

DATE: 5-6-80
 DATE: 5-6-80

DATE	REV. NO.	REVISION DESCRIPTION
4/15/80	2	As per DPW Comments
3/19/80	1	As per DPW Comments

COLUMBIA
 6TH. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2

PROJECT TITLE:
 PLAN AND PROFILE
 WHITE SPRING WAY
 STA. 4+28.00 TO STA 16+00

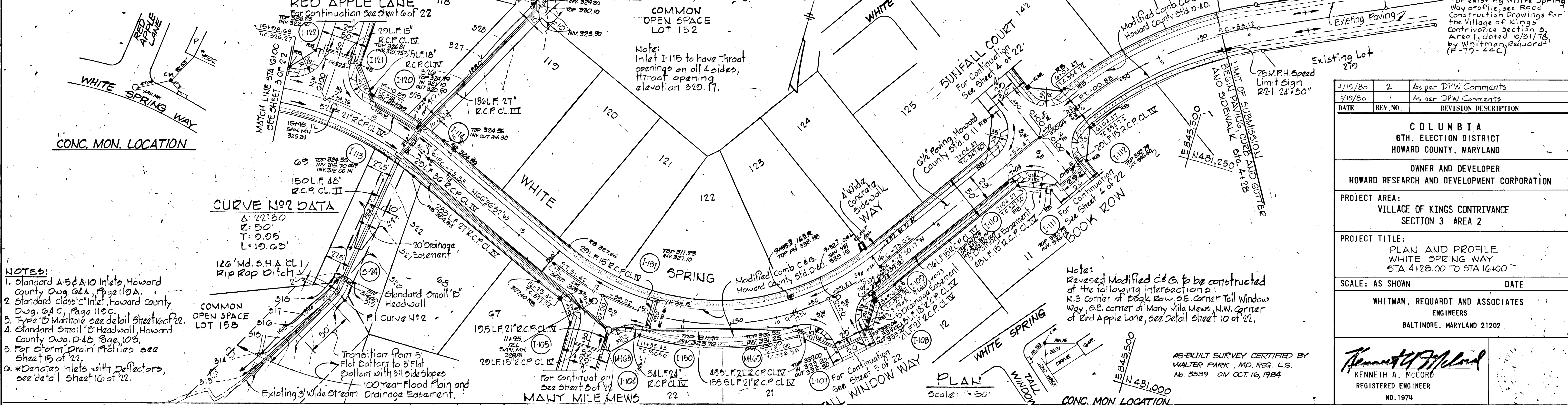
SCALE: AS SHOWN DATE

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

REGISTERED ENGINEER
 NO. 1974

CURVE DATA

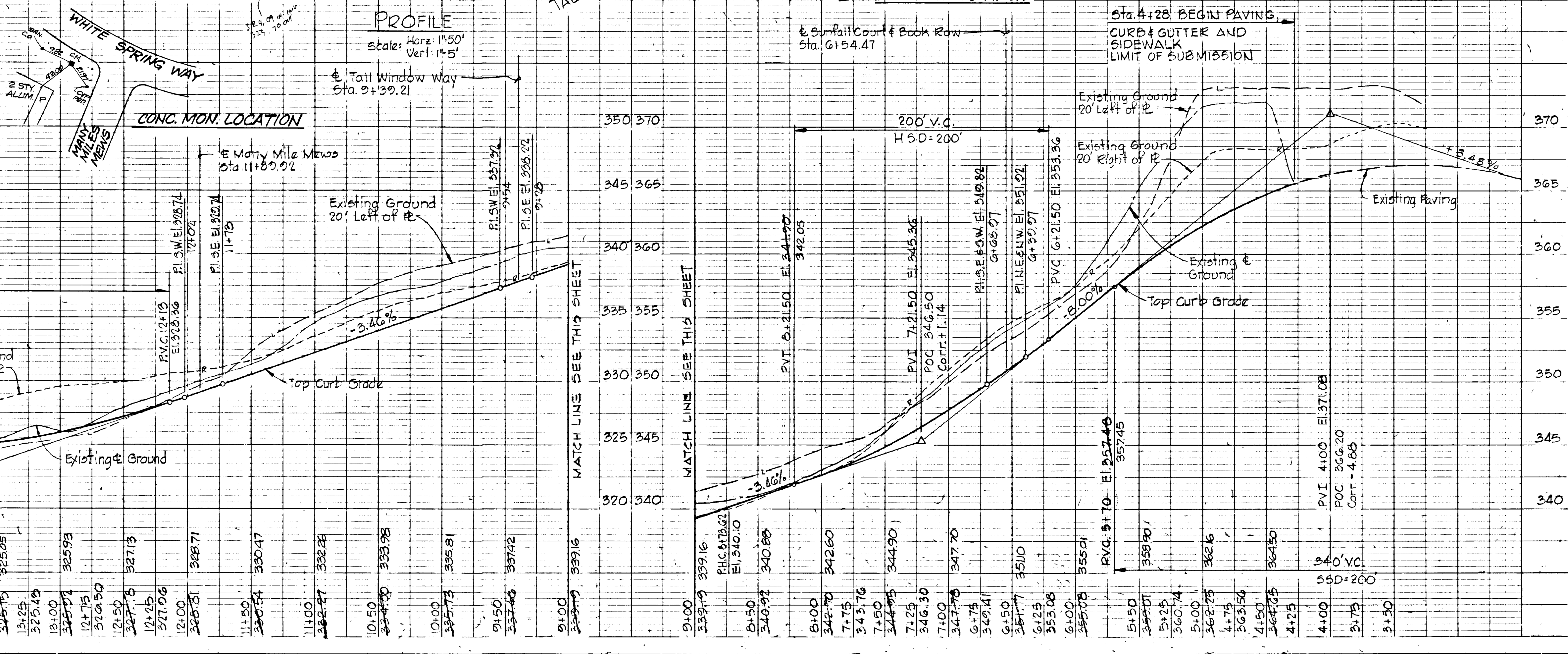
PC: 3+88.12 to PT: 6+00.88 Δ: 50°28'34" Tan: 108.30' R: 400.00' Chd.: 210.26' Arc: 212.76' Org.: N50°04'39"E	PC: 6+19.64 to PT: 9+39.21 Δ: 19°39'25" Tan: 37.95' R: 275.00' Chd.: 65.59' Arc: 65.59' Org.: S41°20'14"W	PC: 11+89.22 to PT: 12+51.42 Δ: 17°18'49" Tan: 30.88' R: 275.00' Chd.: 61.37' Arc: 61.50' Org.: N72°59'15"W
PC: 14+25.88 to PT: 15+14.76 Δ: 21°09'52" Tan: 68.18' R: 250.00' Chd.: 128.16' Arc: 128.88' Org.: N76°59'49"W	PC: 15+15.16 to PT: 16+41.60 Δ: 46°58'16" Tan: 151.08' R: 250.00' Chd.: 278.96' Arc: 286.98' Org.: S08°58'06"W	



- NOTES:**
- Standard A-5 & 10 Inlets Howard County Dwg. 64A, Page 119A.
 - Standard class 'C' Inlet, Howard County Dwg. 64C, Page 119C.
 - Type 'B' Manhole, see detail sheet 10 of 22.
 - Standard Small 'B' Headwall, Howard County Dwg. D-4b, Page 103.
 - For Storm Drain Profiles see sheet 15 of 22.
 - * Denotes inlets with deflectors, see detail sheet 16 of 22.

STORM DRAIN STRUCTURE SCHEDULE

NO.	TYPE	TOP ELEV.	INV. IN	INV. OUT	LOCATION
I-104	Standard A-5 Inlet, width: 25	329.80	325.37	324.87	Inlet 15.92' Left of Sta. 0+57.02
I-105	Standard A-10 Inlet, width: 25	329.80	325.30	324.80	Inlet 15.92' Right of Sta. 0+57.02
I-107	Standard A-10 Inlet, width: 25	329.02	323.23	322.54	Inlet 15.92' Right of Sta. 0+51.80
I-108	Standard A-10 Inlet, width: 25	329.02	323.78	323.78	Inlet 15.92' Left of Sta. 0+51.80
I-109	Standard A-10 Inlet, width: 25	329.70	325.43	324.92	Inlet 15.92' Left of Sta. 8+01.06
I-110	Standard A-10 Inlet, width: 25	327.54	323.25	322.54	Inlet 15.92' Left of Sta. 7+07.64
I-111	Standard A-10 Inlet, width: 25	329.70	326.27	324.97	Inlet 15.92' Right of Sta. 0+55.67
I-112	Standard A-10 Inlet, width: 25	329.70	326.24	324.97	Inlet 15.92' Left of Sta. 0+55.67
I-113	Standard A-10 Inlet, width: 25	324.61	318.68	318.68	Inlet 15.92' Left of Sta. 14+51.77
I-114	Standard A-10 Inlet, width: 25	324.61	317.54	316.72	Inlet 15.92' Right of Sta. 14+51.77
I-115	Standard Class 'C' Inlet	330.00	324.17	323.97	See Plan and Profile
I-116	Standard A-5 Inlet, width: 25	324.94	321.12	320.59	Inlet 15.92' Right of Sta. 15+07.72
I-121	Standard A-10 Inlet, width: 25	326.35	322.23	321.54	Inlet 15.92' Right of Sta. 0+52.53
I-122	Standard A-10 Inlet, width: 25	326.35	322.39	321.39	Inlet 15.92' Left of Sta. 0+52.53
I-130	Standard A-10 Inlet, width: 25	325.31	325.84	325.59	Inlet 15.92' Left of Sta. 11+33.76
I-131	Standard A-10 Inlet, width: 25	325.31	327.04	327.04	Inlet 15.92' Right of Sta. 11+33.76
M-168	Type 'B' Manhole	323.00	323.00	323.11	Manhole 15.92' Left of Sta. 0+39.98
M-169	Type 'B' Manhole	330.32	331.25	330.77	Manhole 17.00' Left of Sta. 9+18.4
S-24	Standard Small 'B' Headwall	319.30	314.30	314.30	See Plan and Profile



PLAN AND PROFILE

STATION	ELEVATION	DESCRIPTION
320.00	320.00	Low Point
320.25	320.25	
320.50	320.50	
320.75	320.75	
321.00	321.00	
321.25	321.25	
321.50	321.50	
321.75	321.75	
322.00	322.00	
322.25	322.25	
322.50	322.50	
322.75	322.75	
323.00	323.00	
323.25	323.25	
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324.25	324.25	
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330.50	330.50	
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332.50	332.50	
332.75	332.75	
333.00	333.00	
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333.50	333.50	
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368.75	368.75	
369.00	369.00	
369.25	369.25	
369.50	369.50	
369.75	369.75	
370.00	370.00	

CURVE DATA
 P.I. 15+54.76 to P.I. 18+41.67
 $\Delta = 46^\circ 58' 16''$ Tan = 152.08'
 $R = 350.00'$ Chd = 278.96'
 Arc = 286.93' Brg = 568° 58' 06" W

P.I. 18+41.67 to P.I. 19+59.55
 $\Delta = 19^\circ 17' 53''$ Tan = 59.51'
 $R = 350.00'$ Chd = 117.33'
 Arc = 117.89' Brg = 535° 50' 02" W

Note:
 For Cul-De-Sac details
 See Sheet 10 of 22

REV. DATE	REV. NO.	REVISION DESCRIPTION
4/15/80	2	As per DPW Comments
3/19/80	1	As per DPW Comments

COLUMBIA
 6TH. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2

PROJECT TITLE:
 PLAN AND PROFILE
 WHITE SPRING WAY
 STA. 16+00 TO STA. 24+06.35

SCALE: AS SHOWN DATE

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

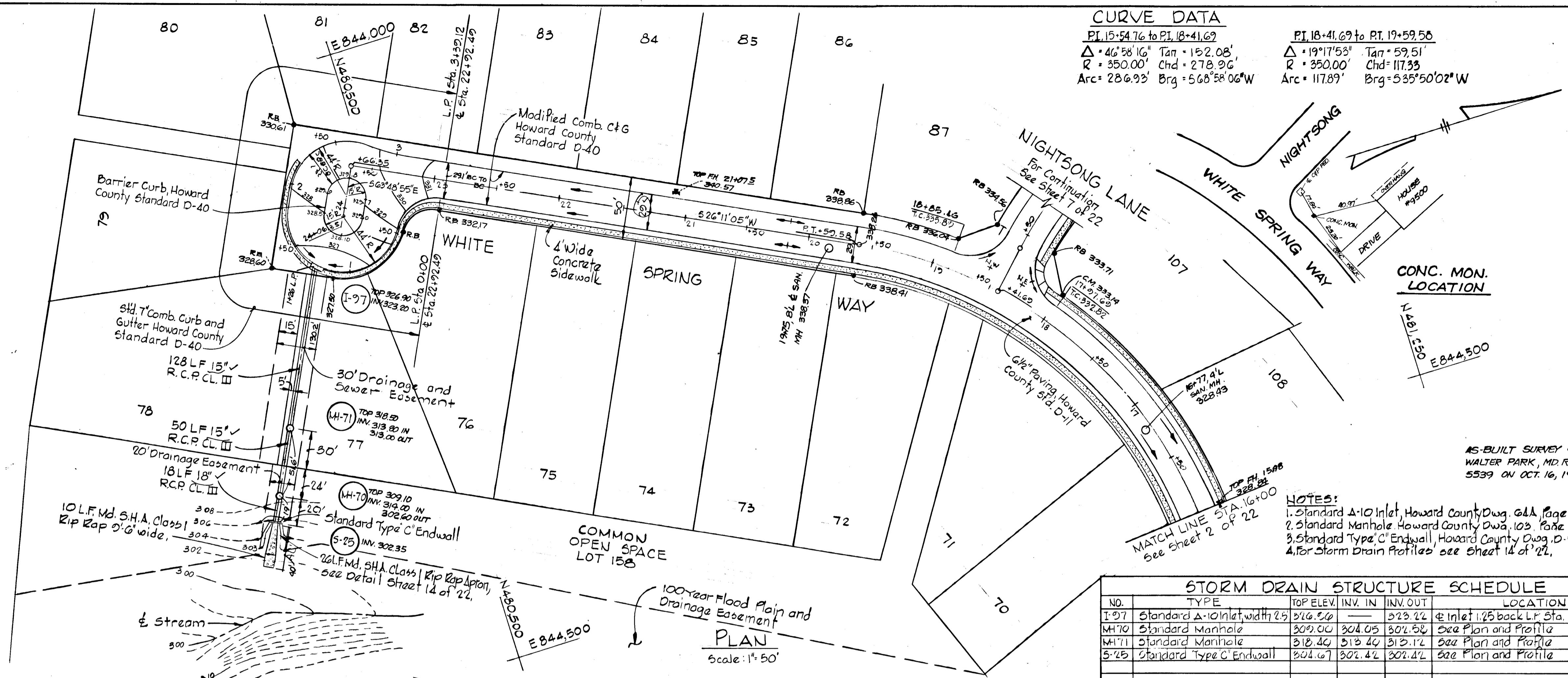
Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974

STORM DRAIN STRUCTURE SCHEDULE

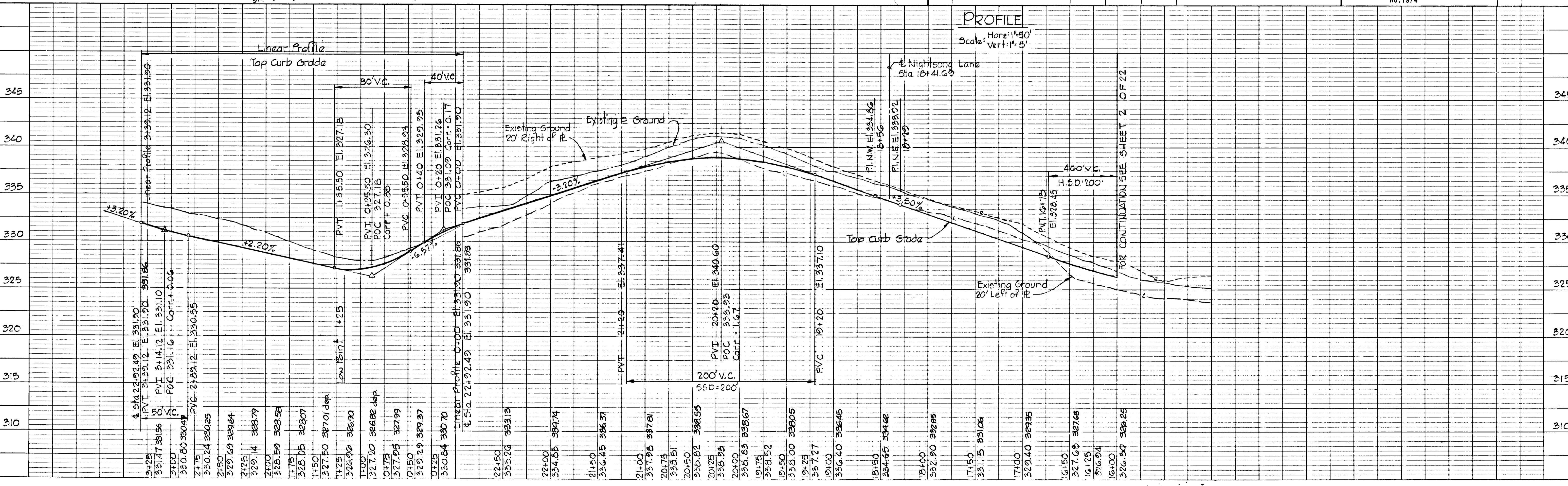
NO.	TYPE	TOP ELEV.	INV. IN	INV. OUT	LOCATION
I-97	Standard A-10 Inlet, width 25"	304.50	304.05	302.58	@ Inlet 1.25 back Lr Sta. 1+76
MH70	Standard Manhole	309.00	304.05	302.58	See Plan and Profile
MH71	Standard Manhole	318.40	313.40	312.14	See Plan and Profile
S-25	Standard Type C Endwall	304.07	302.42	302.42	See Plan and Profile

NOTES:
 1. Standard A-10 Inlet, Howard County Dwg. G.A. Page 110 A.
 2. Standard Manhole Howard County Dwg. 103, Page 158.
 3. Standard Type C Endwall, Howard County Dwg. D-51, Page 107.
 4. For Storm Drain Profiles see Sheet 14 of 22.

AS-BUILT SURVEY CERTIFIED BY
 WALTER PARK, MD. REG. L.S. No.
 5339 ON OCT. 16, 1984



PLAN
 Scale: 1" = 50'



PROFILE
 Scale: Horiz: 1" = 50'
 Vert: 1" = 5'

PLAN

DATE	BY	CHKD.

NO. 1

PROFILE

DATE	BY	CHKD.

NO. 1

445

Note:
 For Cul-De-Sac details
 See Sheet 10 of 22

4/15/80	2	As per DPW Comments
3/10/80	1	As per DPW Comments
REV. DATE	REV. NO.	REVISION DESCRIPTION

COLUMBIA
 6TH. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

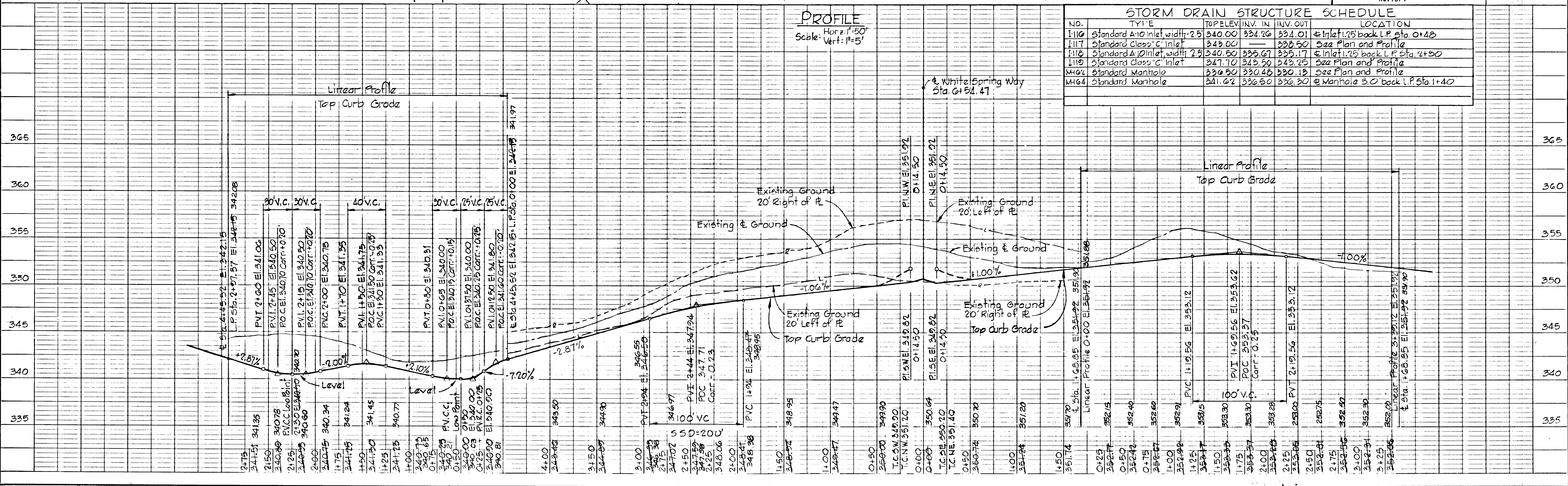
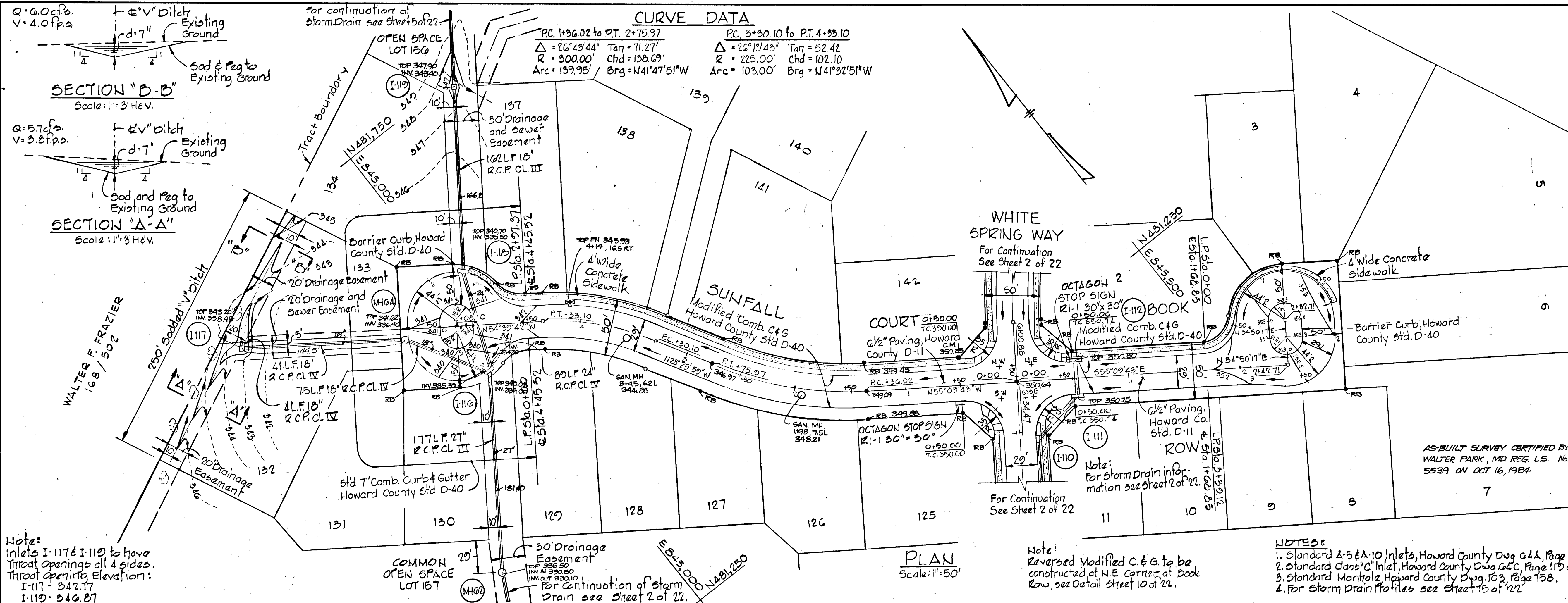
OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2

PROJECT TITLE:
 PLAN AND PROFILE
 SUNFALL COURT
 BOOK ROW

SCALE: AS SHOWN DATE

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202



Note:
 For Cul-De-Sac details
 See Sheet 10 of 22

REV. DATE	REV. NO.	REVISION DESCRIPTION
7/29/81	3	Added Storm Drain North of MH 03
4/15/80	2	As per DPW Comments
3/19/80	1	As per DPW Comments

COLUMBIA
 6TH. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2

PROJECT TITLE:
 PLAN AND PROFILE
 TALL WINDOW WAY
 AND VOLLMEZHAUSEN DRIVE

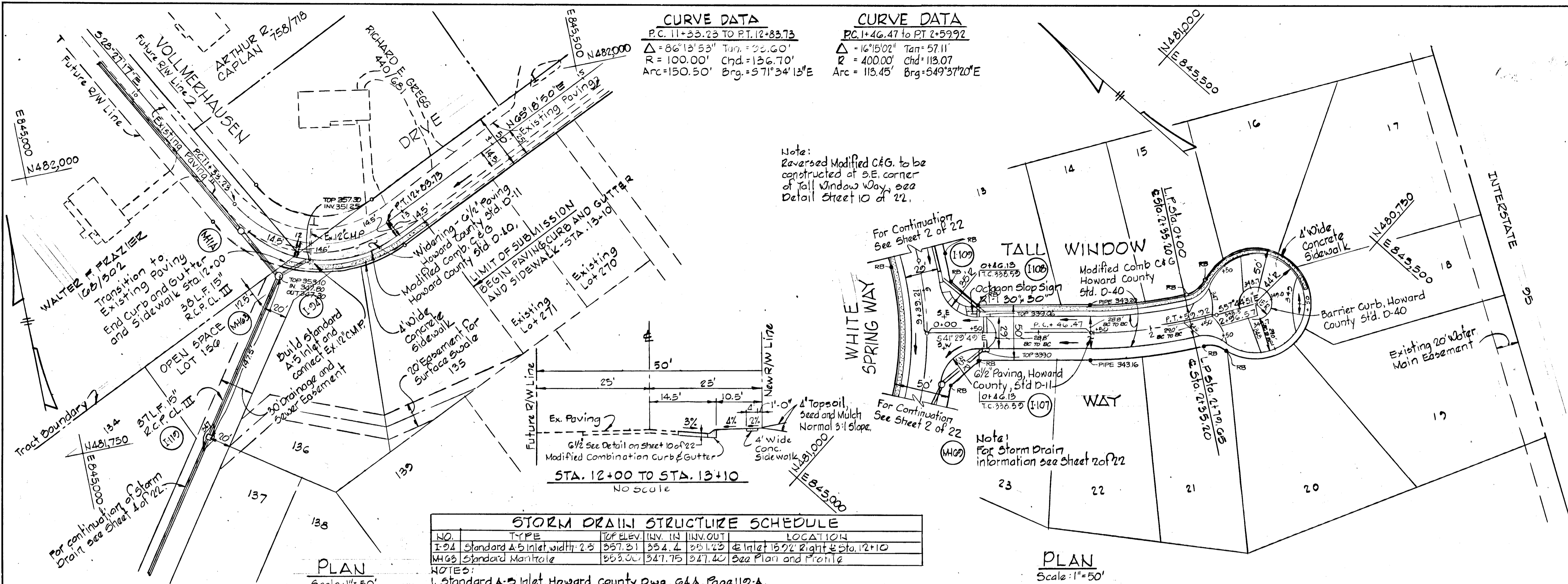
SCALE: AS SHOWN DATE

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974

CURVE DATA	CURVE DATA
P.C. 11+35.23 TO P.T. 12+83.73	P.C. 1+46.47 TO P.T. 2+59.92
$\Delta = 86^{\circ}13'53''$ Tan = 22.60'	$\Delta = 16^{\circ}15'02''$ Tan = 57.11'
R = 100.00' Chd. = 136.70'	R = 400.00' Chd. = 113.07'
Arc = 150.50' Brg. = $57^{\circ}13'41.5''E$	Arc = 113.45' Brg. = $64^{\circ}37'20''E$

Note:
 Reversed Modified C&G. to be constructed at S.E. corner of Tall Window Way, see Detail Street 10 of 22.



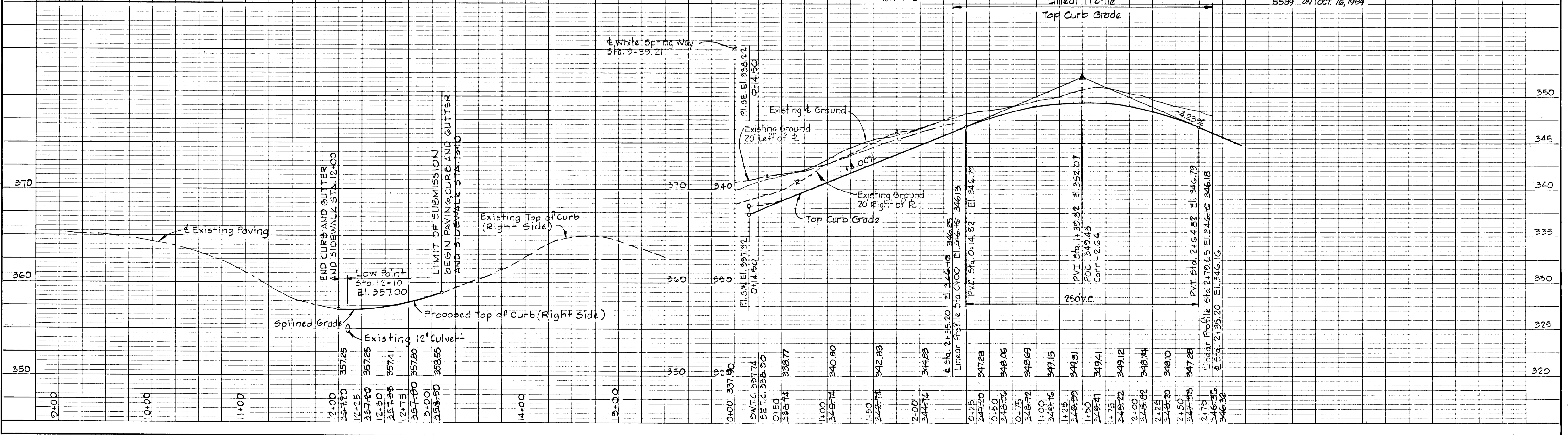
NO.	TYPE	TOP ELEV.	INV. IN	INV. OUT	LOCATION
I-24	Standard A-5 Inlet, width: 23	357.31	354.4	351.43	At Inlet 15' 72" Right of Sta. 12+10
MH 03	Standard Manhole	353.00	347.75	347.40	See Plan and Profile

- NOTES:
 1. Standard A-5 Inlet, Howard County Dwg. 611, Page 110-A.
 2. Standard Manhole, Howard County Dwg. 103, Page 15B.
 3. For Storm Drain Profiles, see Sheet 15 of 22.

PLAN
 SURVEYED, PLOTTED, ALIGNED, CHECKED, REVISIONS CHECKED, DATE

PROFILE
 SURVEYED, PLOTTED, GRADES CHECKED, REVISIONS CHECKED, DATE

Note: See Road Construction Dwg. for Village of Kings Contrivance Section 3 Area 1 Sheets 10 & 20 of 27 for Storm Drain System North of MH 03.

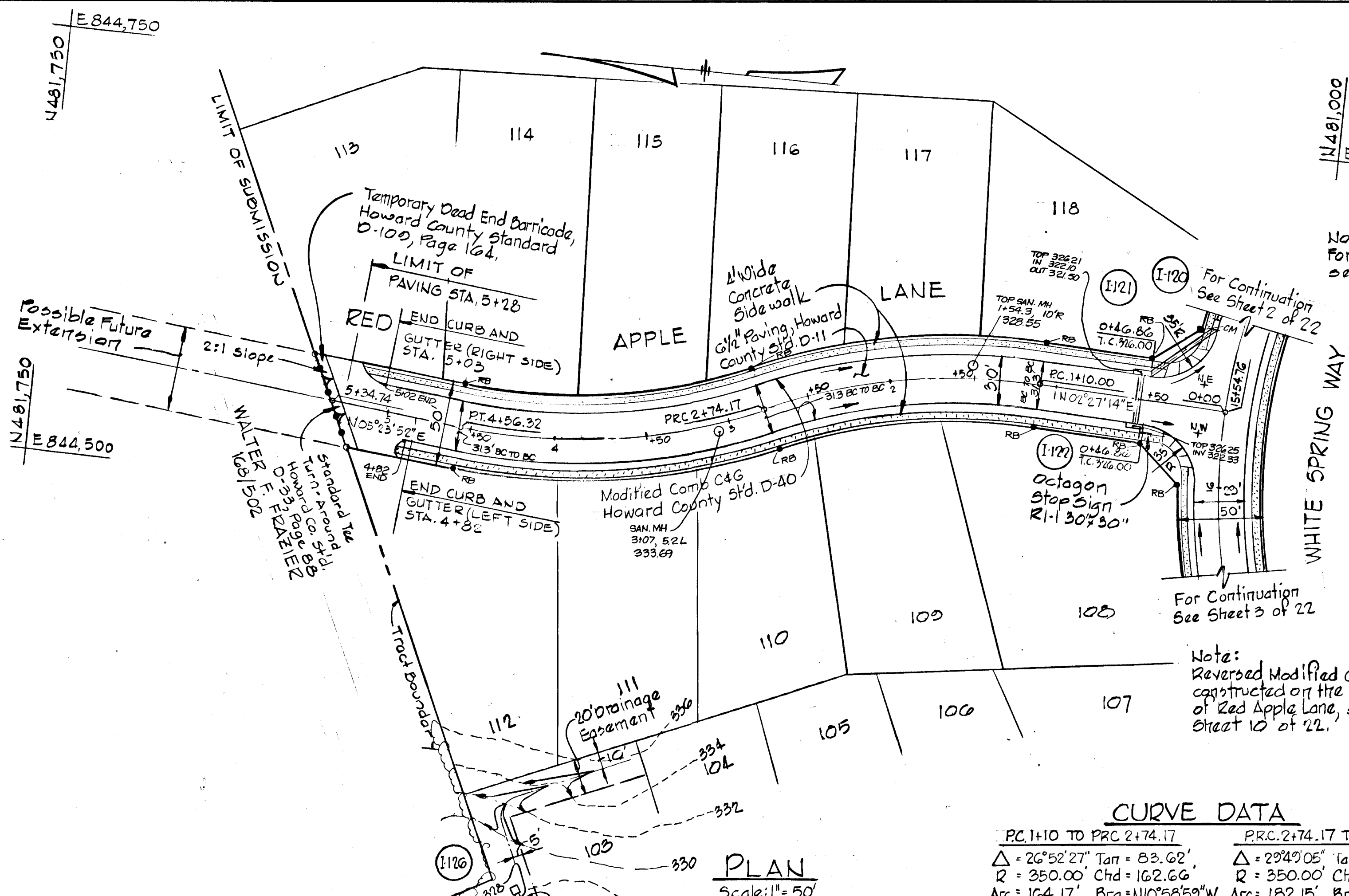


AS-BUILT SURVEY CERTIFIED BY
 WALTER PARK, MD REG. L.S. No. 5539 ON OCT. 16, 1984

DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Engineering *Walter* 5-9-80
 DATE
 OFFICE OF PLANNING AND ZONING
 Chief, Division of Land Development *Shull* 5-6-80
 DATE

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

DATE
 BY
 SURVEYED
 GRADE CHECKED
 NOTE BOOK NO. STRUCTURE NOTATIONS CHECKED



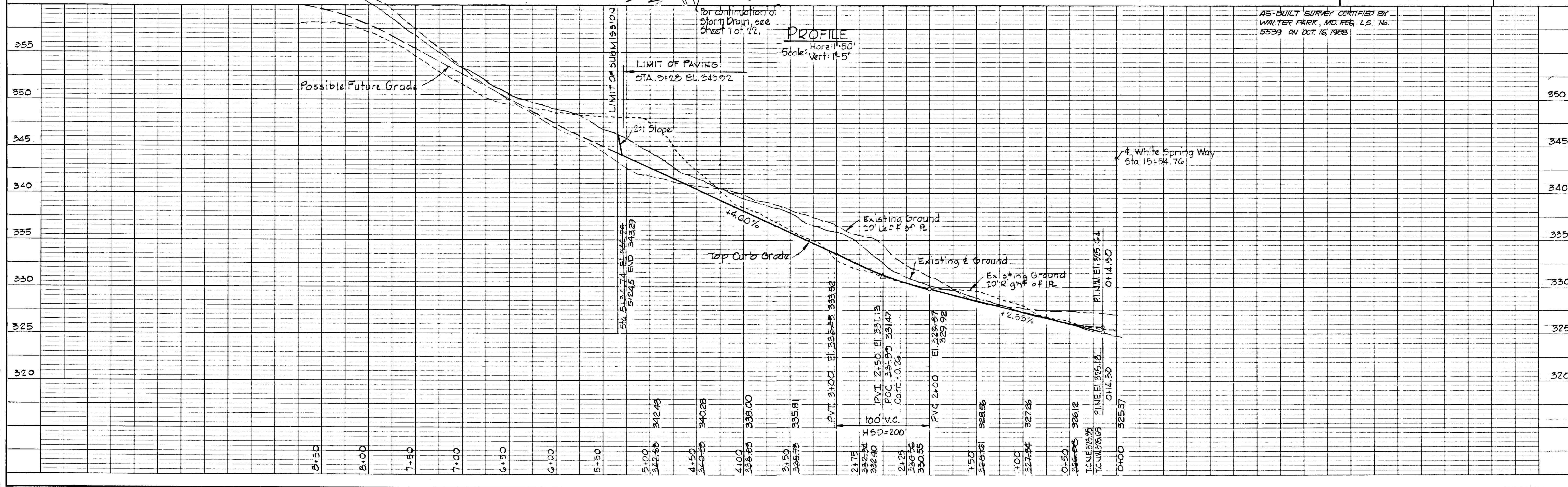
Note:
 For Storm Drain information
 see sheet 2 of 22.

Note:
 Reversed Modified C&G to be
 constructed at the N.W. corner
 of Red Apple Lane, see Detail
 sheet 10 of 22.

