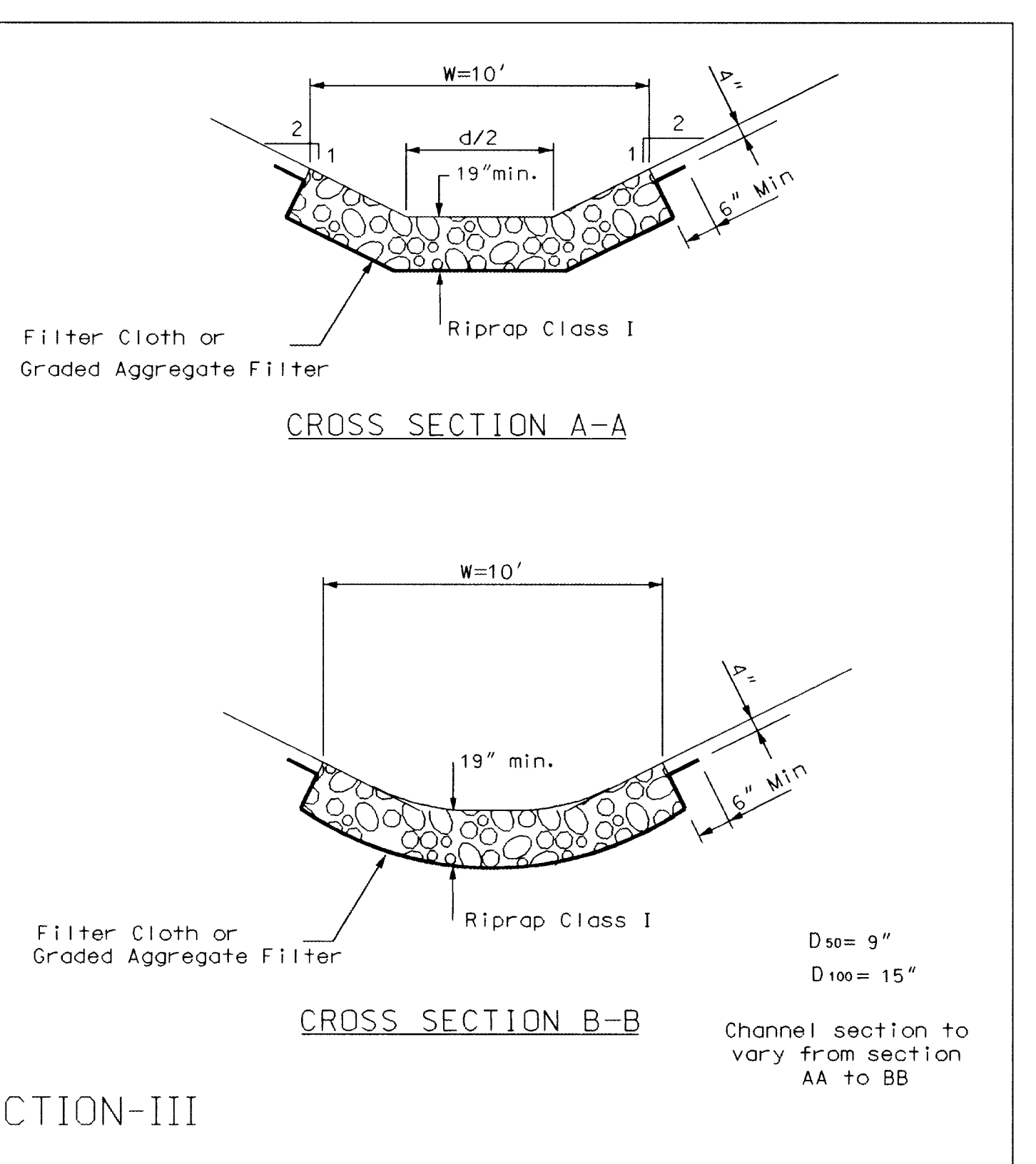
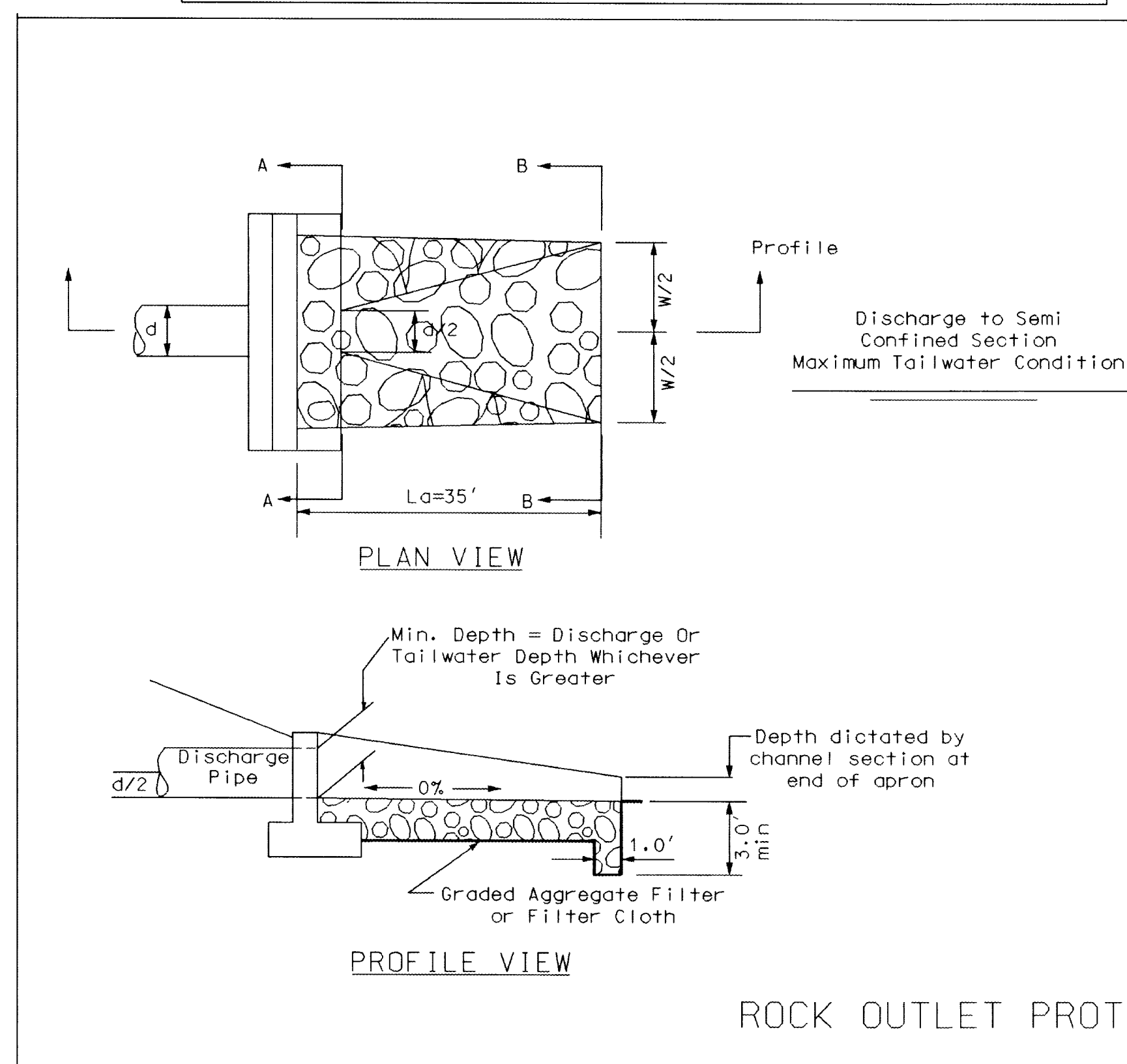
