

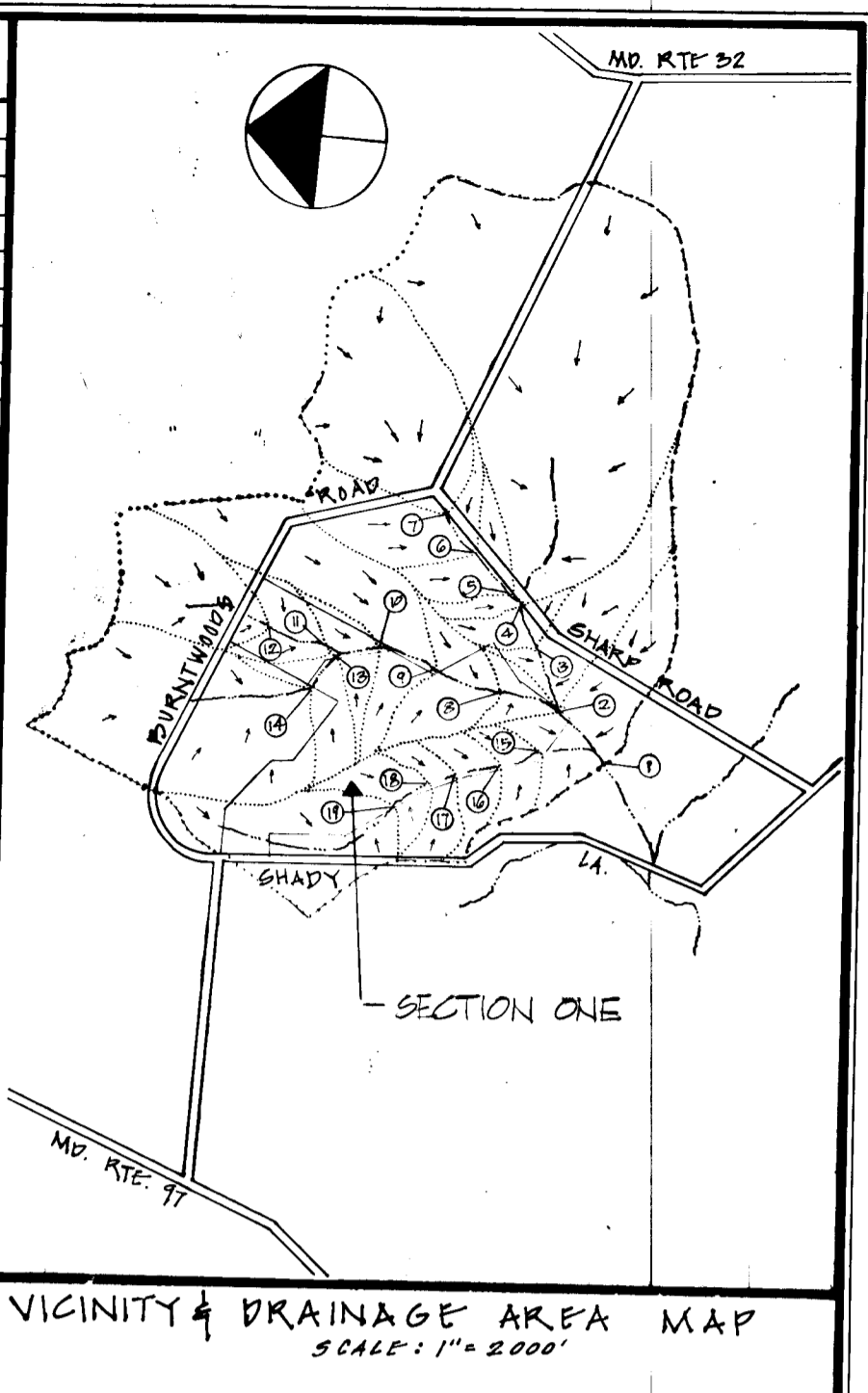
- SEDIMENT CONTROL - GENERAL NOTES**
- CONTRACTOR TO GIVE MINIMUM 24 HOUR NOTICE TO HOWARD CO. DEPT. OF INSPECTIONS 465-5000 EXT-361 AND HOWARD SOIL CONSERVATION DISTRICT 465-3180.
  - EROSION AND SEDIMENT CONTROL MEASURES TO BE INSTALLED PRIOR TO GENERAL SITE GRADING.
  - PERMANENT SLOPES NOT TO EXCEED 3:1 IN FILL & 2:1 IN CUT.
  - ALL FILLS TO BE BERMED AT TOP AFTER EACH WORKING DAY. FILL SLOPES TO BE LEFT ROUGH TO PREVENT UNDER EROSION UNTIL READY TO STABILIZE.
  - LOCATION OF TEMP. EARTH BERMS ARE APPROXIMATE AND SHALL MEET FIELD CONDITIONS.
  - ADDITIONAL SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY FIELD CONDITIONS.
  - A CONCEPTUAL GRADING PLAN SHALL BE DEVELOPED BY THE BUILDER AND APPROVED BY HOWARD COUNTY, BEFORE ANY BUILDING PERMITS WILL BE ISSUED.

**STRUCTURE SCHEDULE**

NUMBER	TYPE	INV. IN	INV. OUT	FIN. ELEV.	STD. DETAIL
I-1	TYPE 'K' INLET	—	572.57	575.00	PWG# 94
I-2	CLASS 'A' INLET	—	572.13	574.82	PWG# 24-A
I-3	CLASS 'A' INLET	570.83	570.63	574.82	"
I-4	"	562.88	561.0	574.82	"
I-5	"	562.88	562.0	574.82	"
I-6	CLASS 'A' INLET	—	569.0	576.51	"
I-7	CLASS 'A' INLET	528.76	528.06	576.21	"
M-1	STD. MANHOLE	572.65	572.45	579.71	PWG# D-103
M-2	"	561.90	569.50	576.51	"
M-3	"	568.64	568.00	575.21	"
H.W. 1	END SUPPLY WALL	—	567.96	—	PWG# D-46
H.W. 2	"	—	560.0	—	"
H.W. 3	"	—	522.5	—	"