4/15/80	2	As per DPW Comments
3/19/80	1	As per DPW Comments
REV. DATE	REV. NO.	REVISION DESCRIPTION

COLUMBIA
 6TH. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2
 PROJECT TITLE:
 PLAN AND PROFILE
 RED APPLE LANE
 SCALE: AS SHOWN DATE

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202
Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974



#445

CURVE DATA

PC. 0+38.22 to PT. 1+88.56
 $\Delta = 28^{\circ}42'47''$ Tan. = 76.79'
 $R = 300.00'$ Chd. = 148.77'
 Arc = 150.34' Brg. = N30°09'38"W

PC. 3+53.23 to PT. 6+23.97
 $\Delta = 31^{\circ}01'26''$ Tan. = 138.76'
 $R = 500.00'$ Chd. = 267.44'
 Arc = 270.74' Brg. = N31°18'58"W

DEPARTMENT OF PUBLIC WORKS
 W. ... 5-9-80
 CHIEF, BUREAU OF ENGINEERING DATE
 OFFICE OF PLANNING AND ZONING
 ... 5-6-80
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Note:
 For Cul-De-Sac details
 See Sheet 10 of 22

REV. DATE	REV. NO.	REVISION DESCRIPTION
4/15/80	2	As per DPW Comments
3/19/80	1	As per DPW Comments

COLUMBIA
 6TH. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

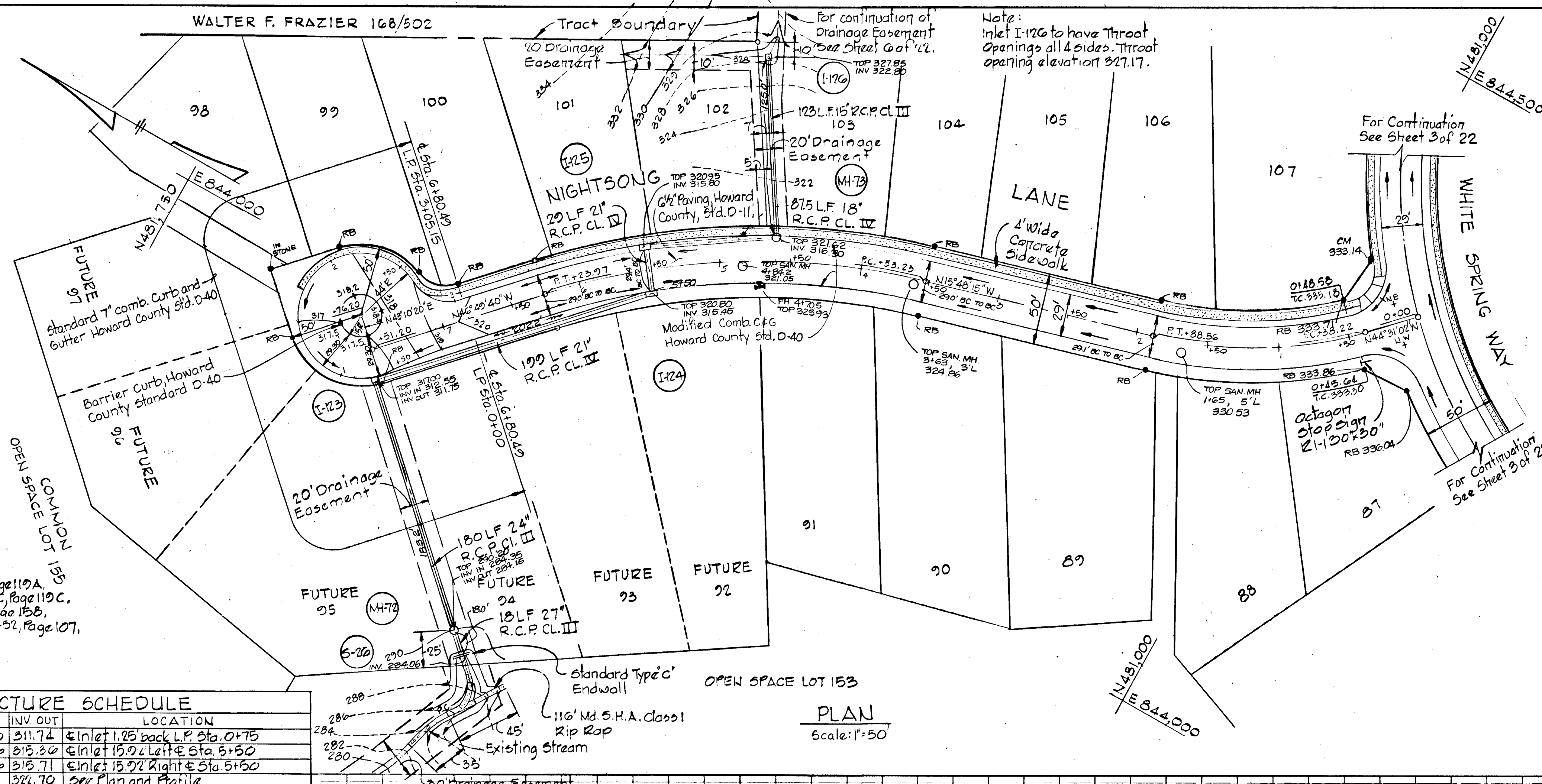
PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2

PROJECT TITLE:
 PLAN AND PROFILE
 NIGHTSONG LANE

SCALE: AS SHOWN DATE

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

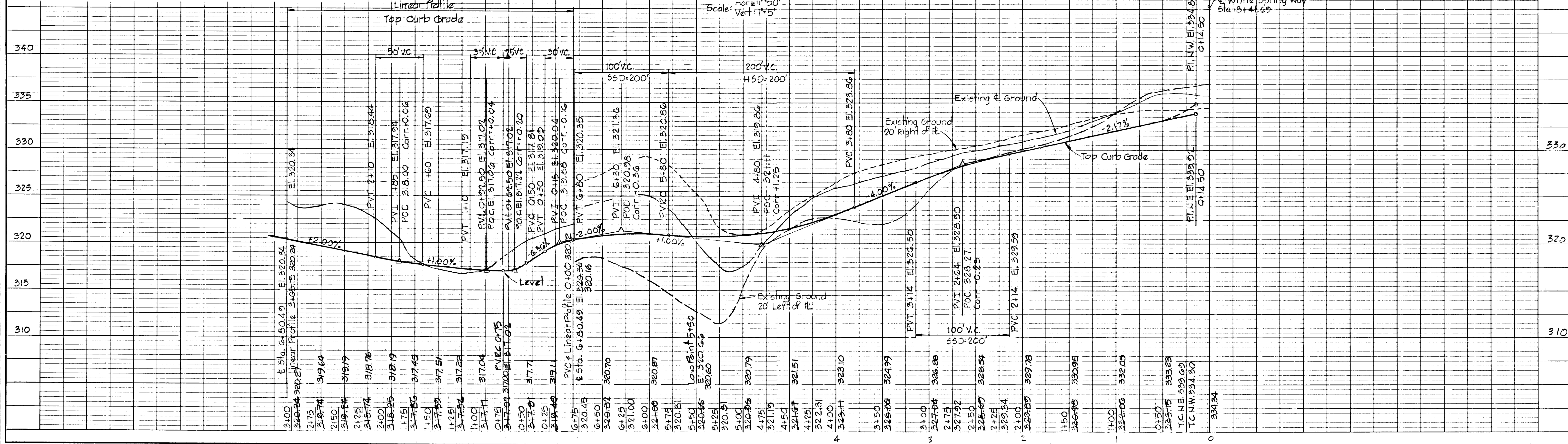
Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974



PLAN
 Scale: 1"=50'

STORM DRAIN STRUCTURE SCHEDULE

NO.	TYPE	TOP ELEV.	INV. IN	INV. OUT	LOCATION
I-123	Standard A-5 Inlet, width: 2.5	317.04	312.50	311.74	inlet 1.25 back L.P. Sta. 0+75
I-124	Standard A-5 Inlet, width: 2.5	320.87	315.50	315.30	inlet 15.92 Left Sta. 5+50
I-125	Standard A-5 Inlet, width: 2.5	320.87	315.50	315.71	inlet 15.92 Right Sta. 5+50
I-126	Standard class 'c' inlet	328.00	-	328.70	See Plan and Profile
M-172	Standard Manhole	290.00	284.40	284.15	See Plan and Profile
M-173	Standard Manhole	321.50	316.47	316.22	in Manhole 17.5 Right Sta. 4+60
E-20	Standard type 'c' Endwall	290.16	284.03	284.02	See Plan and Profile



PROFILE
 Scale: Hor. 1"=50', Vert. 1"=5'

AS-BUILT SURVEY CERTIFIED BY
 WALTER PARK, MD REG. L.S. NO.
 5539 ON OCT. 16, 1984

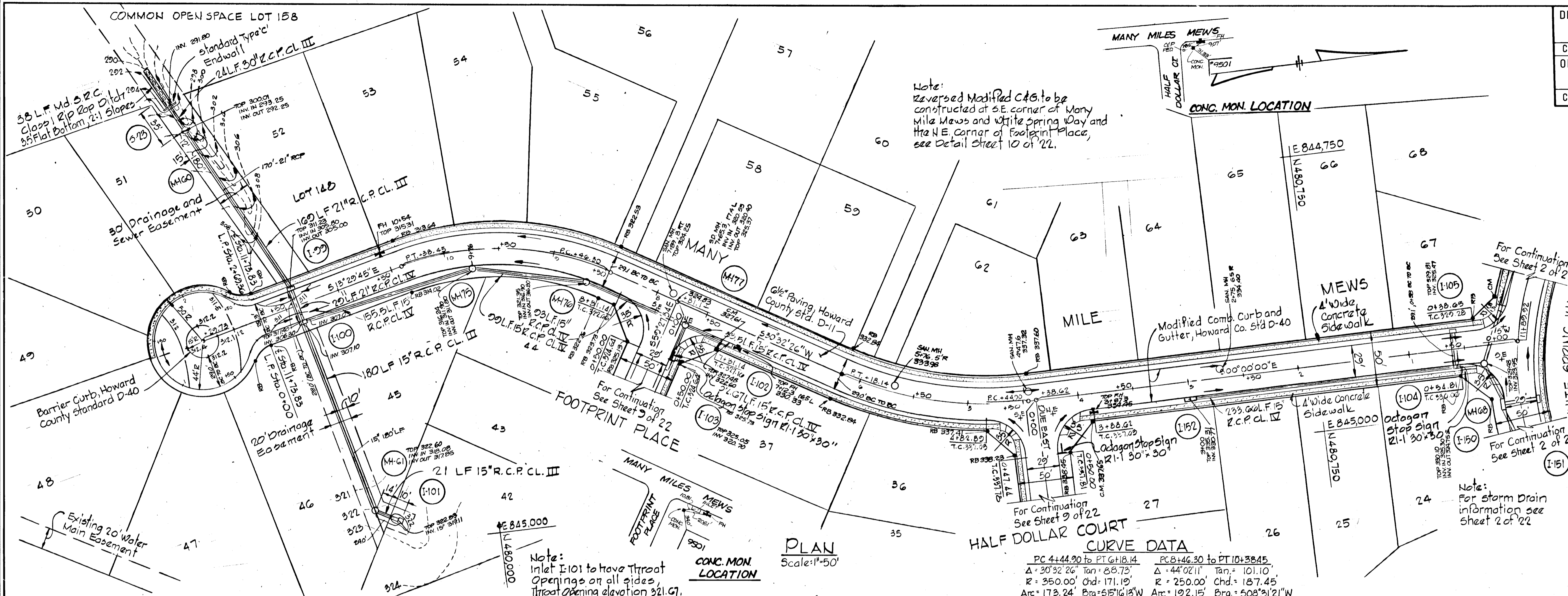
DATE
 BY
 SURVEY
 ACCOUNT CHECKED
 BY
 NOTE BOOK
 NO.

DATE
 BY
 SURVEY
 GRADES CHECKED
 BY
 NOTE BOOK
 NO.

#445

Note:
 For Cul-De-Sac details
 See Sheet 10 of 22

4/15/80	2	As per DPW Comments
3/19/80	1	As per DPW Comments
REV. DATE	REV. NO.	REVISION DESCRIPTION
COLUMBIA 6TH. ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORPORATION		
PROJECT AREA: VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 2		
PROJECT TITLE: PLAN AND PROFILE MANY MILE MEWS		
SCALE: AS SHOWN		DATE
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21202		
<i>Kenneth A. McCord</i> KENNETH A. MCCORD REGISTERED ENGINEER NO. 1974		



CURVE DATA

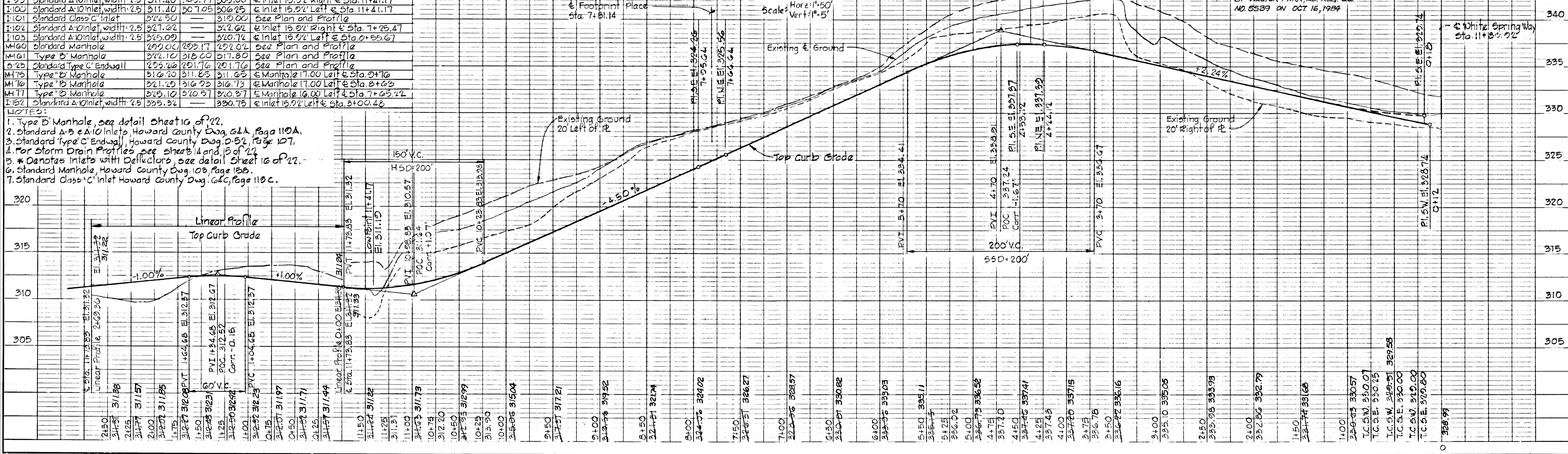
PC 4+44.20 to PT 6+18.4	PC 8+46.30 to PT 10+38.45
Δ = 30°32'26" Tan = 88.73'	Δ = 44°02'11" Tan = 101.10'
R = 350.00' Chd = 171.19'	R = 250.00' Chd = 187.45'
Arc = 173.24' Brg = 65°16'13"W	Arc = 192.15' Brg = 508°31'21"W

STORM DRAIN STRUCTURE SCHEDULE

NO	TYPE	TOP ELEV.	INV. IN	INV. OUT	LOCATION
I-99	Standard A-10 Inlet, width 2.5	311.40	308.77	308.00	inlet 15.92' Right of Sta. 11+41.17
I-100	Standard A-10 Inlet, width 2.5	311.40	307.05	306.75	inlet 15.92' Left of Sta. 11+41.17
I-101	Standard Class C Inlet	312.50		312.00	See Plan and Profile
I-102	Standard A-10 Inlet, width 2.5	312.62		312.62	inlet 15.92' Right of Sta. 7+25.47
I-103	Standard A-10 Inlet, width 2.5	312.09		312.74	inlet 15.92' Left of Sta. 0+55.67
MH60	Standard Manhole	299.00	299.17	292.00	See Plan and Profile
MH61	Type B Manhole	312.10	318.00	317.80	See Plan and Profile
MH75	Standard Type C Endwall	312.20	311.85	311.76	See Plan and Profile
MH76	Type B Manhole	312.10	316.25	316.73	inlet 17.00' Left of Sta. 8+63
MH77	Type B Manhole	312.10	316.27	316.27	inlet 16.00' Left of Sta. 7+65.42
I-152	Standard A-10 Inlet, width 2.5	312.34		310.75	inlet 15.92' Left of Sta. 8+00.48

- NOTES:
 1. Type B Manhole, see detail sheet 10 of 22.
 2. Standard A-B A-10 Inlets, Howard County Dog. 61A, Page 110A.
 3. Standard Type C Endwall, Howard County Dog. D-52, Page 107.
 4. For Storm Drain Profiles see sheets 14 and 15 of 22.
 5. Denotes inlets with Collectors, see detail sheet 16 of 22.
 6. Standard Manhole, Howard County Dog. 109, Page 155.
 7. Standard Class C Inlet Howard County Dog. 61C, Page 110C.

PROFILE



PLAN

DATE	BY	REVISION
		1. APPROVED FOR CONSTRUCTION
		2. AS-BUILT

PROFILE

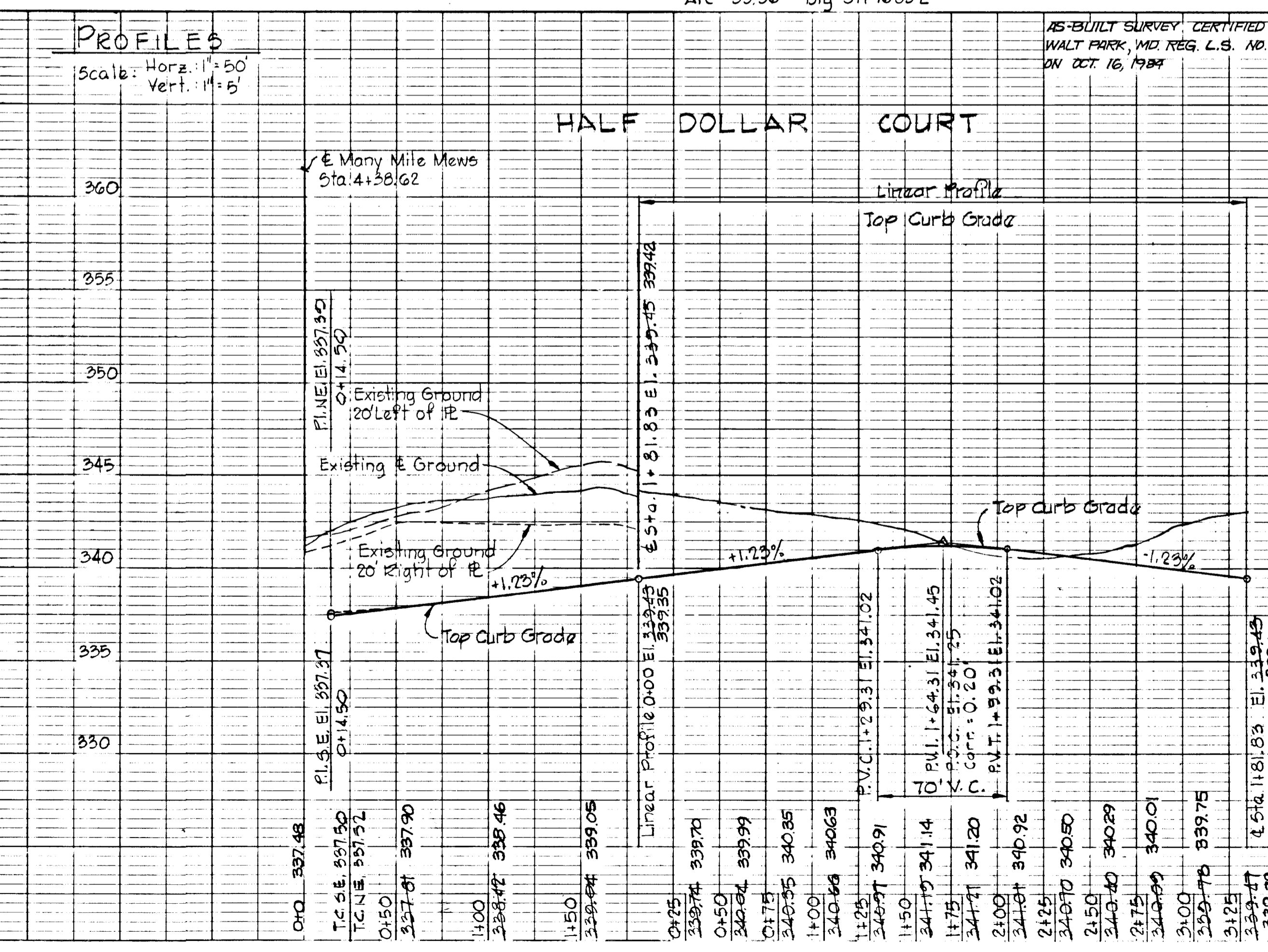
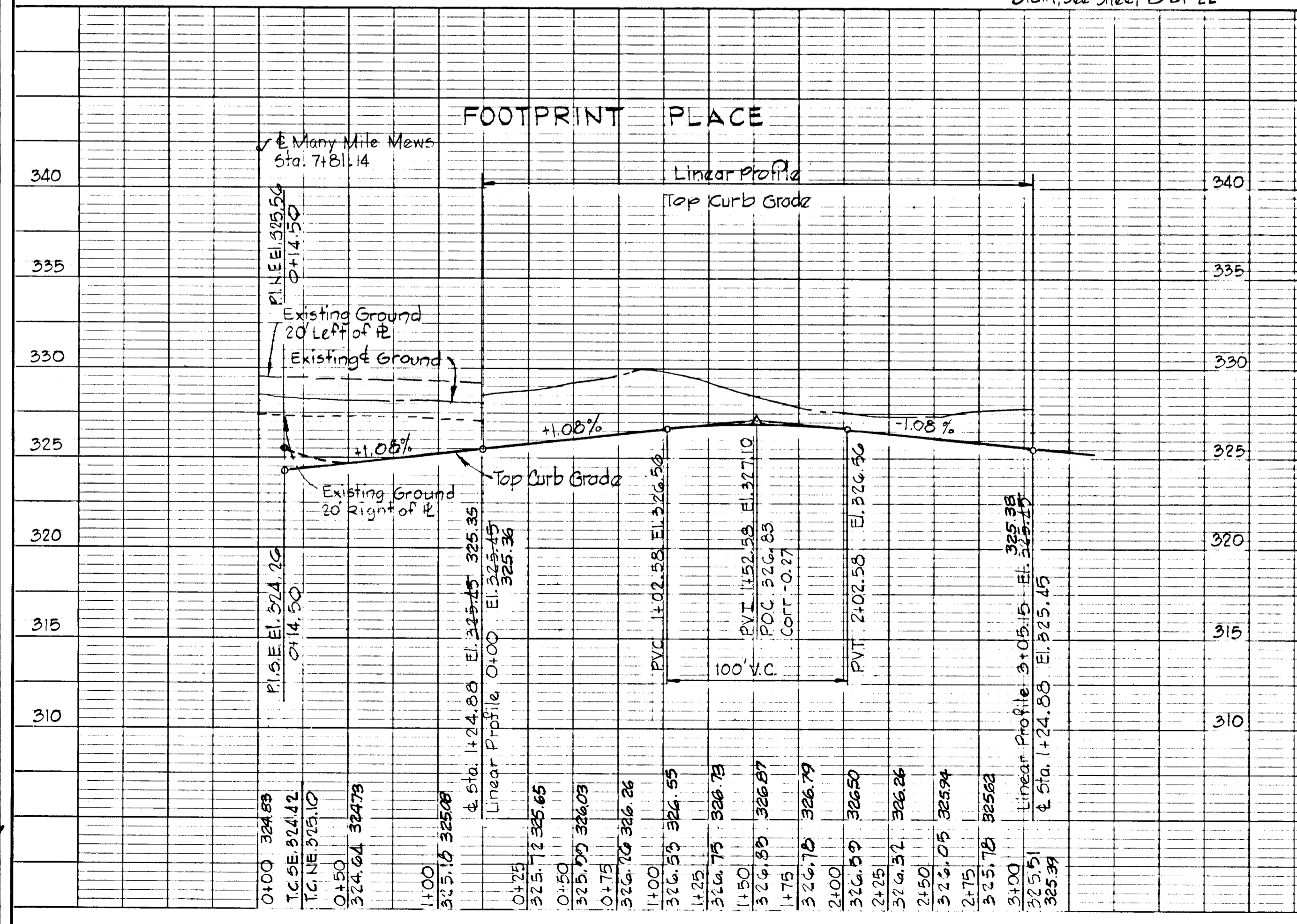
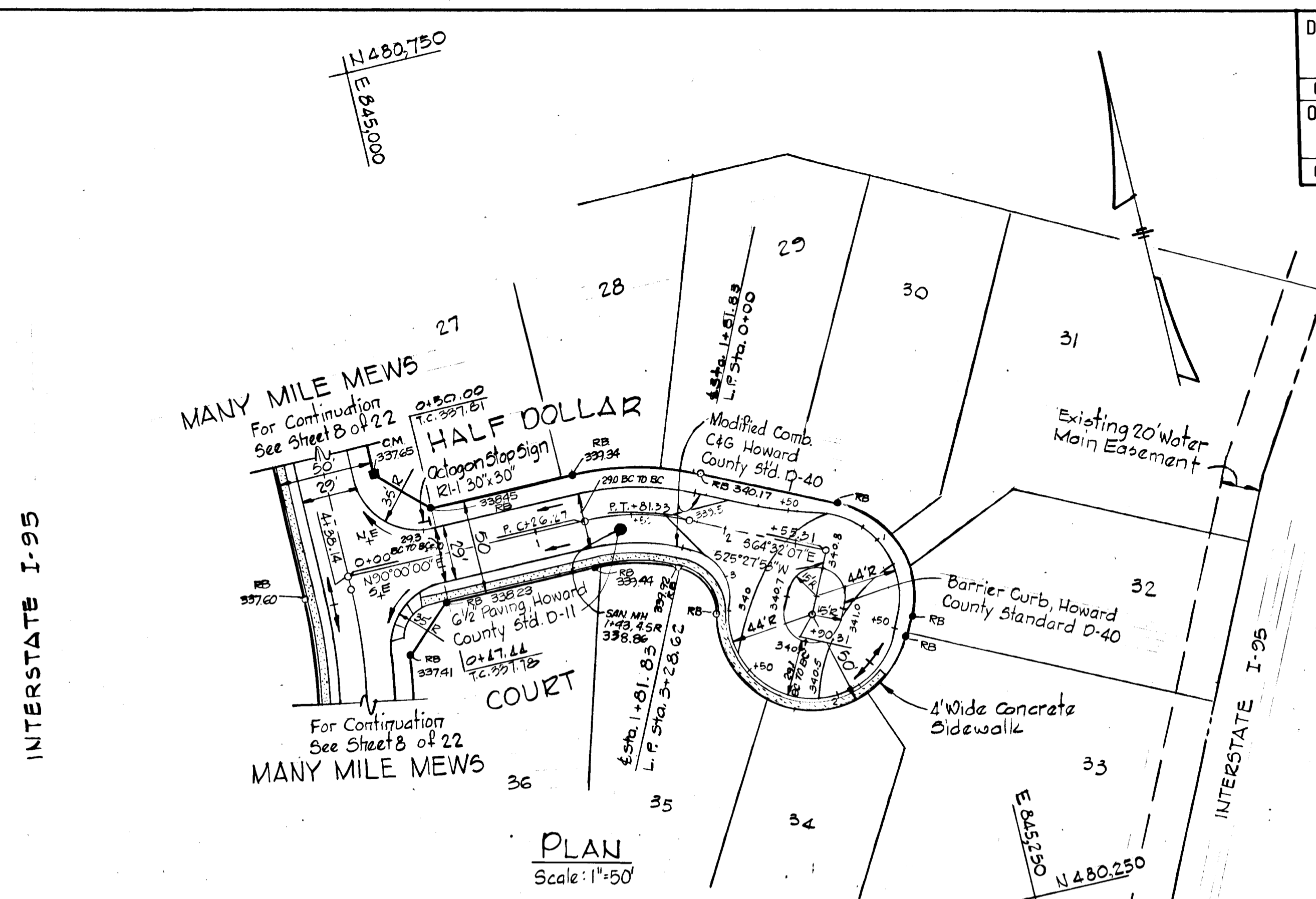
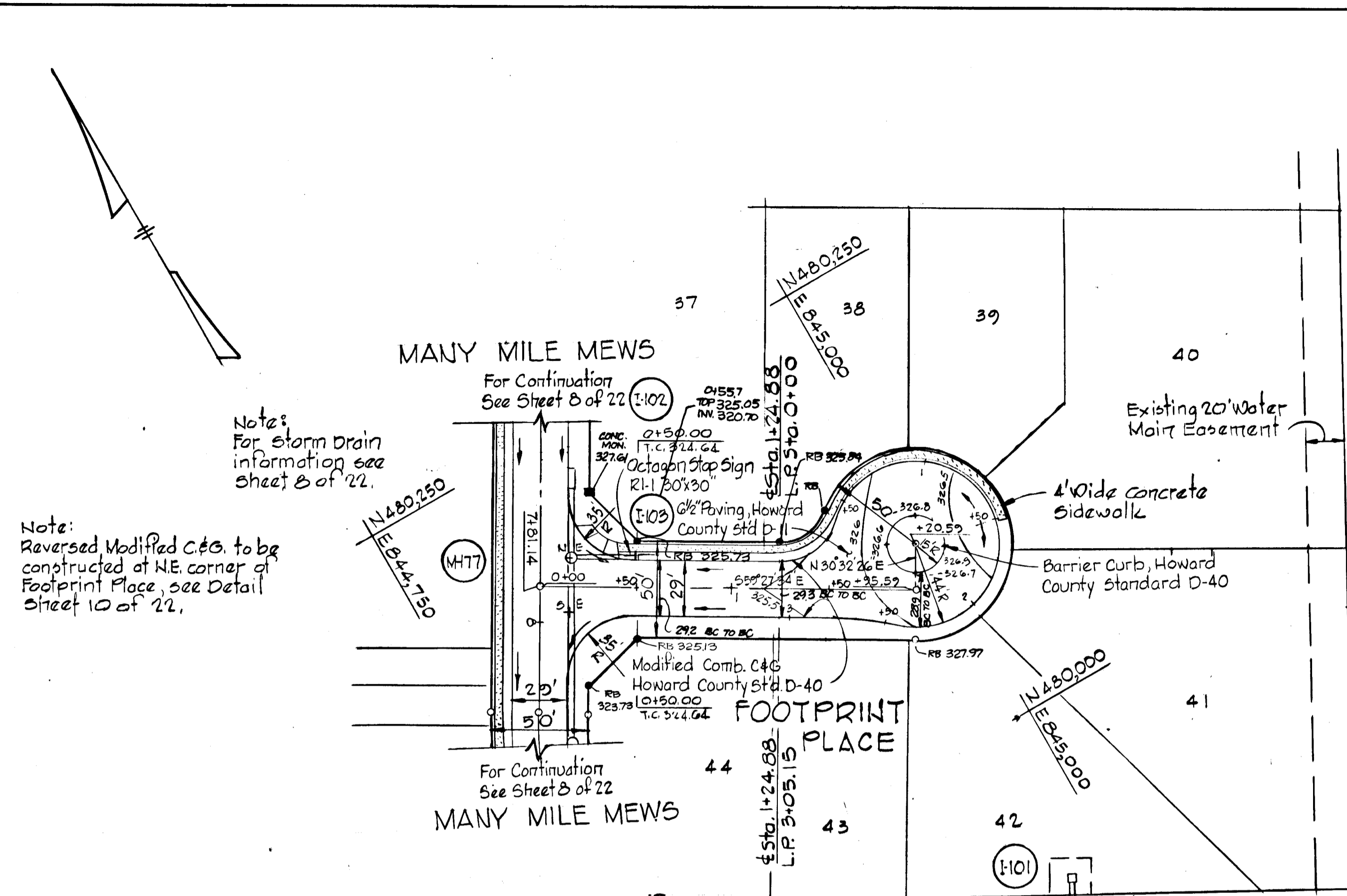
DATE	BY	REVISION
		1. APPROVED FOR CONSTRUCTION
		2. AS-BUILT

Note:
 For Cut-De-Sac details
 See Sheet 10 of 22

4/15/80	2	As per DPW Comments
3/19/80	1	As per DPW Comments
REV. DATE	REV. NO.	REVISION DESCRIPTION

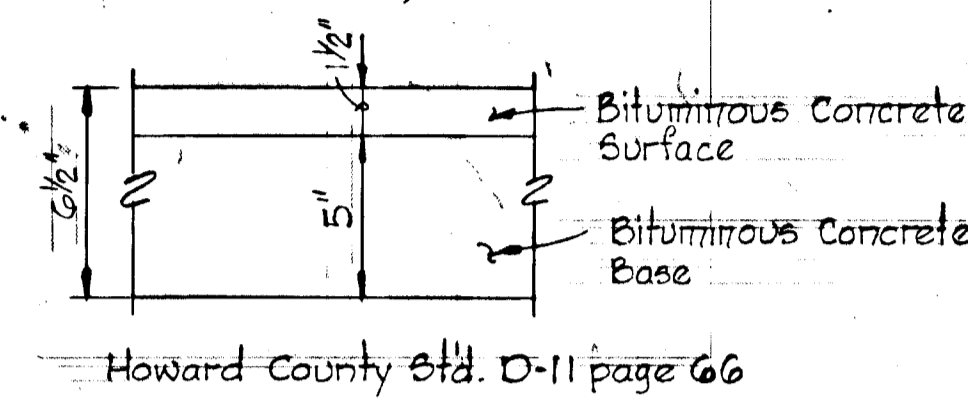
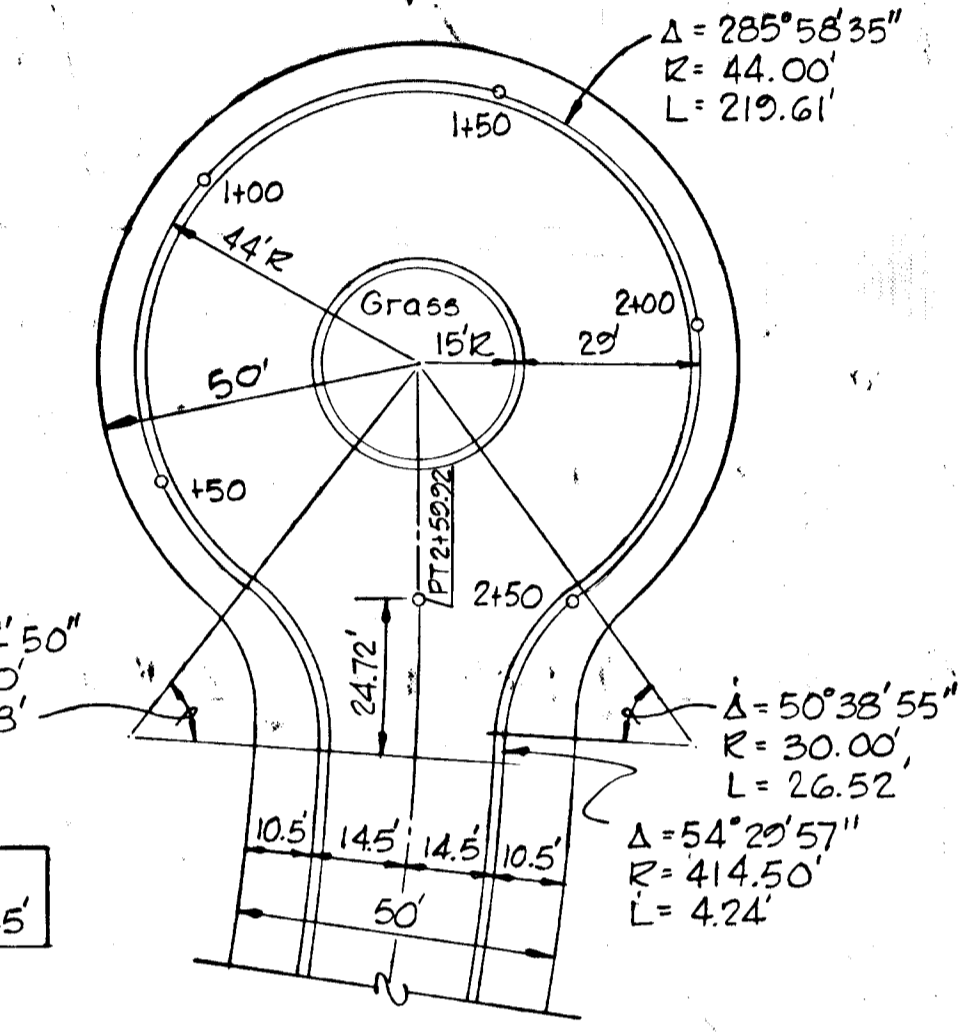
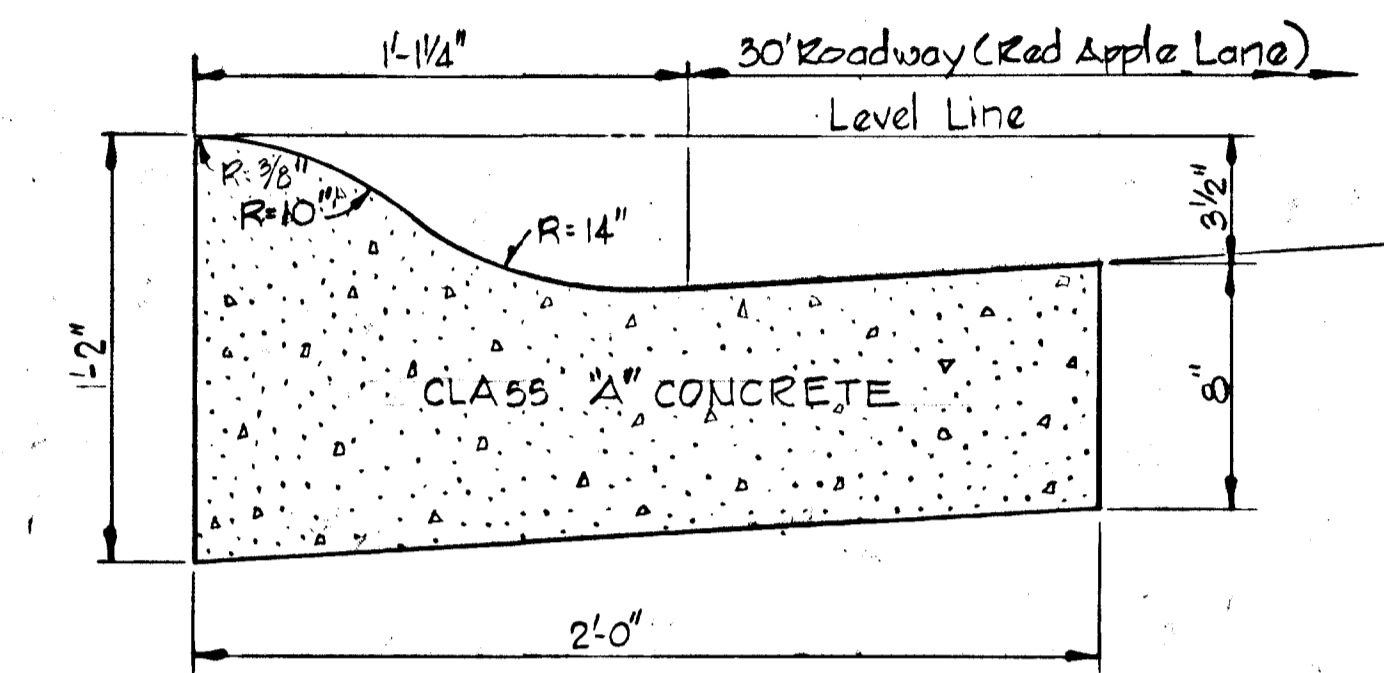
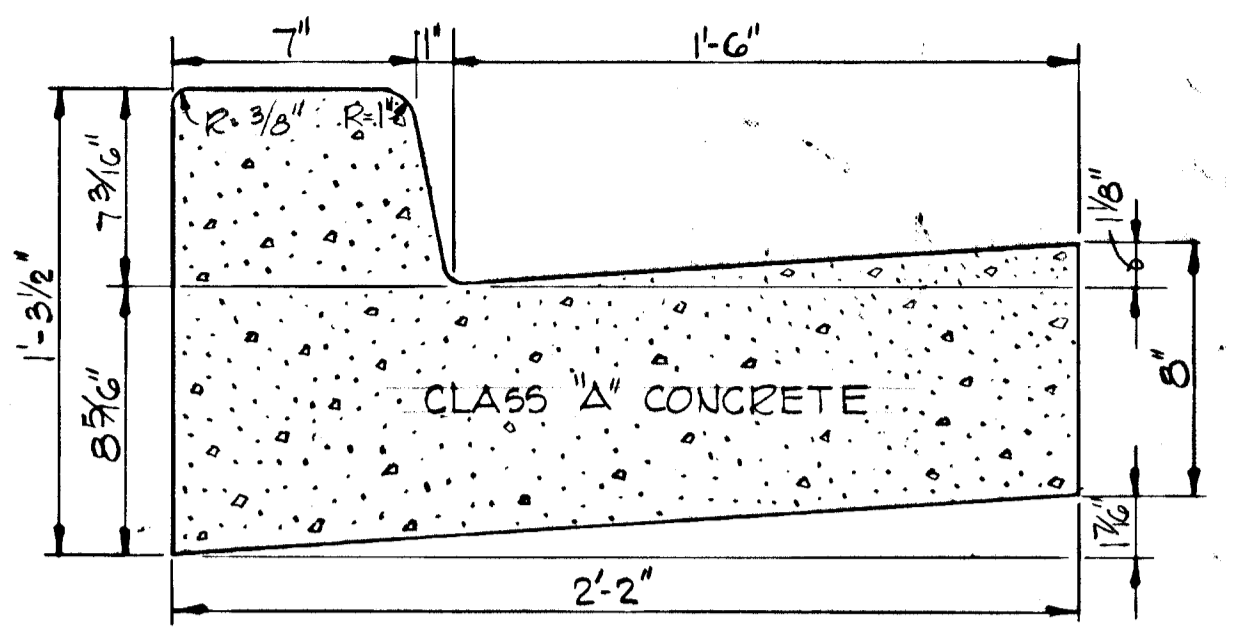
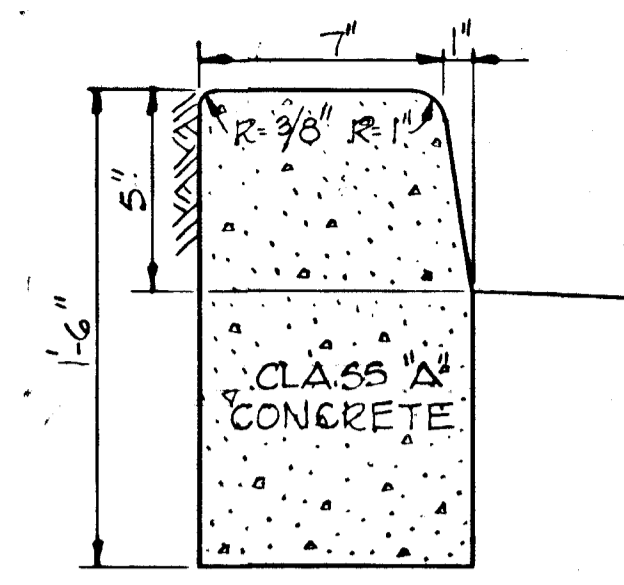
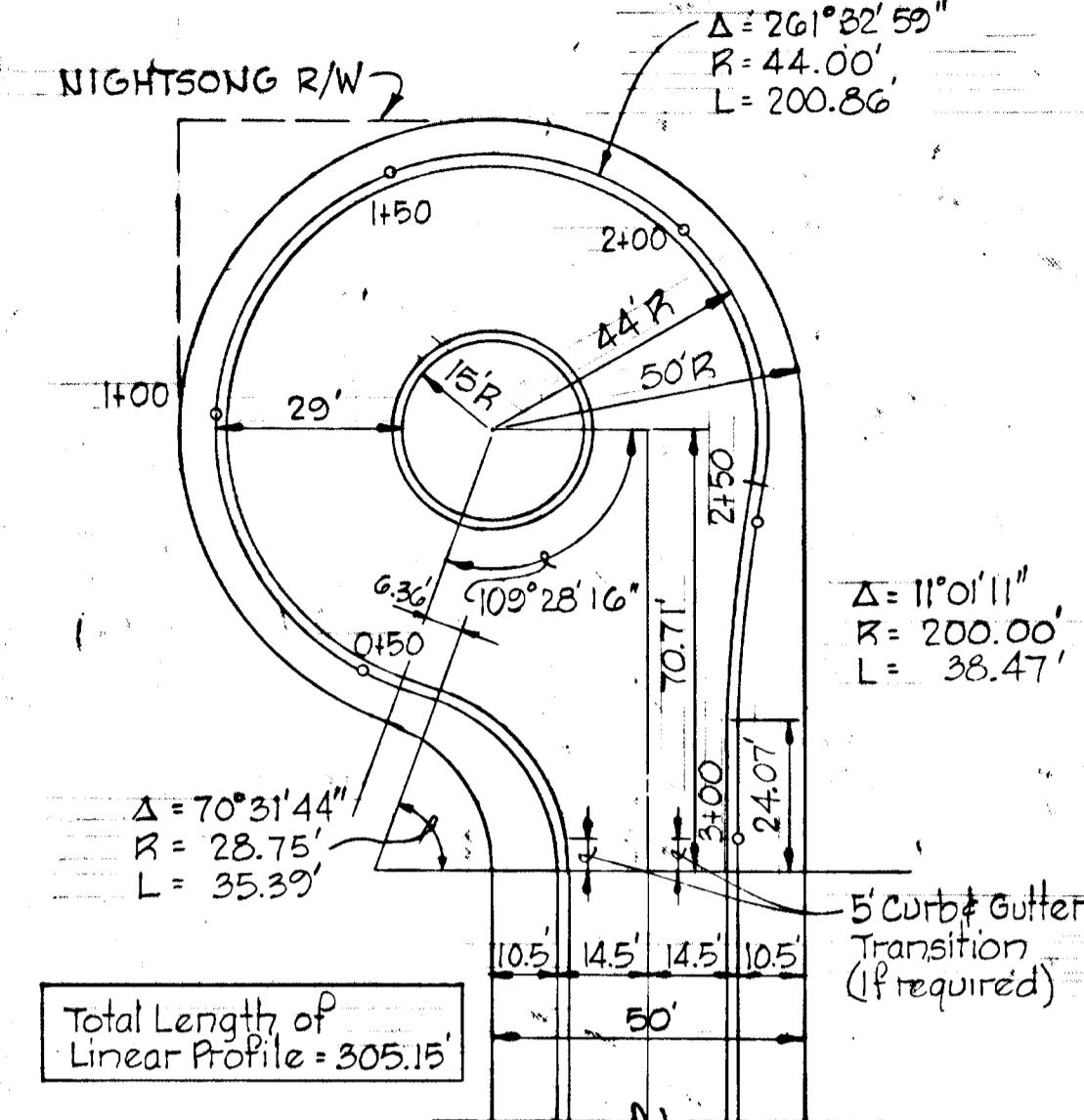
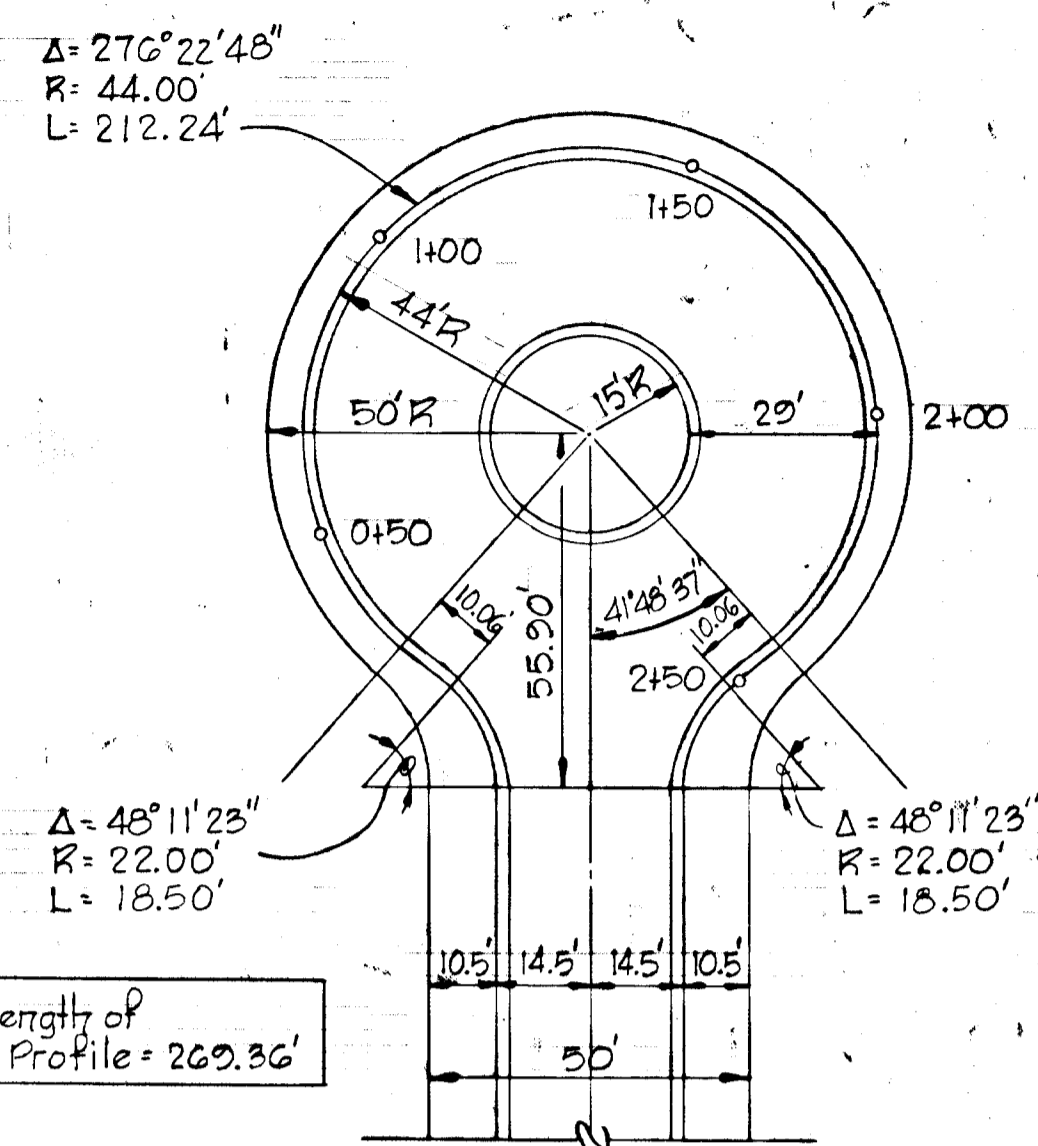
COLUMBIA
 6TH. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2
 PROJECT TITLE:
 PLAN AND PROFILE
 HALF DOLLAR COURT
 FOOTPRINT PLACE
 SCALE: AS SHOWN DATE
 WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974