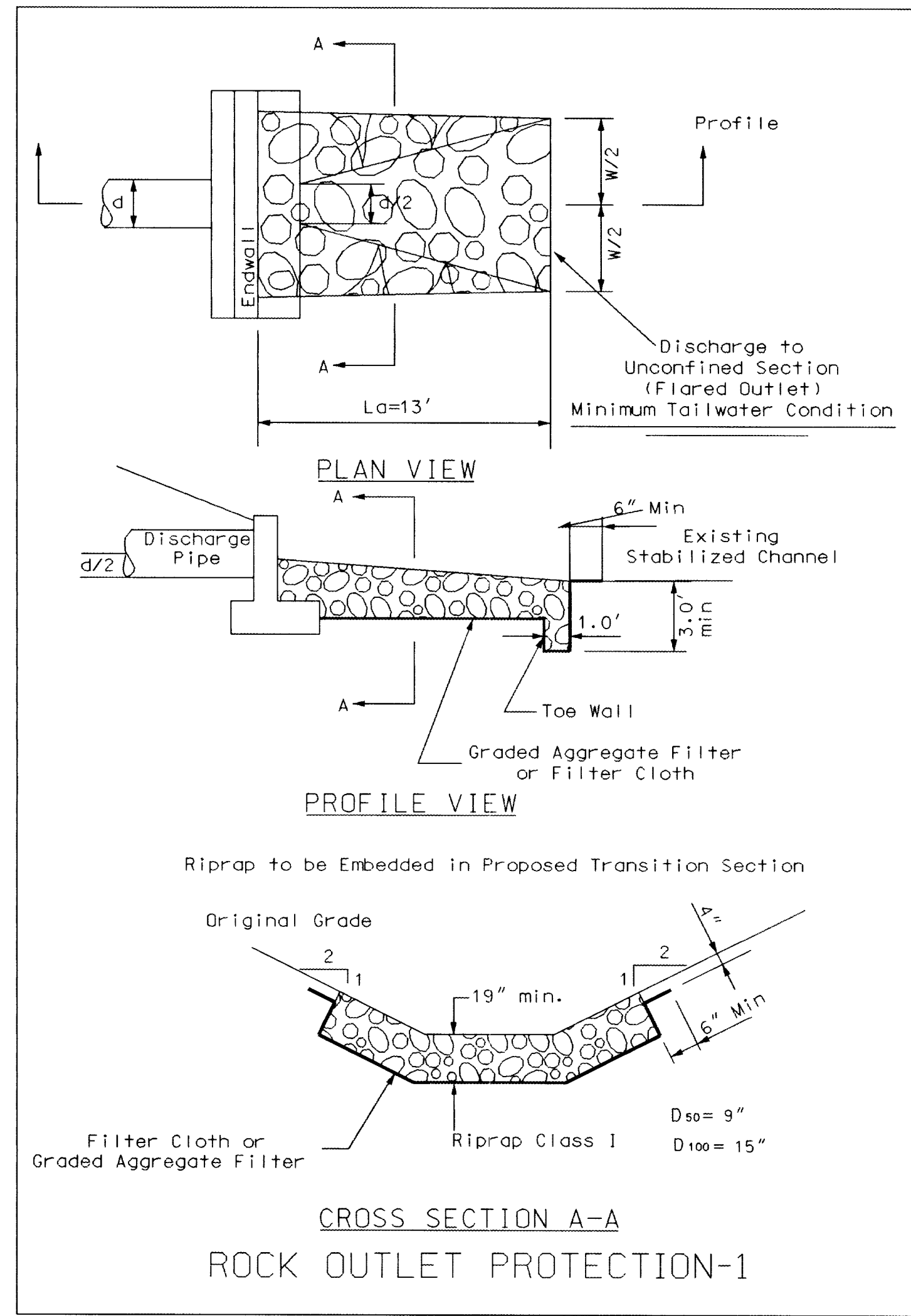
STABILIZED CONSTRUCTION ENTRANCE



- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND BOTTOM.
 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.
- POSTS:** STEEL (EITHER T OR U TYPE) OR 2" HARDWOOD
FENCE: WOVEN WIRE, 14 1/2 GAUGE, 6" MAX. MESH OPENING
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL
PREFABRICATED UNIT: GEOTAB, ENVIROFENCE, OR APPROVED EQUAL

SILT FENCE

- PERMANENT SEEDING SPECIFICATIONS**
1. ALL DISTURBED AREAS - SHALL BE SEEDED AND MULCHED
 2. SEED BED PREPARATION - THE TOP LAYER OF SOIL SHALL BE LOOSENEED BY DISCING OR RAKING (SHALL BE DONE ON CONTOUR) TO A DEPTH OF AT LEAST 3" BEFORE SEEDING OCCURS. APPLY TWO (2) TON PER ACRE OF LIME AND 1000 LBS. PER ACRE OF 10-10-10 FERTILIZER OR EQUIVALENT. THOROUGHLY MIX INTO SOIL TO A MINIMUM OF 3".
 3. SEEDING METHOD OF APPLICATION - APPLY SEED UNIFORMLY WITH A CYCLONE SEED DRILL, CULTIPACKER SEEDER OR HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER).
 4. SEEDING - USE 50% KENTUCKY BLUEGRASS, 40% PENNLAWN CREEPING RED FESCUE AND 10% OF RED TOP AT THE RATE OF 90 LBS. PER ACRE. PERMANENT SEEDING TO BE DONE ONLY DURING THE PERIOD OF 2/1 TO 4/30 AND 8/15 TO 10/31.
 5. MULCHING - USE CLEAN, UNWEATHERED, UNCHOPPED SMALL GRAIN STRAW AT THE RATE OF 1 1/2 TO 2 TONS PER ACRE ANCHORED DOWN WITH CUTBACK ASPHALT AT THE RATE OF 5-8 GALLONS PER 1000 SQ. FT.
- SODDING**
- CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED, OR MARYLAND OR VIRGINIA STATE APPROVED SOD. SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD SHALL BE LAID ON SOIL PREPARED IN ACCORDANCE WITH NOTE 2 PERMANENT SEEDING. SOD IS TO BE LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR WITH STAGGERED JOINTS WITH ALL ENDS TIGHTLY ABUTTING AND NOT OVERLAPPING. SOD SHALL BE ROLLED AND THOROUGHLY WATERED WITHIN EIGHT HOURS OF INSTALLATION. DAILY WATERING TO MAINTAIN 4 INCH DEPTH OF MOISTURE FOR THE FIRST WEEK IS REQUIRED IN THE ABSENCE OF RAINFALL. SOD IS NOT TO BE APPLIED ON FROZEN GROUND.
- SEQUENCE OF CONSTRUCTION**
1. OBTAIN GRADING PERMIT FROM HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSES AND PERMITS (3 DAYS).
 2. INSTALL SEDIMENT CONTROL MEASURES AS SHOWN ON PLANS (1 DAY)
 3. PERFORM SWALE GRADING, INSTALL STORM DRAIN SYSTEMS ACCORDING WITH PLANS. MAXIMUM LENGTH OF DISTURBANCE SHALL BE 100' AT ANY ONE TIME PROVIDE PERMANENT STABILIZATION. (30 DAYS)
 4. WITH APPROVAL OF THE EROSION/SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT/EROSION CONTROL DEVICES (1 DAY)