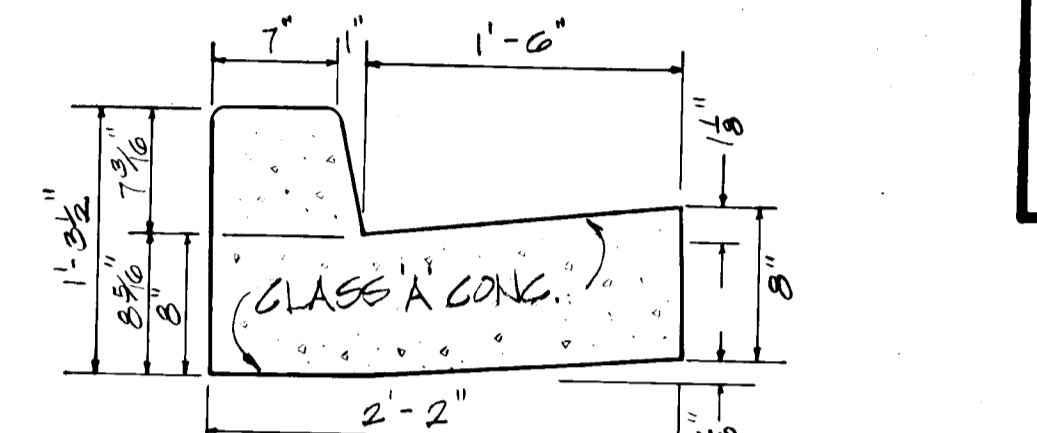
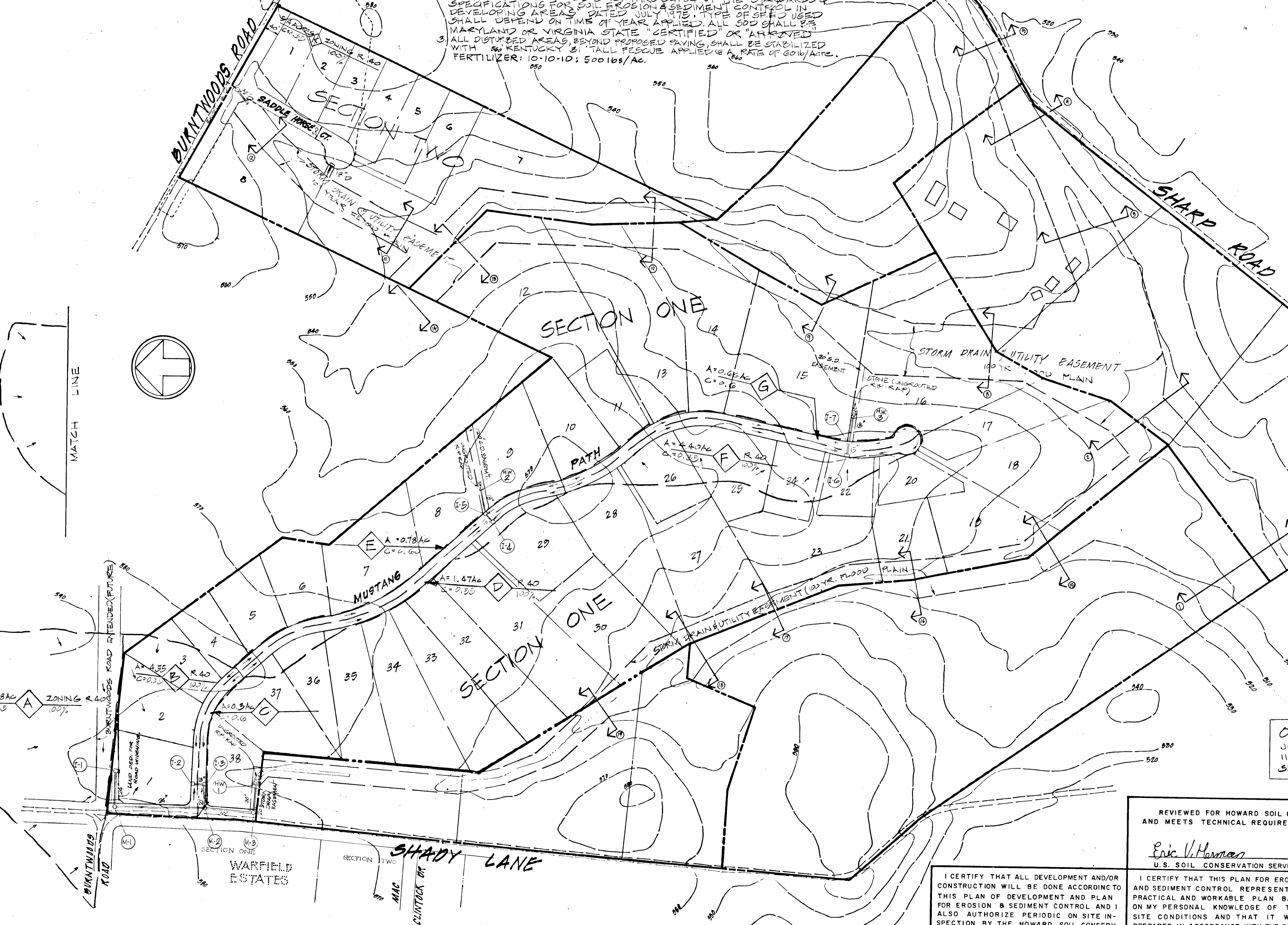
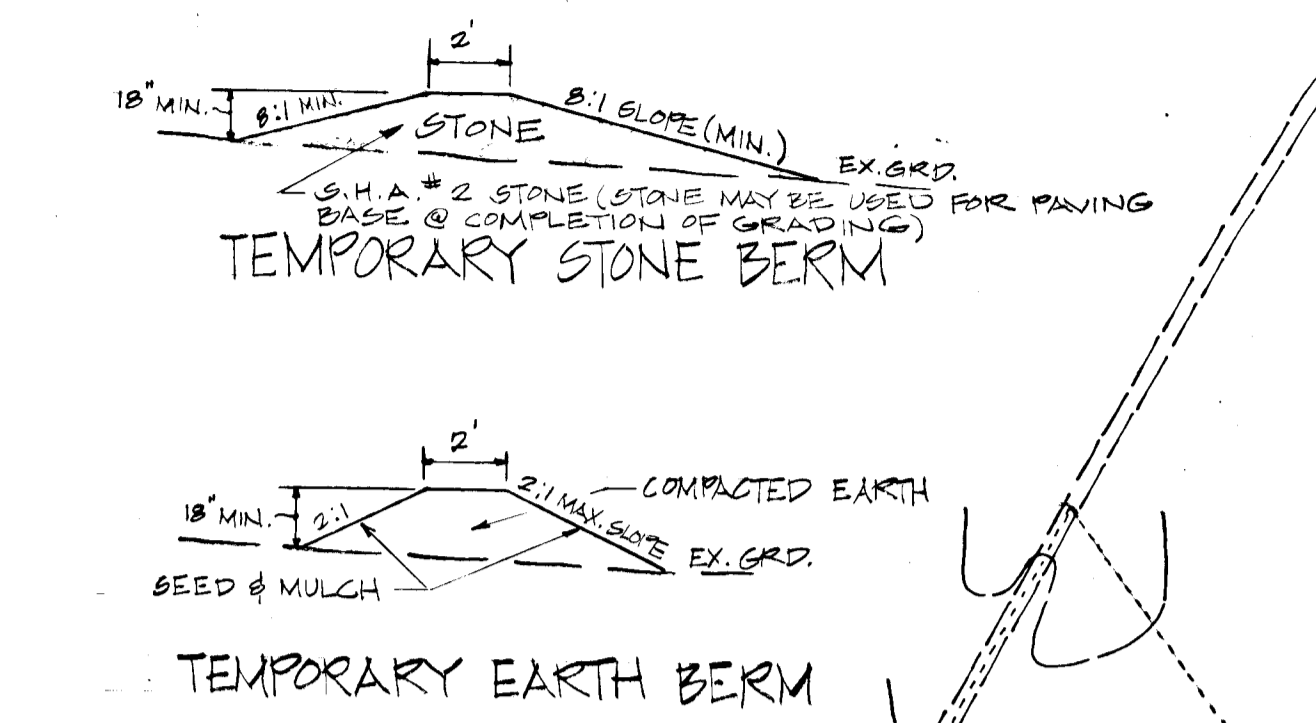
**FLOOD PLAIN FLOW COMPUTATIONS**