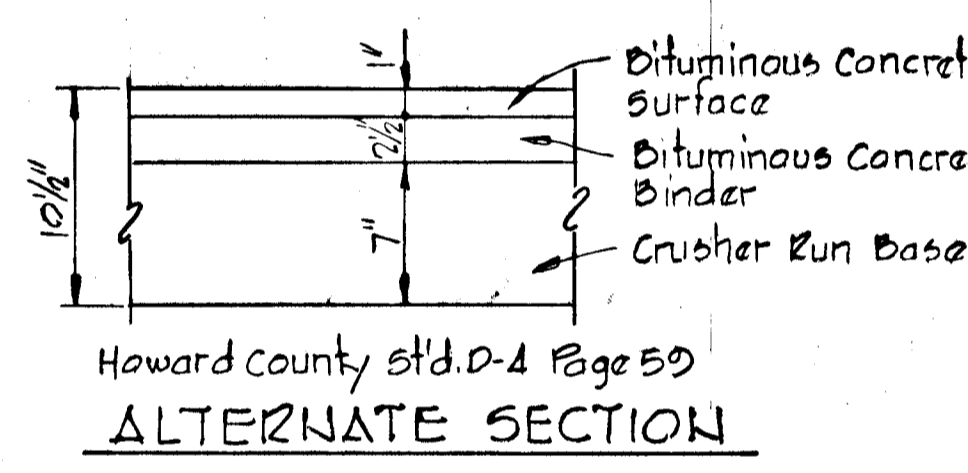
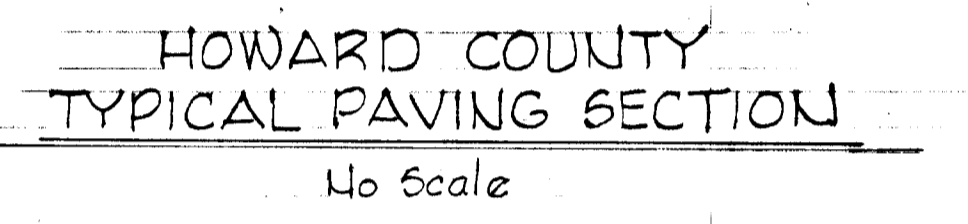


AS-BUILT SURVEY CERTIFIED BY
 WALT PARK, MD. REG. L.S. NO. 5539
 ON OCT. 16, 1984

340	360
335	355
330	350
325	345
320	340
315	335
310	330



Notes:
 1. Base will be primed in accordance with C-30-C as provided in the Howard County Road Construction Code and Standard Specifications.
 2. Tack Coat is required in accordance with Section C-31-4 of the Howard County Road Construction Code and Standard Specifications.



NOTE:
 ONLY ONE OF THE PAVING SECTIONS SHOWN SHALL BE USED FOR THE ROAD CONSTRUCTION PROPOSED UNDER THIS SUBMISSION.

REV. DATE	REV. NO.	REVISION DESCRIPTION
4/15/80	2	As per DPW Comments
3/19/80	1	As per DPW Comments

**COLUMBIA
 6TH. ELECTION DISTRICT
 HOWARD COUNTY MARYLAND**

**OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION**

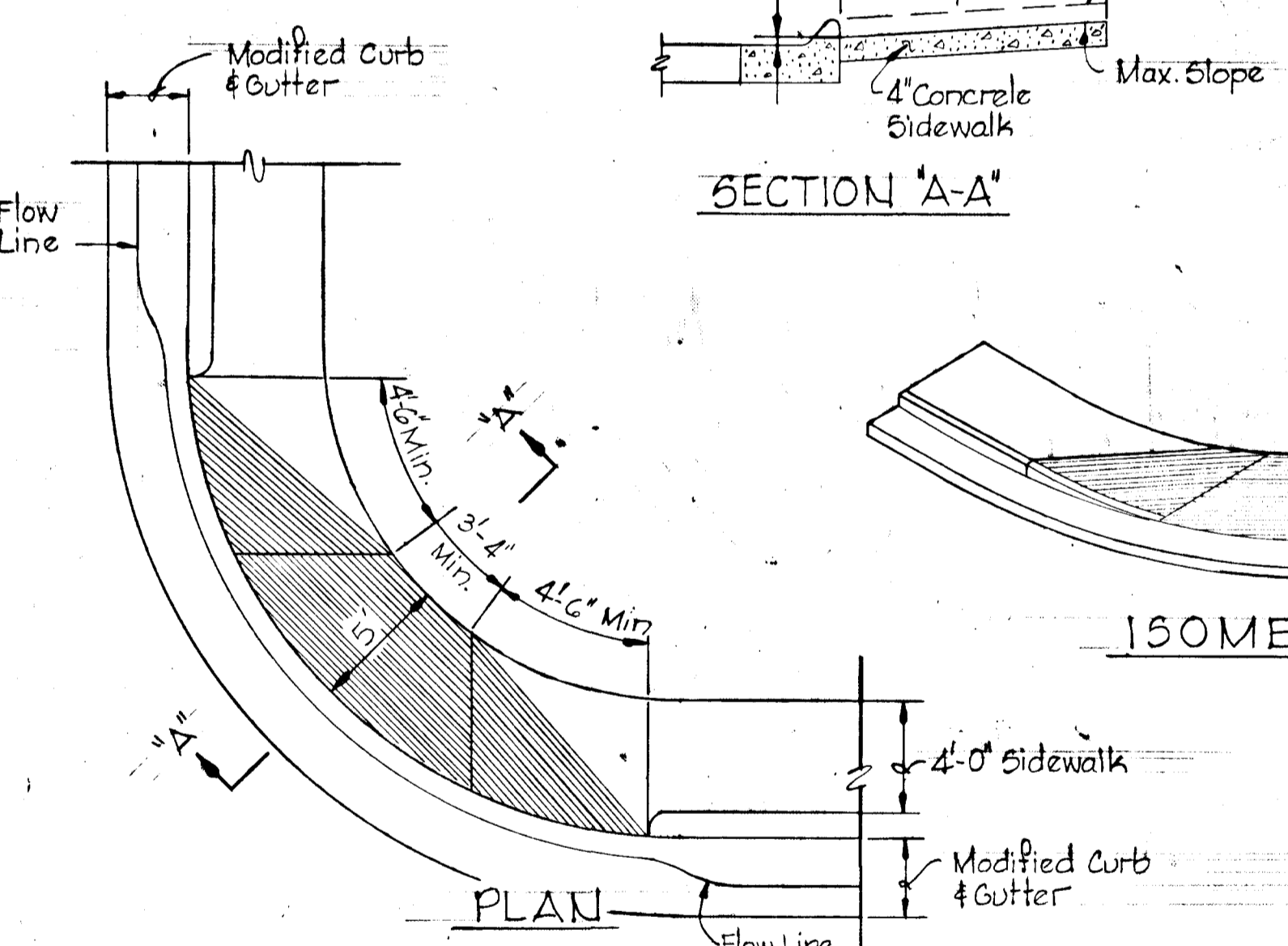
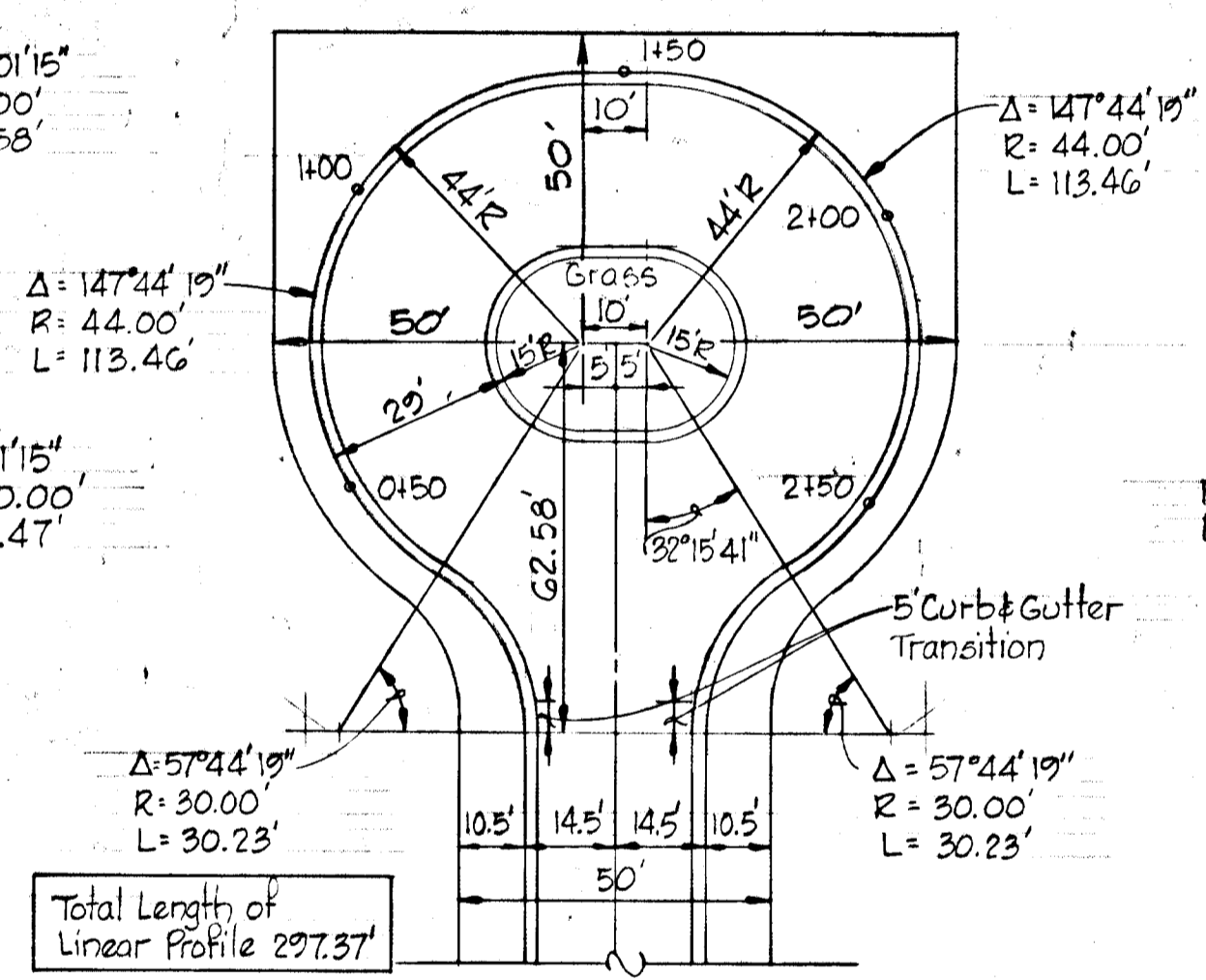
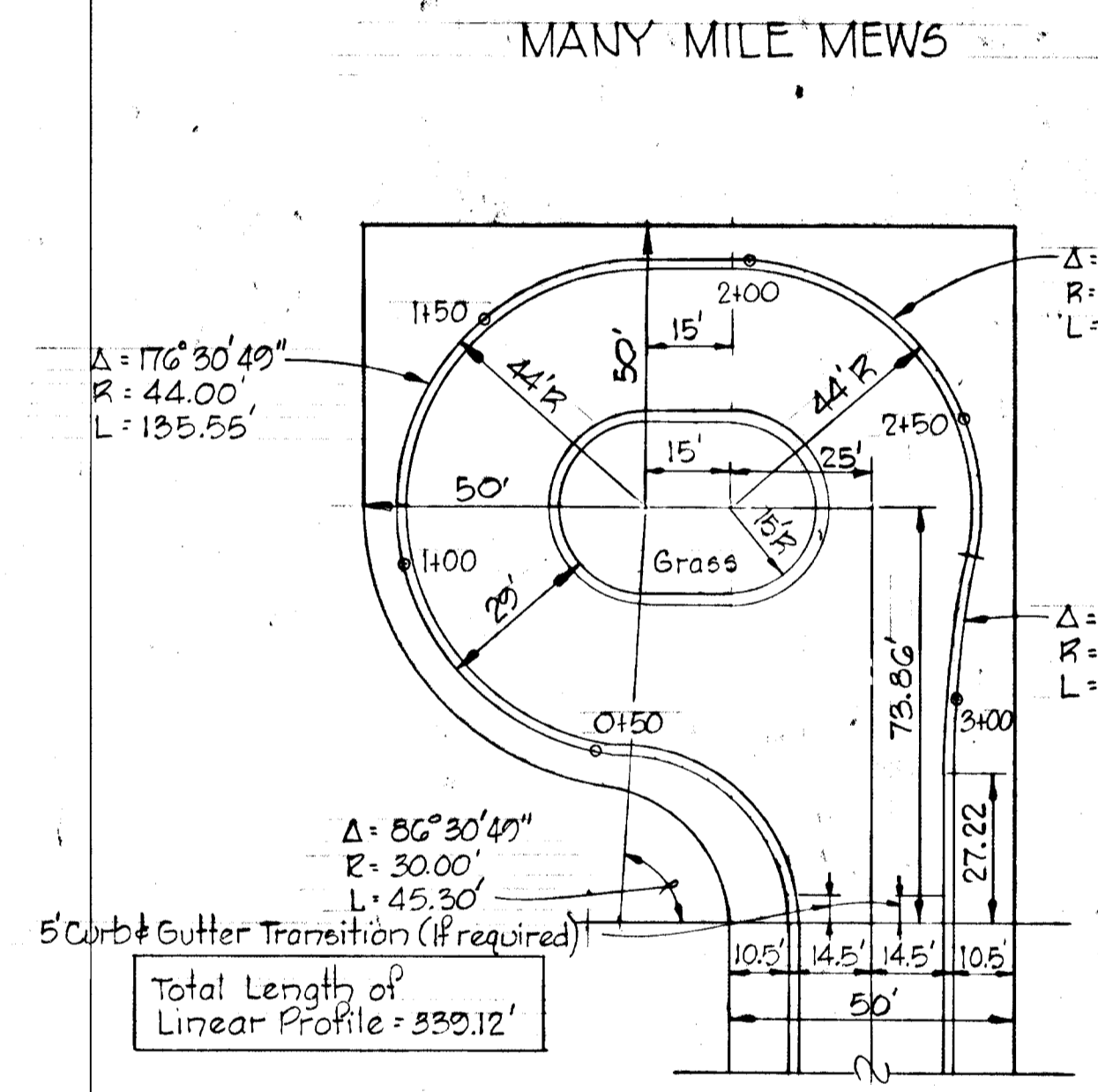
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 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2**

**PROJECT TITLE:
 ROADWAY DETAILS**

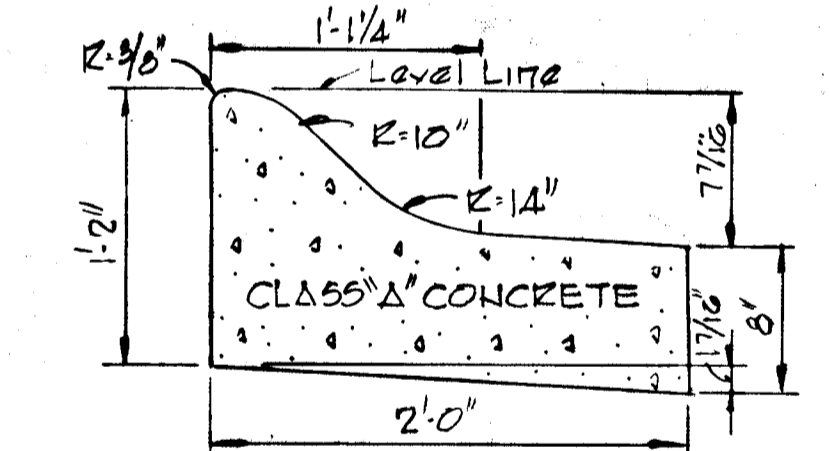
SCALE: AS SHOWN DATE

**WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202**

Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974



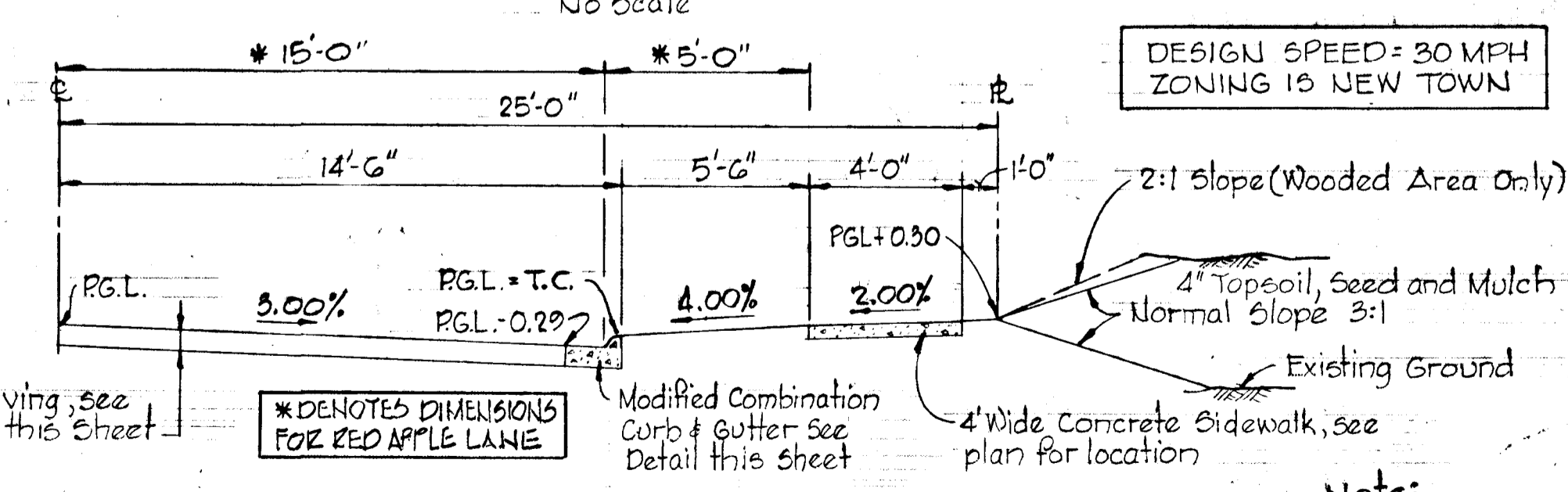
ISOMETRIC



**TYPICAL HALF SECTION 50' R/W
 APPLIES TO:
 WHITE SPRING WAY Sta. 4+28 to Sta. 22+92.49
 SUNFALL COURT Sta. 0+00 to Sta. 4+45.52
 BOOK ROW Sta. 0+00 to Sta. 1+68.85
 TALL WINDOW WAY Sta. 0+00 to Sta. 2+35.70
 RED APPLE LANE Sta. 0+00 to Sta. 5+34.74
 NIGHTSONG LANE Sta. 0+00 to Sta. 6+80.49
 MANY MILE MEWS Sta. 0+00 to Sta. 11+73.83
 FOOTPRINT PLACE Sta. 0+00 to Sta. 1+24.88
 HALF DOLLAR COURT Sta. 0+00 to Sta. 1+81.83**

* RED APPLE LANE TO HAVE 30' ROADWAY, SEE TYPICAL SECTION FOR 20' ROADWAY FOR DIMENSIONS.

Note:
 Sidewalk to be constructed in accordance with Article C-35 of the Howard County Construction Code and Specifications.



GENERAL NOTES

- All dimensions are to back of curb.
- See plans for sidewalk locations.
- Paving is 6" Bituminous Concrete.
- Standard 7" combination Curb & Gutter in curbed cul-de-sacs only, otherwise use Modified combination Curb & Gutter.

CUL-DE-SAC DETAILS
 Scale 1"=30'



#445
 WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND
Kenneth A. McCord
 KENNETH A. MCCORD PE NO. 1274

REV. NO.	REVISION DESCRIPTION
1	As per DPW comments
2	As per DPW comments

COLUMBIA
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2
 PROJECT TITLE:
 DRAINAGE AREA MAP
 SCALE: 1" = 100' DATE:

FOR CONTINUATION SEE SHEET 12 OF 22

DEPARTMENT OF PUBLIC WORKS
William E. Reig 5-9-80
 CHIEF, BUREAU OF ENGINEERING DATE
 OFFICE OF PLANNING AND ZONING
William M. Manshion 5-6-80
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

FOR CONTINUATION SEE SHEET 11 OF 22



#445
 WHITMAN, REQUARDT & ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND
Kenneth A. McCord
 KENNETH A. MCCORD PE NO. 1974

REV. DATE	REV. NO.	REVISION DESCRIPTION
1/15/80	2	As per DPW Comments
3/19/80	1	As per DPW Comments

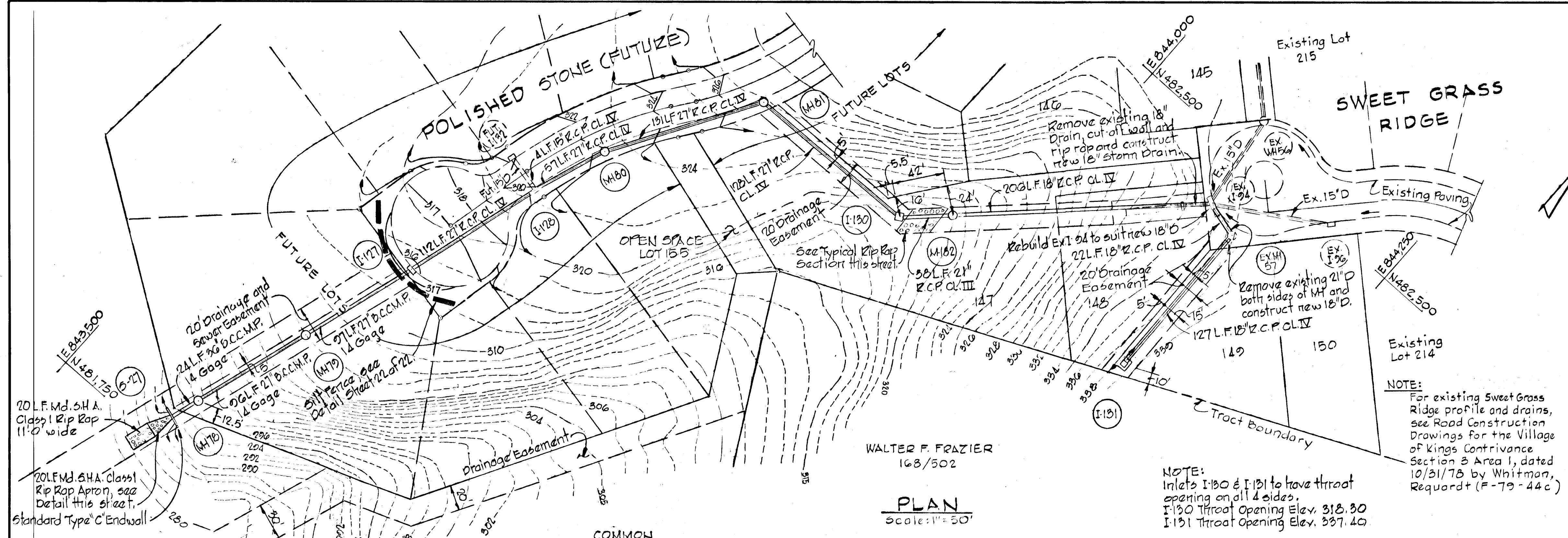
COLUMBIA
 6TH. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2