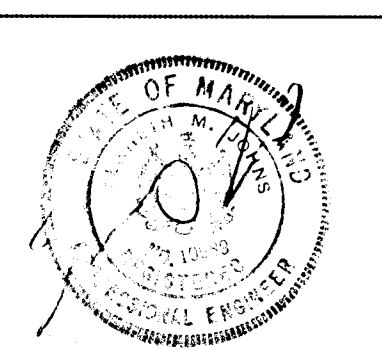
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *[Signature]* 9/20/95
 DATE: 9/20/95

Chief, Bureau of Engineering: *[Signature]* 9/13/95
 DATE: 9/13/95

Chief, Bureau of Highways: *[Signature]* 9-15-95
 DATE: 9-15-95

EBA ENGINEERING, INC.
 5800 METRO DRIVE
 BALTIMORE, MARYLAND 21215
 (410) 358-7171



DES: L.C.			
DRN: AOS			
CHK: L.C.			
DATE: 9/20/1995	BY NO.	REVISION	DATE
			600' SCALE MAP NO. _____ BLOCK NO. _____

DIAMONDBACK DRIVE
 DARTMOUTH ROAD
 DALTON DRIVE
 EROSION AND SEDIMENT CONTROL DETAILS

DRAINAGE SYSTEM IMPROVEMENT PROGRAM
 CAPITAL PROJECT NO. D-1078 S.E.
 HOWARD COUNTY, MARYLAND
 CONTRACT NO.
 ELECTION DISTRICT

NO SCALE
 SHEET 4 OF 6

WETLAND IMPACT (FOR THIS SHEET SITE 2 ONLY)

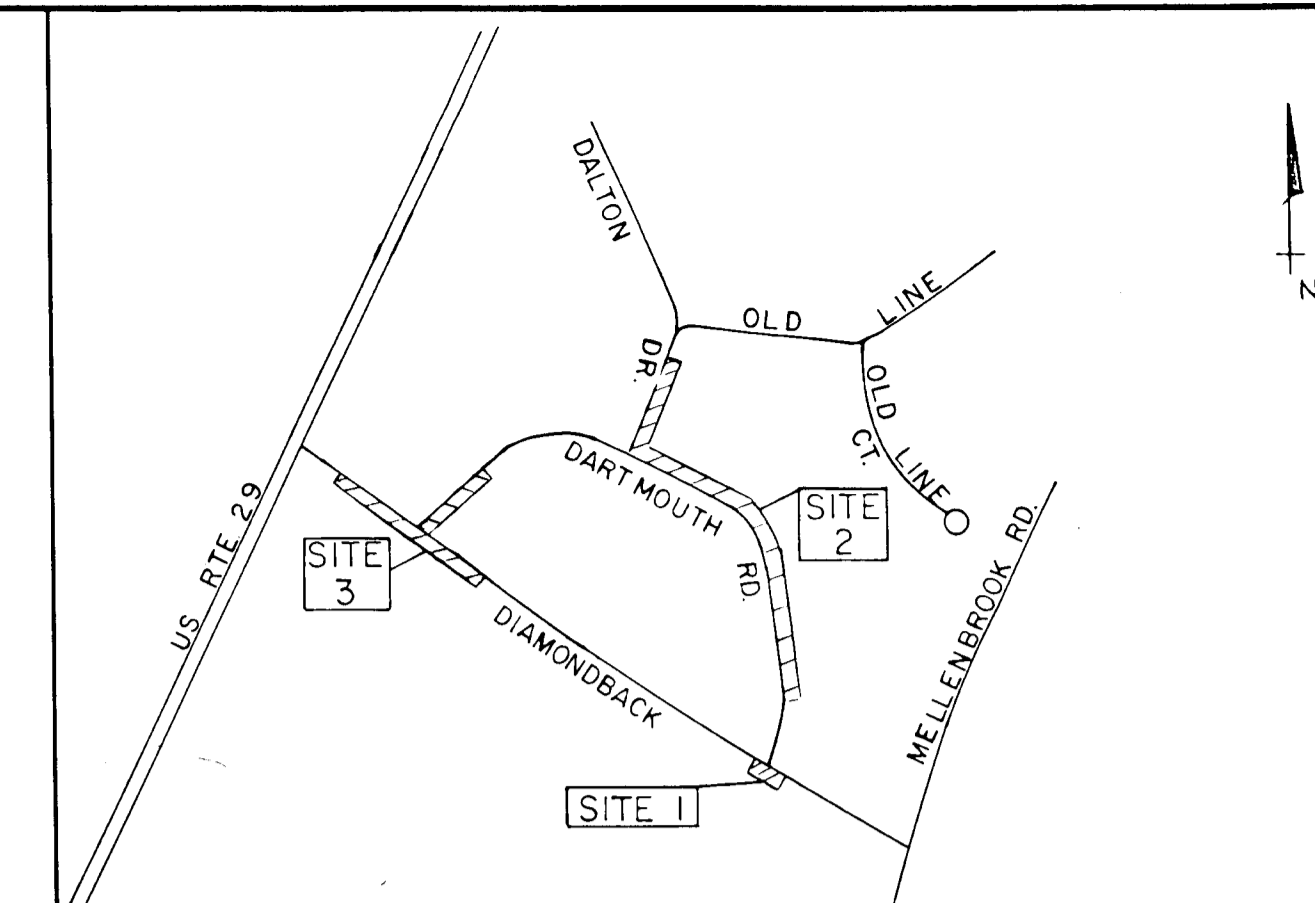
* PERMANENT DISTURBANCE WETLAND IMPACT	140 SF RIPRAP	140 SF
TOTAL		
BUFFER IMPACT	210 SF RIPRAP	
	36 SF FILL (TOPSOIL)	
TOTAL		246 SF
EARTHWORK:		
EARTHWORK IN WETLAND	9 CY CUT	
EARTHWORK IN BUFFER	2 CY FILL (TOPSOIL)	
	13 CY CUT	
TOTAL		16 CY CUT
	2 CY FILL (TOPSOIL)	
TOTAL		2 CY FILL (TOPSOIL)
RIPRAP:		
RIPRAP IN WETLAND	9 CY	
RIPRAP IN BUFFER	13 CY	
TOTAL		22 CY RIPRAP
* TEMPORARY DISTURBANCE		
WETLAND IMPACT	0 SF	
BUFFER IMPACT	0 SF	
TOTAL		0 SF