SYSTEM	ACRES	C	CA	TIME	I <sub>100</sub>	Q <sub>100</sub>
1	771.4	0.56	277.06	22.8	66.72	1821.90
2	642.8	0.56	231.48	21.5	68.74	1574.00
3	552.6	0.50	141.64	20.5	75	1060.00
4	544.4	0.42	137.76	19.5	77	1022.40
5	116.6	0.55	44.81	18.2	81	285.82
6	100.1	0.55	35.24	17.2	83	202.77
7	69.8	0.55	24.43	15.9	85	155.58
8	292.7	0.55	97.75	21.0	75	695.15
9	221.8	0.55	74.73	19.8	77	615.92
10	149.9	0.55	54.47	18.6	79	469.81
11	50.5	0.55	17.68	15.6	82	146.74
12	37.7	0.55	13.20	14.0	85	112.2
13	105.6	0.55	36.96	17.8	80	245.68
14	91.8	0.55	32.13	16.8	82	225.47
15	101.0	0.55	35.25	21.5	75	245.15
16	77.9	0.55	27.77	20.5	75	209.78
17	68.9	0.55	24.12	19.7	77	185.72
18	56.7	0.55	19.92	18.2	77	155.58
19	44.1	0.55	15.44	17.7	77	121.98

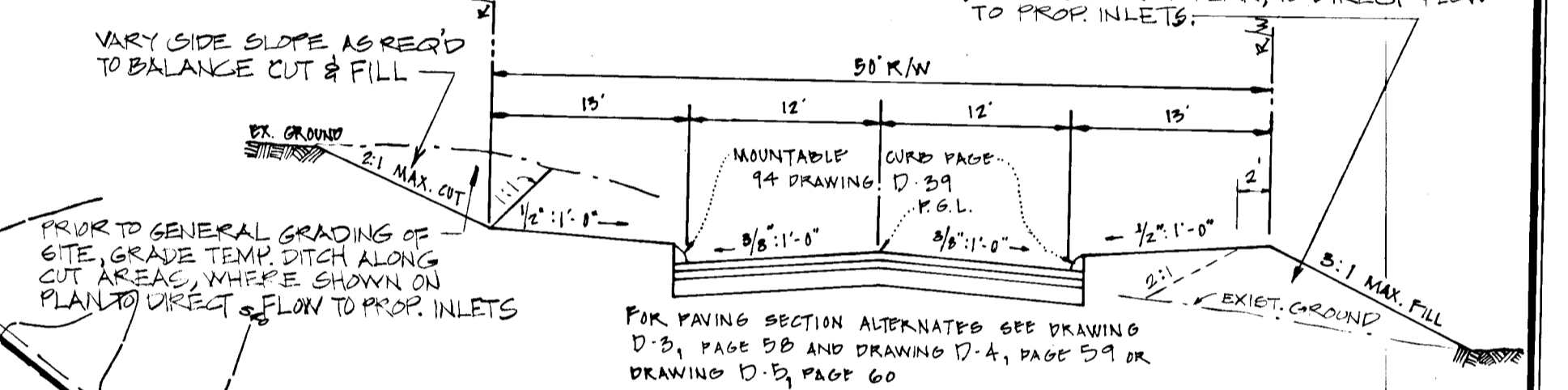


- SEDIMENT CONTROL SEQUENCE OF CONSTR.**
- PHASE I - 1.** GRADE AREA IN VICINITY OF PROPOSED STORM SYSTEM TO ROAD SUB-GRADE
- 2.** INSTALL STORM DRAIN SYSTEMS AND SEDIMENT BASINS AT ALL CLASS 'A' INLETS. (SEE SA 30FS FOR DETAILS)
- 3.** GRADE TEMP. EARTH BERMS AND DITCHES TO DIRECT SURFACE FLOW TO PROPOSED BASINS @ INLETS.
- 4.** COMPLETE SITE GRADING & INSTALL TEMP. STONE BERMS. INSTALL PAVING BASE MATERIAL.
- PHASE II - 5.** FILL AREA AROUND INLETS & INSTALL STONE FILTER ON 3 SIDES OF INLET TO TOP ELEV. OF INLET. (SEE DETAIL ON SHEET 3 OF 5)
- 6.** INSTALL ROAD PAVING SECTION - BITUMINOUS CONCRETE.

- GENERAL NOTES FOR SOIL AND SEEDING**
- CROWN VETCH @ 20 LBS/AC (SEED TO BE SCARIFIED & INOCULATED) AND KY-31 FESCUE @ 40 LBS/AC. SHALL BE USED ON ALL SLOPES STEEPER THAN 3:1. - SOIL WILL NOT BE PERMITTED.
  - TEMPORARY AND PERMANENT SEEDING AND SOODING SHALL CONFORM WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. SEE SPEC. 50.01 THRU 50.04 OF THE "STANDARDS & SPECIFICATIONS FOR SOIL EROSION & SEDIMENT CONTROL IN DEVELOPING AREAS" DATED JULY 1975. TYPE OF SEED USED SHALL DEPEND ON TIME OF YEAR APPLIED. ALL SOIL SHALL BE MARYLAND OR VIRGINIA STATE "CERTIFIED" OR "APPROVED" ALL DISTURBED AREAS BEYOND PROPOSED PAVING SHALL BE STABILIZED WITH 50% KENTUCKY 31 TALL FESCUE APPLIED @ RATE OF 60 LBS/AC. FERTILIZER: 10-10-10; 500 LBS/AC.



STD. 7" CURB & GUTTER FOR CUL-DE-SAC ONLY NO SCALE



TYPICAL SECTION - MUSTANG PATH 50 FT. RIGHT OF WAY RESIDENTIAL STREET NO SCALE DESIGN SPEED 30 mph.

- GENERAL NOTES**
- ALL CONSTRUCTION SHOWN ON THESE PLANS SHALL BE IN ACCORDANCE WITH HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPEC. DATED NOV. 27, 1962 AND REVISED AUG. 1967.
  - REFERENCE TO PAGE AND DRAWING NUMBERS REFER TO ABOVE MENTIONED SPECIFICATIONS.
  - BASE WILL BE PRIMED IN ACCORDANCE WITH COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
  - TACK COAT IS REQUIRED IN ACCORDANCE WITH SECTION C 31-4 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE & STD. SPECIFICATION.
  - PLYWOOD (3/4" THICK) SHALL BE PLACED OVER THE OPEN END OF ANY UNFINISHED STORM DRAINS AT THE END OF EACH WORKING DAY.
  - MUSTANG PATH SHALL BLEND INTO THE ADJACENT LOTS AS SHOWN ON THE ABOVE TYPICAL SECTION. CONTRACTOR SHALL FINE GRADE AS REQUIRED TO PREVENT TRAPPING SURFACE WATER ON ADJACENT LOTS.
  - EXISTING CONTOUR SHOWN ON SHEETS # 3, 4 & 5 WERE INTERPOLATED FROM THE TOPOGRAPHIC SURVEY PREPARED BY PHOTO SCIENCE INC. - DATED JUNE 1966.