PROJECT TITLE:
 DRAINAGE AREA MAP

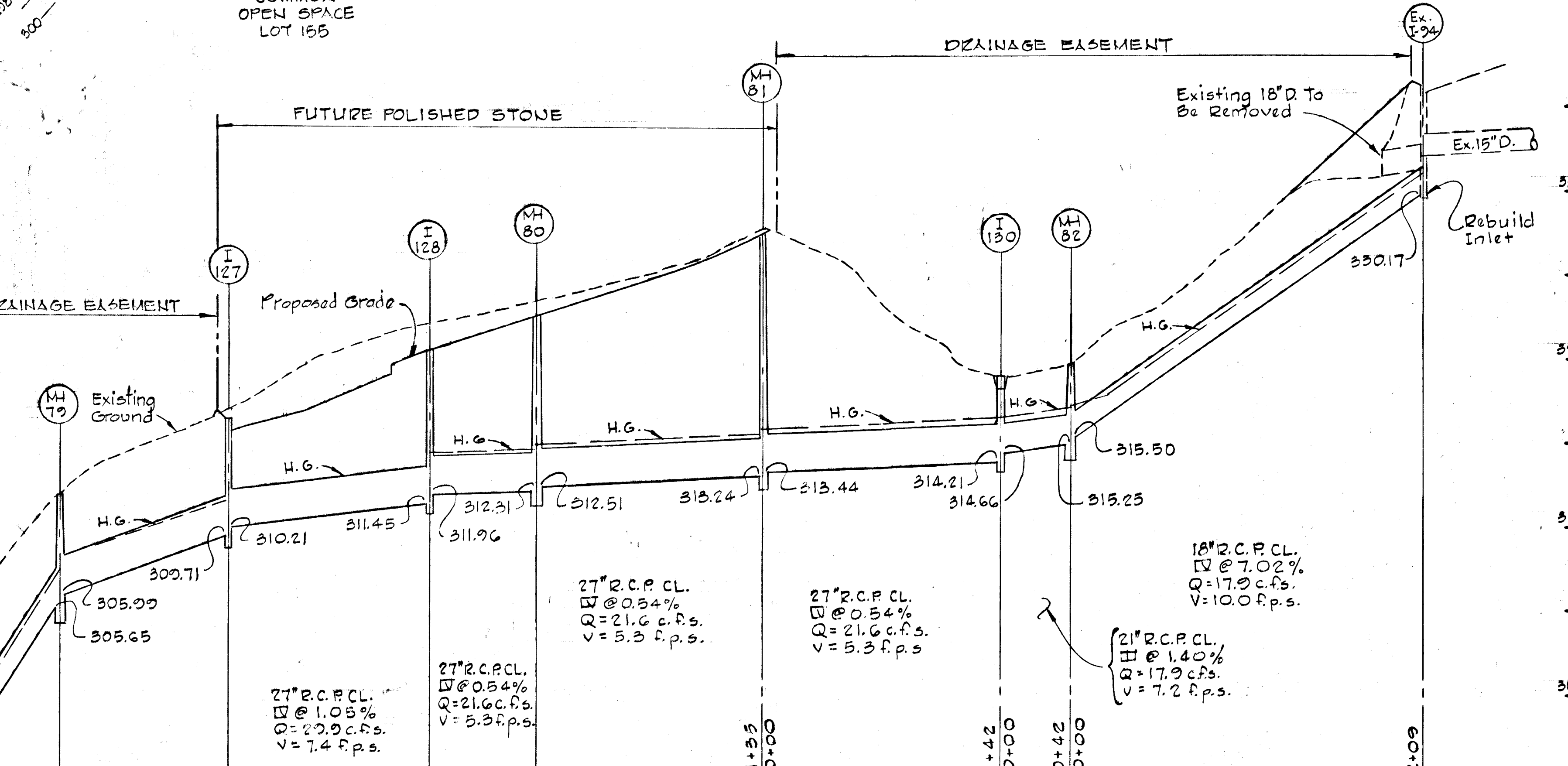
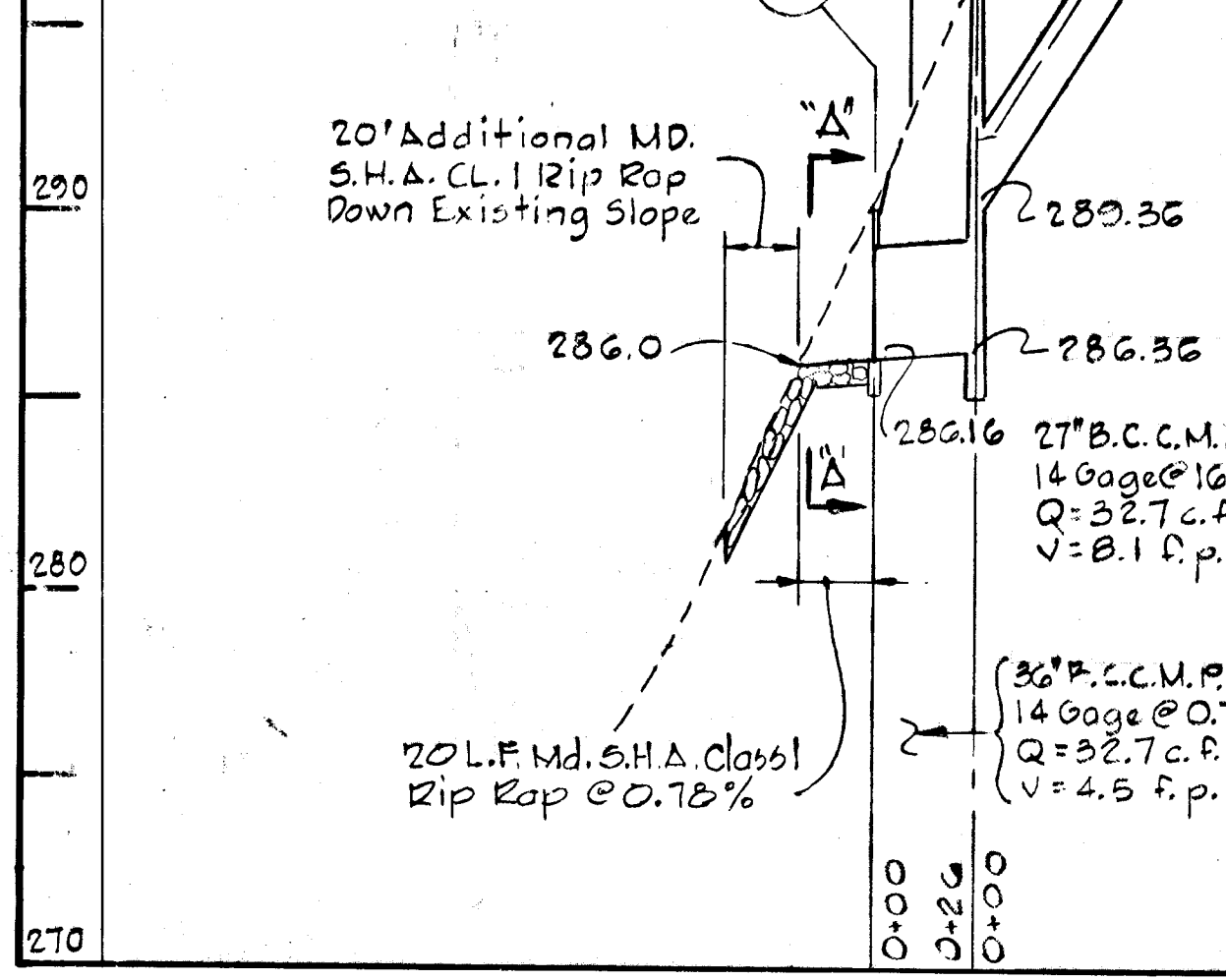
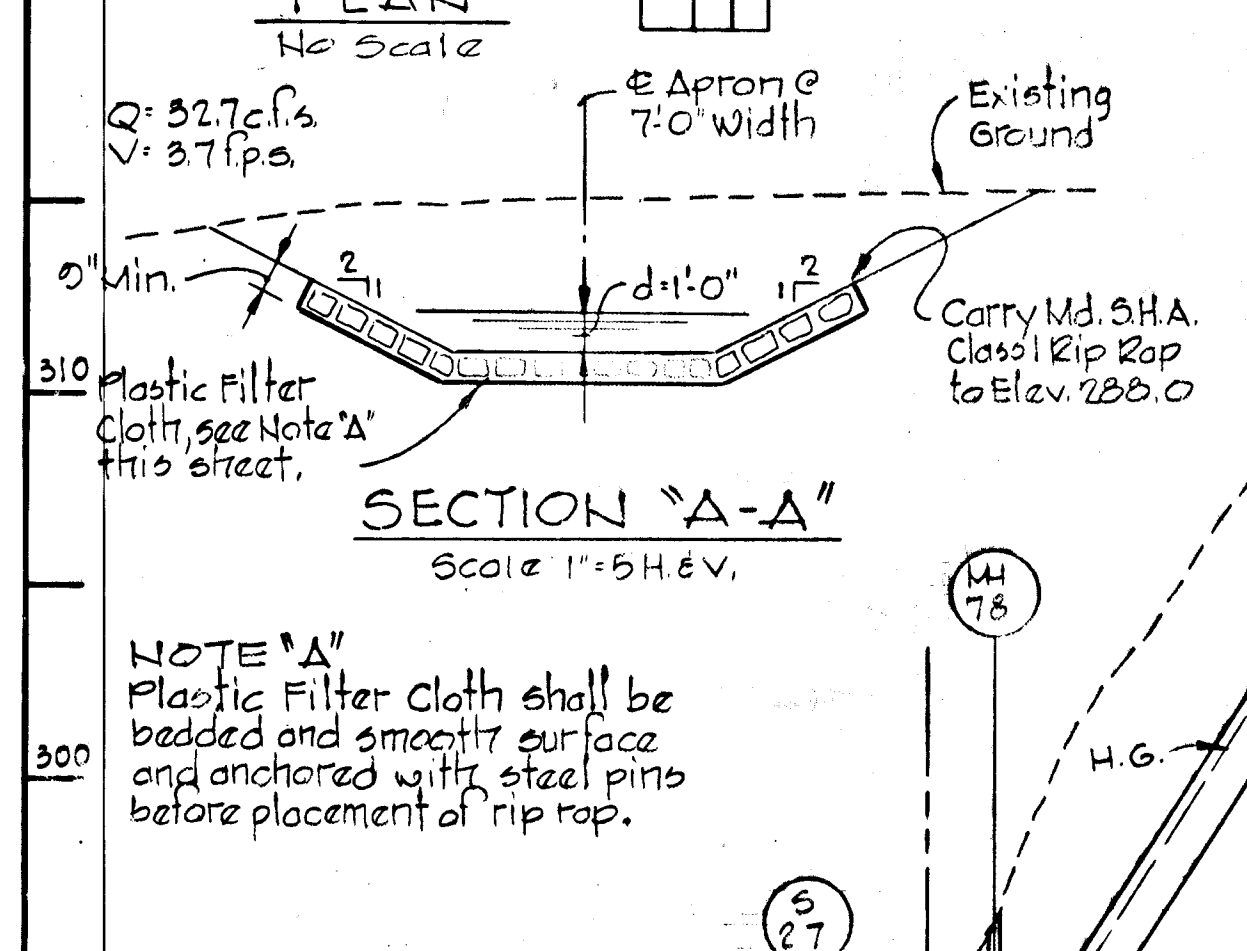
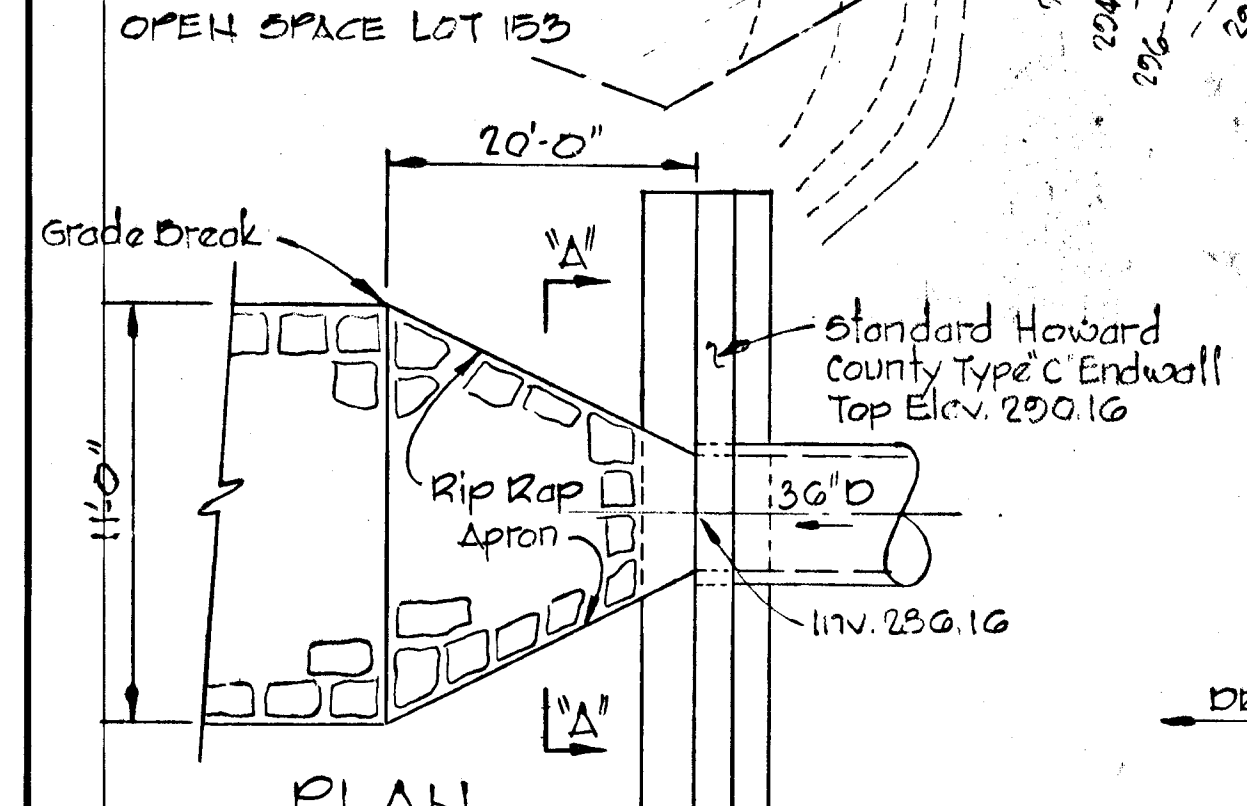
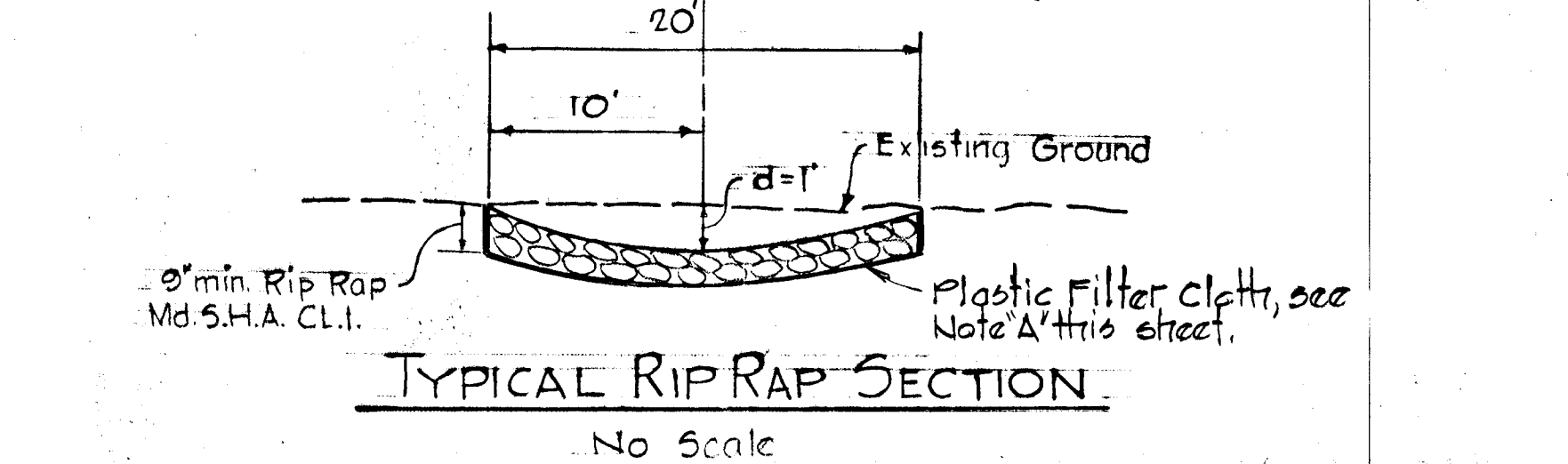
SCALE: 1" = 100'
 DATE: 4/15/80



STORM DRAIN STRUCTURE SCHEDULE

NO.	TYPE	TOP ELEV.	INVERT	INV. OUT	LOCATION
6-27	Standard Type C Endwall	290.16	286.16	286.16	See Plan and Profile
MH 78	Standard Manhole	291.50	289.39	286.36	See Plan and Profile
MH 79	Standard Manhole	312.00	305.99	305.65	See Plan and Profile
I 127	Standard A-B Inlet, width 25"	316.54	310.21	309.71	Inlet 145 Left L.P. Sta. 1+10
I 128	Standard A-B Inlet, width 25"	320.65	311.52	311.45	Inlet 159 Left L.P. Sta. 1+40.30
MH 80	Standard Manhole	322.76	312.51	312.51	MH 79 Left L.P. Sta. 1+72
MH 81	Standard Manhole	327.75	313.44	313.24	MH 79 Left L.P. Sta. 1+32
I 130	Standard Class C Inlet	312.19	314.66	314.71	See Plan and Profile
MH 82	Type B Manhole	320.00	315.25	315.25	See Plan and Profile
I 131	Standard Class C Inlet	338.29	333.10	333.10	See Plan and Profile
Ex. I 84	Standard A-B Inlet, width 25"	326.54	322.24	322.17	Existing
Ex. MH 57	Standard Manhole	327.72	322.56	322.36	Existing

NOTES:
 1. Standard Class C Inlet, Howard County Dog. 64C, Page 110C.
 2. Type B Manhole, see Street 16 at 22.
 3. Standard Type C Endwall, Howard County Dog. D-52, Page 107.
 4. Standard Manhole, Howard County Dog. 103, Page 15B.
 5. Standard A-B and A-B Inlet, Howard County Dog. 64A, Page 110A.



CERTIFICATION BY THE DEVELOPER
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL, AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY.
 Walter Woodford 11-8-79
 WALTER WOODFORD DATE

CERTIFICATION BY THE ENGINEER
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Kenneth A. McCord 11-8-79
 KENNETH A. MCCORD DATE

COLUMBIA 6TH. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 2

PROJECT TITLE:
 STORM DRAIN PROFILES AND PLAN AND SEDIMENT CONTROL

SCALE: AS SHOWN DATE

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 BALTIMORE, MARYLAND 21202

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

SIGNATURE DATE
 U.S. SOIL CONSERVATION SERVICE

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

APPROVED: Robert Zickler 5/1/80
 HOWARD S.C.D. DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

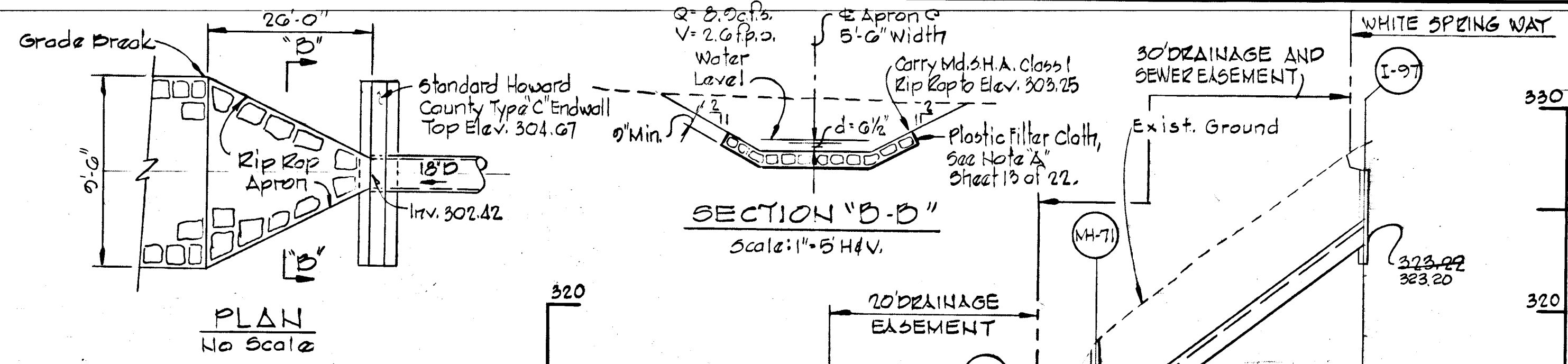
SIGNATURE DATE
 U.S. SOIL CONSERVATION SERVICE

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

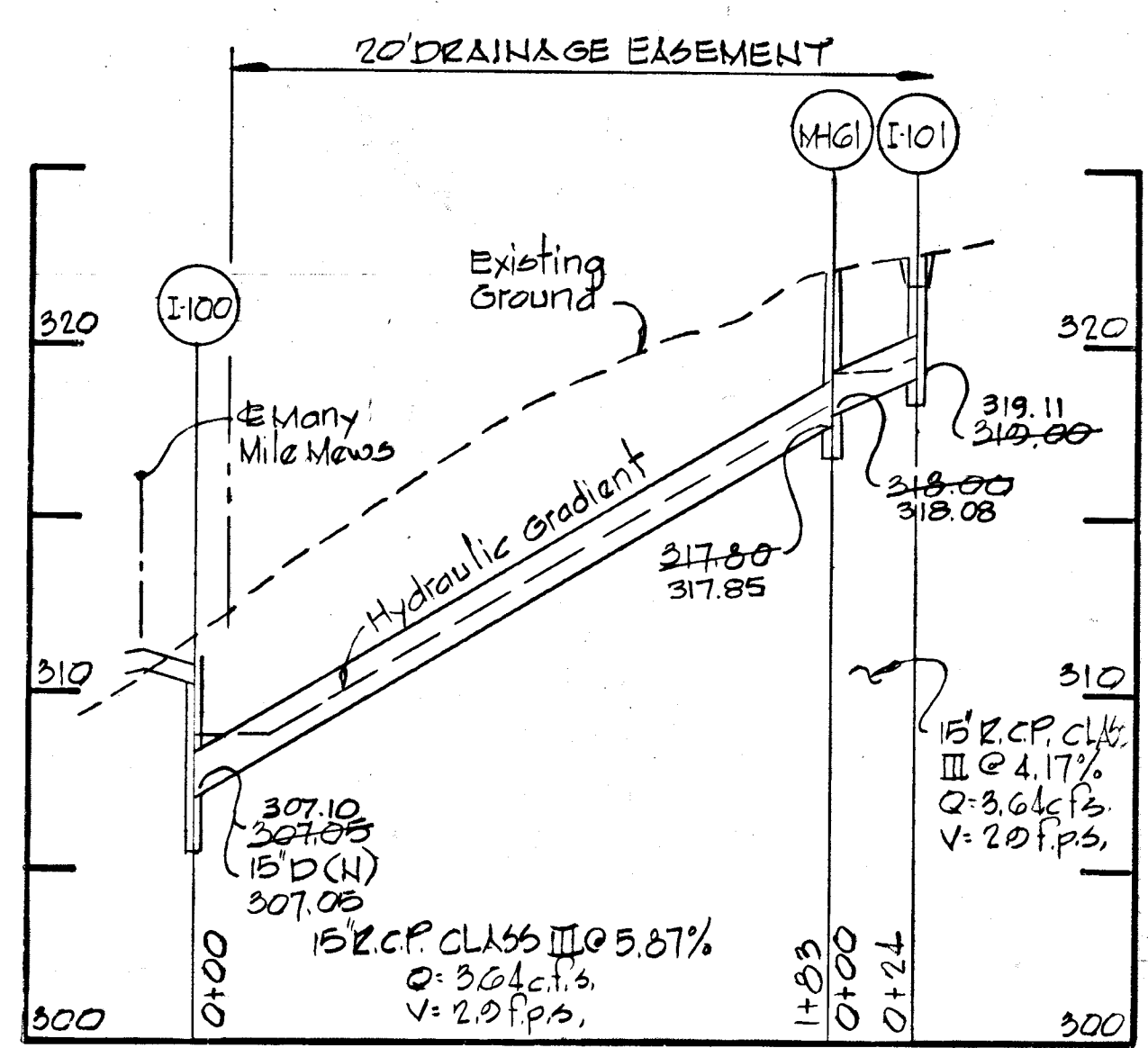
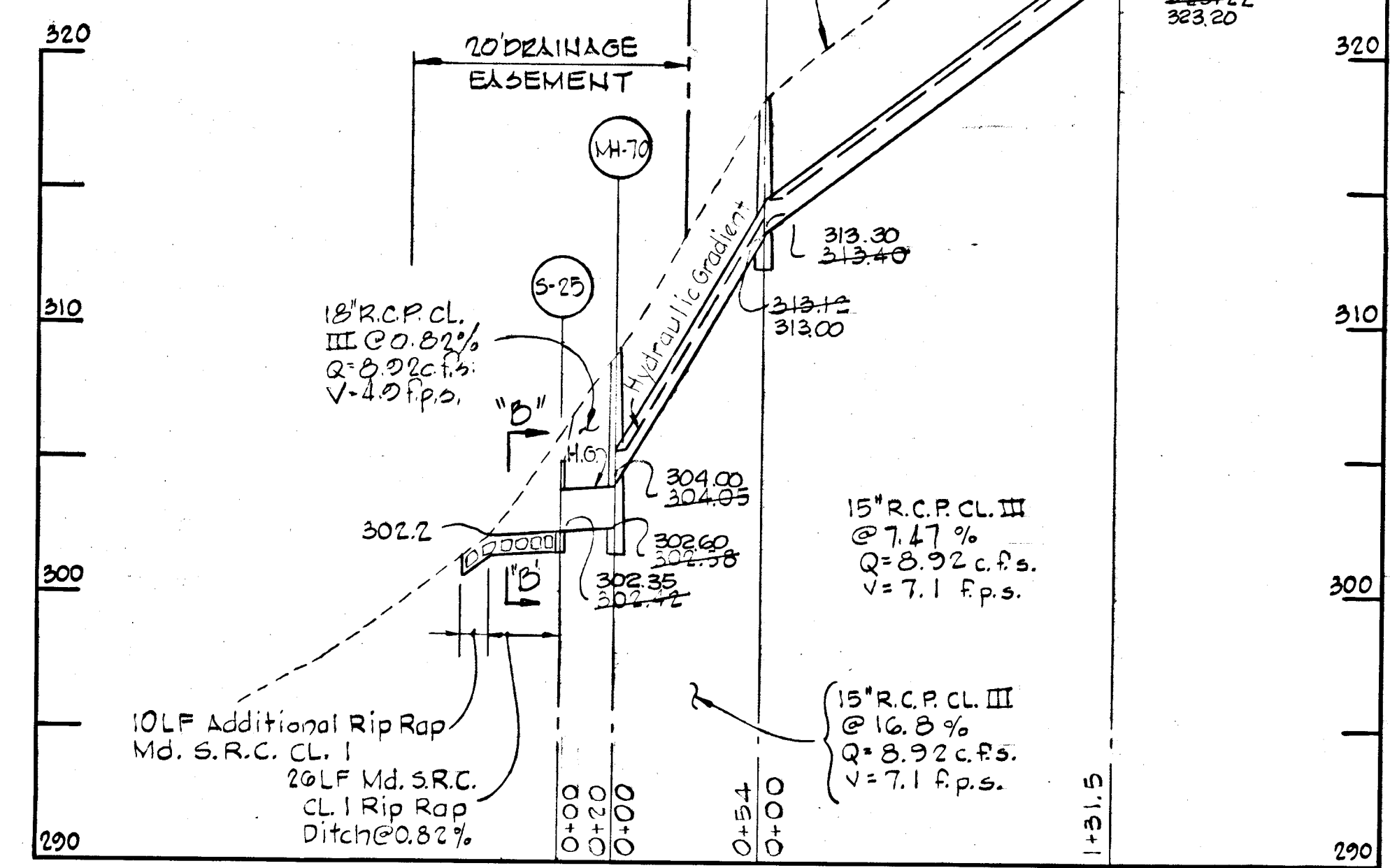
APPROVED: Robert Zickler 5/1/80
 HOWARD S.C.D. DATE

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 BALTIMORE, MARYLAND 21202

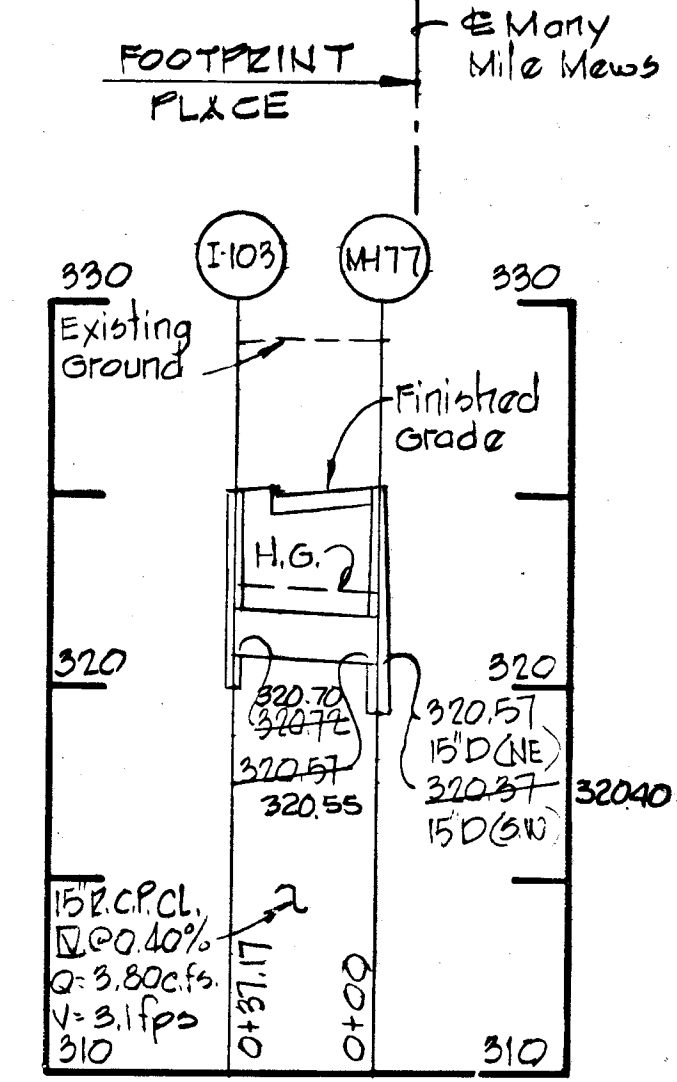
Kenneth A. McCord REGISTERED ENGINEER NO. 1974



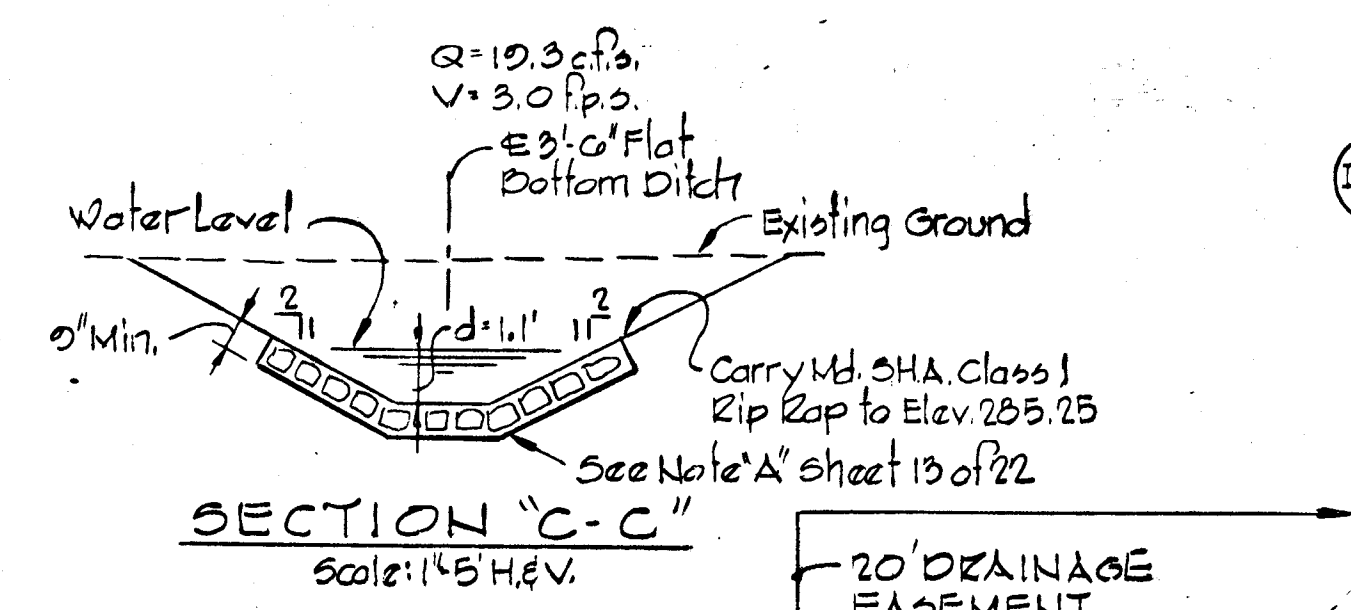
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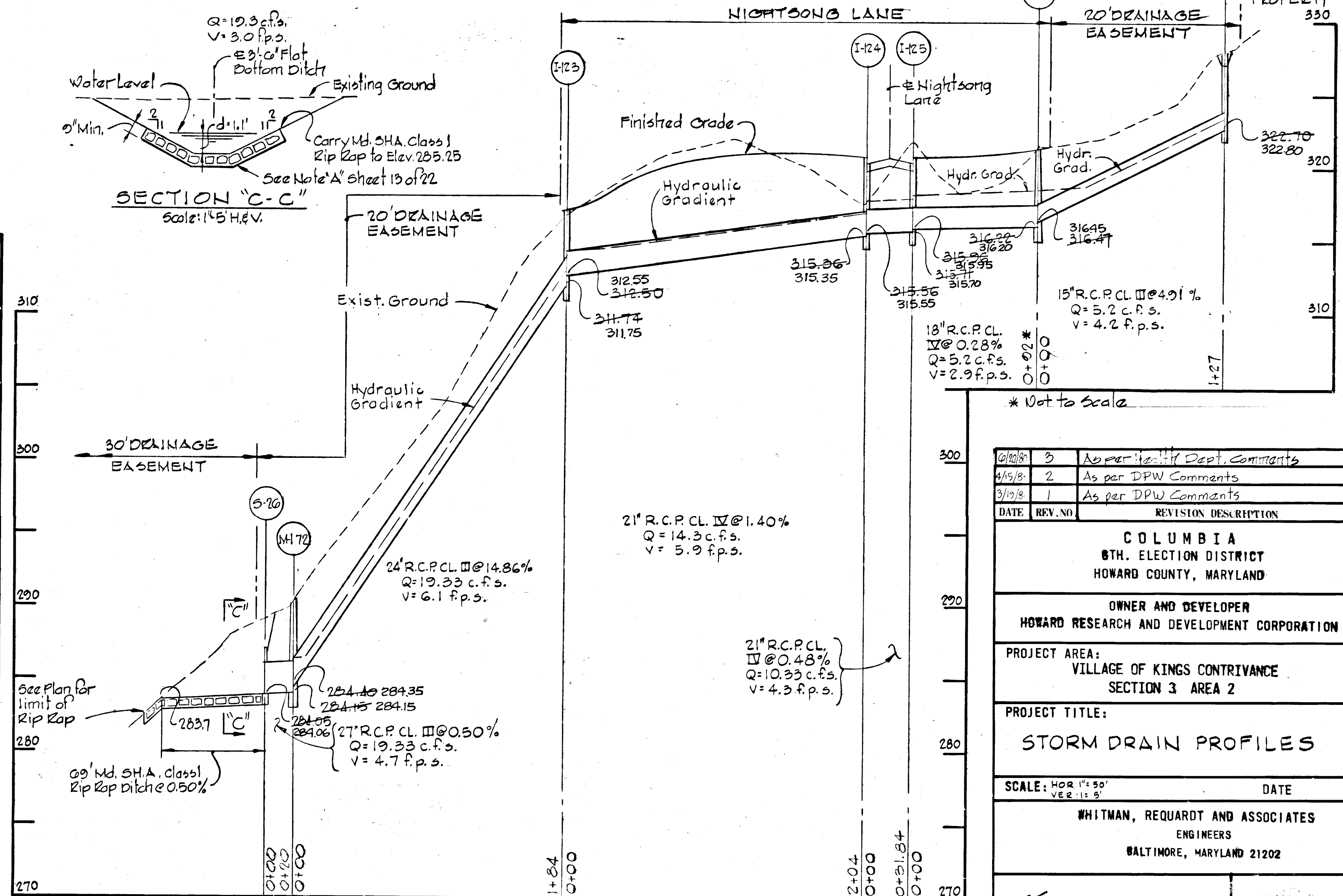
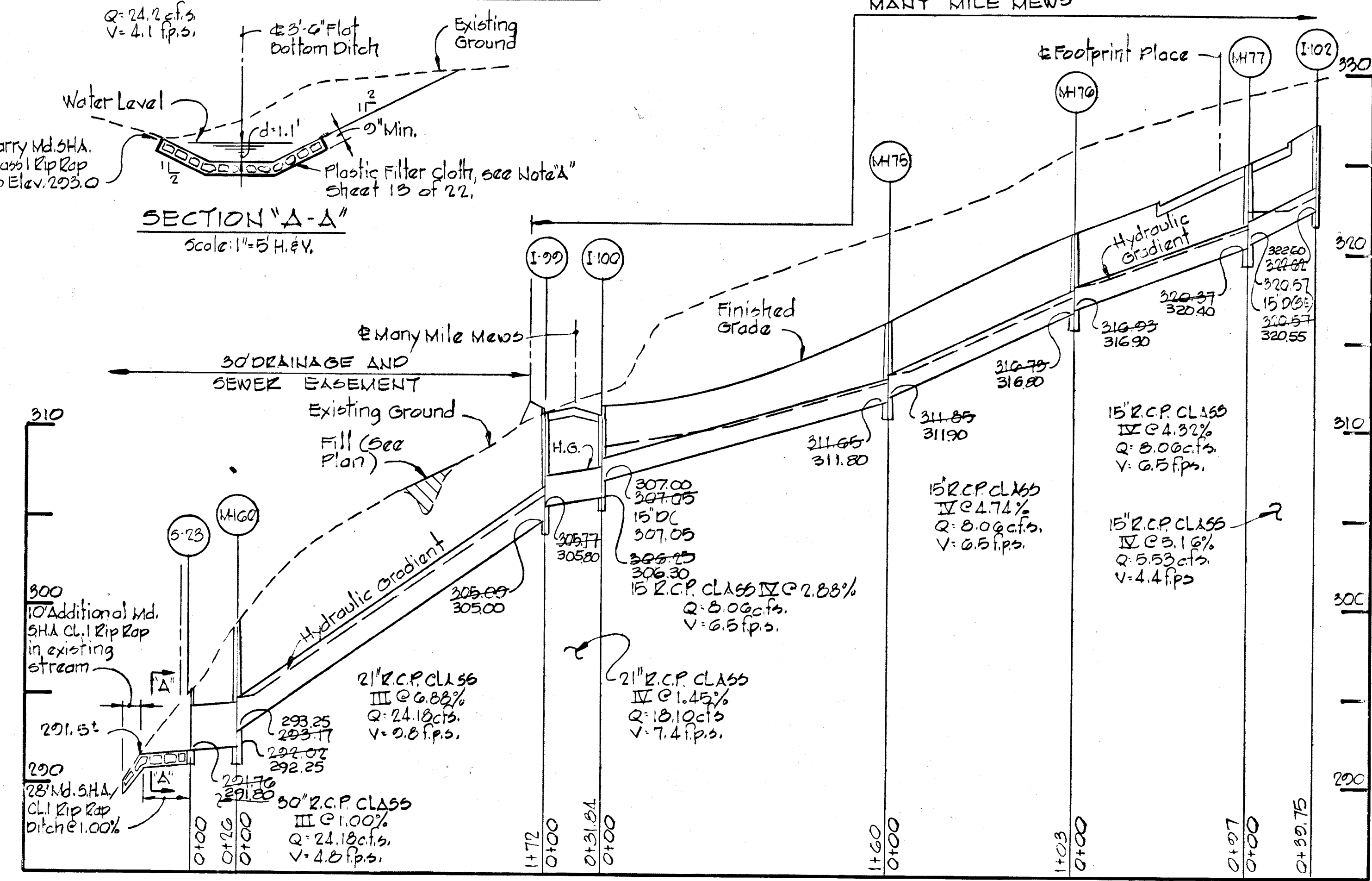
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 Scale: 1"=5'H&V.



MARY MILE MEWS



SECTION "C-C"
 Scale: 1"=5'H&V.



DATE	REV. NO.	REVISION DESCRIPTION
3/15/80	1	As per Health Dept. Comments
4/15/80	2	As per DPW Comments
3/15/80	1	As per DPW Comments