TOTAL WETLAND & BUFFER IMPACT (FOR SITE 2 ONLY) = 386 SF

* QUANTITIES SHOWN ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR SHALL VERIFY QUANTITIES TO OWN SATISFACTION.

NOTES:
 - ALL WORK SHALL COMPLY WITH THE HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS.
 - FOR EROSION & SEDIMENT CONTROL DETAILS SEE SHEET 4 OF 6

NOTES:
 1. SEE SHEET 6 OF 6 FOR WETLAND IMPACT NOTES.
 2. SEE SHEET 6 OF 6 FOR WETLAND IMPACTS SUMMARY (TOTAL FOR SITE 2 & 3)



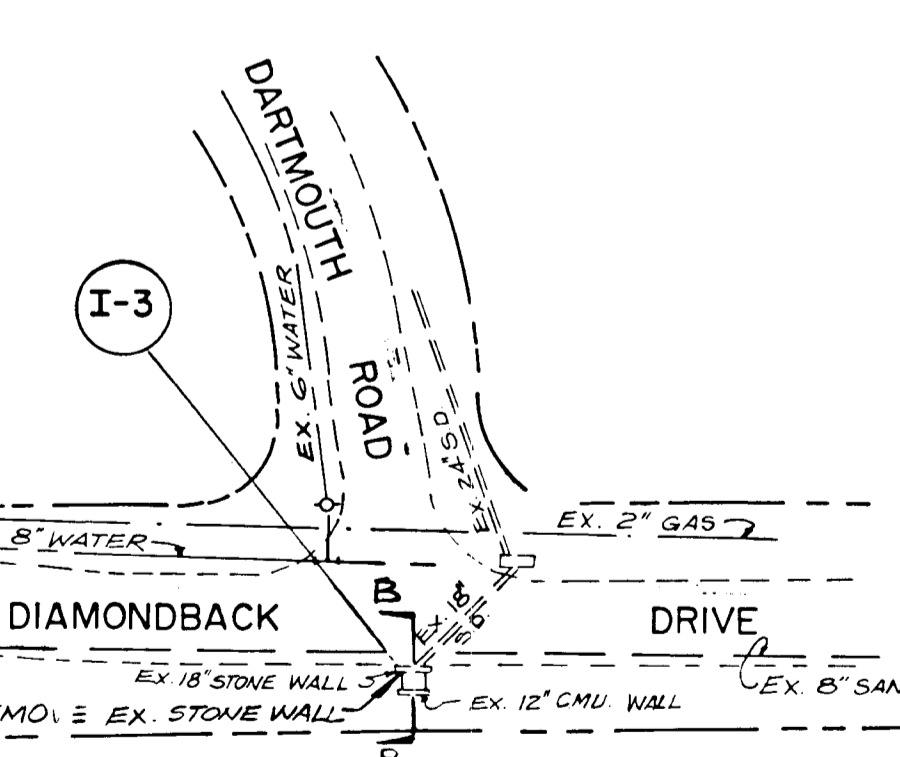
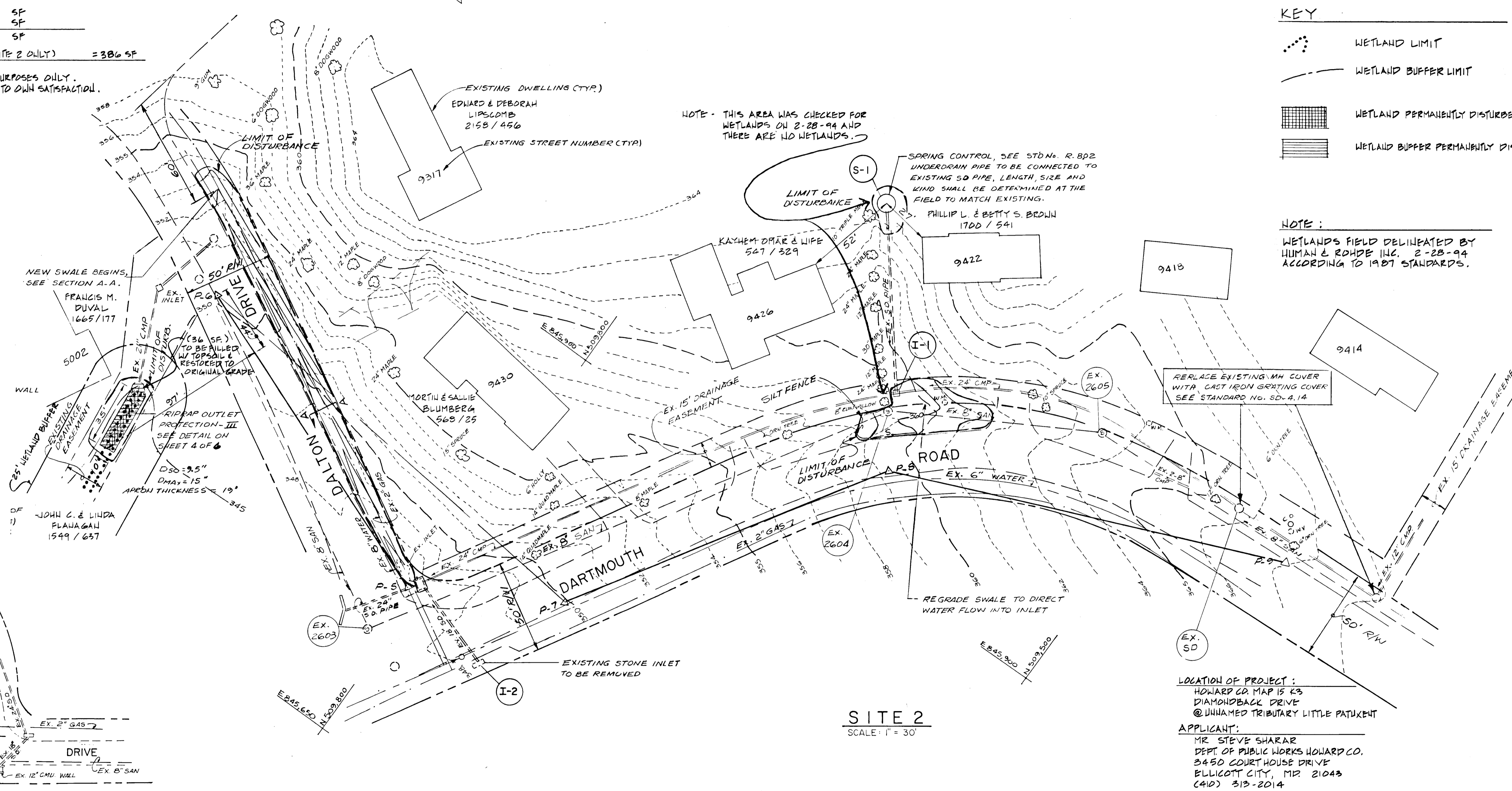
VICINITY MAP
SCALE: 1" = 600'