**SITE ANALYSIS**

TOTAL AREA	88.33 AC
TOTAL AREA DISTURBED	6.4 AC
TOTAL AREA STABILIZED	4.4 AC
TOTAL PAVEMENT AREA	2.0 AC

**OWNER - DEVELOPER**  
JUSTICE TRACT JOINT VENTURE  
1131 UNIVERSITY BLVD. WEST  
SILVER SPRING, MD. 20912

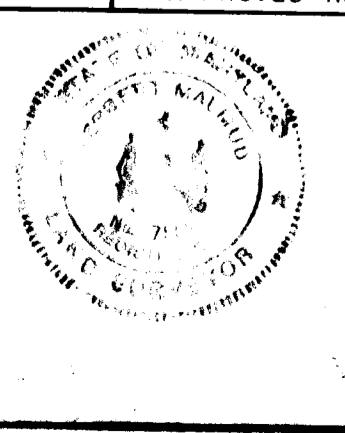
APPROVED  
DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING  
HOWARD COUNTY, MARYLAND  
DATE: May 18, 1976

REVIEWED FOR HOWARD SOIL CONSERVATION AND MEETS TECHNICAL REQUIREMENTS:  
Eric V. Harman 6/8/76  
U.S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
Richard J. Zichow 6/10/76  
APPROVED HOWARD S.C.D. DATE

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION & SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC ON SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS THEY ARE DEEMED NECESSARY.  
Justice Tract Joint Venture  
Richard J. Zichow 6/1/76  
DEVELOPER DATE

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.  
H. Malmud 5-29-76  
ENGINEER DATE

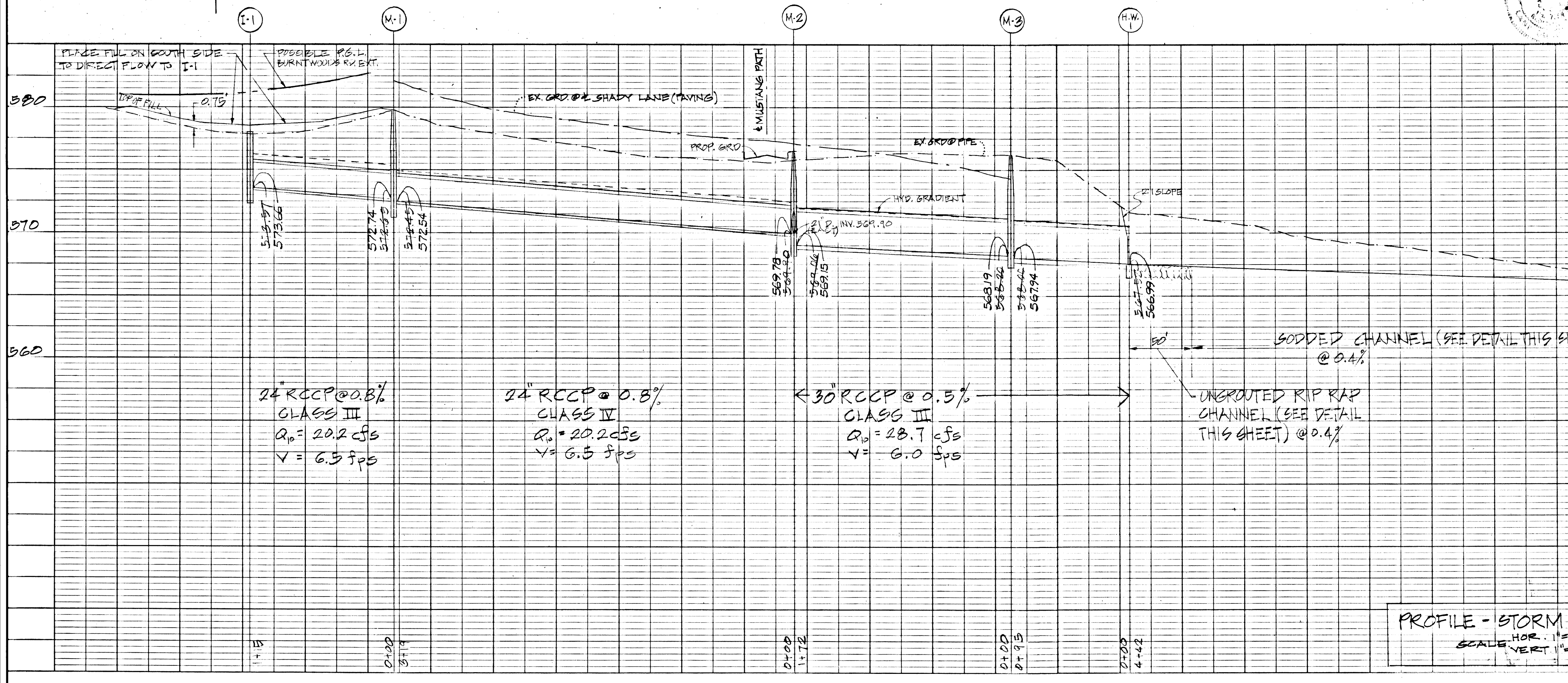
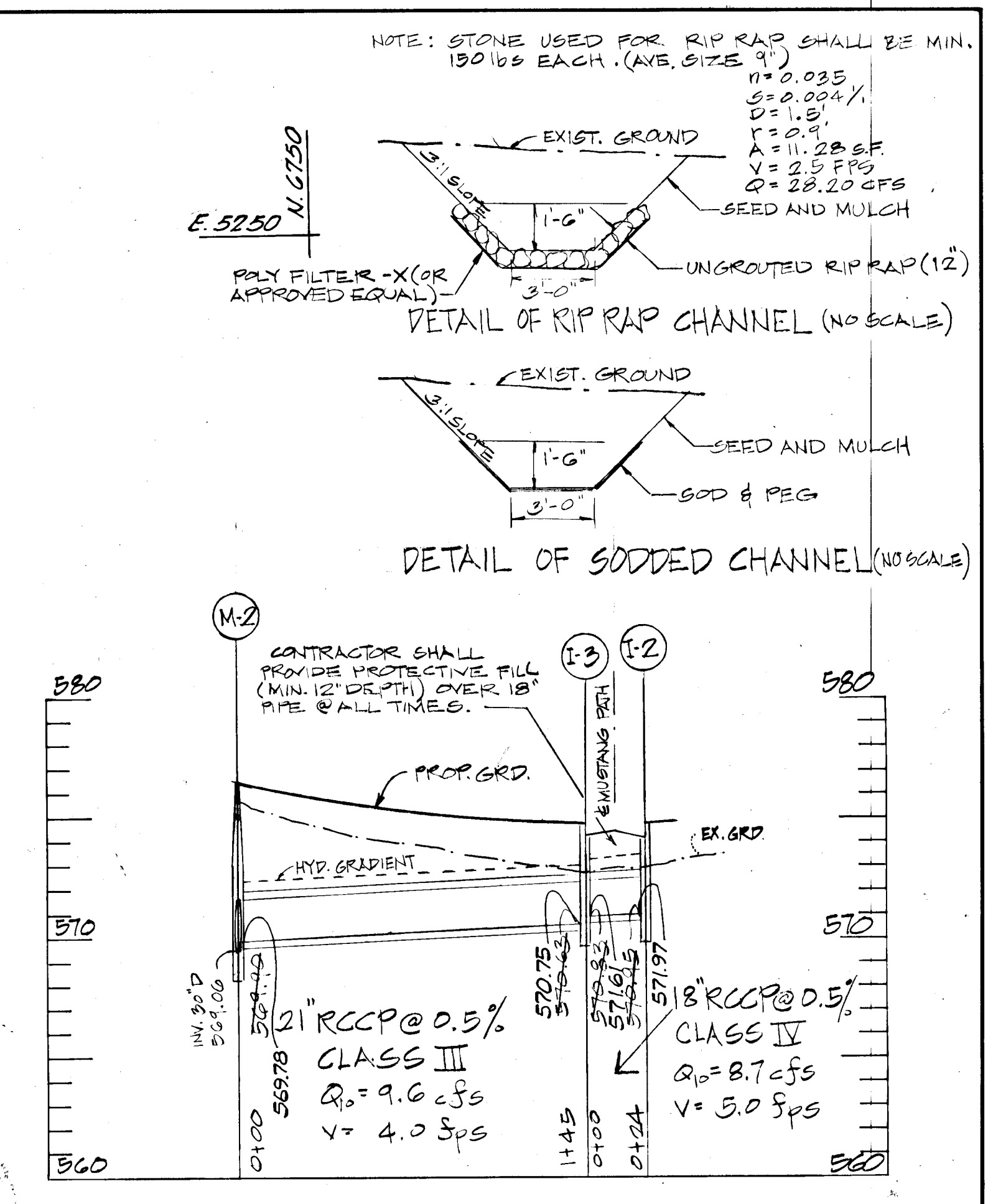
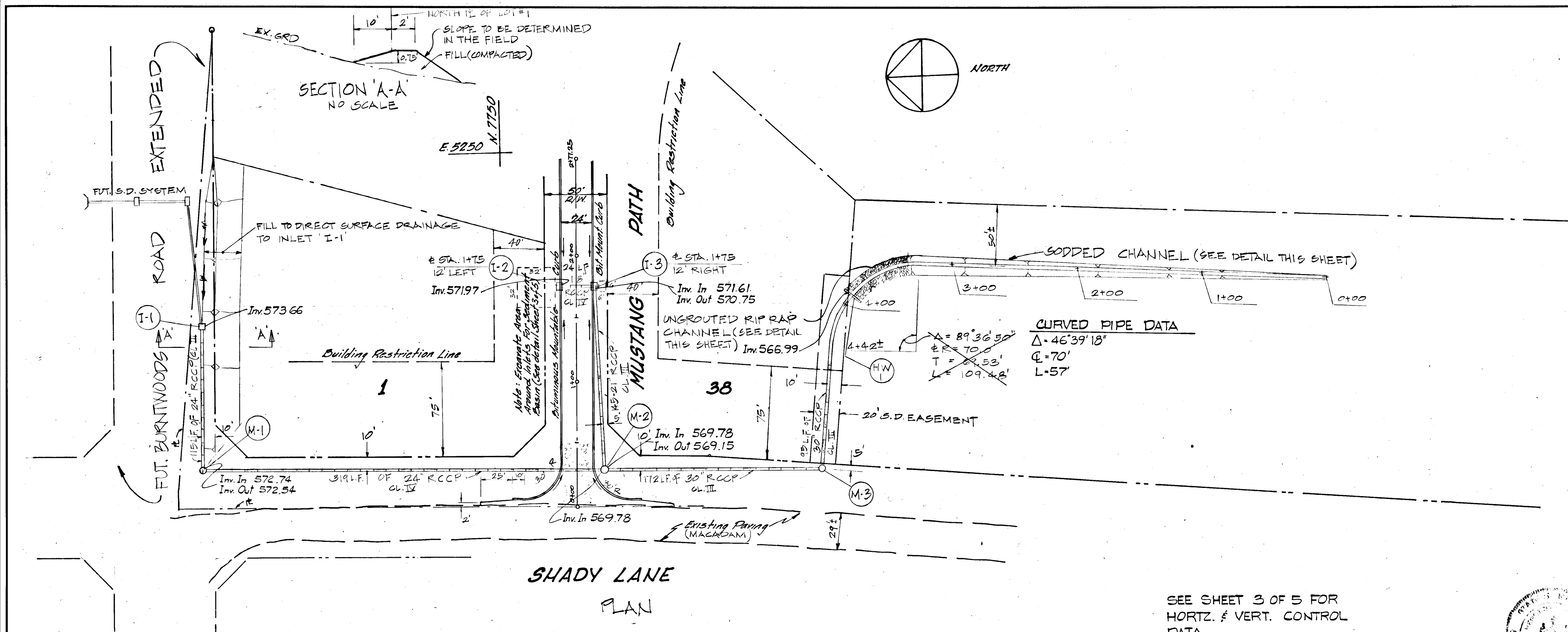