COLUMBIA
 8TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2

PROJECT TITLE:
 STORM DRAIN PROFILES

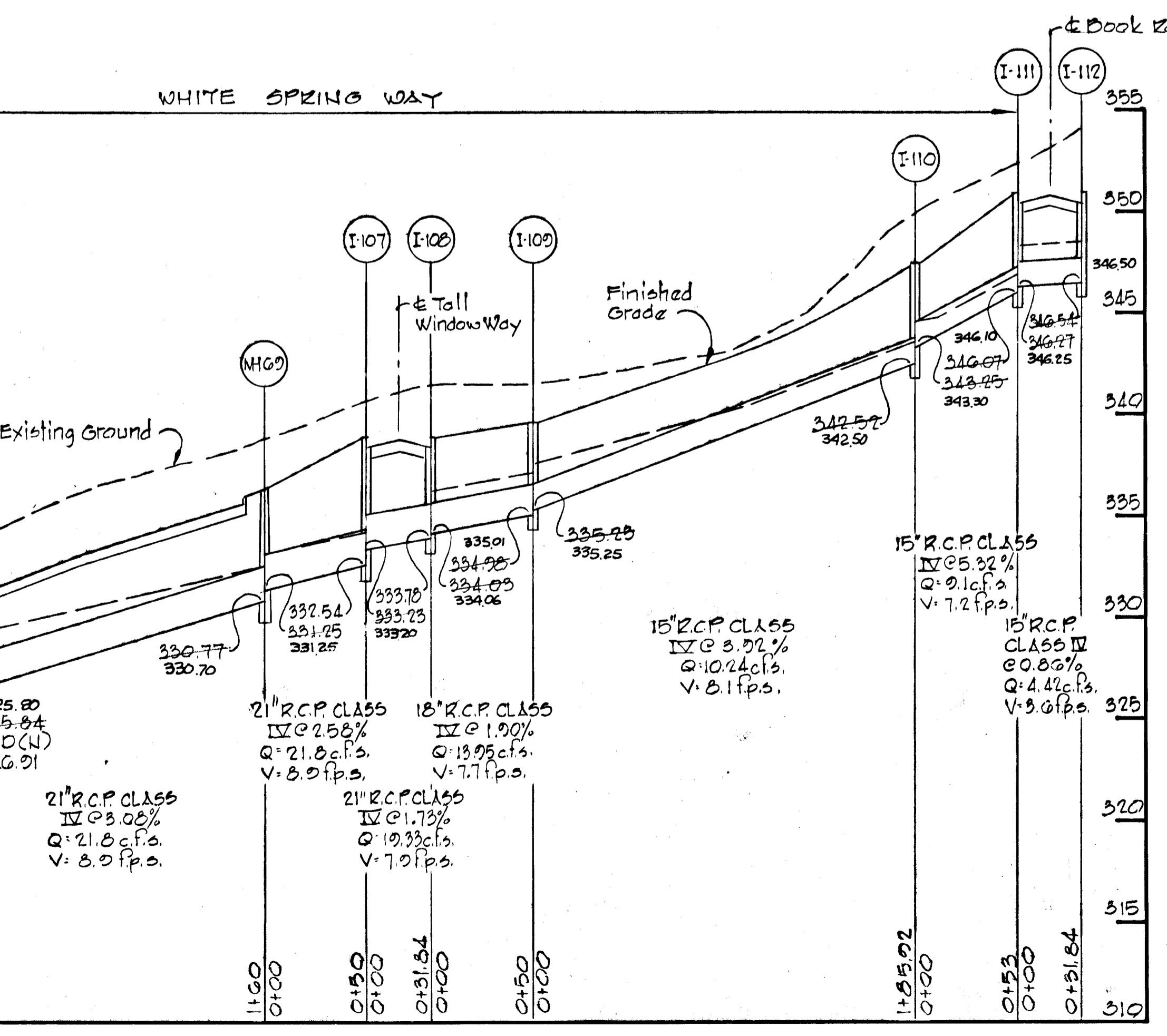
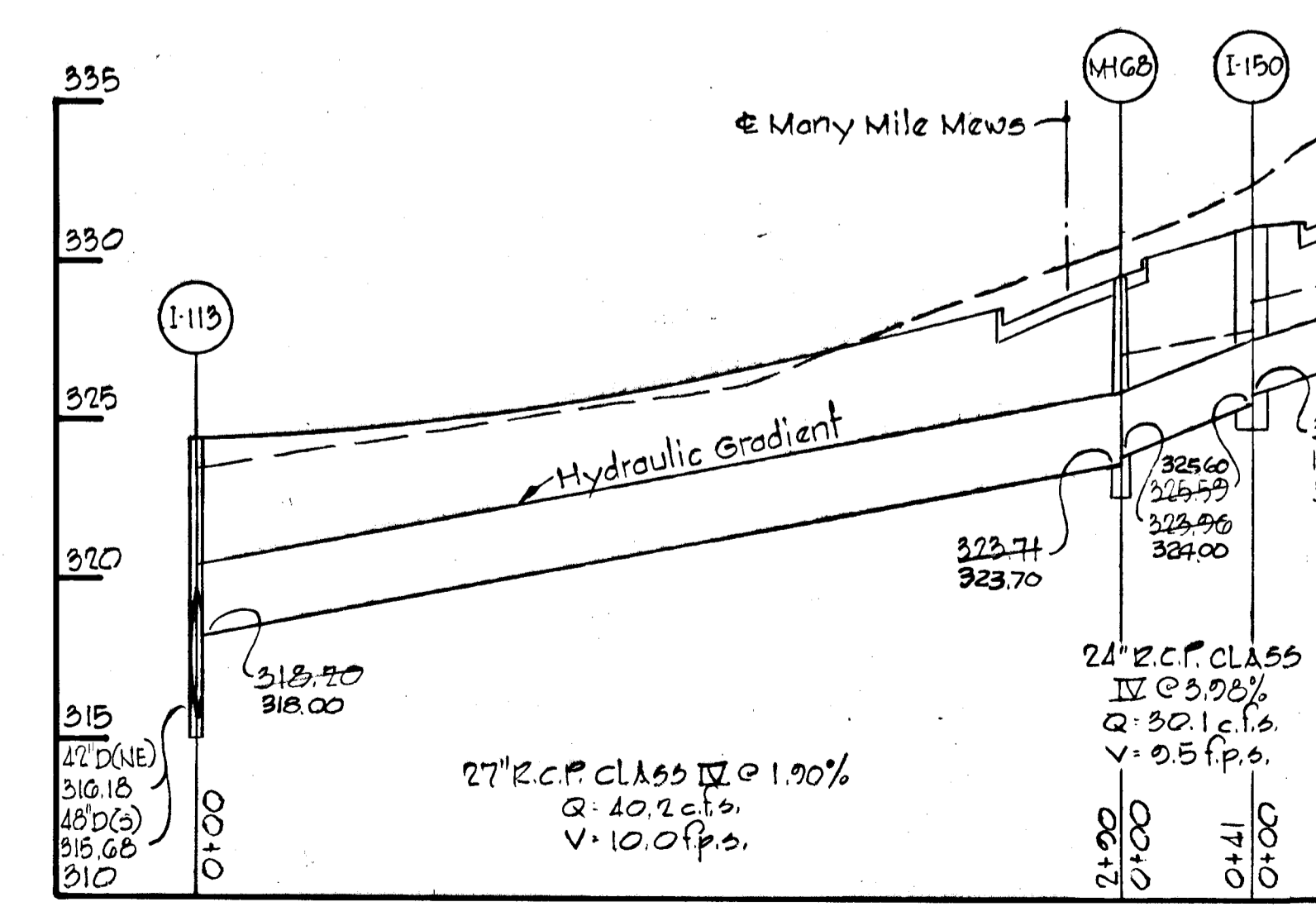
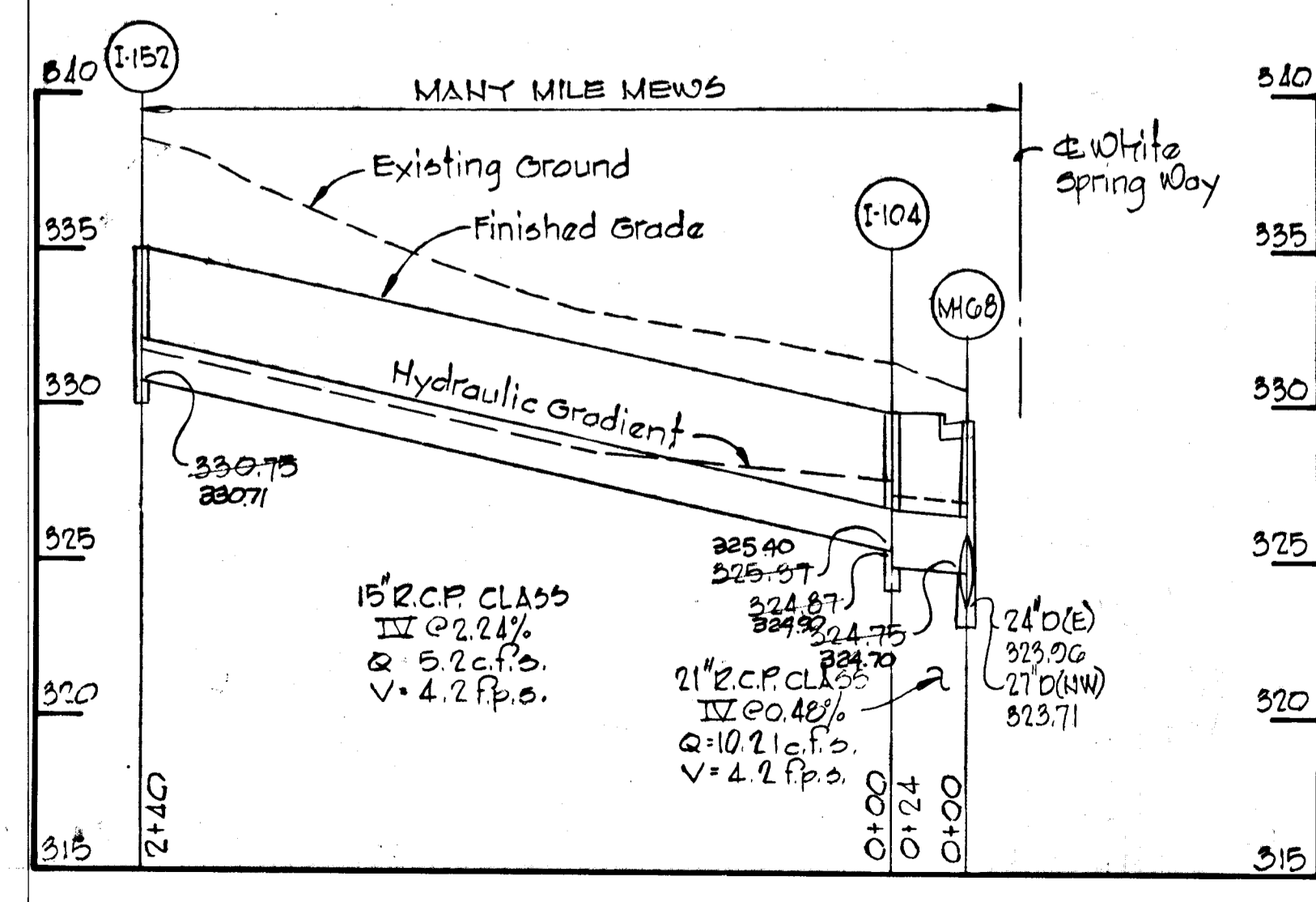
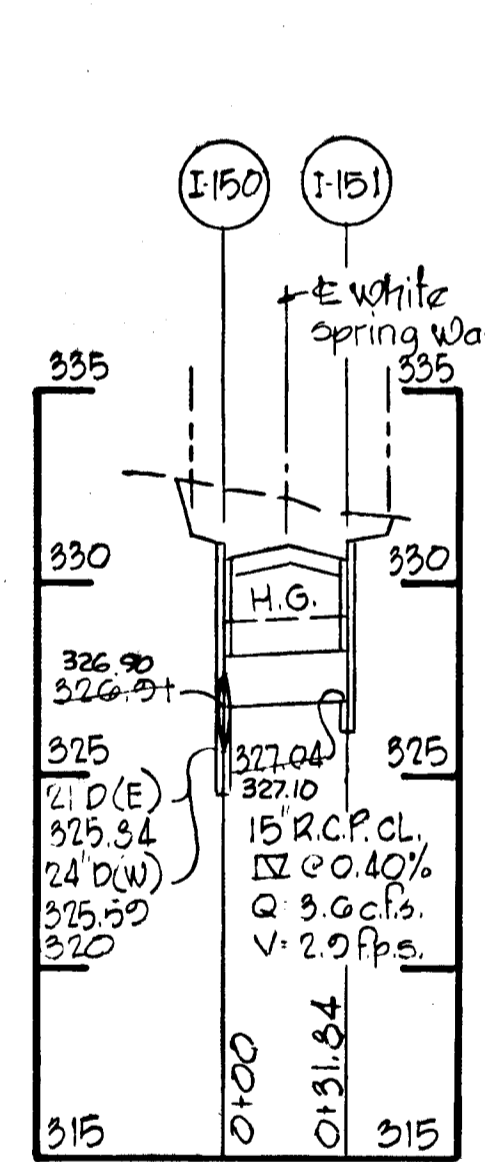
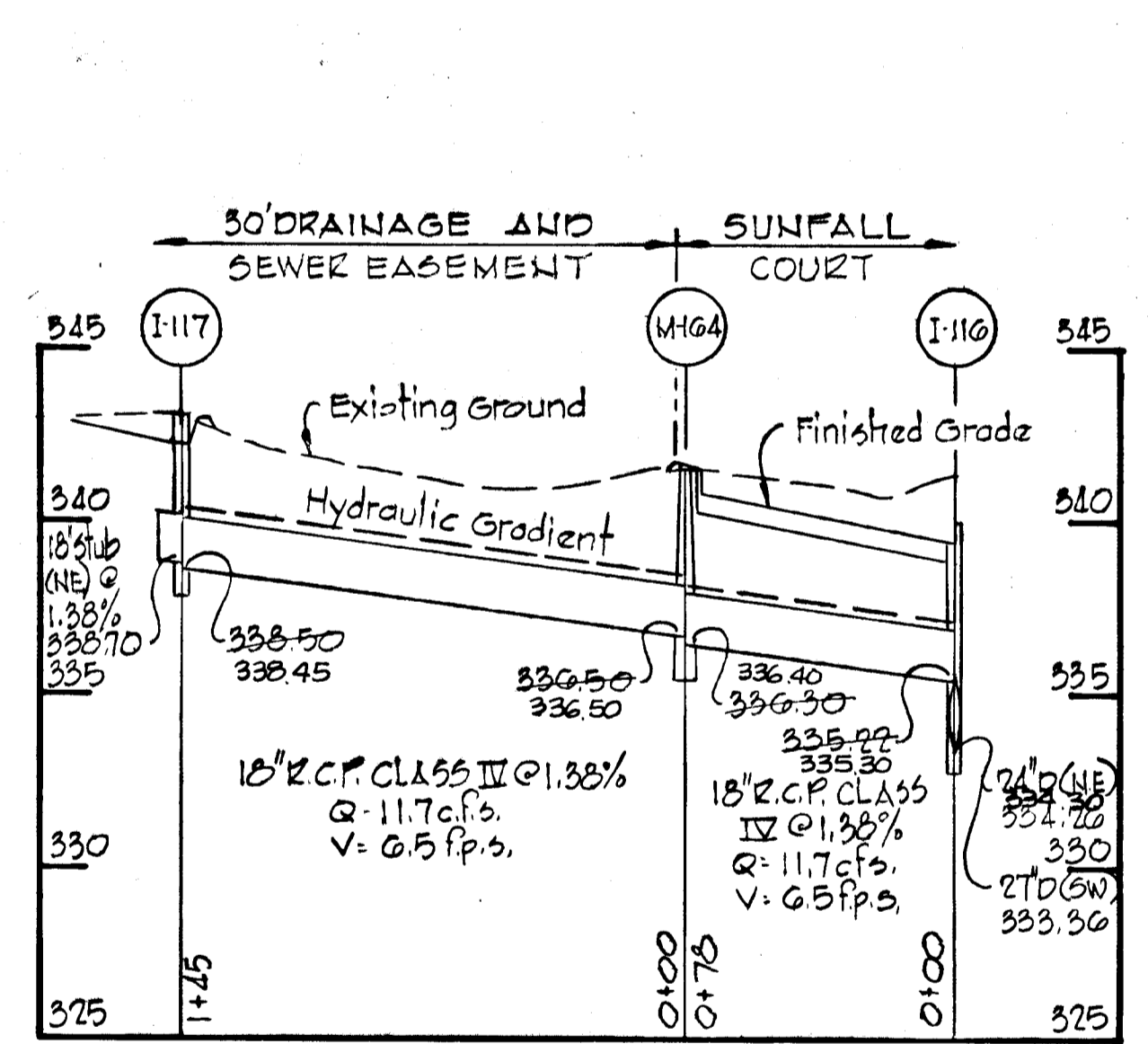
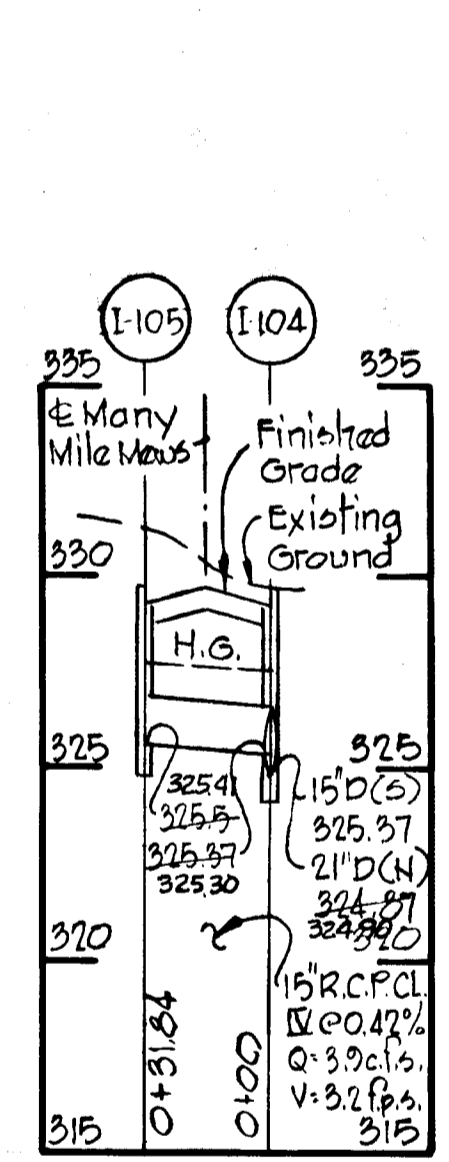
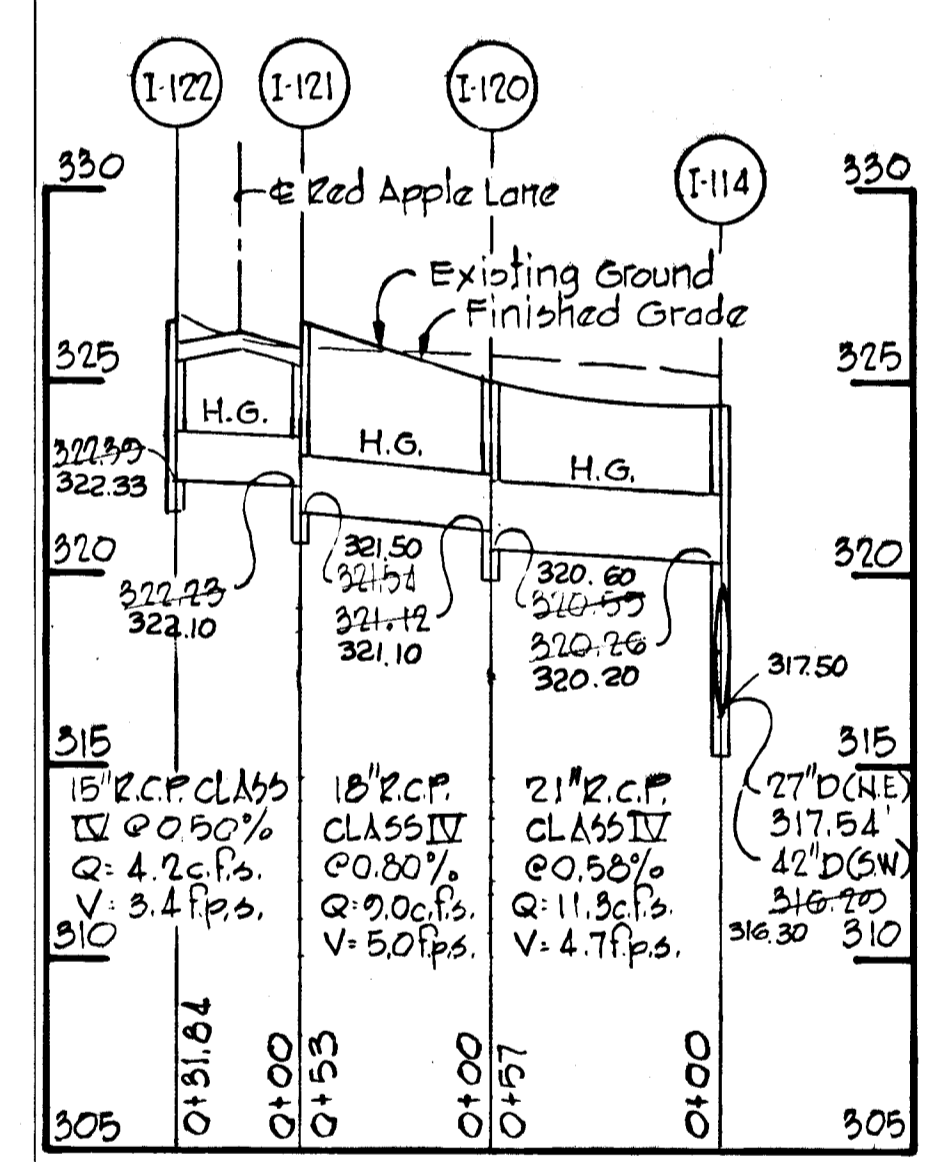
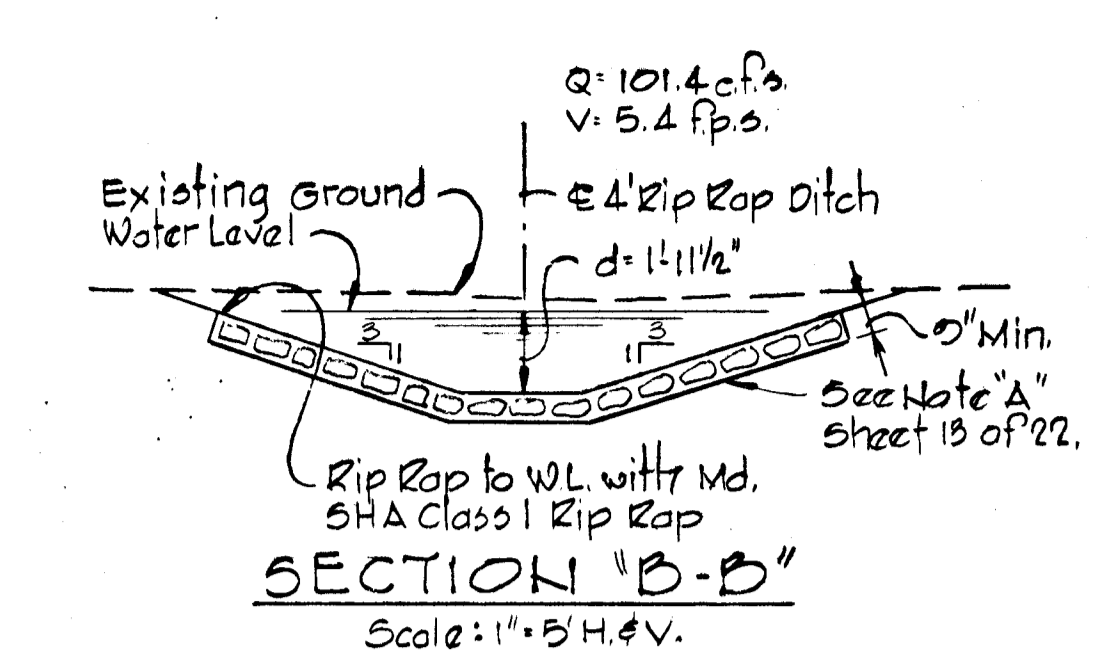
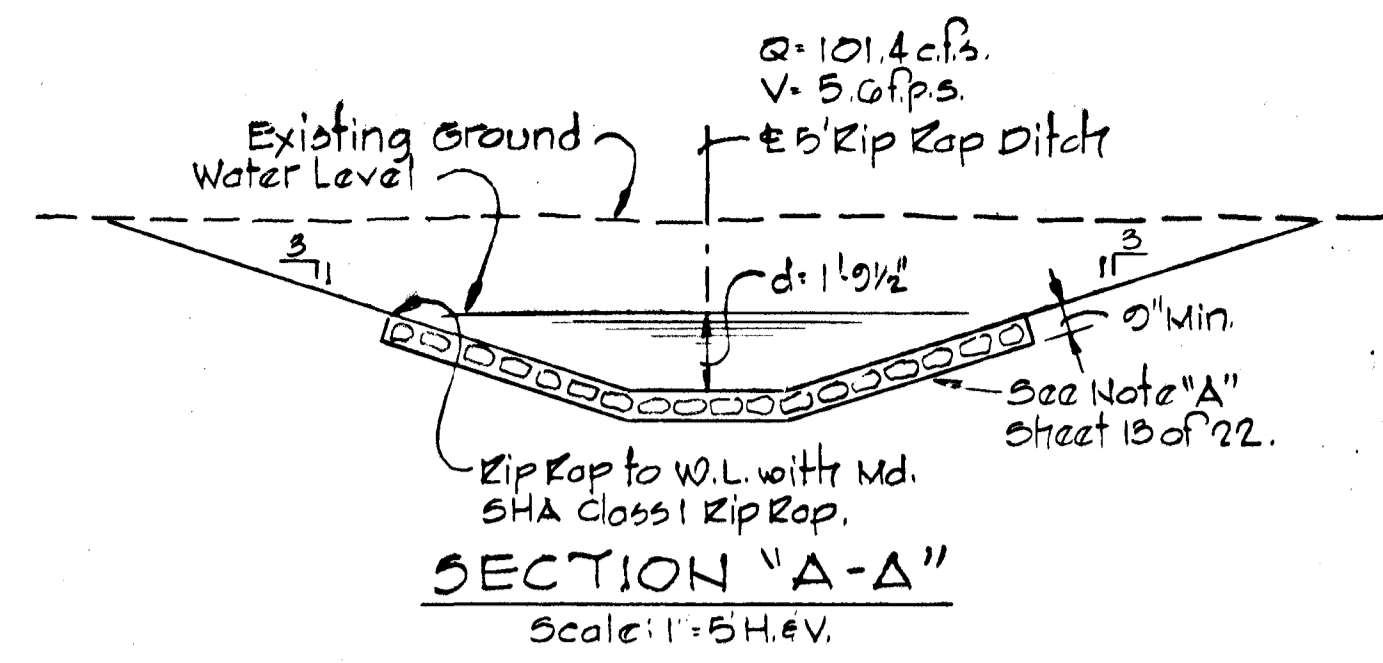
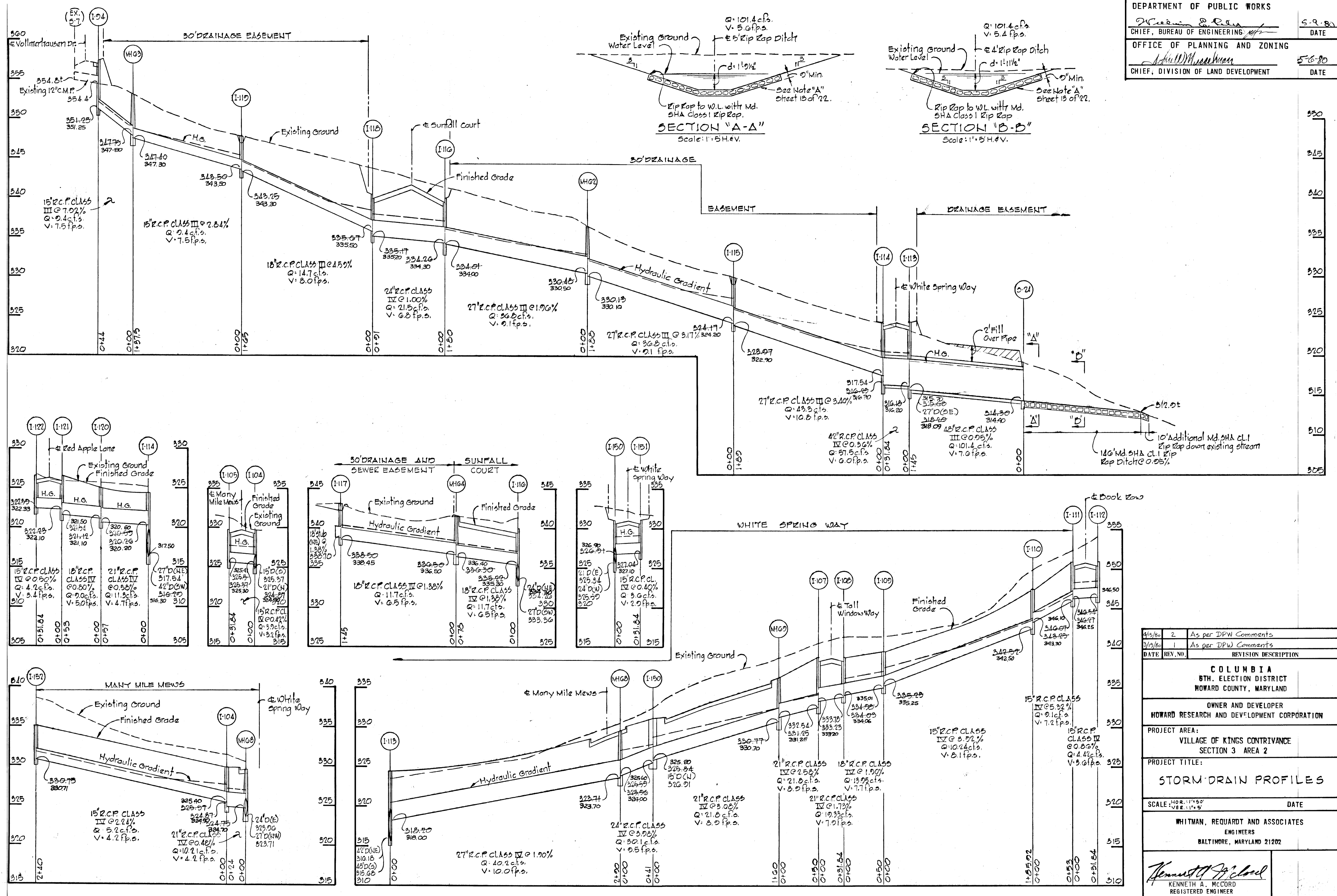
SCALE: HOR 1"=50'
 VER 1"=5'

DATE

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

Kenneth A. McCord
 REGISTERED ENGINEER
 NO. 1974

#445



DATE	REV. NO.	REVISION DESCRIPTION
4/15/80	2	As per DPW Comments
3/19/80	1	As per DPW Comments

COLUMBIA 8TH. ELECTION DISTRICT HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 2

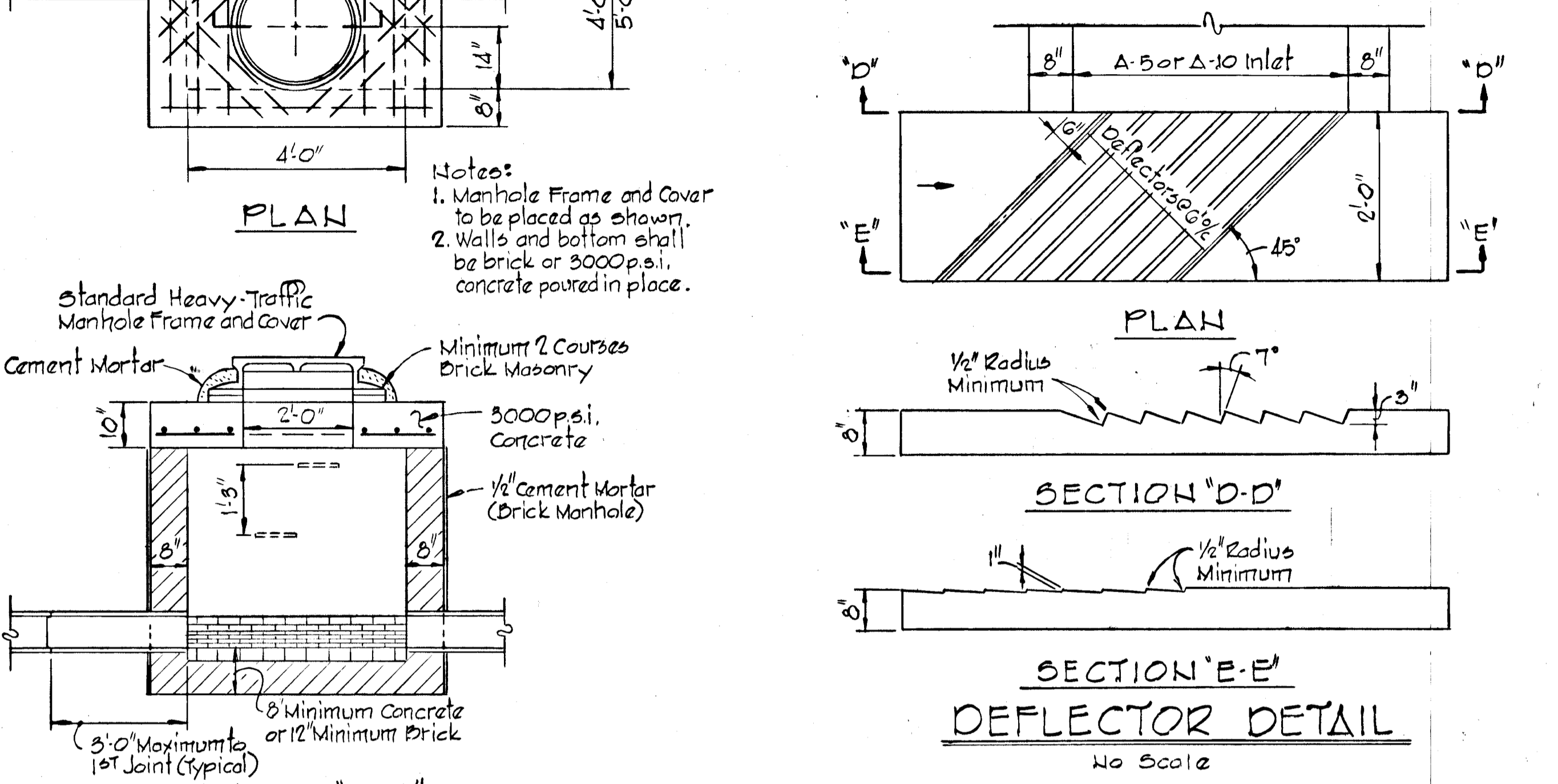
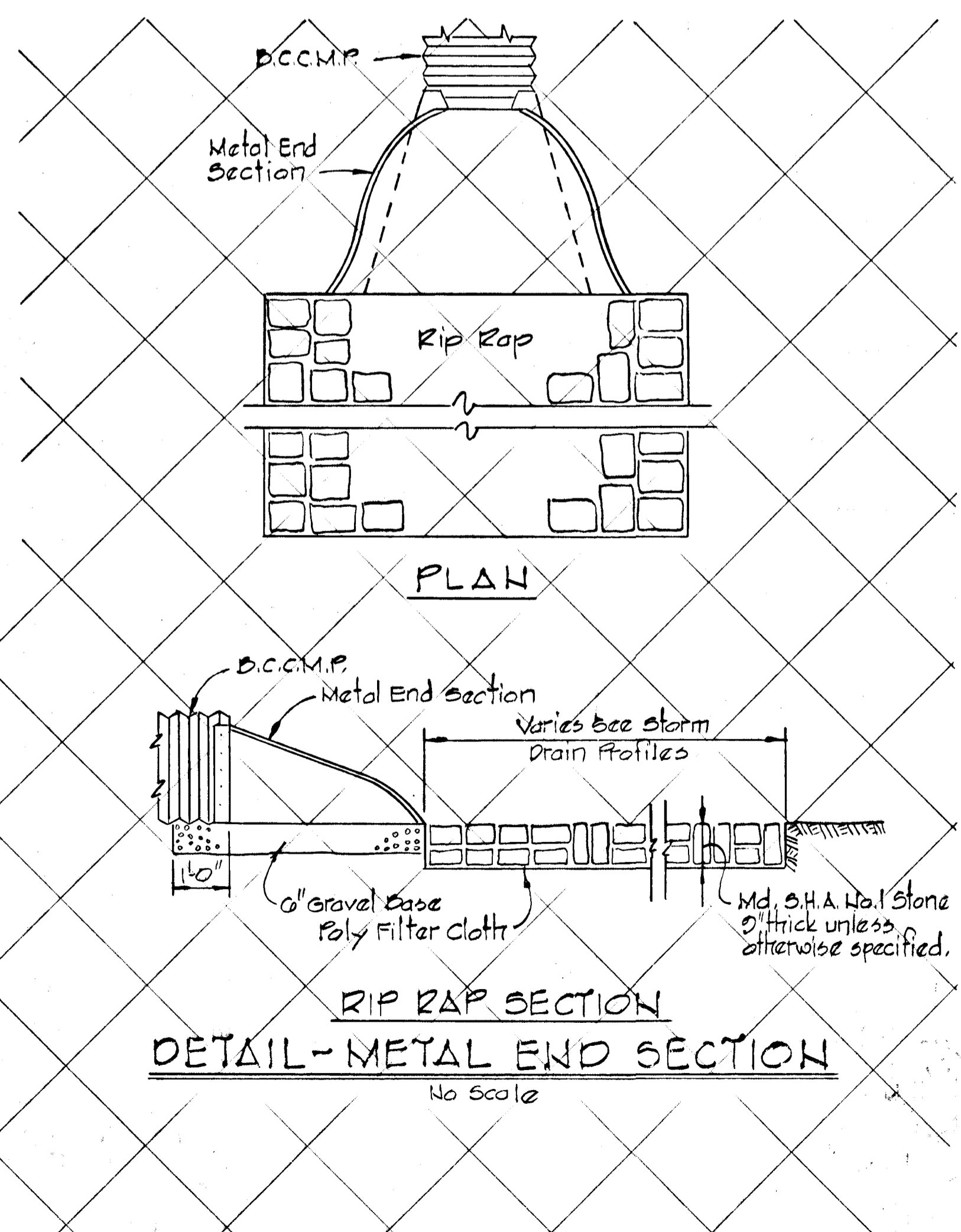
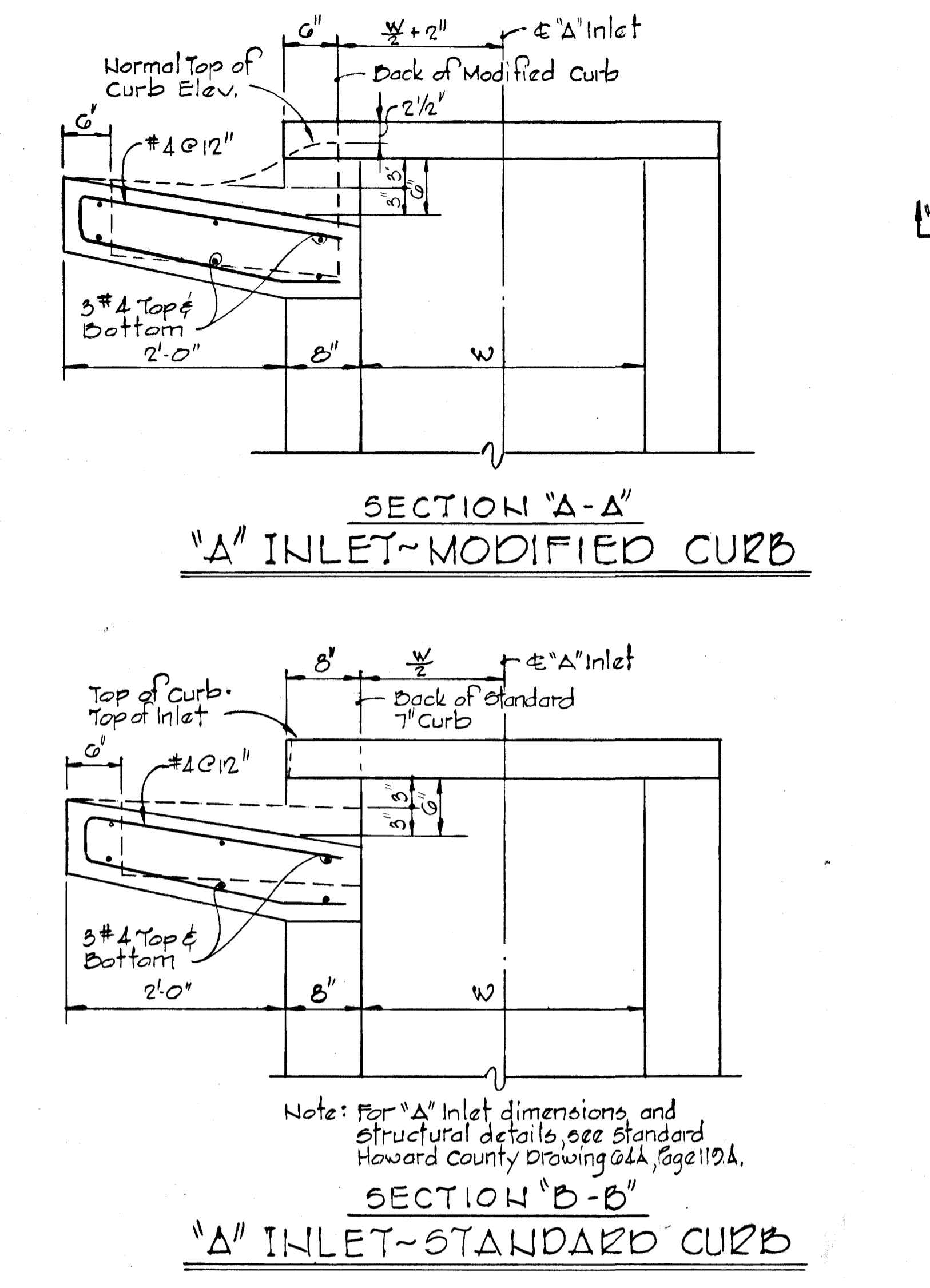
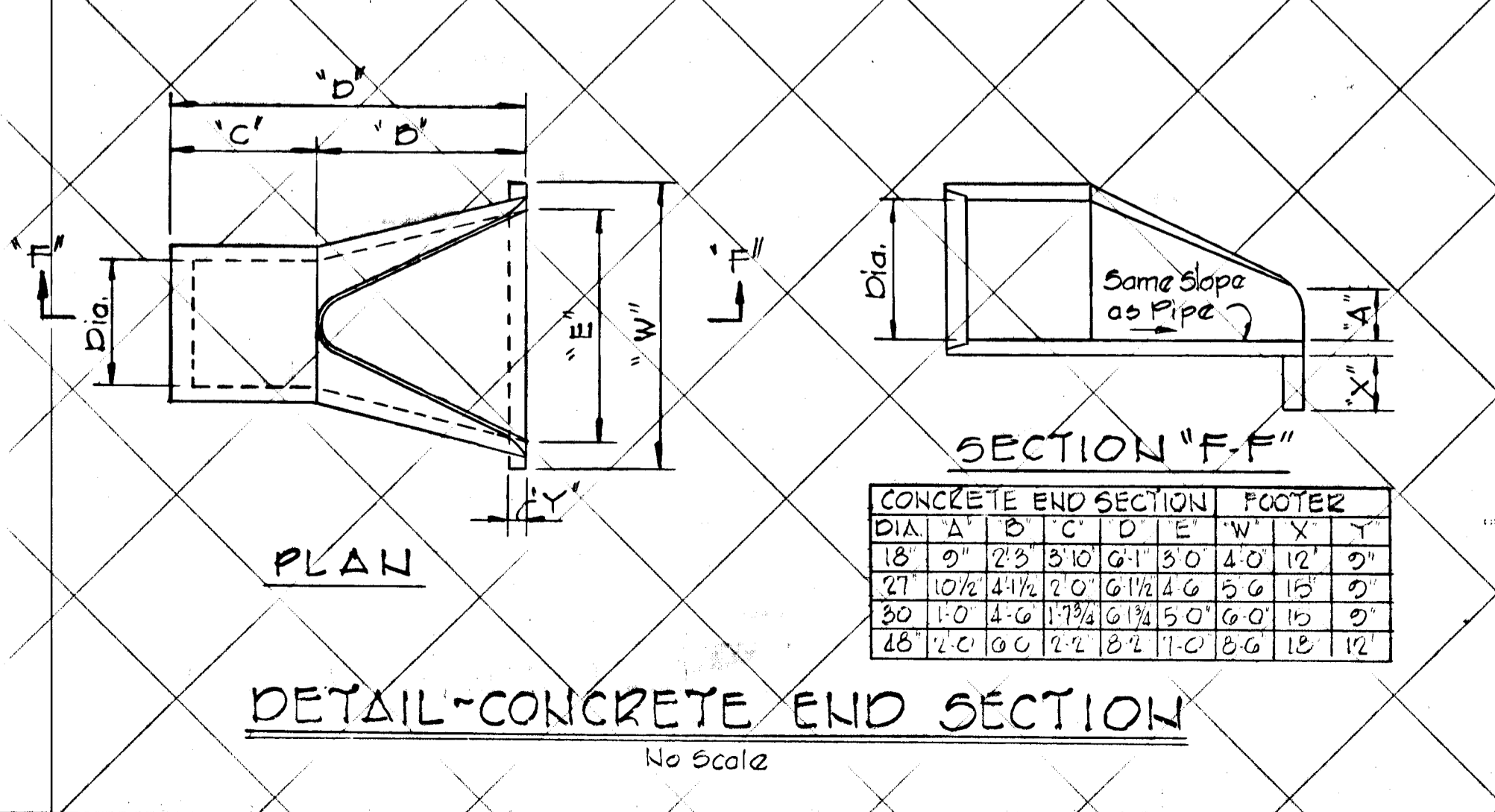
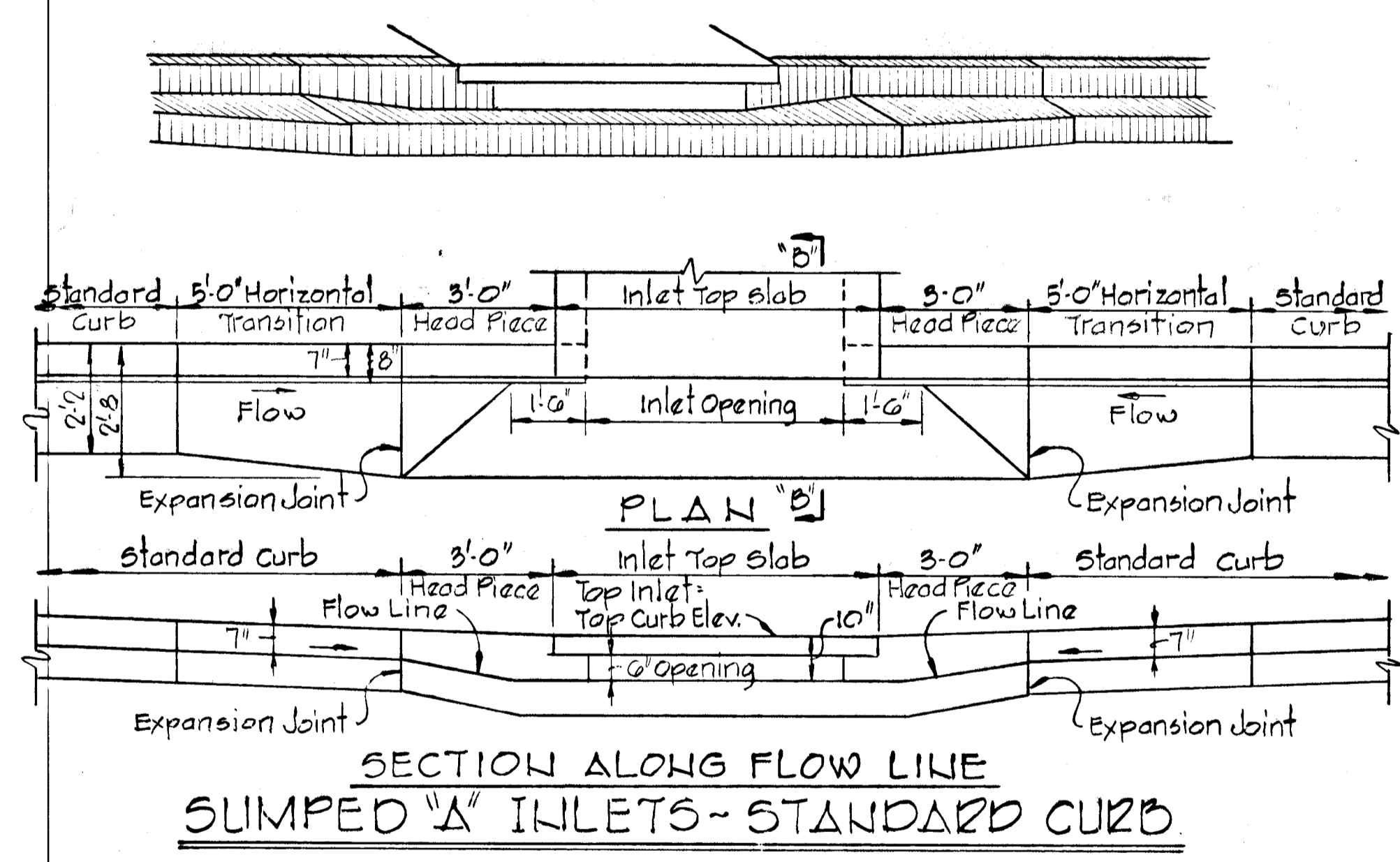
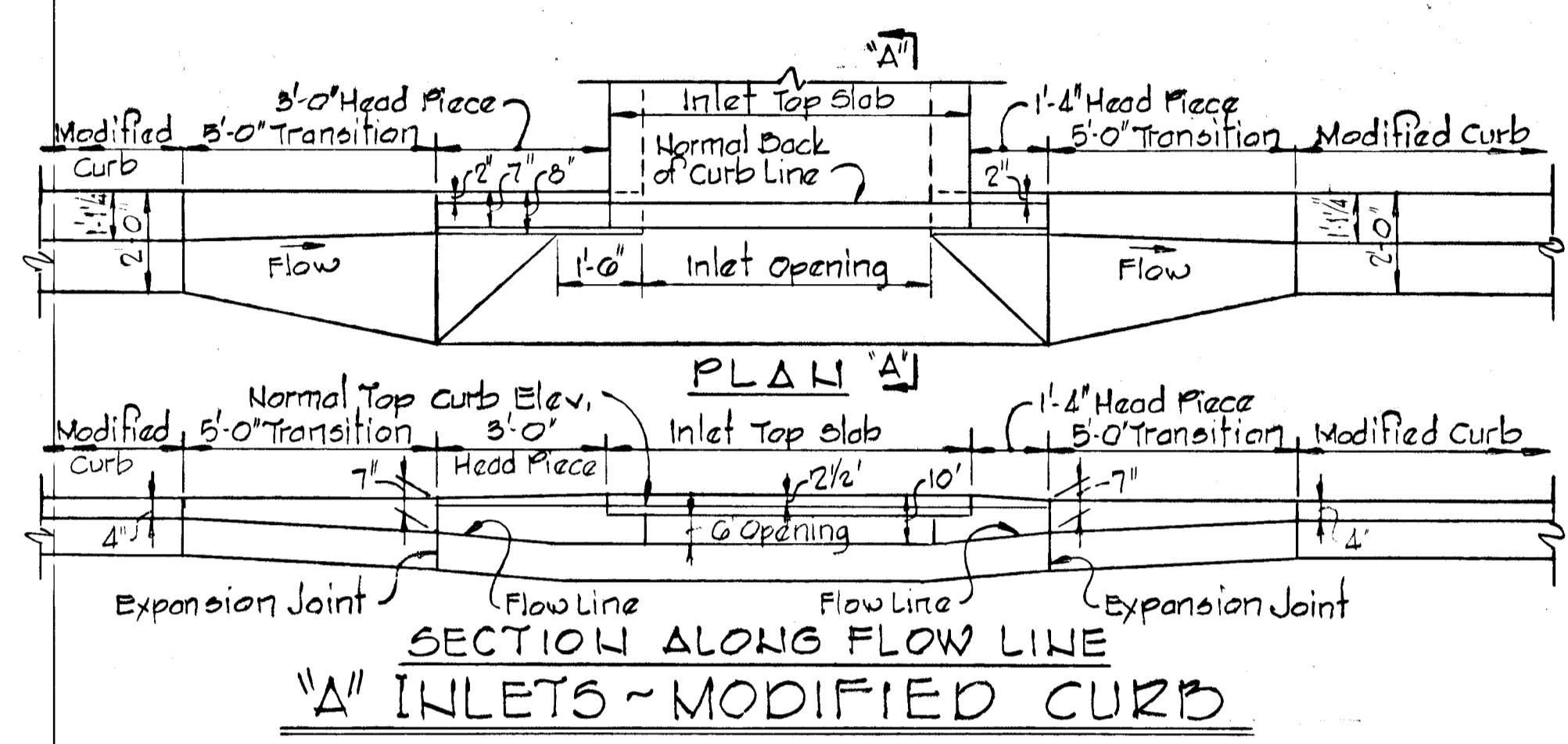
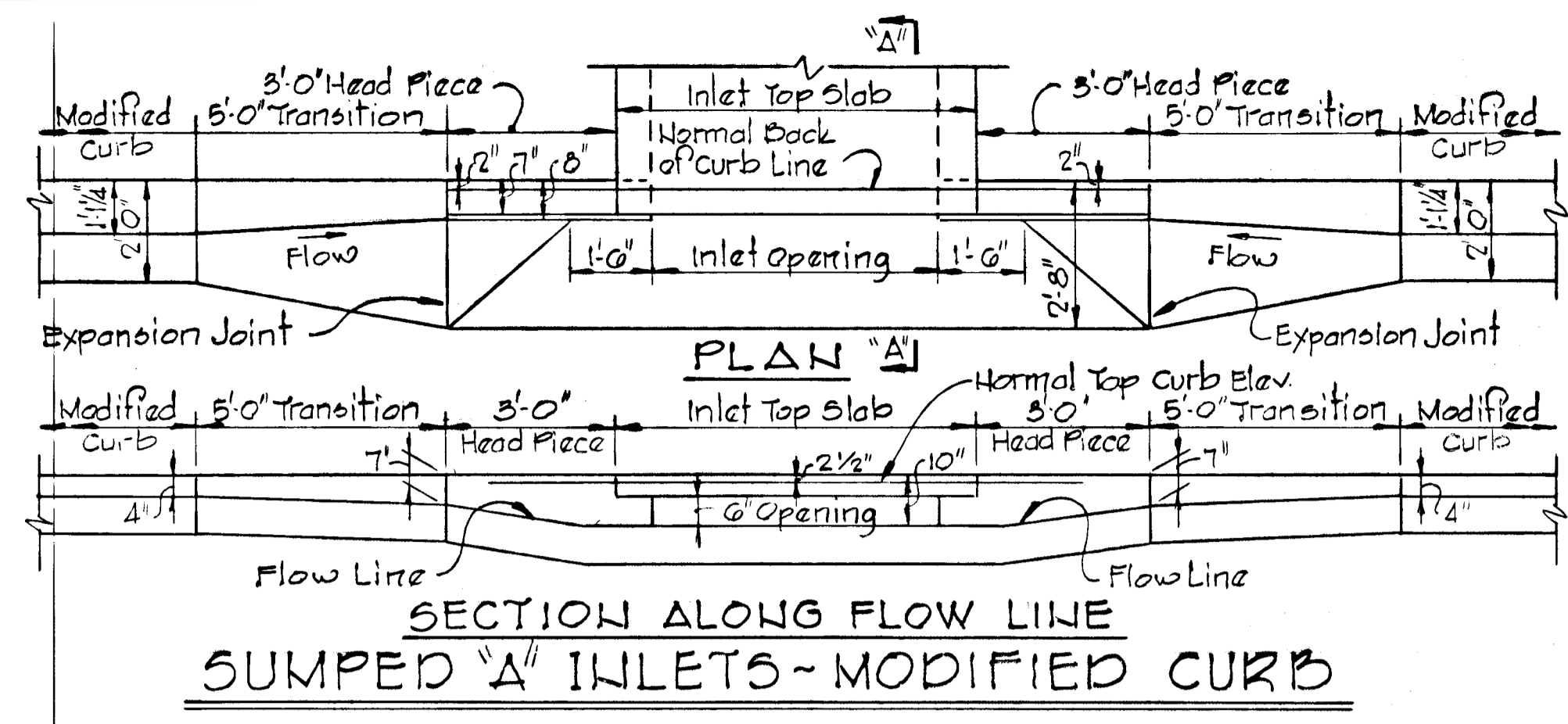
PROJECT TITLE:
 STORM DRAIN PROFILES