KEY

	WETLAND LIMIT
	WETLAND BUFFER LIMIT
	WETLAND PERMANENTLY DISTURBED
	WETLAND BUFFER PERMANENTLY DISTURBED

NOTE:
 WETLANDS FIELD DELINEATED BY HUMAN & ROHDE INC. 2-28-94 ACCORDING TO 1987 STANDARDS.

NOTE
 FOR RIPRAP DETAILS SEE SHEET 2 OF 6 STORM DRAIN PLAN & PROFILE DIAMONDBACK DRIVE



SITE 1
SCALE: 1" = 50'

SITE 2
SCALE: 1" = 30'

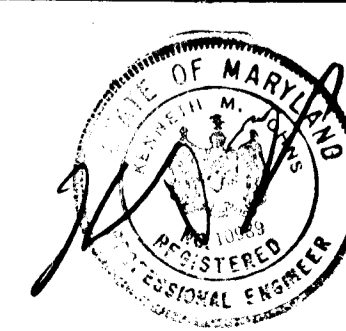
LOCATION OF PROJECT:
 HOWARD CO. MAP 15 K3
 DIAMONDBACK DRIVE
 @ UNNAMED TRIBUTARY LITTLE PATUXENT

APPLICANT:
 MR. STEVE SHARAR
 DEPT. OF PUBLIC WORKS HOWARD CO.
 3450 COURT HOUSE DRIVE
 BELLICOTT CITY, MD 21043
 (410) 313-2014

PREPARED BY:
 HUMAN & ROHDE, INC.
 Landscape Architects
 110 E. Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 825-3885

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Director of Public Works: *James A. Shaw* 9/20/95
 Chief, Bureau of Engineering: *Robert J. ...* 9/13/95
 Chief, Bureau of Highways: *Andrew M. ...* 9-15-95
 Chief, Division of Transportation Proj. and Watershed Management: *...* 9/13/95



DES:	
DRN:	
CHK:	
DATE:	06/06/95
BY NO.	
REVISION	
DATE	

WETLAND IMPACTS PLAN
 DATE 3-8-94
 DARTMOUTH ROAD

DRAINAGE SYSTEM IMPROVEMENT PROGRAM
 CAPITAL PROJECT NO. D-1078 S.E.
 HOWARD COUNTY, MARYLAND
 CONTRACT NO.
 ELECTION DISTRICT 6