**GLENWOOD ESTATES**  
SECTION ONE  
ELECTION DISTRICT NO. 4  
**HOWARD COUNTY MARYLAND**  
DEPARTMENT OF PUBLIC WORKS  
PREPARED BY  
H. MALMUD & ASSOC. INC.  
8815 MEADOW HEIGHTS RD.  
RANDALLSTOWN, MD. 21133  
TELEPHONE (301)-655-6465  
DATE: 1/5/76 SCALE: AS SHOWN SHEET 1 OF 5

LOCATION AND DRAINAGE AREA MAP SCALE 1" = 200'

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHNG.	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHNG.	
	NO.	

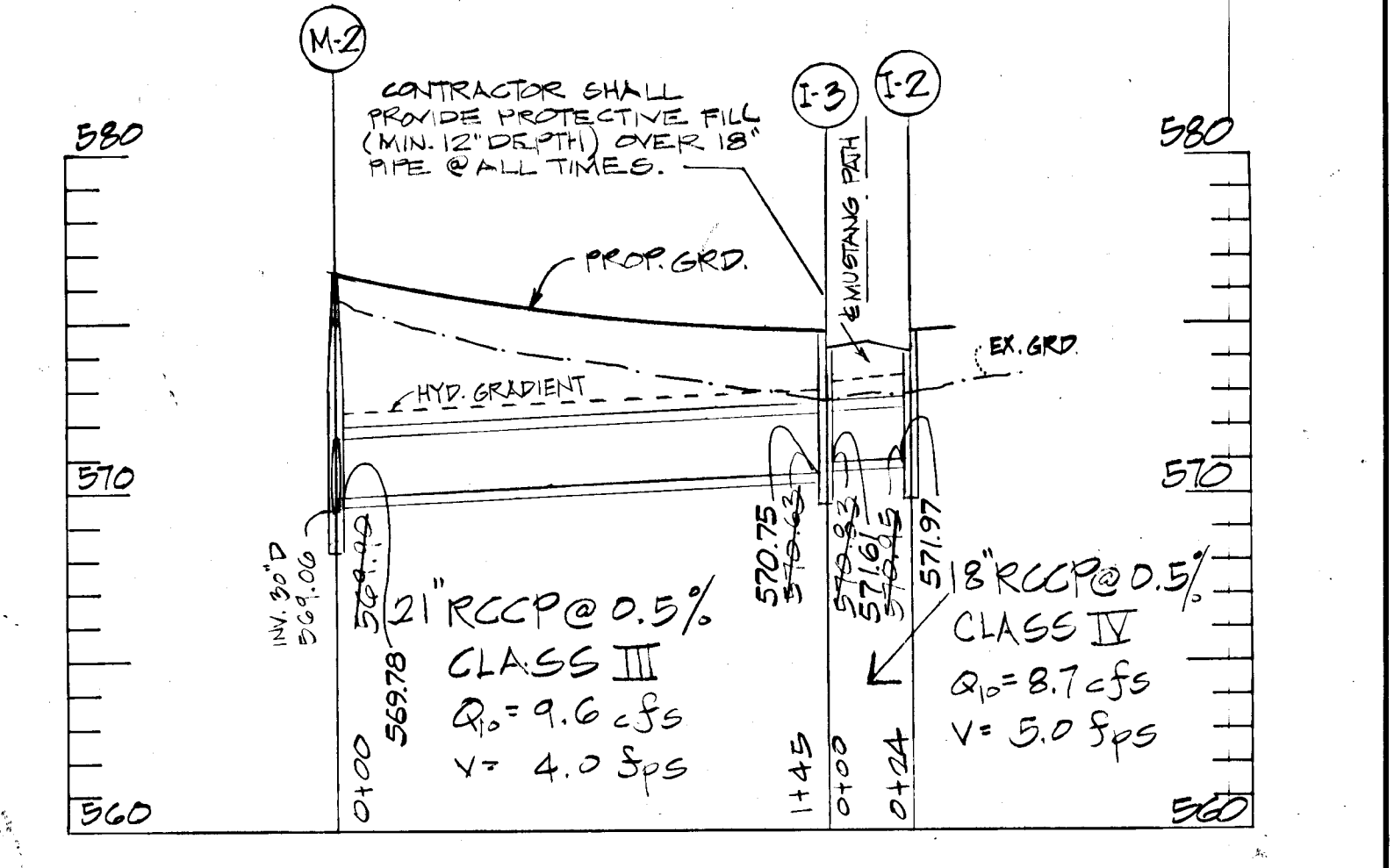


*Robert Malmud*

NOTE: STONE USED FOR RIP RAP SHALL BE MIN. 130 LBS EACH (AVE. SIZE 9")  
 $n = 0.035$   
 $S = 0.004\%$   
 $V = 1.5$   
 $A = 11.28 \text{ SF}$   
 $V = 2.5 \text{ FPS}$   
 $Q = 28.20 \text{ CFS}$   
 SEED AND MULCH

DETAIL OF RIP RAP CHANNEL (NO SCALE)  
 UNROUTED RIP RAP (12")  
 SEED AND MULCH

DETAIL OF SODDED CHANNEL (NO SCALE)  
 SEED AND MULCH  
 SOD & PEG



CONTRACTOR SHALL PROVIDE PROTECTIVE FILL (MIN. 12" DEPTH) OVER 18" PIPE AT ALL TIMES.

APPROVED  
 DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING  
 HOWARD COUNTY, MARYLAND  
 DATE MAY 18, 1976  
*[Signature]*

*[Signature]*  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE 6/9/76

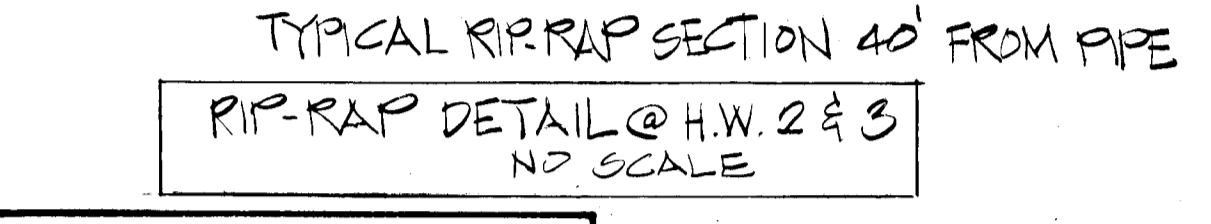
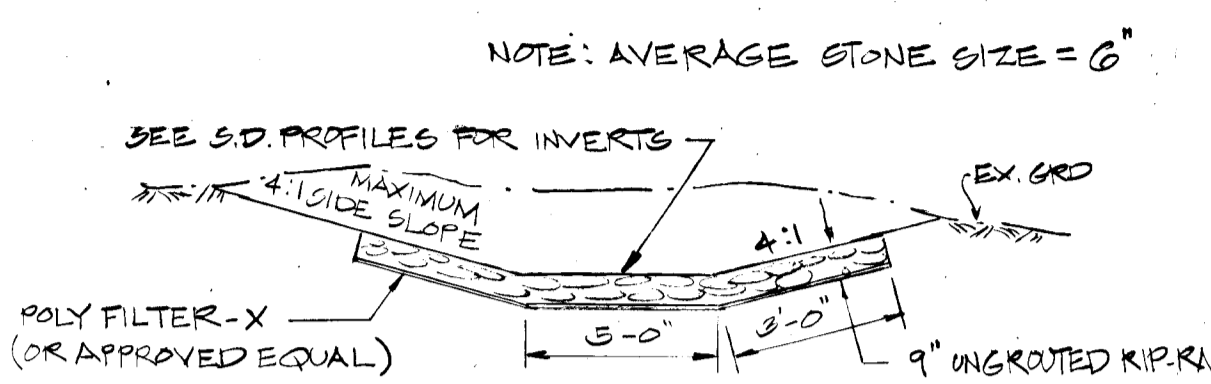
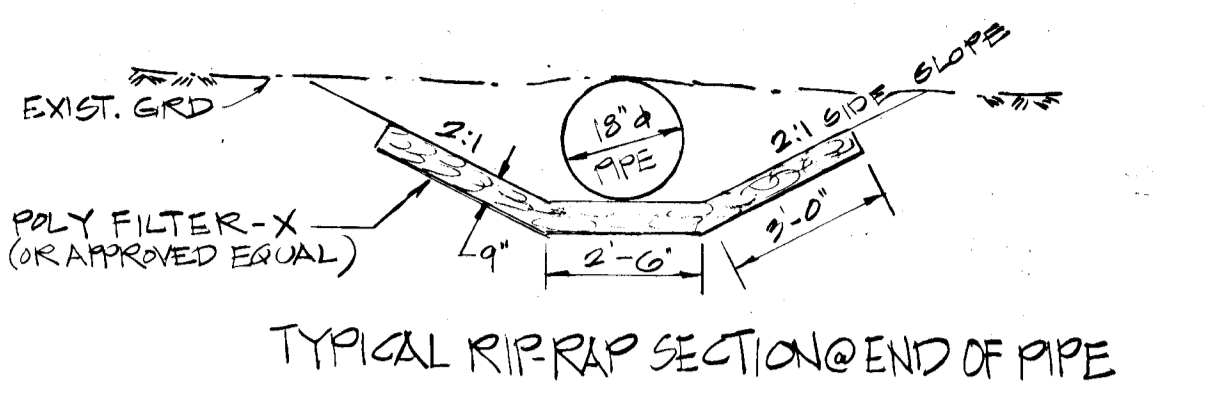
HOWARD COUNTY MARYLAND  
 DEPARTMENT OF PUBLIC WORKS  
 HIGHWAY AND STORM DRAIN  
 PLAN AND PROFILE OF  
 MUSTANG PATH  
 SHADY LANE TO STA. 2+00  
 GLENWOOD ESTATES  
 SECTION ONE  
 ELECTION DISTRICT NO. 4

PROFILE - STORM DRAIN  
 SCALE HOR. 1"=50'  
 VERT. 1"=5'