SCALE: HOR. 1" = 50' VER. 1" = 5'
DATE:

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 BALTIMORE, MARYLAND 21202

Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974

#445



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COLUMBIA
 6TH. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

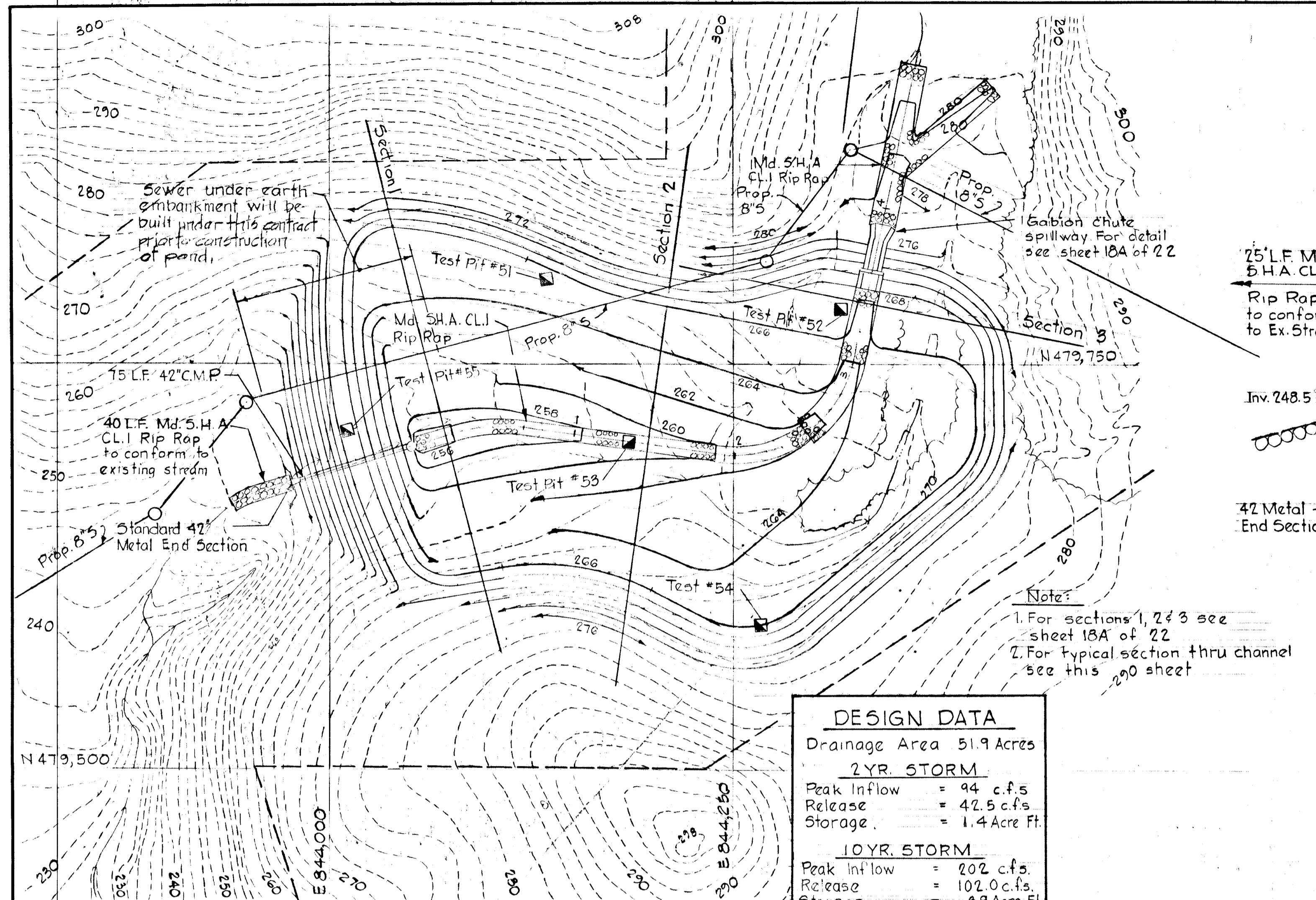
PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2

PROJECT TITLE:
 STORM DRAIN DETAILS

SCALE: AS SHOWN
DATE:

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974



SITE PLAN
 Scale 1" = 50'

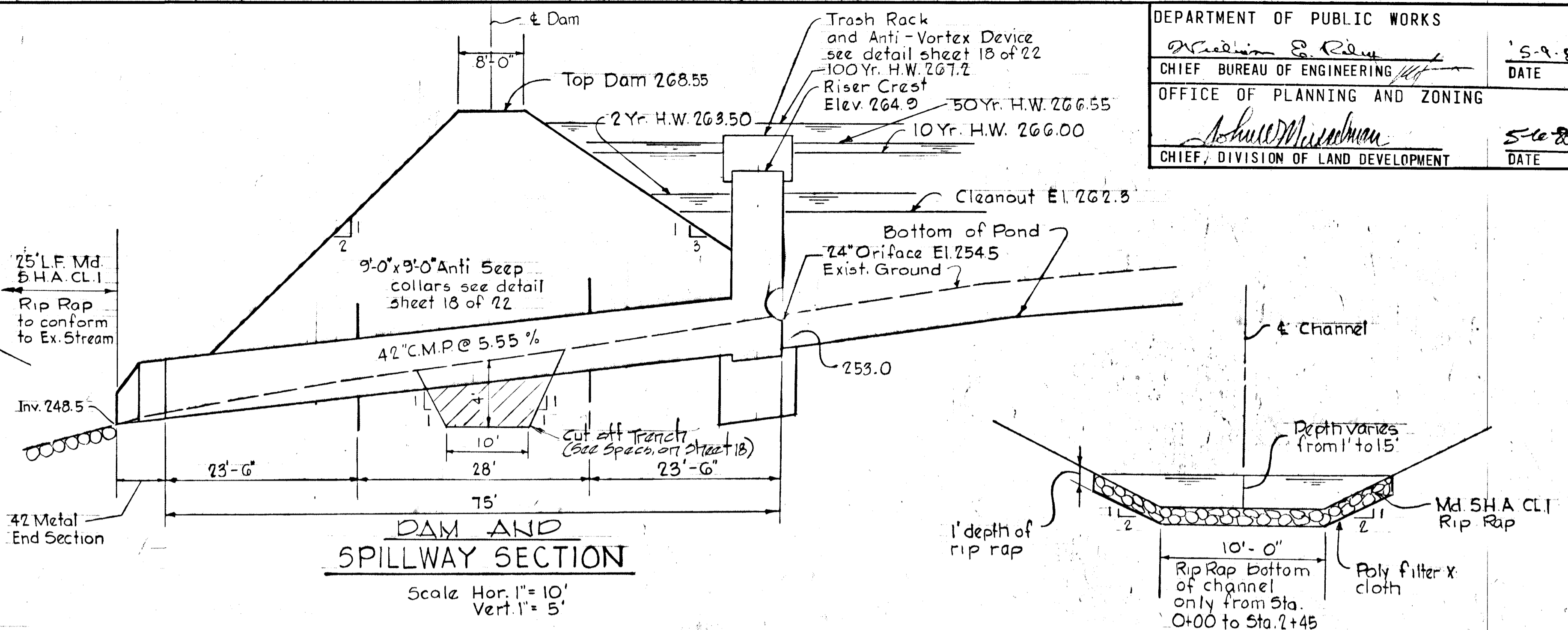
DESIGN DATA

Drainage Area 51.9 Acres

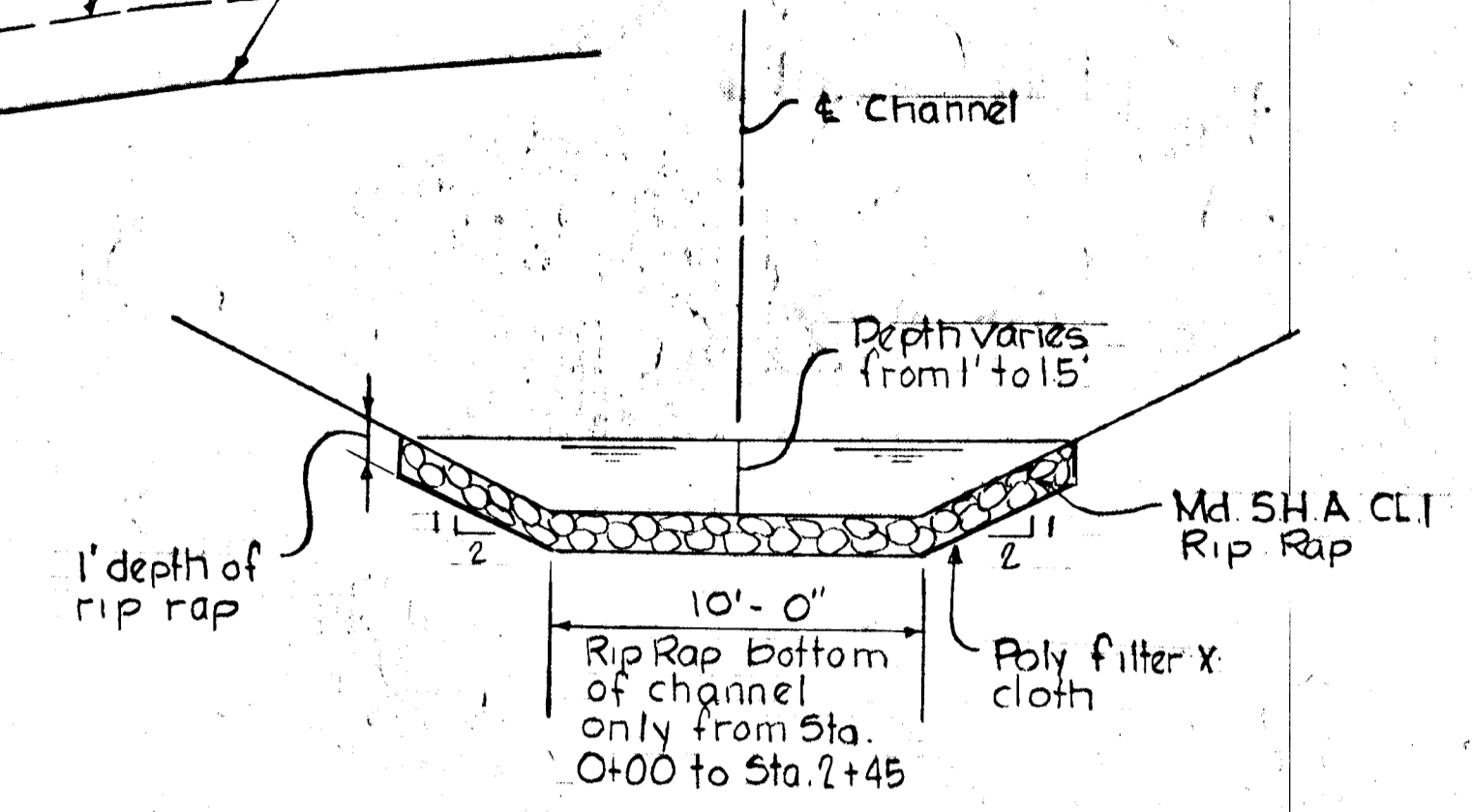
2 YR. STORM
 Peak Inflow = 94 c.f.s
 Release = 42.5 c.f.s
 Storage = 1.4 Acre Ft.

10 YR. STORM
 Peak Inflow = 202 c.f.s
 Release = 102.0 c.f.s
 Storage = 8.9 Acre Ft.

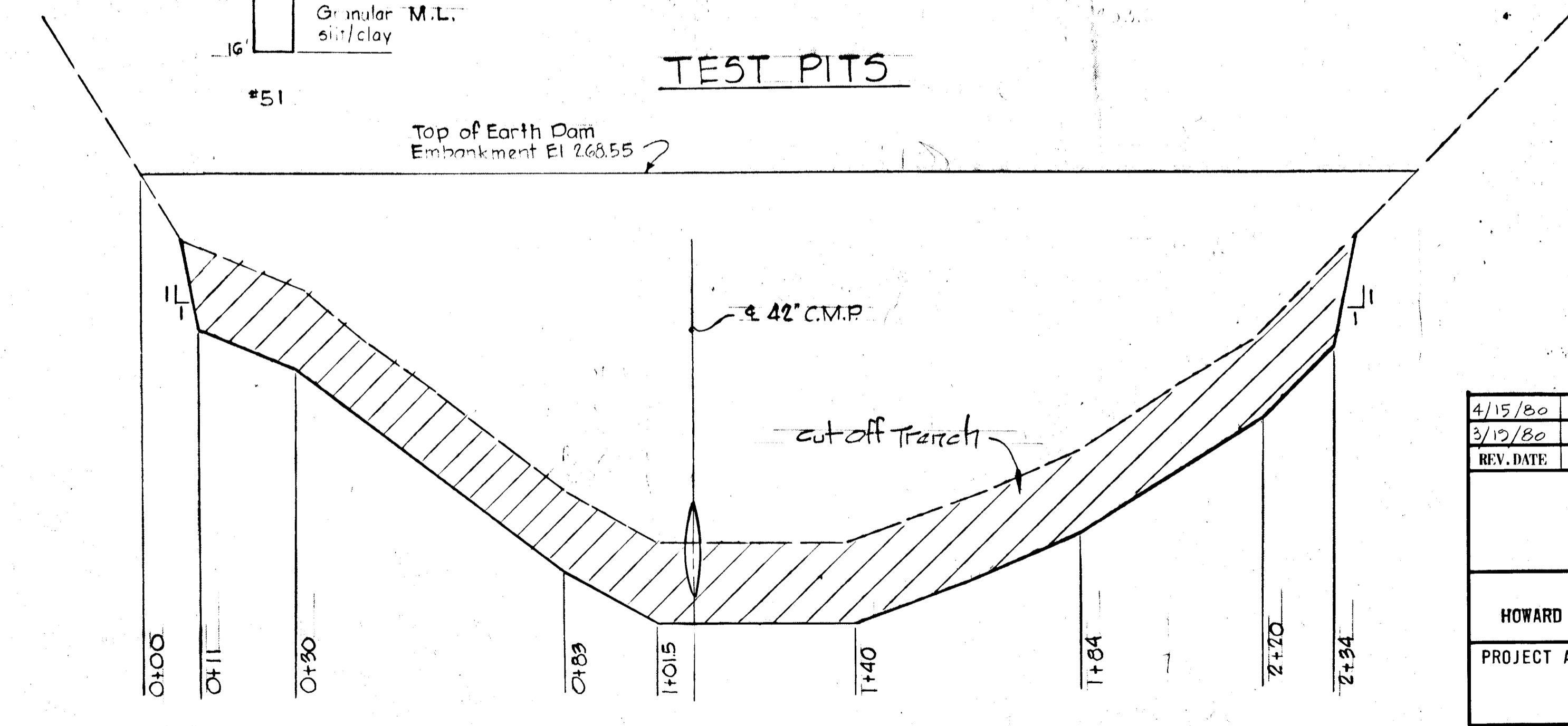
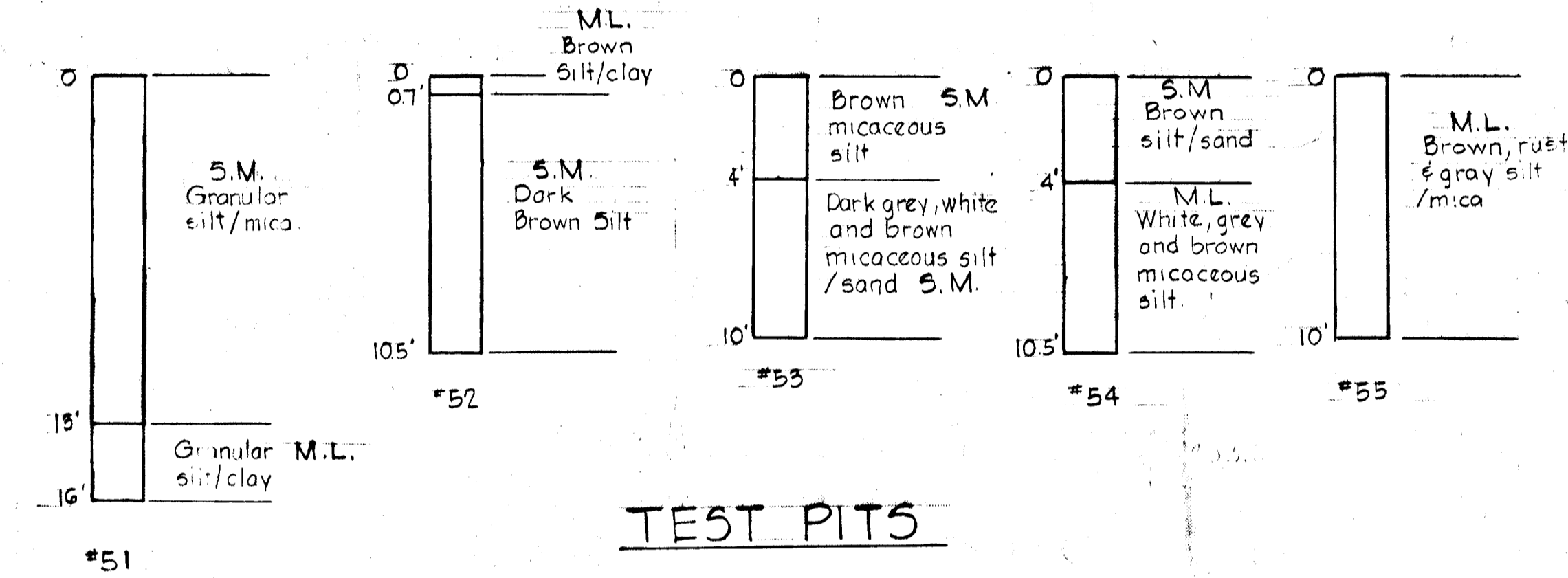
50 YR. STORM
 Peak Inflow = 276 c.f.s
 Release = 151.0 c.f.s
 Storage = 4.75 Acre Ft.



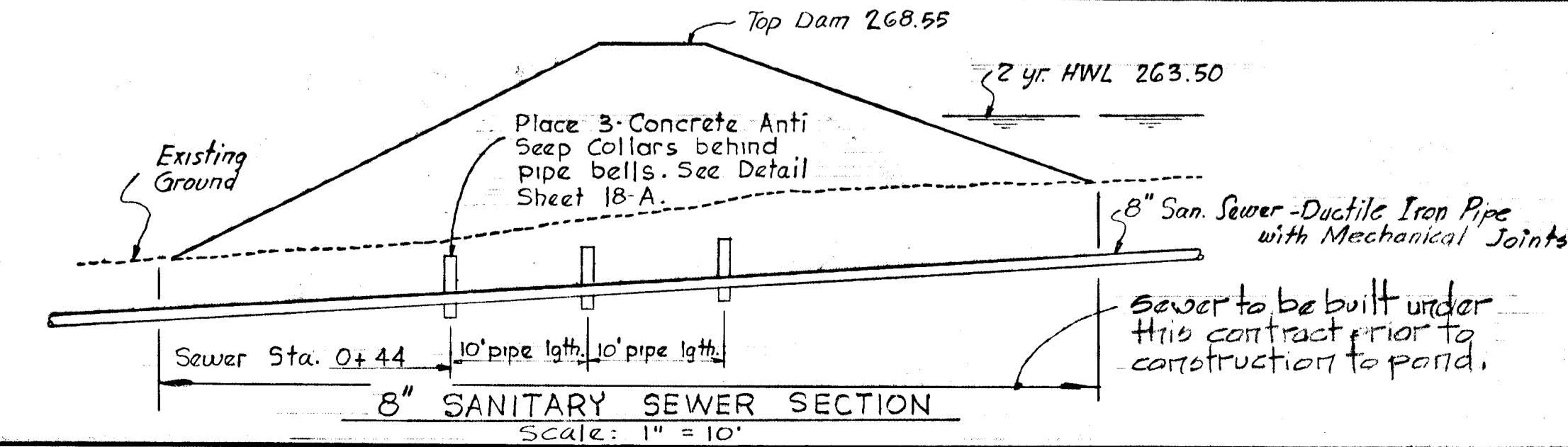
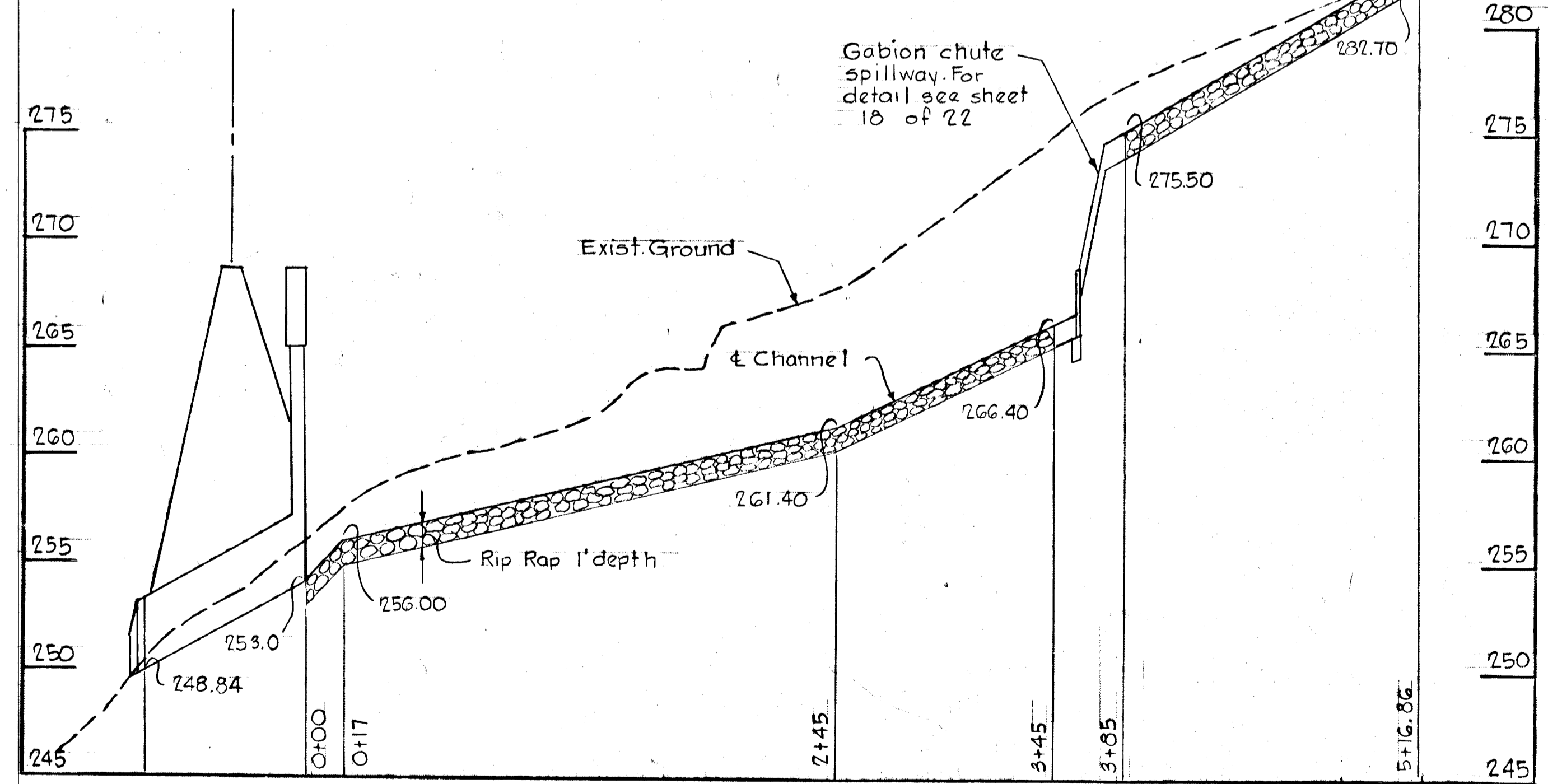
DAM AND SPILLWAY SECTION



TYPICAL CHANNEL SECTION



PROFILE EARTH DAM AND CUT OFF TRENCH



THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

SIGNATURE _____ DATE _____
 U.S. SOIL CONSERVATION SERVICE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: *Robert W. Zichem* 5/15/80
 HOWARD S.C.D. DATE

PLAN NUMBER _____

4/15/80	2	As per DPW Comments
3/17/80	1	As per DPW Comments
REV. DATE	REV. NO.	REVISION DESCRIPTION
COLUMBIA 6TH. ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORPORATION		
PROJECT AREA VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 2		
PROJECT TITLE STORM WATER MANAGEMENT POND NO. 5		
SCALE: AS SHOWN		DATE:
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21202		
<i>Kenneth A. McCord</i>		DATE: 11-8-79
KENNETH A. MCCORD REGISTERED ENGINEER NO. 1974		