SCALE AS SHOWN
 SHEET 5 OF 6

NOTE

- FOR CUTTING AND REPAIRING OPENINGS IN EXISTING ROADWAY PAVING SEE HO. CO. STD. NO. G.4.01
- CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES (WATER, SEWER, GAS, C&P ELECT. ETC.), IF THERE IS ANY INTERFERENCE BETWEEN THESE UTILITIES AND THE PROPOSED STORM DRAIN SYSTEM, CONTACT THE ENGINEER SO A DETERMINATION OF UTILITY RELOCATION OR REDESIGN OF STORM DRAIN CAN BE MADE.
- ALL NON-PAVED AREAS OUTSIDE THE WETLAND & BUFFER THAT ARE DISTURBED DURING CONSTRUCTION, TO BE STABILIZED WITH SOD, UNLESS OTHERWISE NOTED.

WETLAND IMPACT SUMMARY (TOTAL FOR SITES 2 & 3)

* PERMANENT DISTURBANCE			
WETLAND IMPACT	TOTAL	140 SF RIPRAP	140 SF
BUFFER IMPACT		330 SF RIPRAP	
	TOTAL	36 SF FILL	366 SF
EARTHWORK:			
IN WETLAND		9.0 CY CUT	
IN BUFFER		21.0 CY CUT	
		2 CY FILL (TOPSOIL)	
TOTAL		30.0 CY CUT	
		2 CY FILL (TOPSOIL)	
RIPRAP:			
IN WETLAND		9.0 CY	
IN BUFFER		21.0 CY	
TOTAL		30.0 CY RIPRAP	
* TEMPORARY DISTURBANCE			
WETLAND IMPACT		0 SF	
BUFFER IMPACT		0 SF	
TOTAL WETLAND & BUFFER IMPACT (FOR SITE 2 & 3)			506 SF

WETLAND IMPACT SITE 3 (FOR THIS SHEET ONLY)

* PERMANENT DISTURBANCE			
WETLAND IMPACT	TOTAL	0 SF	0 SF
BUFFER IMPACT		120 SF RIPRAP	
TOTAL		120 SF	
EARTHWORK:			
IN WETLAND		0 CY CUT	
IN BUFFER		8 CY CUT	
TOTAL		8 CY CUT	
RIPRAP:			
IN WETLAND		0 CY	
IN BUFFER		8 CY	
TOTAL		8 CY	
* TEMPORARY DISTURBANCE			
WETLAND IMPACT		0 SF	
BUFFER IMPACT		0 SF	
TOTAL WETLAND & BUFFER IMPACT (FOR SITE 3 ONLY)			120 SF

* QUANTITIES SHOWN ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR SHALL VERIFY QUANTITIES TO OWN SATISFACTION.