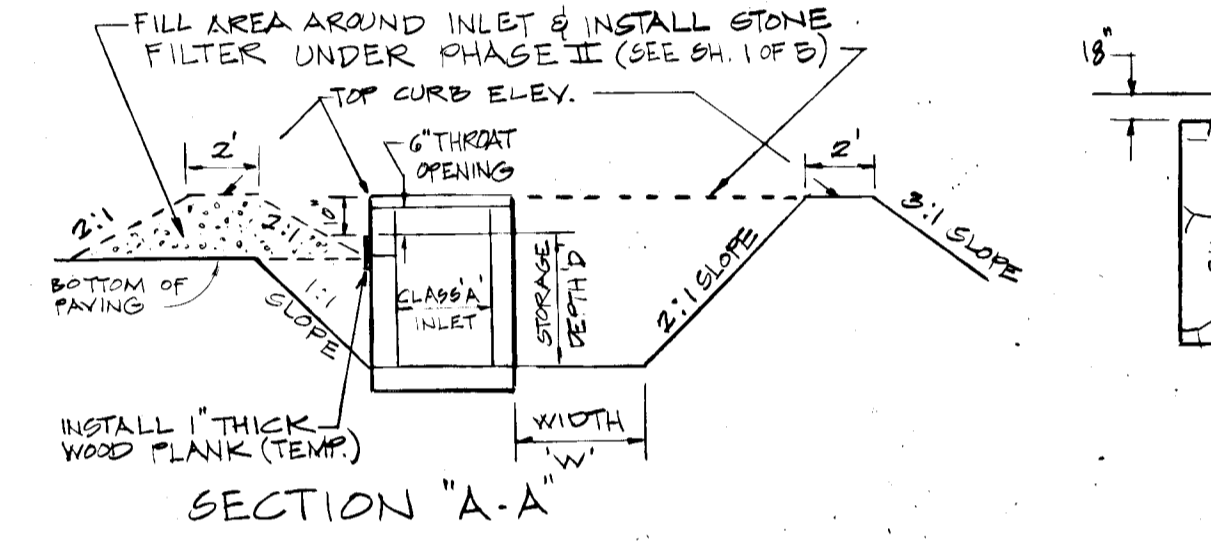
SCALE: PLAN 1"=50' PROFILE HOR. 1"=50' VERT. 1"=5' DATE 1/5/76 DWG 2 OF 5

AS-BUILT

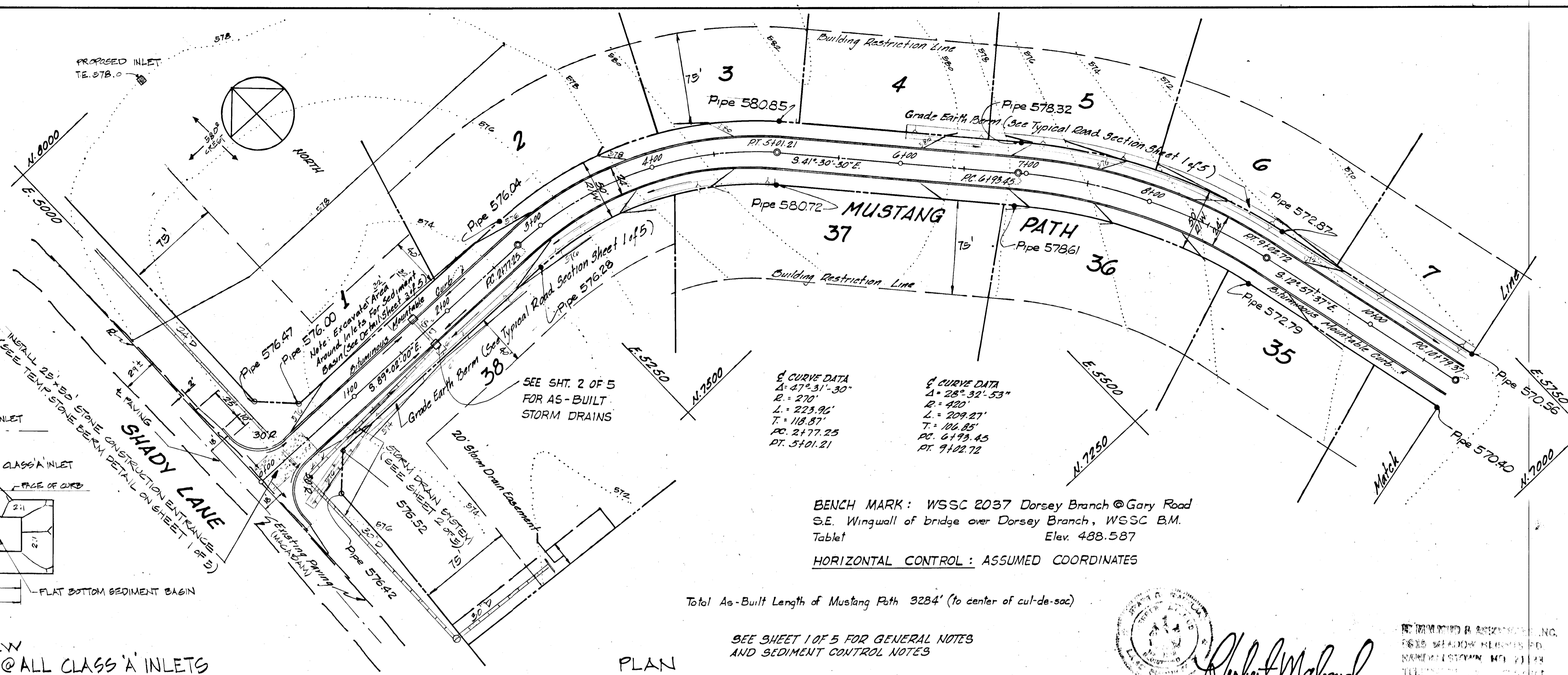
F-76-62



OWNER-DEVELOPER  
JUSTICE TRACT JOINT VENTURE  
1131 UNIVERSITY BLVD WEST  
SILVER SPRING MD. 20902



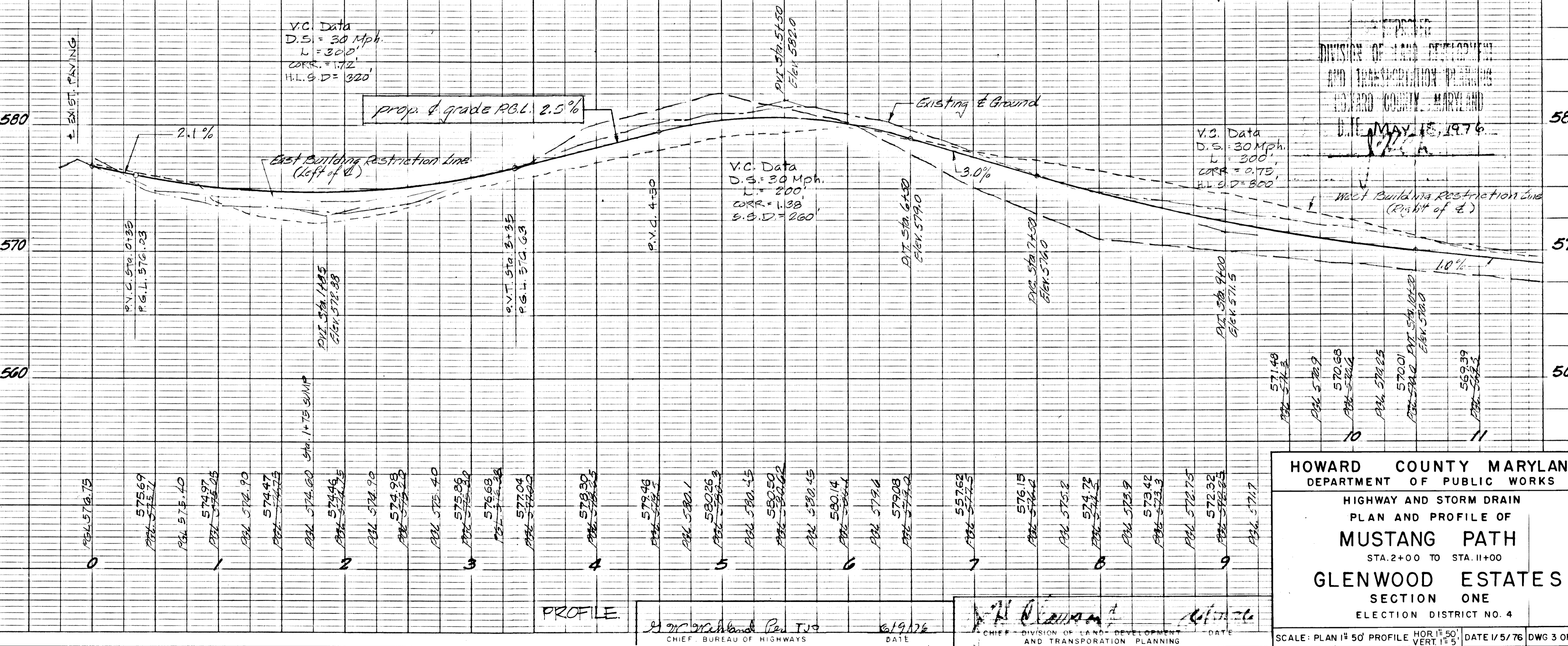
PLAN VIEW  
DETAIL OF TEMP. SEDIMENT BASIN @ ALL CLASS 'A' INLETS  
NO SCALE



DATE	BY
SURVEYED	ALIGNED
NOTE BOOK	GRADES CHECKED
NO.	RT. OF WAY CHECKED

DATE	BY
SURVEYED	GRADES CHECKED
NOTE BOOK	B. M. NOTED
NO.	STRUCTURE NOTATIONS CHECKED

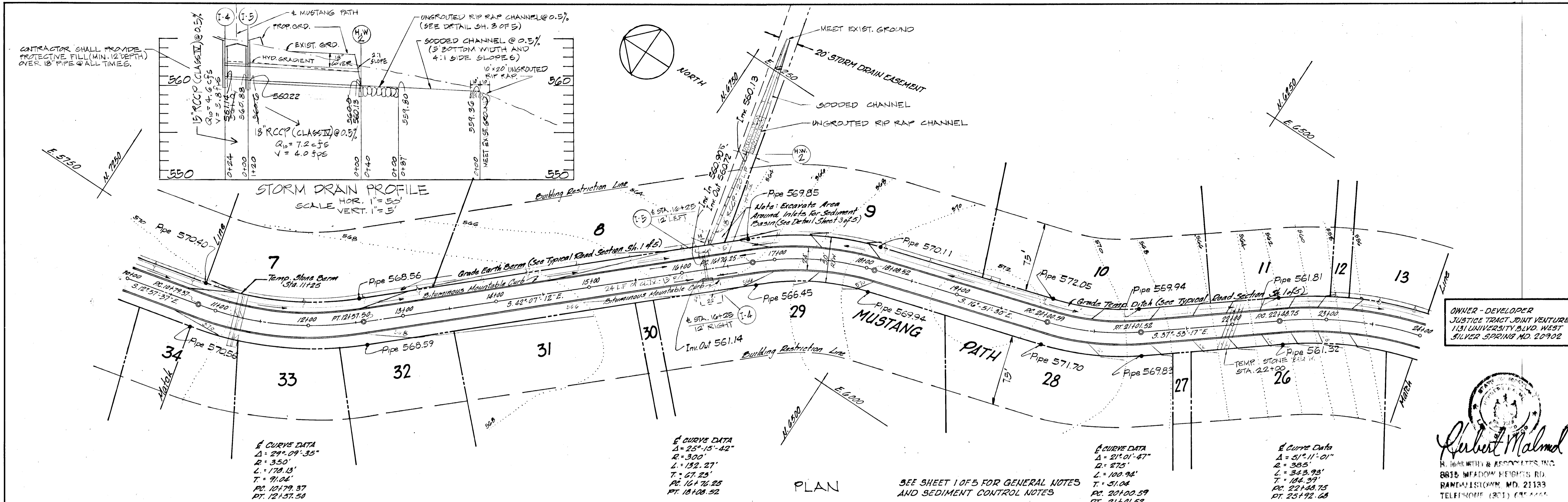
INLET NO.	I-2	I-3	I-4	I-5	I-6	I-7
INLET I.G. EL.	574.3	574.3	574.7	574.7	573.3	573.3
INLET THROAT EL.	574.0	574.0	573.8	573.8	572.3	572.3
EXT. EL. SED. BASIN	571.0	570.3	561.0	560.3	549.0	548.3
STORAGE DEPTH D'(FT)	3.0	3.3	2.3	3.3	3.3	4.0
EXT. WIDTH W'(FT)	32'	6'	22'	14'	5'	5'
EXT. LENGTH L'(FT)	32'	6'	22'	14'	33'	16'
DRAINAGE AREA (A <sub>c</sub> )	4.35	0.3	1.47	0.78	4.40	0.66
DISTURBED AREA (A <sub>d</sub> )	2.4	0.3	1.20	0.78	1.00	0.66
STORAGE REQ'D (CY)	161	22	82	52	67	44
STORAGE PROVIDED (CY)	161	22	82	52	67	44
CLEANOUT EL.	573.0	573.0	562.0	562.3	551.3	551.3
* DISTURBED AREA - SQ. FT./ACRE						



HOWARD COUNTY MARYLAND  
DEPARTMENT OF LAND DEVELOPMENT  
AND TRANSPORTATION PLANNING  