WETLAND IMPACT NOTES

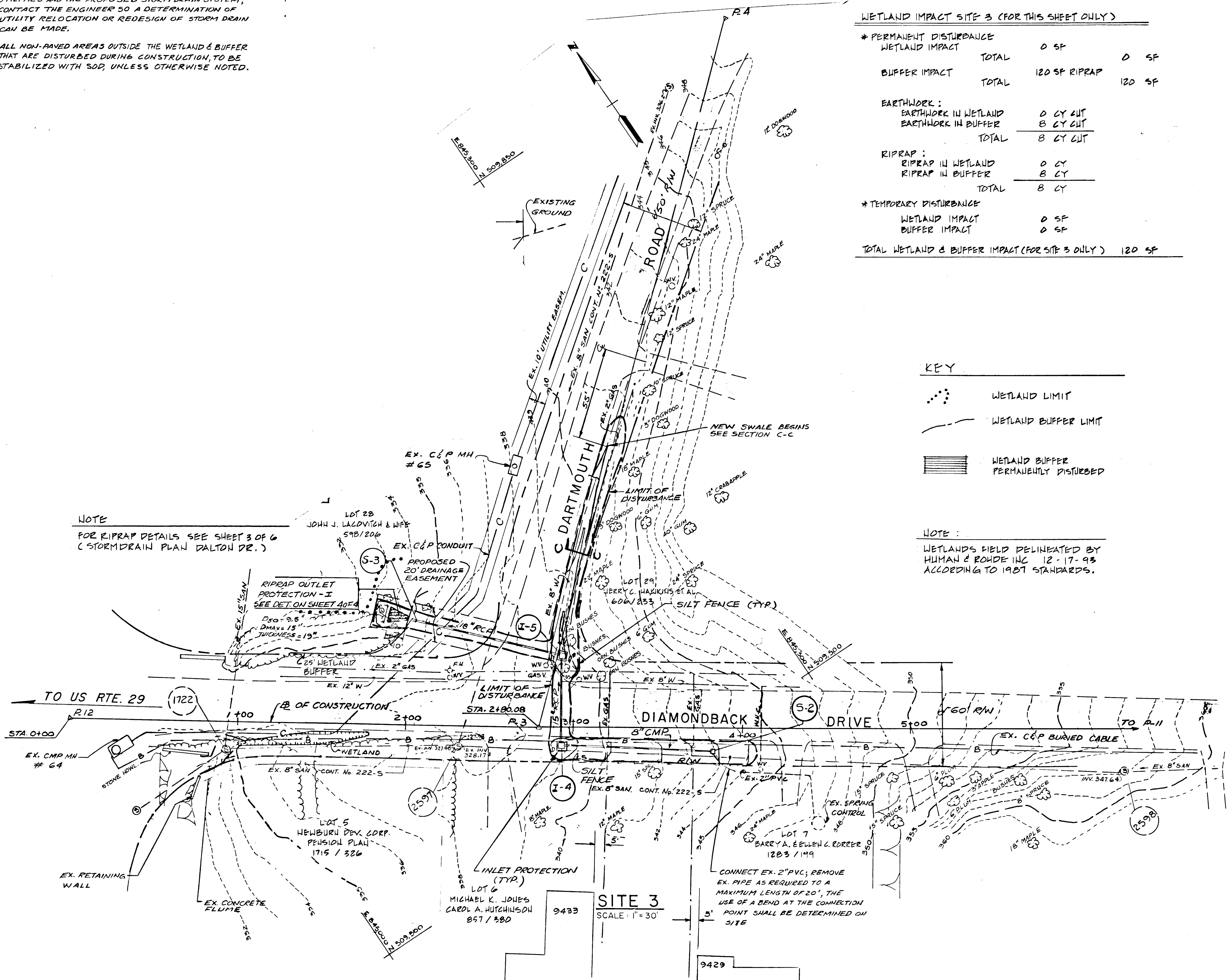
- The following best management practices shall be used during construction:
 - Remove excess debris to an upland disposal area.
 - Make post construction grades and elevations the same as shown on plan.
- For permanently disturbed areas:
 - Use previously excavated material as backfill unless it contains waste metal products, unsightly debris, toxic material, or any other deleterious substance.
 - Use clean borrow material.
 - All disturbed areas are to be restored. Rake area smooth and seed with annual rye grass at the rate of 5 lbs. per 1000 sf.
- For temporary disturbed areas:
 - Strip, stockpile and maintain separately the top 6" of soil material, to be replaced as the top layer of the backfilled material.
 - Use previously excavated material as backfill, unless it contains waste metal products, unsightly debris, toxic material, or any other deleterious substance. Use clean borrow material when excavated material is not suitable for use as backfill.
 - Remove excess debris to an upland disposal area.
 - Make post construction grades and elevations the same as the original.
 - All disturbed areas are to be restored to their existing conditions within 24 hours. Rake area smooth and seed with annual rye grass at the rate of 5 lbs. per 1000 sf.
- Place materials in a location and manner which does not adversely impact surface or subsurface water flow into or out of the nontidal wetland.
- Work must comply with all conditions of the Water Quality Certification issued for this project.

KEY

- WETLAND LIMIT
- WETLAND BUFFER LIMIT
- WETLAND BUFFER PERMANENTLY DISTURBED

NOTE:

WETLANDS FIELD DELINEATED BY HUMAN & ROHDE INC. 12-17-93 ACCORDING TO 1987 STANDARDS.



NOTE

FOR RIPRAP DETAILS SEE SHEET 3 OF 6 (STORM DRAIN PLAN DALTON DR.)

LOCATION OF PROJECT:
HOWARD CO. ADC MAP 15 K3
DIAMONDBACK DRIVE @
UNNAMED TRIBUTARY LITTLE PATUXENT R.

APPLICANT:
ME STEVE SHARAR
DEPT OF PUBLIC WORKS HOWARD CO.
3450 COURT HOUSE DRIVE
ELLICOTT CITY, MD 21043
(410) 313-2014

PREPARED BY:
HUMAN & ROHDE, INC.
Landscape Architects
110 E. Pennsylvania Avenue
Towson, Maryland 21286
(410) 825-3885

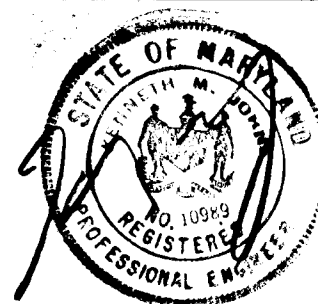
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. Shaw 9/20/95
DIRECTOR OF PUBLIC WORKS DATE

Paul G. Johnson 9/13/95
CHIEF, BUREAU OF ENGINEERING DATE

William M. Dwyer 9-15-95
CHIEF, BUREAU OF HIGHWAYS DATE

6/13/95
CHIEF, DIVISION OF TRANSPORTATION
PROJ. AND WATERSHED MANAGEMENT DATE



DES:	
DRN:	
CHK:	
DATE:	06/06/1995
BY:	NO.
REVISION:	

WETLAND IMPACTS PLAN
DATE 3-8-94
DIAMONDBACK DRIVE

DRAINAGE SYSTEM IMPROVEMENT PROGRAM
CAPITAL PROJECT NO. D-1078 S. E.
HOWARD COUNTY, MARYLAND
CONTRACT NO.
ELECTION DISTRICT 6

SCALE AS SHOWN
SHEET 6 OF 6