DATE MAY 15, 1976  
Robert Mahmud  
CHIEF - DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING

DATE	
BY	
SURVEYED	
GRADES CHECKED	
ALIGNED CHECKED	
RT. OF WAY CHECKED	
NO.	
PLAN	

DATE	
BY	
SURVEYED	
GRADES CHECKED	
ALIGNED CHECKED	
STRUCTURE NOTATIONS CHECKED	
NO.	
PROFILE	



OWNER - DEVELOPER  
JUSTICE TRACT JOINT VENTURE  
1131 UNIVERSITY BLVD. WEST  
SILVER SPRING MD. 20902

**Herbert Malm**  
H. MALM & ASSOCIATES, INC.  
8815 WINDY HILLS RD.  
RANNEYSTOWN, MD. 21133  
TELEPHONE (301) 411-1111

HOWARD COUNTY MARYLAND  
DEPARTMENT OF PUBLIC WORKS  
HIGHWAY AND STORM DRAIN  
PLAN AND PROFILE OF  
**MUSTANG PATH**  
STA. 11+00 TO STA. 23+00  
**GLENWOOD ESTATES**  
SECTION ONE  
ELECTION DISTRICT NO. 4

**H. Malm**  
CHIEF, BUREAU OF HIGHWAYS  
DATE: 6/9/74

**H. Malm**  
CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING  
DATE: 6/6/74

SCALE: PLAN 1" = 50' PROFILE HOR. 1" = 50' VERT. 1" = 5'  
AS-BUILT  
DATE 1/5/76 DWG 4 OF 5  
F-76-62

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 RT. OF WAY CHECKED: \_\_\_\_\_  
 NO. \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 STRUCTURE NOTATIONS CHECKED: \_\_\_\_\_  
 NO. \_\_\_\_\_