CERTIFICATION BY THE DEVELOPER

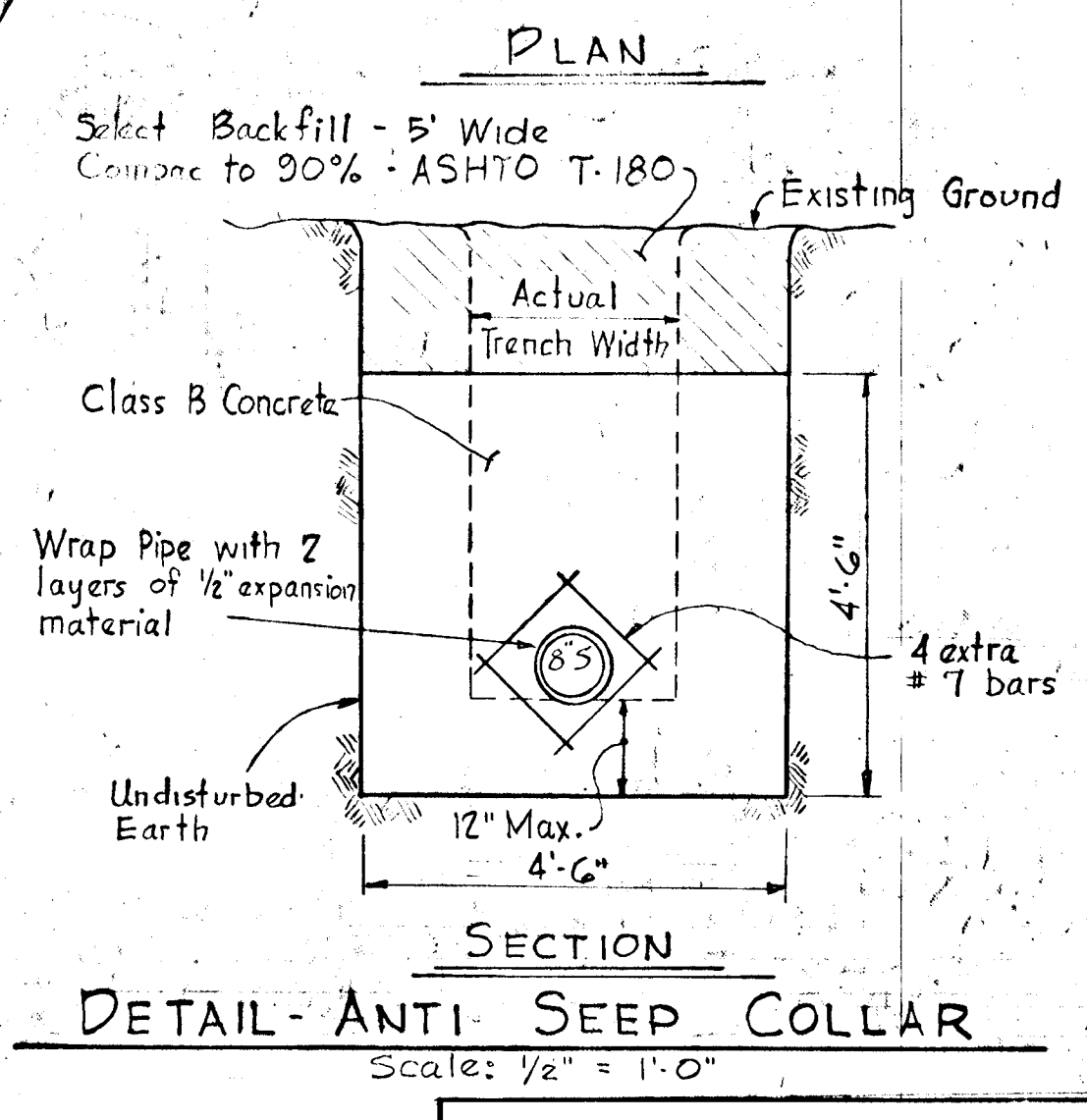
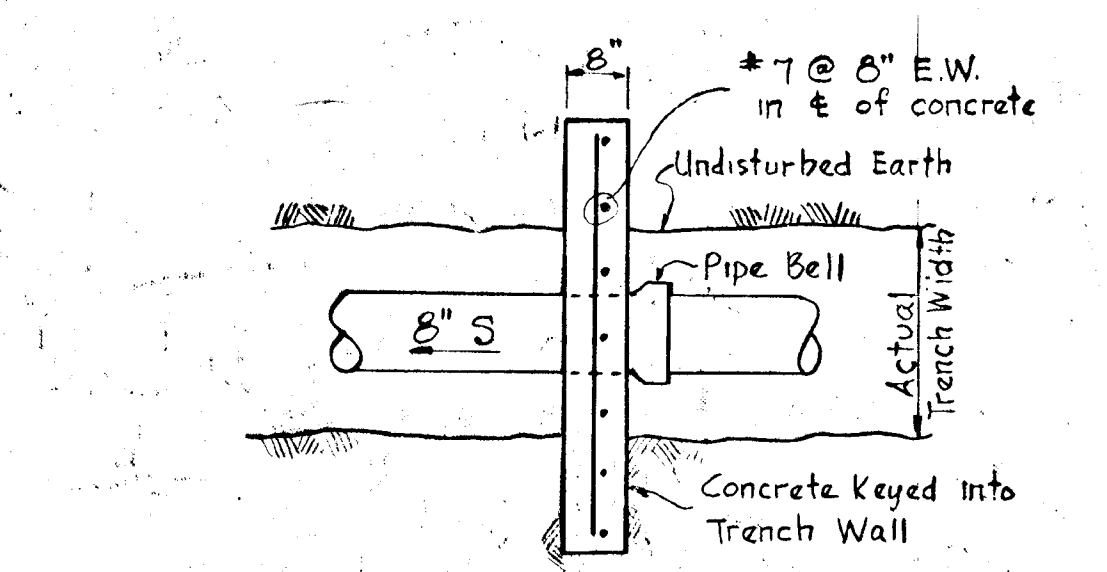
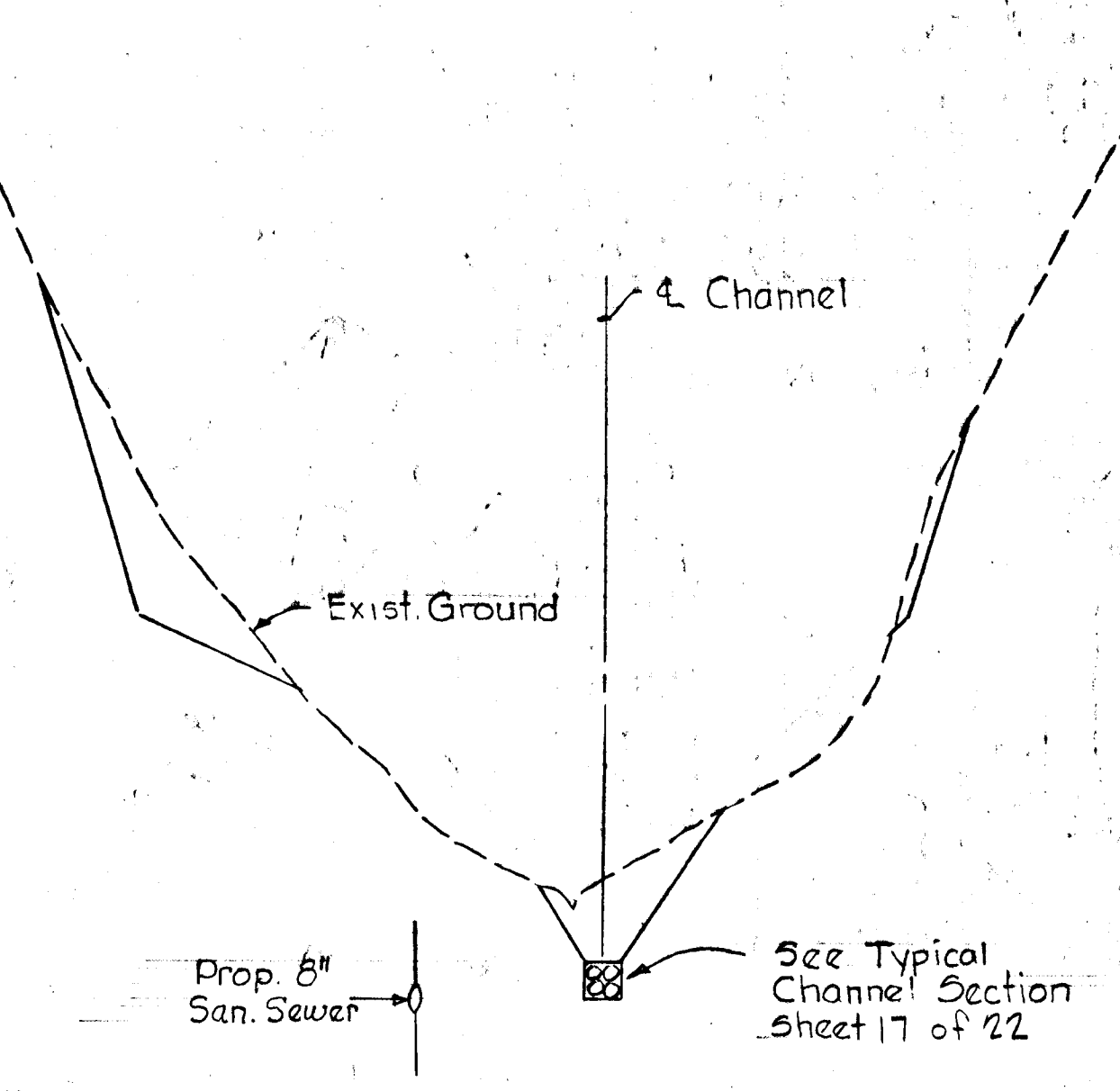
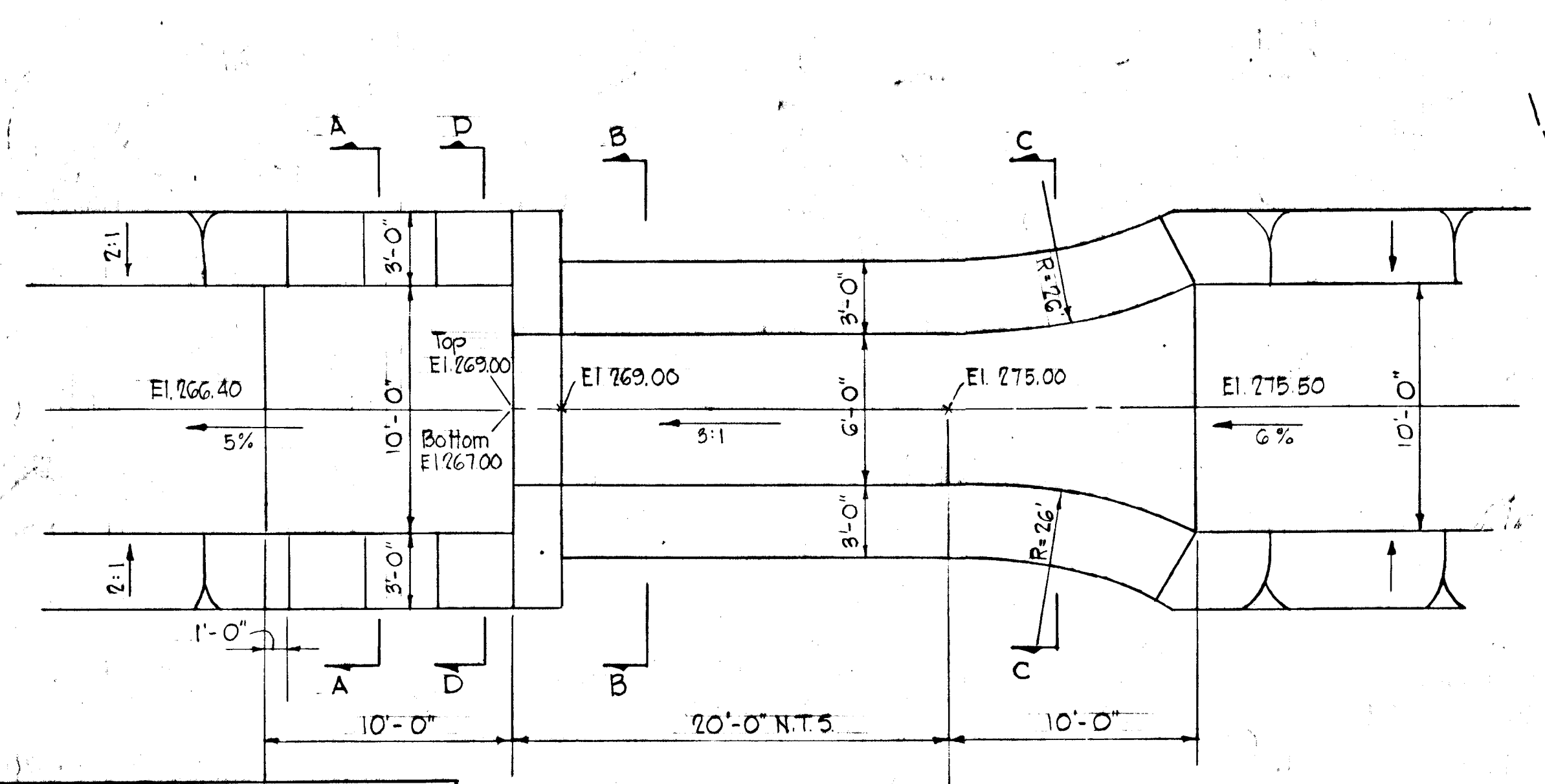
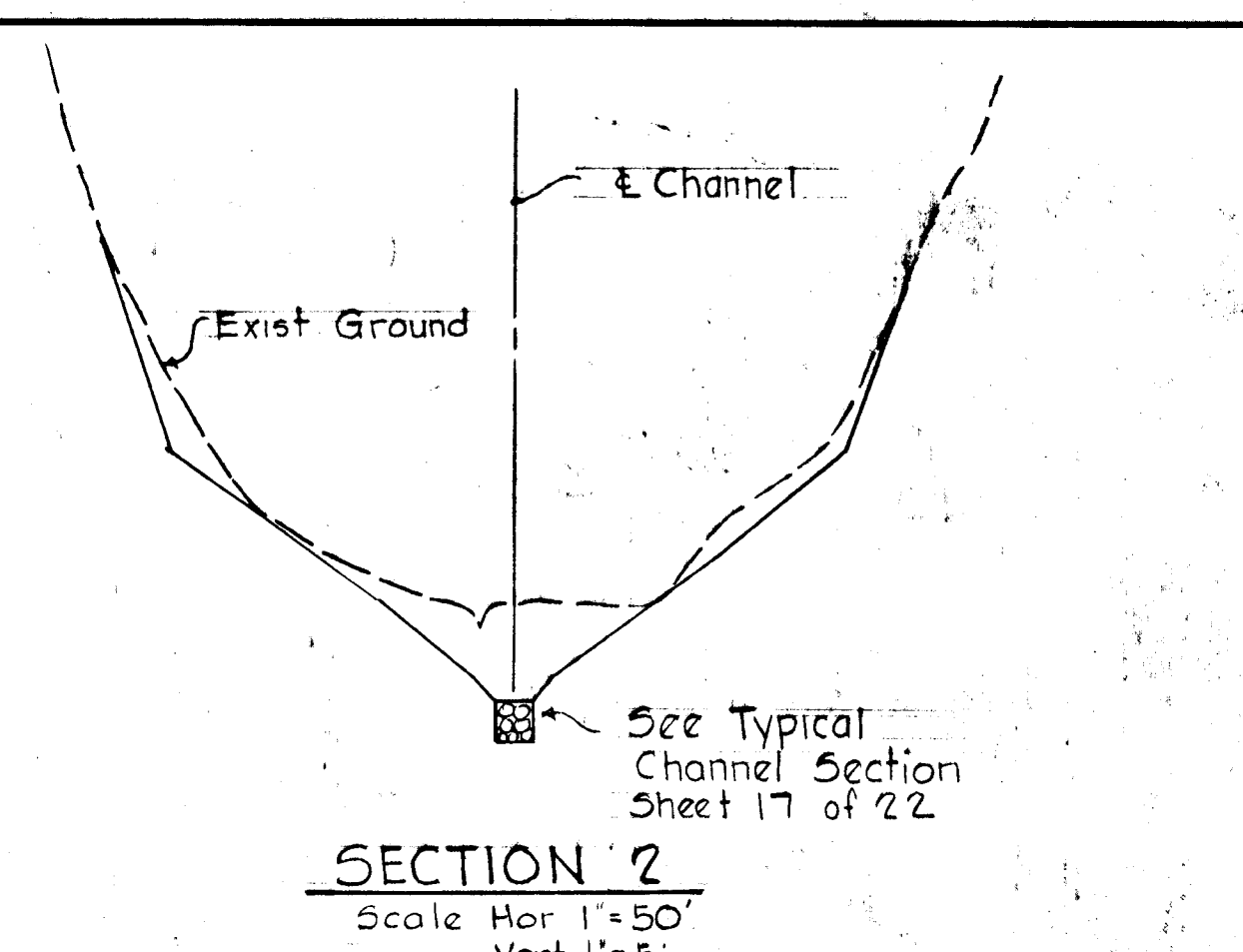
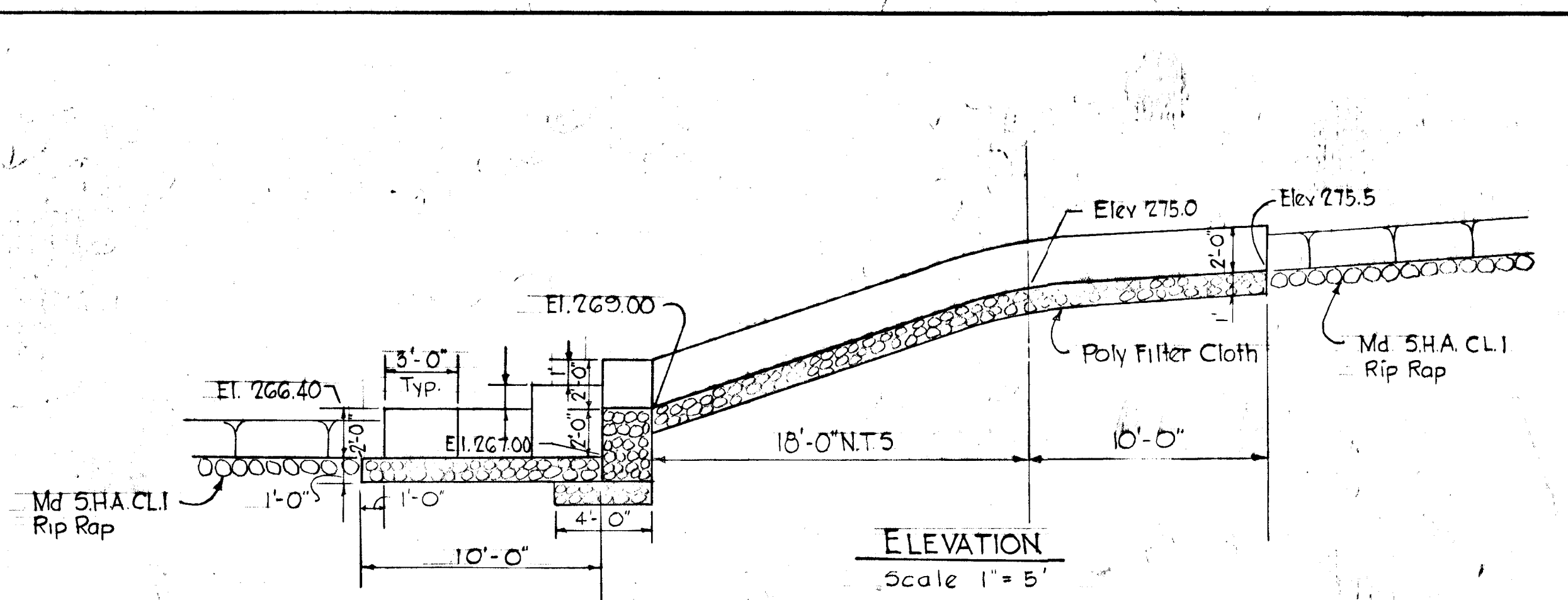
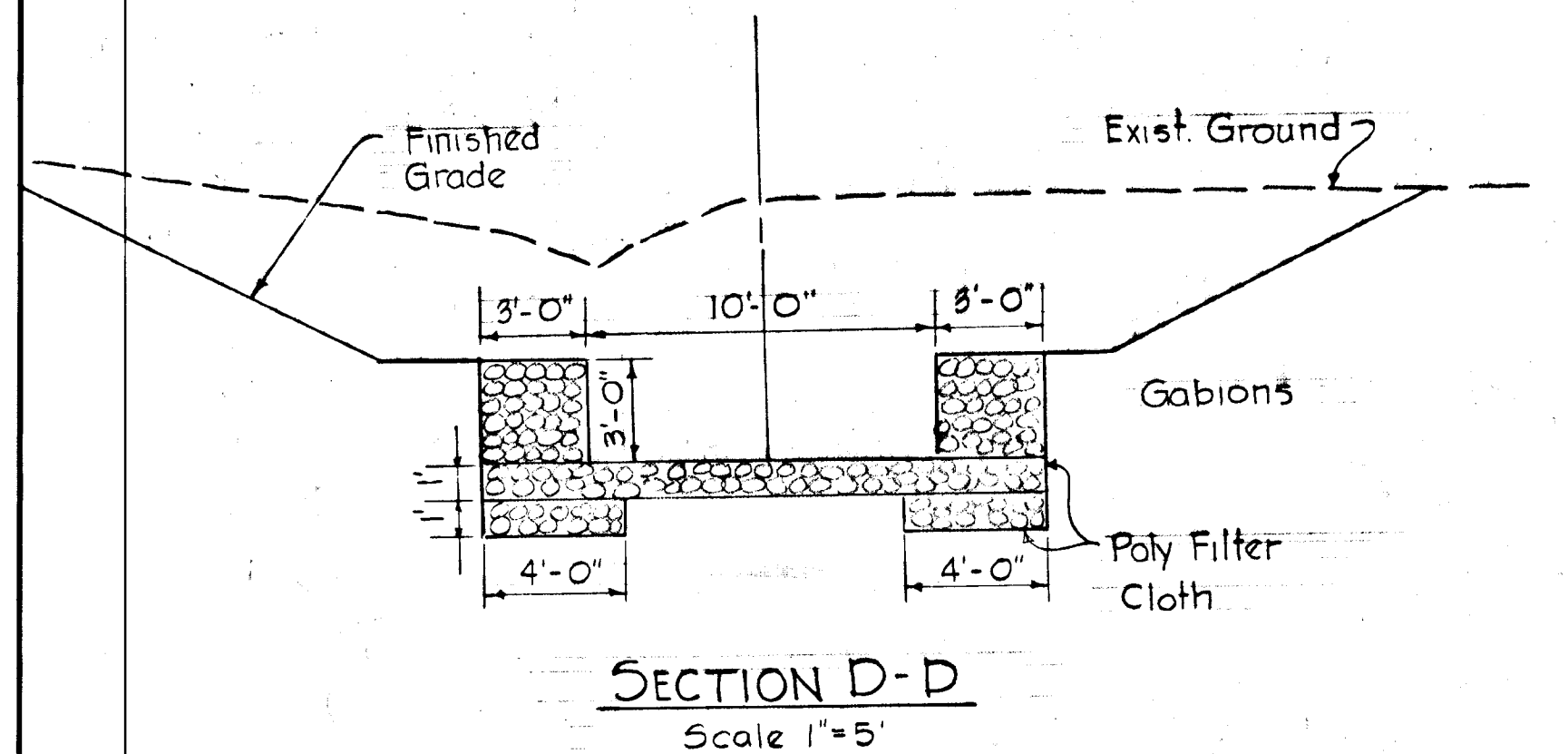
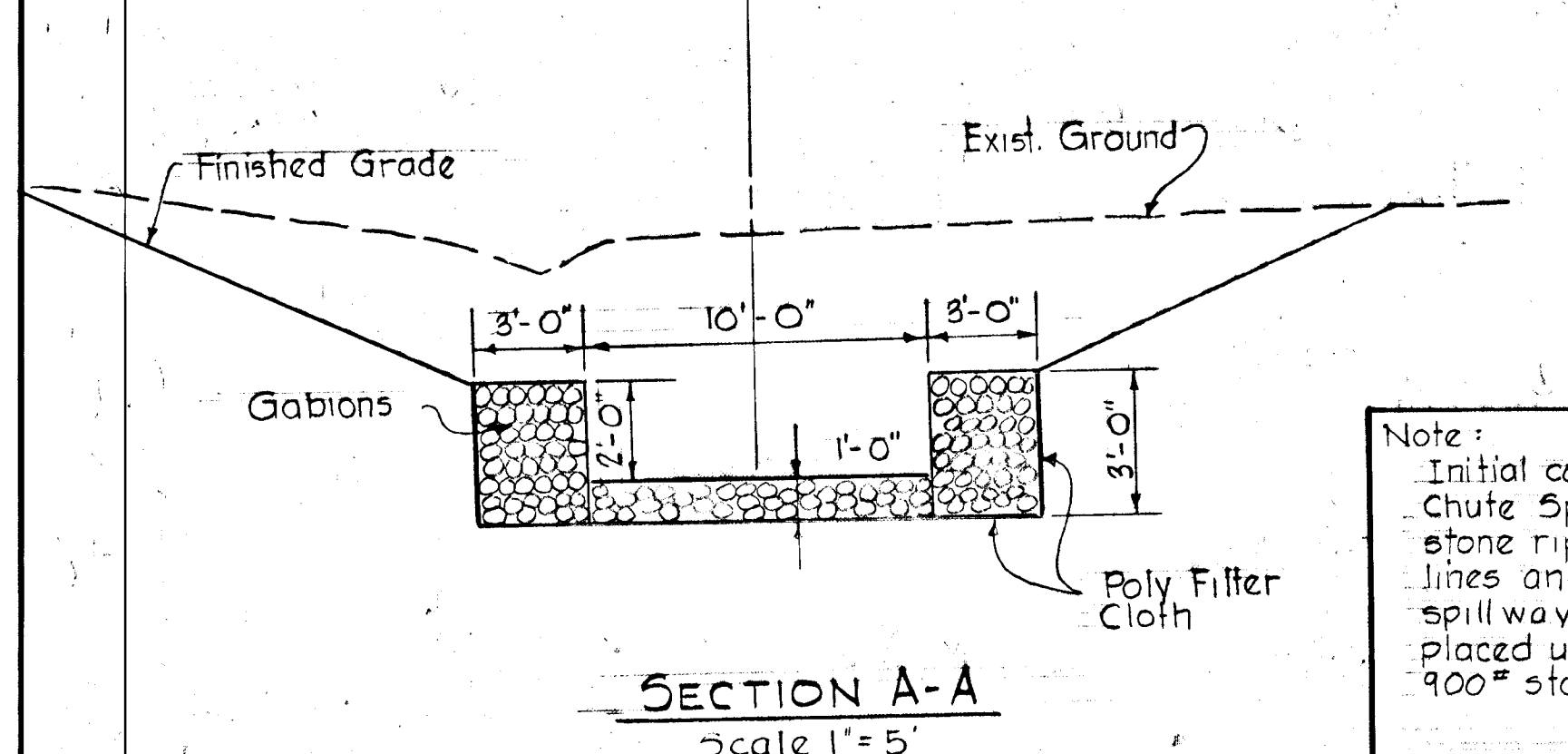
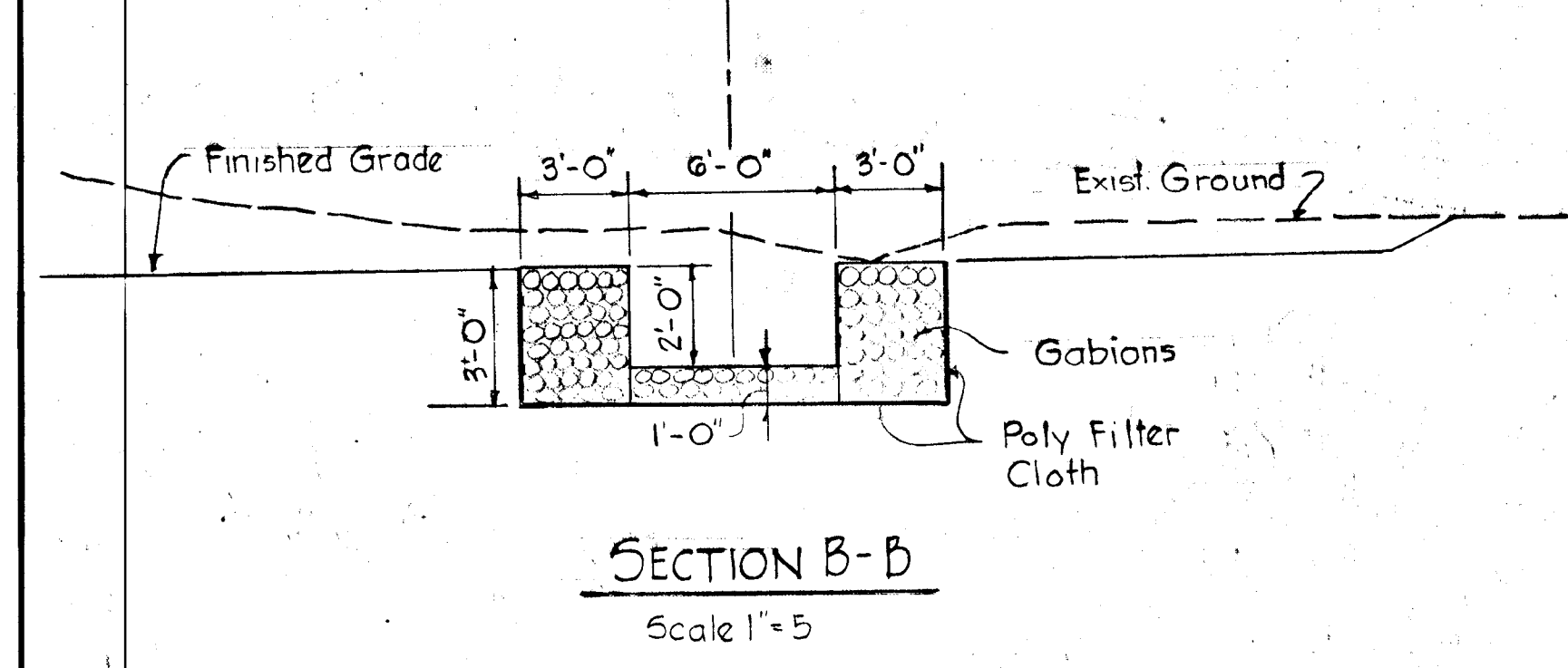
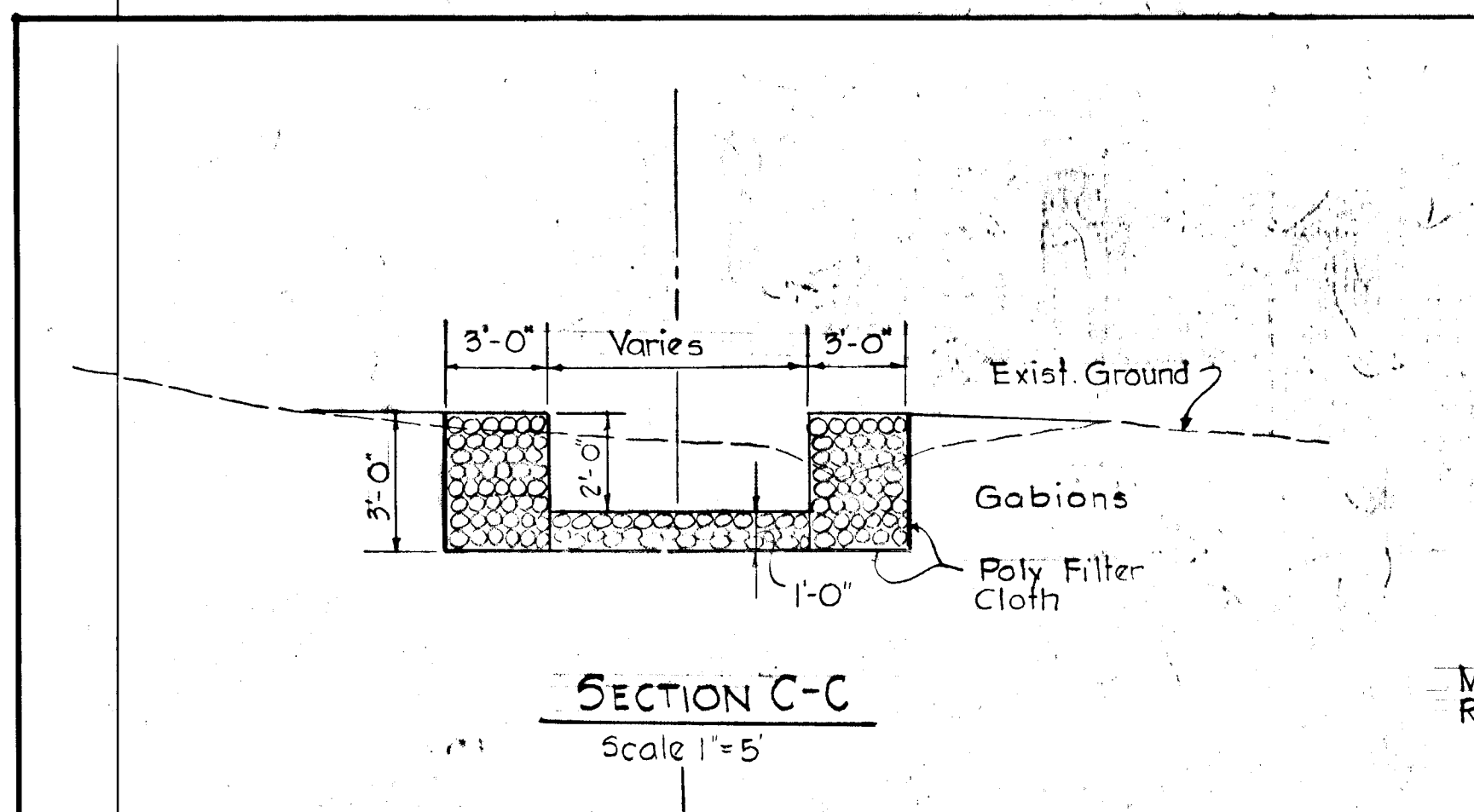
"I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION OF THIS POND WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT". I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL AUTHORIZE A REGISTERED PROFESSIONAL ENGINEER TO SUPPLY THE HOWARD SOIL CONSERVATION DISTRICT OFFICE WITH AN AS-BUILT PLAN OF THIS POND WITHIN 30 DAYS OF THE POND'S COMPLETION.

WALTER WOODFORD DATE: 11-8-79

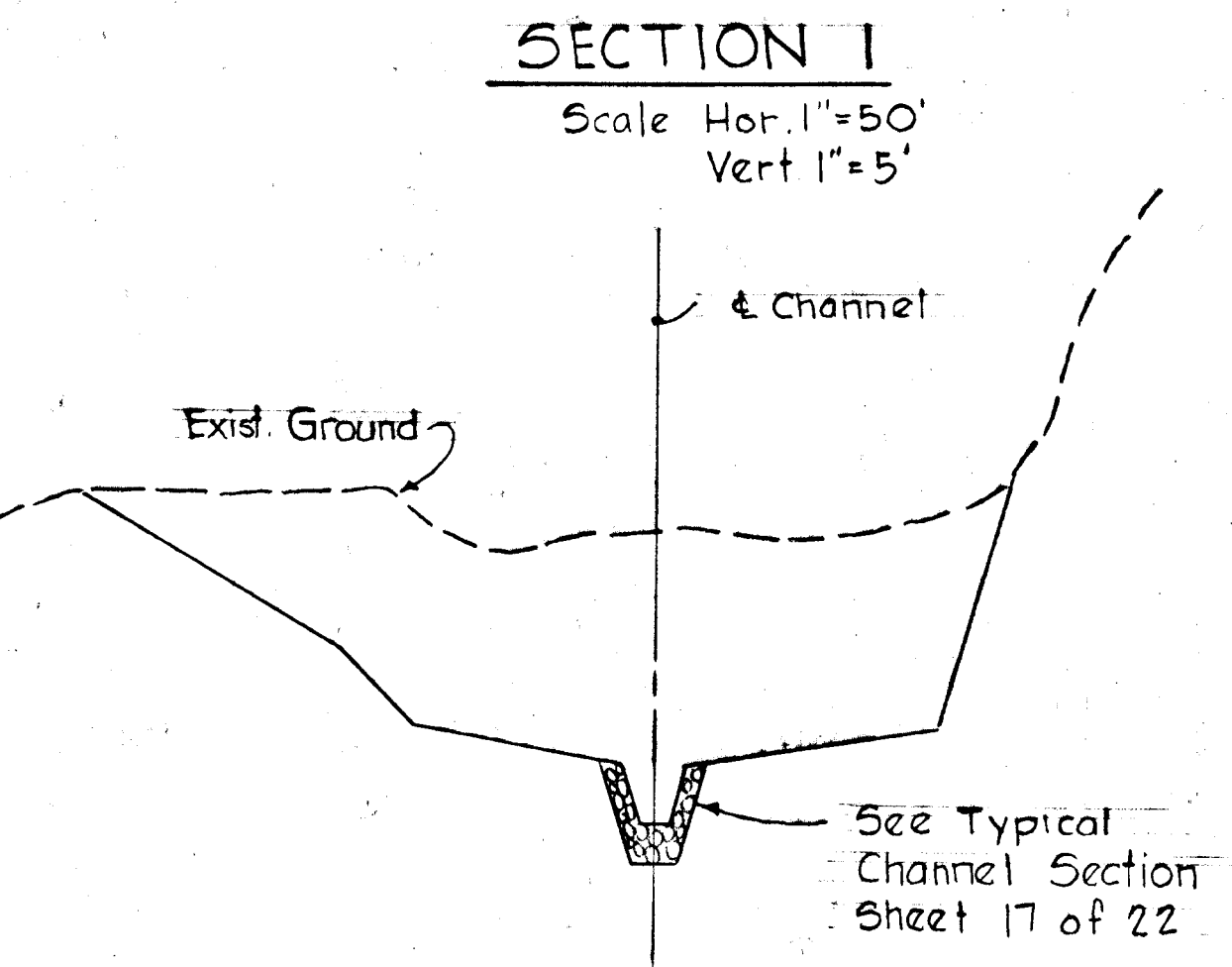
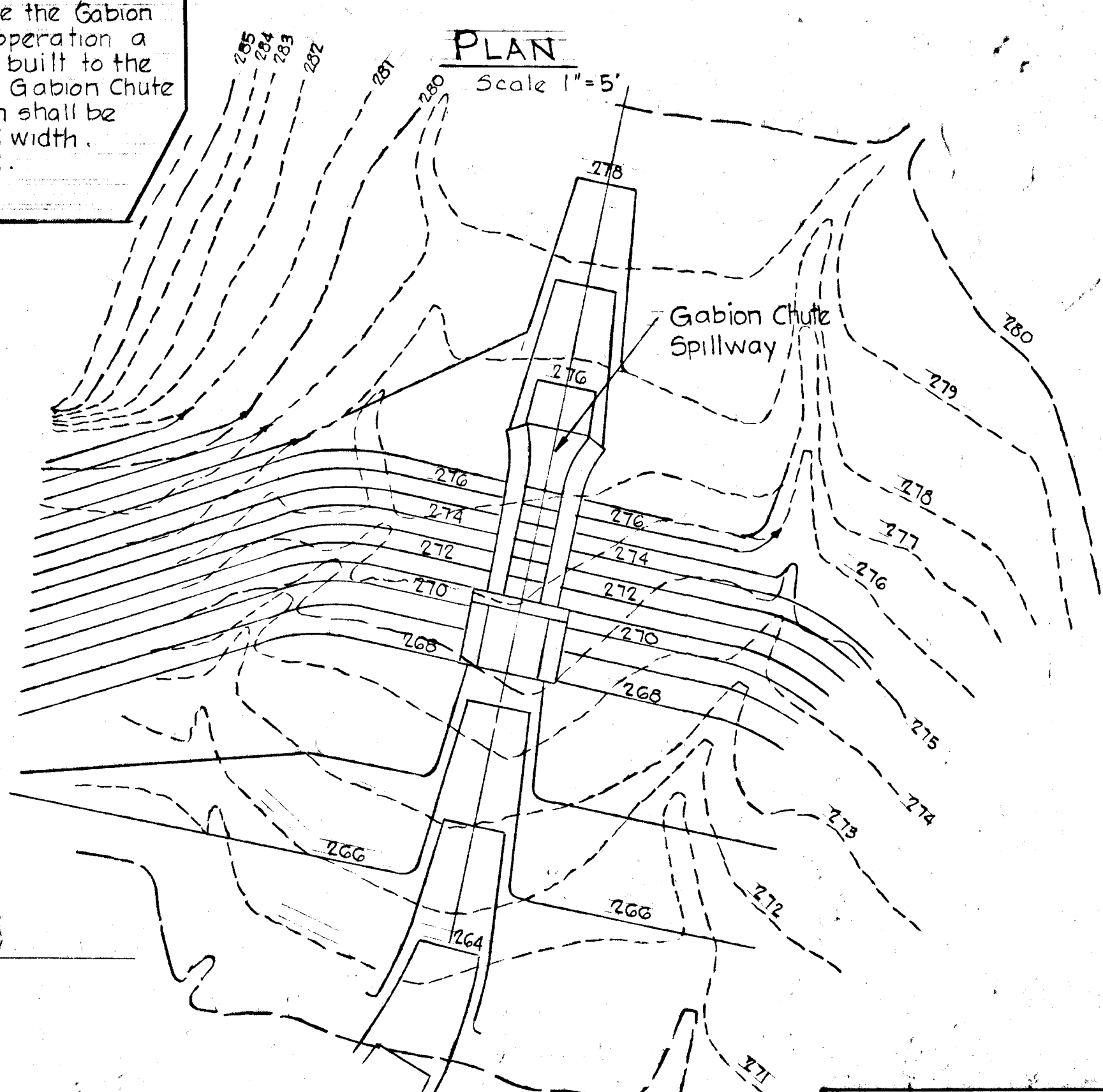
CERTIFICATION BY THE ENGINEER

"I CERTIFY THAT THIS PLAN FOR SMALL POND CONSTRUCTION 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. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION."

Kenneth A. McCord DATE: 11-8-79
 KENNETH A. MCCORD



Note:
 Initial construction does not include the Gabion Chute Spillway. For sediment basin operation a stone rip rap structure shall be built to the lines and grades as shown in the Gabion Chute spillway detail. Poly Filter-X cloth shall be placed under stone full length and width. 900# stone rip rap shall be used.



THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
James M. Nelson 5-8-80
 U.S. SOIL CONSERVATION SERVICE DATE:
 THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: *Robert D. Johns* 5/6/80
 HOWARD S.C.D. DATE:

DATE	REV. NO.	REVISION DESCRIPTION
4/15/80	2	As per DPW Comments
3/17/80	1	As per DPW Comments

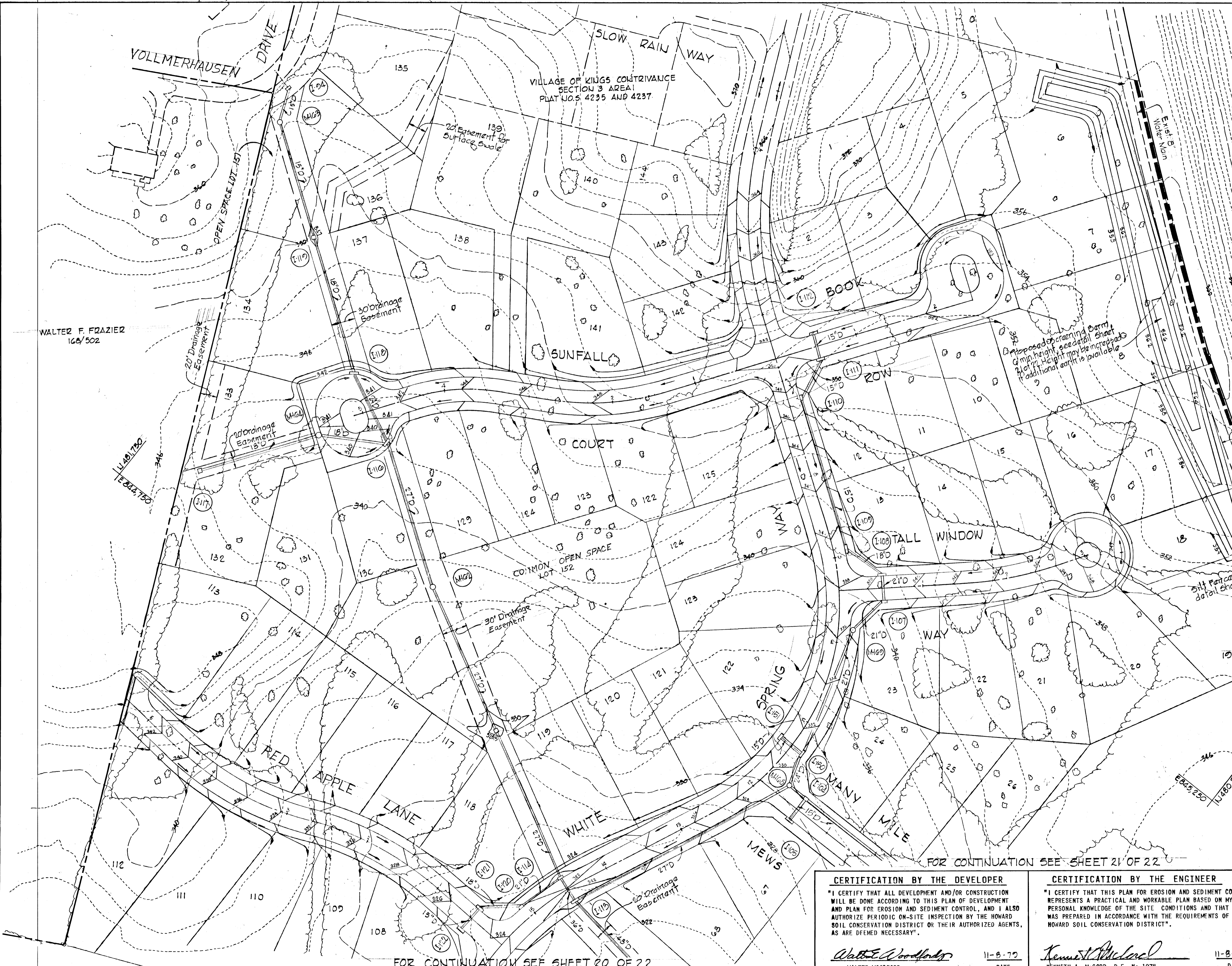
COLUMBIA
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 PROJECT AREA:
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2
 PROJECT TITLE:
 STORM WATER MANAGEMENT POND NO. 5

CERTIFICATION BY THE DEVELOPER
 "I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT, POND CONSTRUCTION AND EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETING POND REFRURISHING."
Walter Woodford
 WALTER WOODFORD
 DATE: 11-8-79

CERTIFICATION BY THE ENGINEER
 "I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION, AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION."
Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974
 DATE: 11-8-79

SCALE: AS SHOWN DATE
 WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202
Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974

GABION CHUTE SPILLWAY DETAIL
 Scale As Shown



REVIEWED FOR HOWARD S.C.D.
 AND MEETS TECHNICAL REQUIREMENTS

James M. ... 5-8-80
 SIGNATURE DATE

U.S. SOIL CONSERVATION SERVICE

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

APPROVED: *Robert D. ...* 5/8/80
 HOWARD S.C.D. DATE

4/15/80	2	As per DPW Comments
3/19/80	1	As per DPW Comments
REV. DATE	REV. NO.	REVISION DESCRIPTION

COLUMBIA
 6TH. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

PROJECT AREA:
 SECTION 3 AREA 2

PROJECT TITLE:
 SEDIMENT CONTROL

SCALE: 1" = 50' DATE:

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974

CERTIFICATION BY THE DEVELOPER
 "I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL, AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."
Walter Woodford
 WALTER WOODFORD
 11-8-77
 DATE

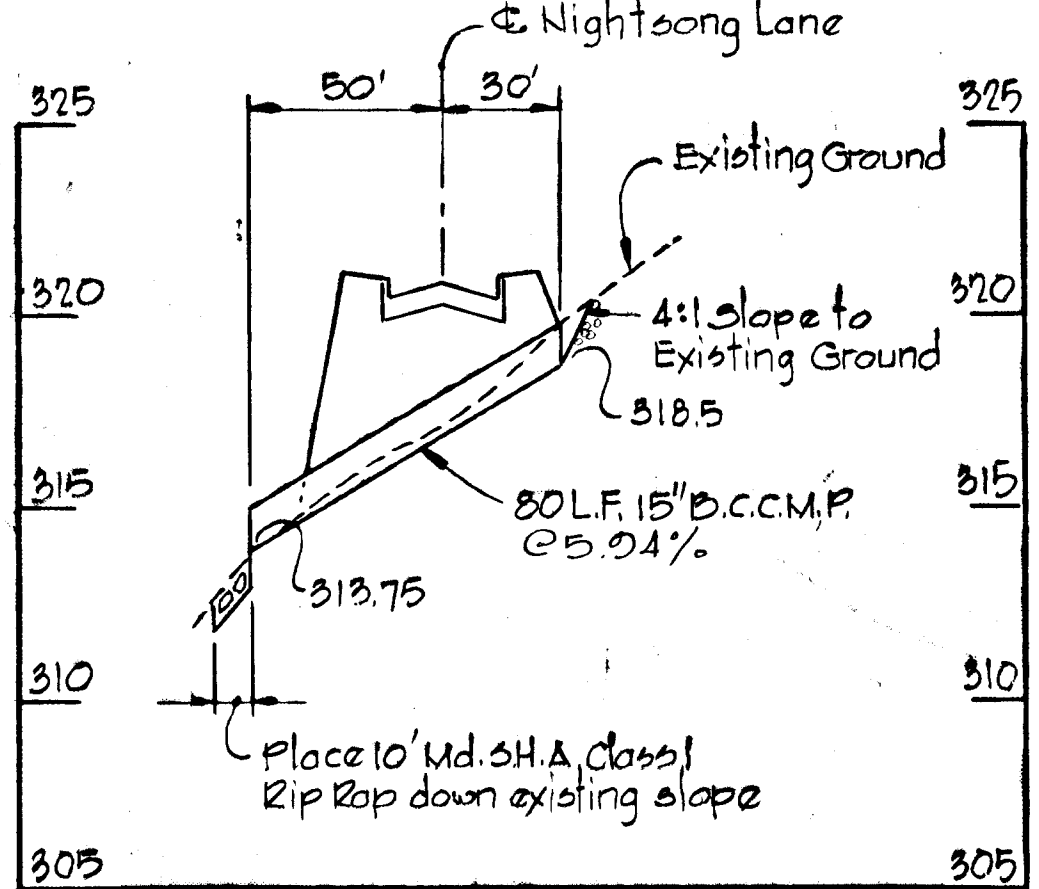
CERTIFICATION BY THE ENGINEER
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
Kenneth A. McCord
 KENNETH A. MCCORD, P.E. No. 1974
 11-8-77
 DATE

FOR CONTINUATION SEE SHEET 20 OF 22

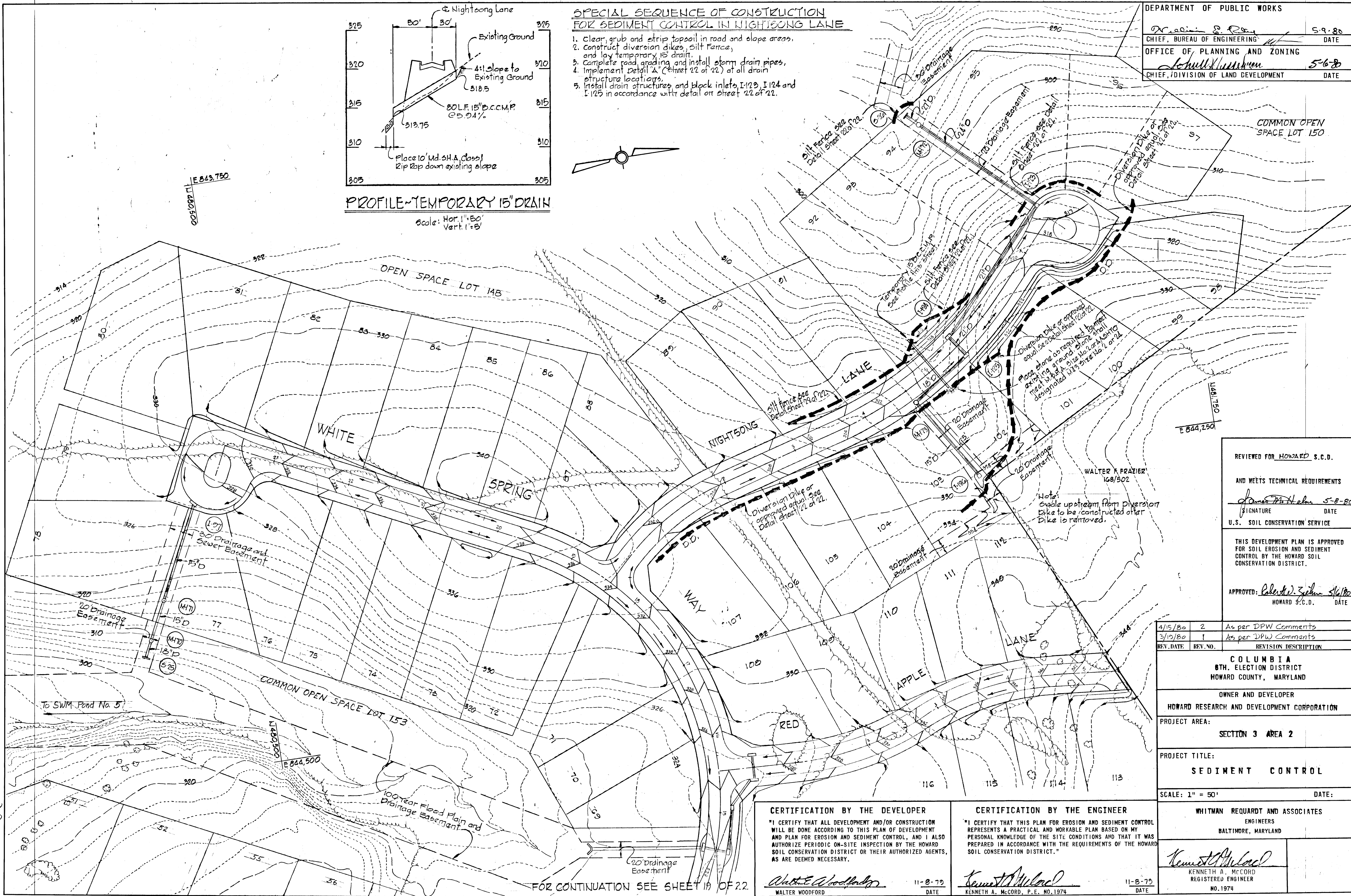
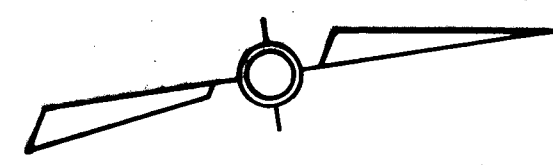
FOR CONTINUATION SEE SHEET 21 OF 22

SPECIAL SEQUENCE OF CONSTRUCTION FOR SEDIMENT CONTROL IN NIGHTSONG LANE

1. Clear, grub and strip topsoil in road and slope areas.
2. Construct diversion dikes, Silt Fence, and lay temporary 15" drain.
3. Complete road grading and install storm drain pipes.
4. Implement Detail A (Sheet 22 of 22) at all drain structure locations.
5. Install drain structures and block inlets, I-123, I-124 and I-125 in accordance with detail on Sheet 22 of 22.



PROFILE - TEMPORARY 15" DRAIN
 Scale: Hor. 1"=50'
 Vert. 1"=5'



REVIEWED FOR HOWARD S.C.D.
 AND MEETS TECHNICAL REQUIREMENTS
James M. ... 5-8-80
 SIGNATURE DATE
 U.S. SOIL CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: *Robert J. ...*
 HOWARD S.C.D. DATE

REV. DATE	REV. NO.	REVISION DESCRIPTION
4/15/80	2	As per DPW Comments
3/12/80	1	As per DPW Comments

COLUMBIA
 8TH. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 PROJECT AREA:
 SECTION 3 AREA 2
 PROJECT TITLE:
 SEDIMENT CONTROL
 SCALE: 1" = 50' DATE:

CERTIFICATION BY THE DEVELOPER
 "I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL, AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."
Walter Woodford
 WALTER WOODFORD
 11-8-79
 DATE

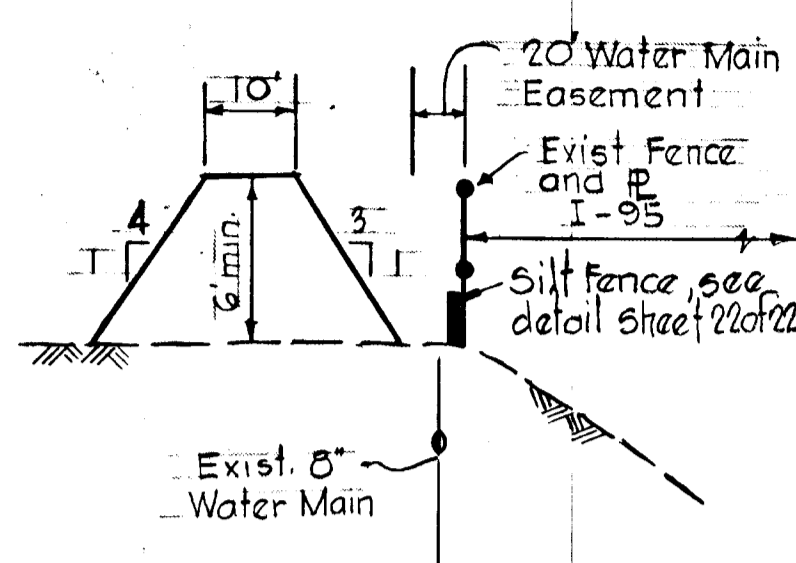
CERTIFICATION BY THE ENGINEER
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
Kenneth A. McCord
 KENNETH A. MCCORD, P.E. NO. 1974
 11-8-79
 DATE

WHITMAN REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND
Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974

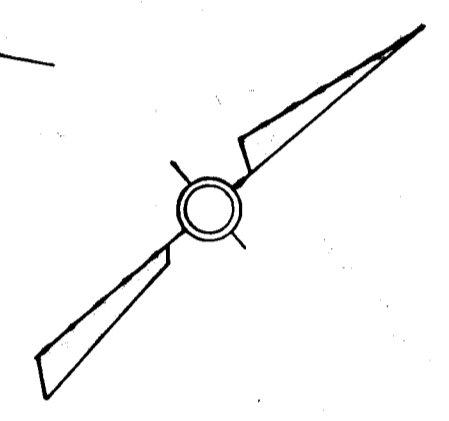
FOR CONTINUATION SEE SHEET 19 OF 22

FOR CONTINUATION SEE SHEET 20 OF 22

DEPARTMENT OF PUBLIC WORKS
William E. Ray 5-9-80
 CHIEF, BUREAU OF ENGINEERING DATE
 OFFICE OF PLANNING AND ZONING
John W. Haddeman 5-8-80
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE



SCREENING BERM DETAIL
 No Scale



FOR CONTINUATION SEE SHEET 19 OF 22

REVIEWED FOR HOWARD S.C.D.

AND MEETS TECHNICAL REQUIREMENTS

James W. Hahn 5-8-80
 SIGNATURE DATE
 U.S. SOIL CONSERVATION SERVICE

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

APPROVED: *Robert D. Zolner* 5/6/80
 HOWARD S.C.D. DATE

4/15/80	2	As per DPW Comments
3/19/80	1	As per DPW Comments
REV. DATE	REV. NO.	REVISION DESCRIPTION

COLUMBIA
 6TH. ELECTION DISTRICT
 HOWARD COUNTY MARYLAND

OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION

PROJECT AREA:
 SECTION 3 AREA 2

PROJECT TITLE:
 SEDIMENT CONTROL

SCALE: 1" = 50' DATE:

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202

Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER
 NO. 1974

CERTIFICATION BY THE DEVELOPER
 "I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL, AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

Walter Woodford
 WALTER WOODFORD
 11-8-79 DATE

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

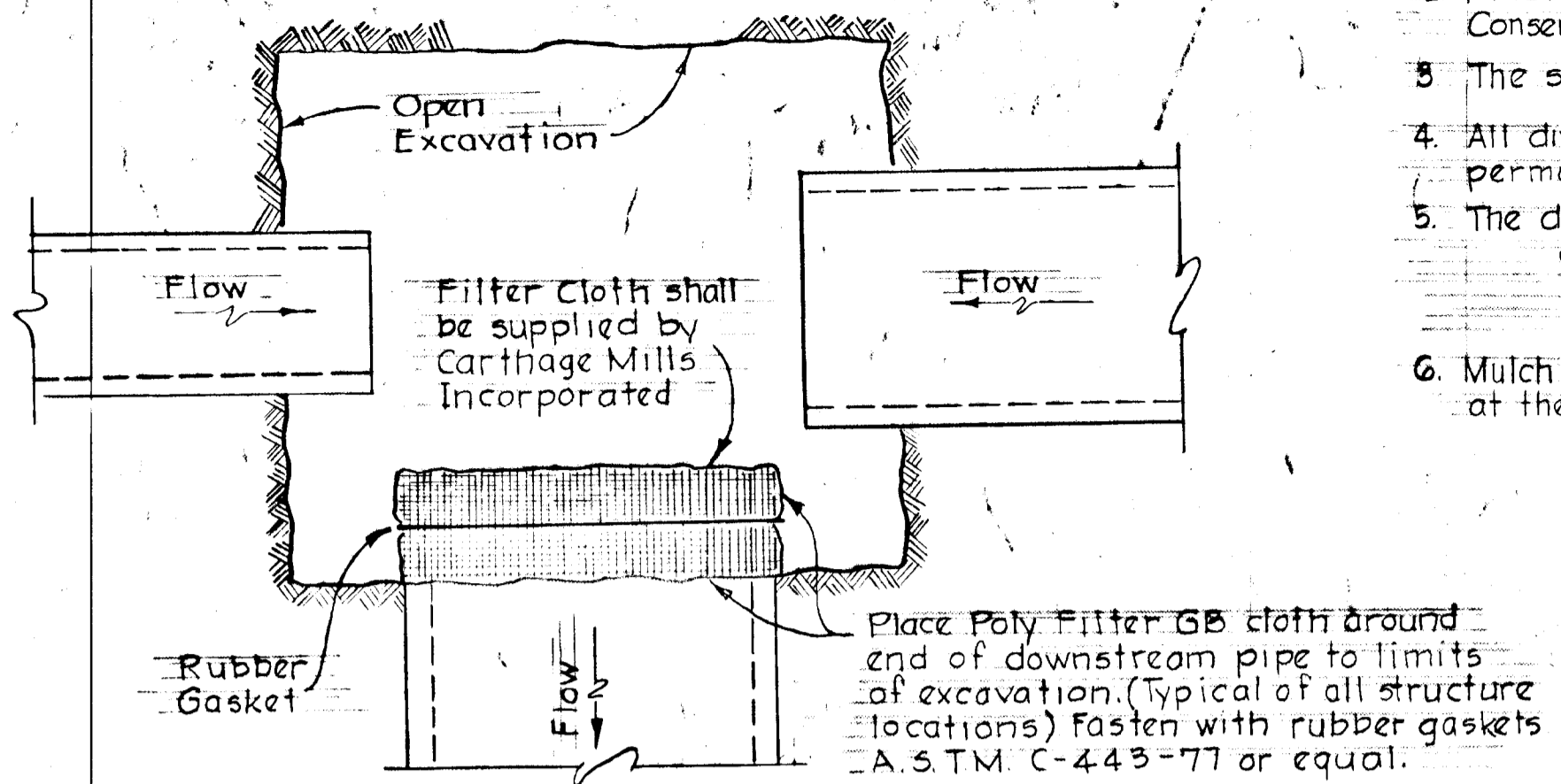
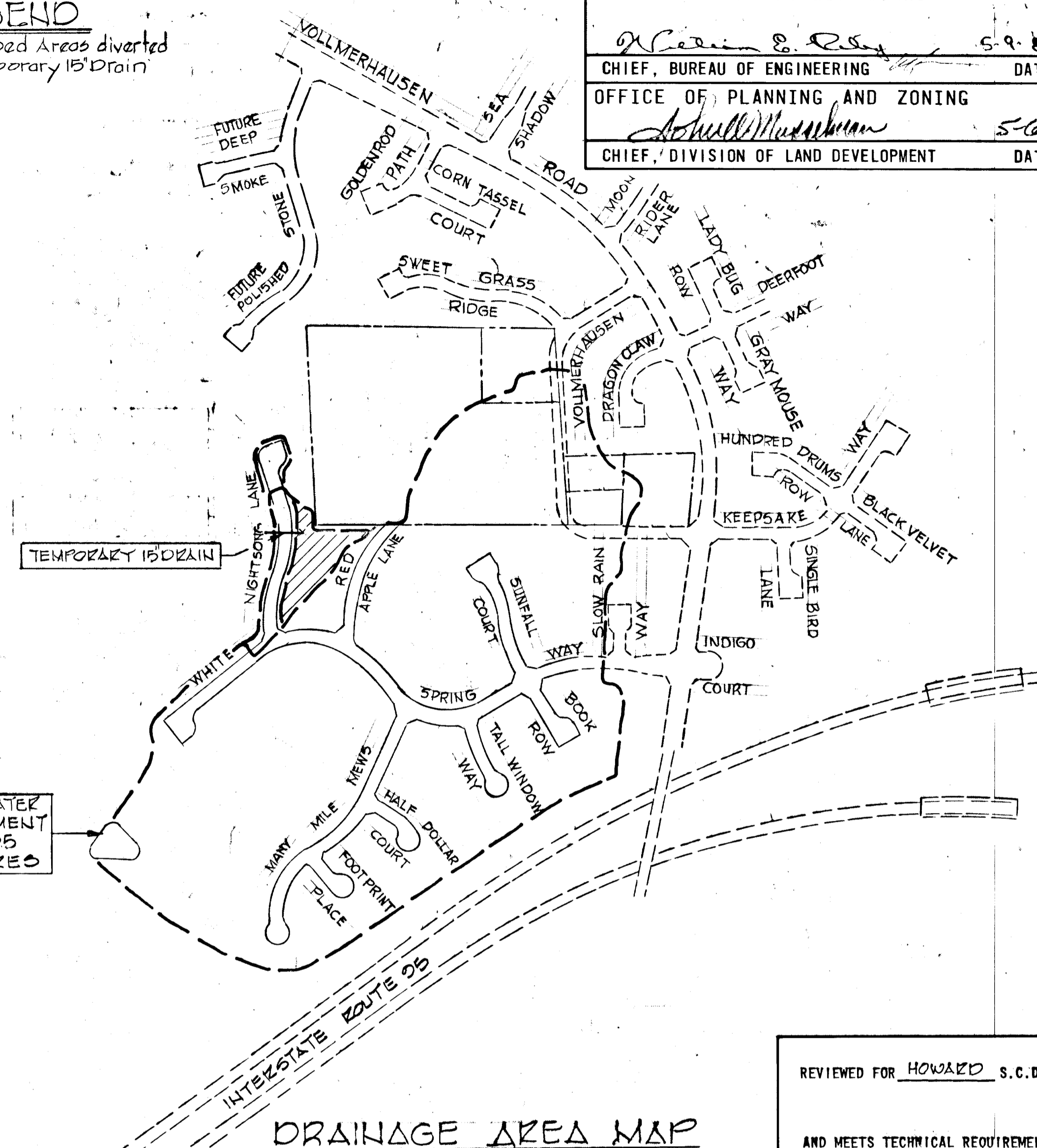
Kenneth A. McCord
 KENNETH A. MCCORD
 11-8-79 DATE

GENERAL NOTES

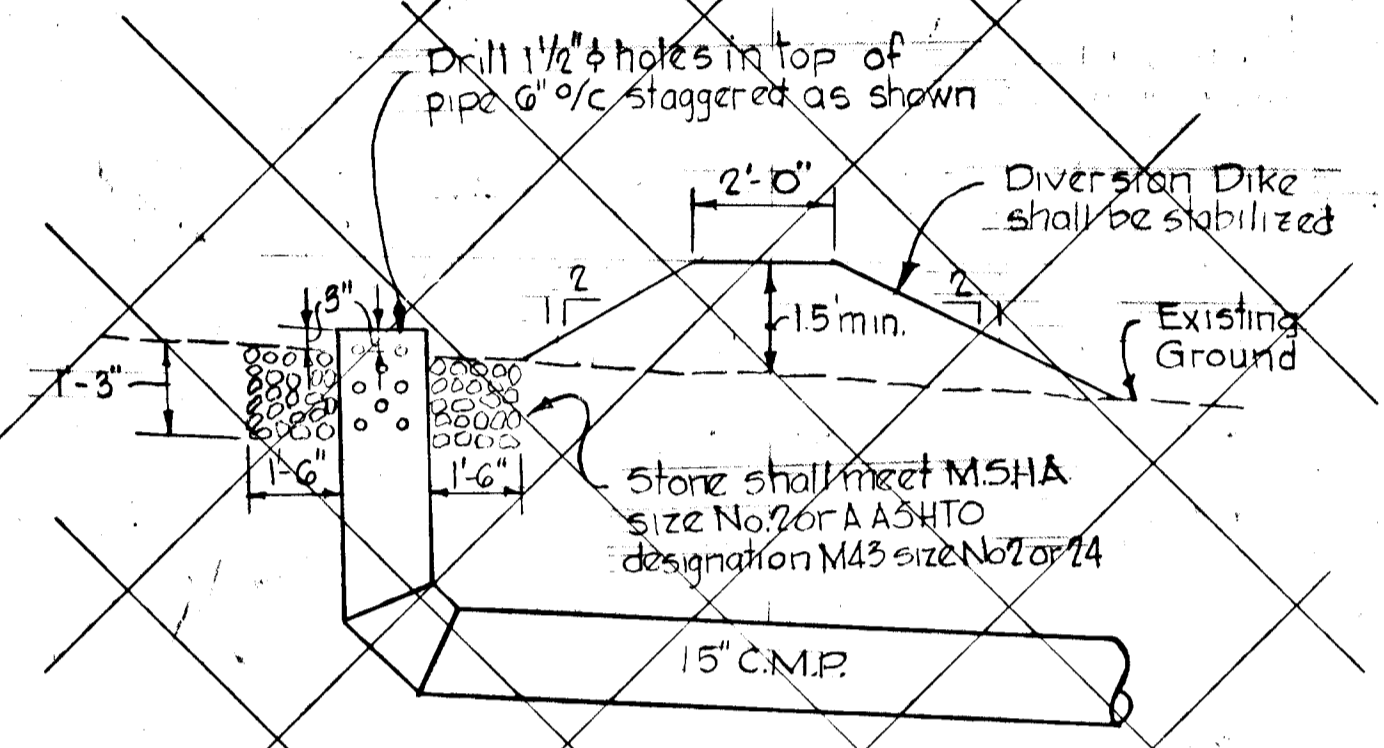
- See "Sequence of Construction" on Sheet 1.
- Prior to starting any work the contractor shall notify the Howard Soil Conservation District at least 24 hours in advance of notice to begin.
- The sediment control measures shall be constructed as shown on these drawings.
- All diversion dikes shall be seeded as specified in notes 5 and 6. All others shall be permanently seeded. See Specifications on Sheet 1.
- The diversion dikes shall be hydroseeded as follows:
 - Ground Lime stone (50#/1000^{sq}) one ton/acre
 - Fertilizer, 10-10-10 (25#/1000^{sq}) 1/2 ton/acre
 - Seed, Italian Rye Grass 40#/acre
- Mulch with straw at the rate of 70#/1000^{sq} or one and one half tons/acre. Anchor with Asphalt at the rate of 480 gallons/acre.

LEGEND
 Undisturbed Areas diverted into Temporary 15' Drain

DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Engineering
 Office of Planning and Zoning
 Chief, Division of Land Development

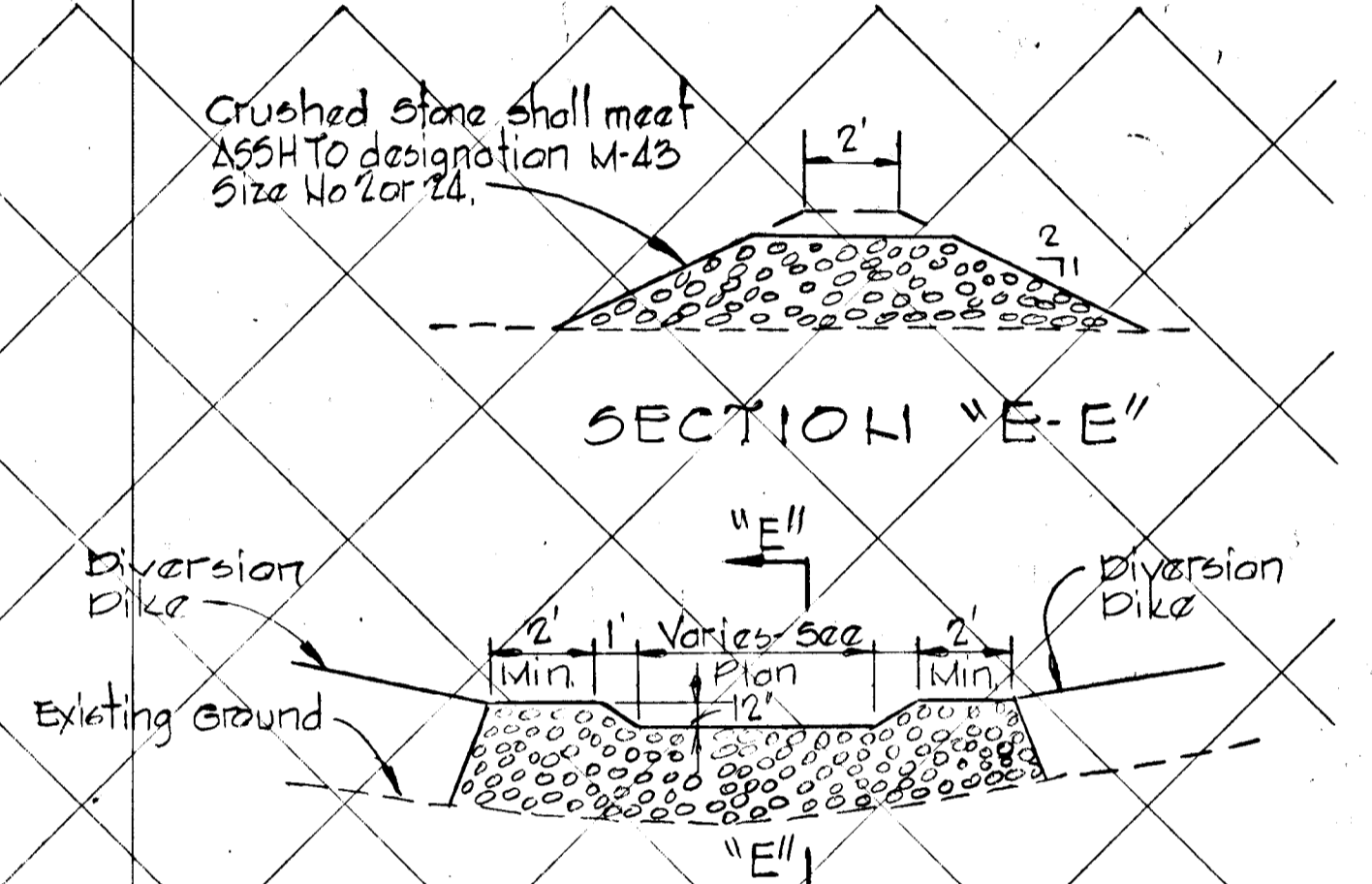


DETAIL 'A'
No Scale

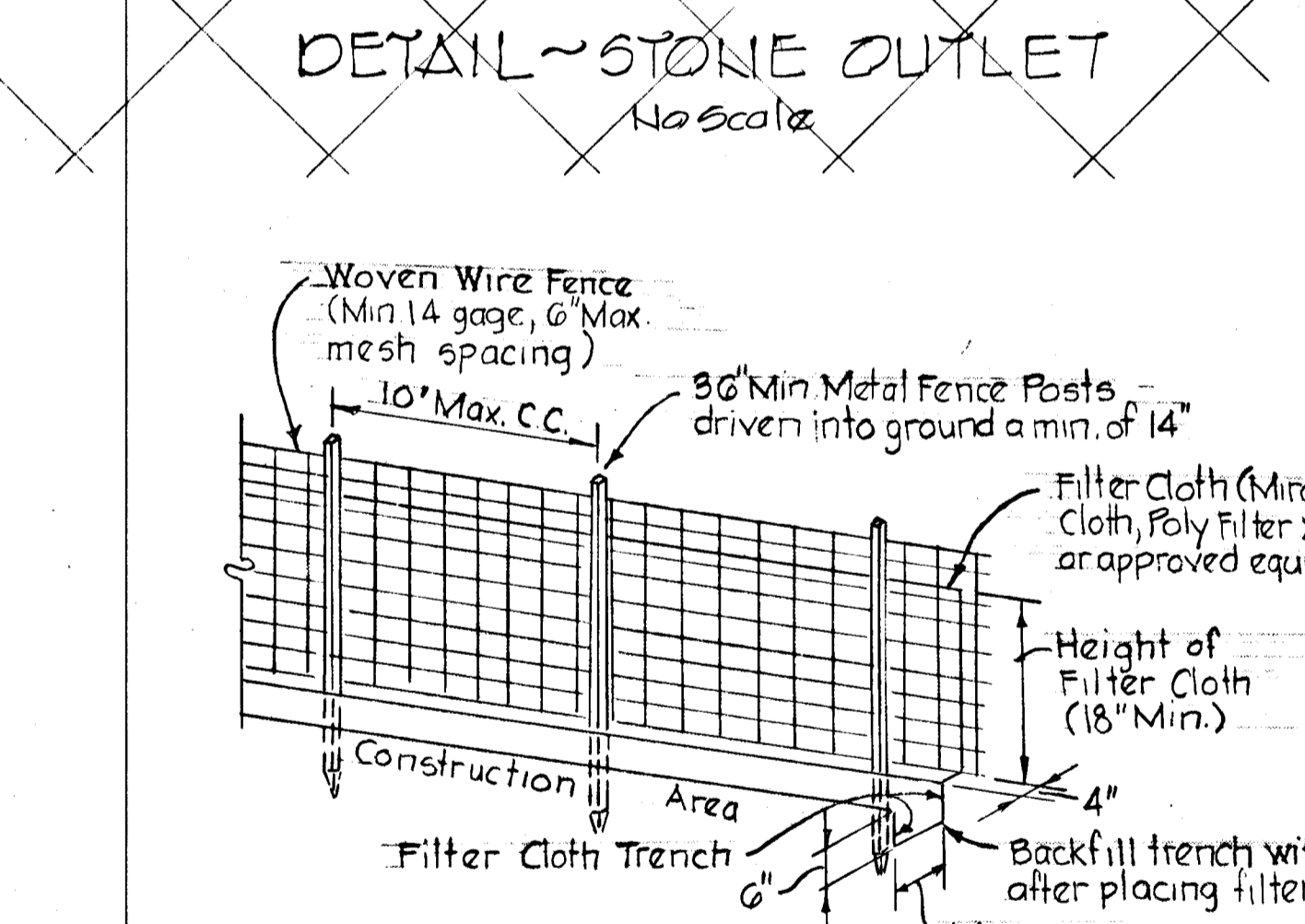


DETAIL - CLEAN WATER INLET AND DIVERSION DIKE
Scale: 3/8" = 1'-0"

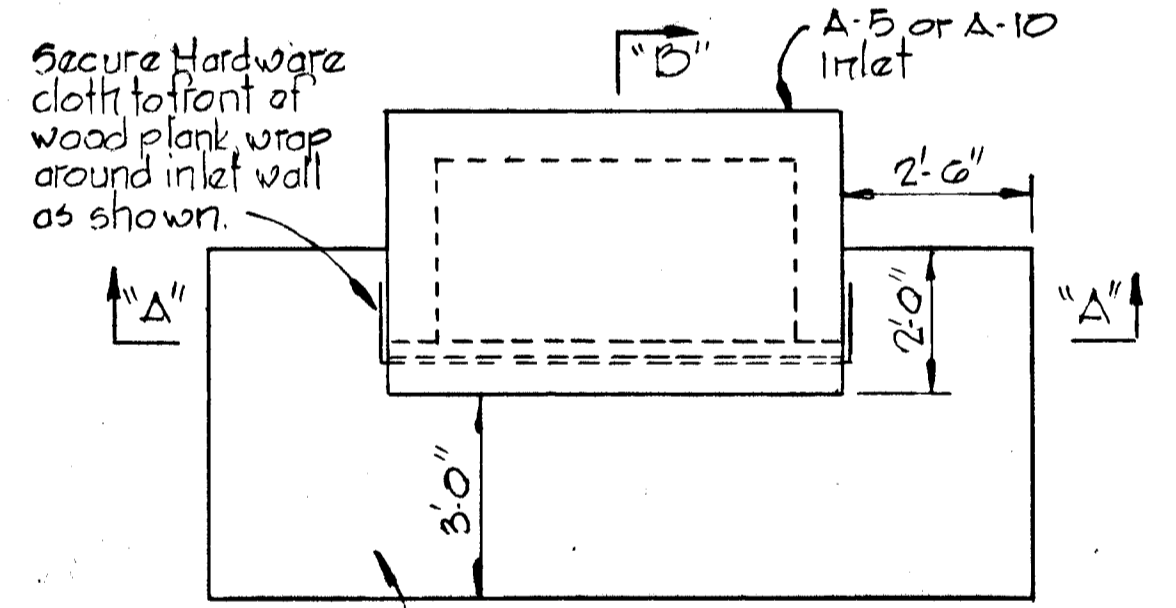
NOT IN THIS CONTRACT



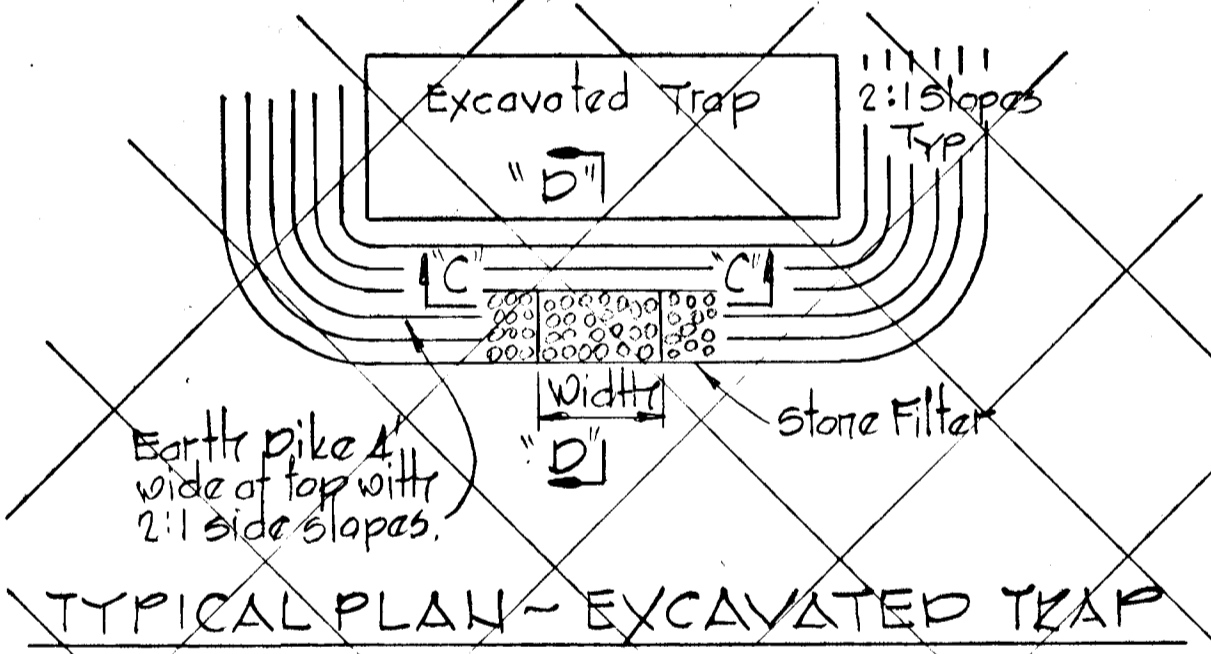
SECTION 'E-E'



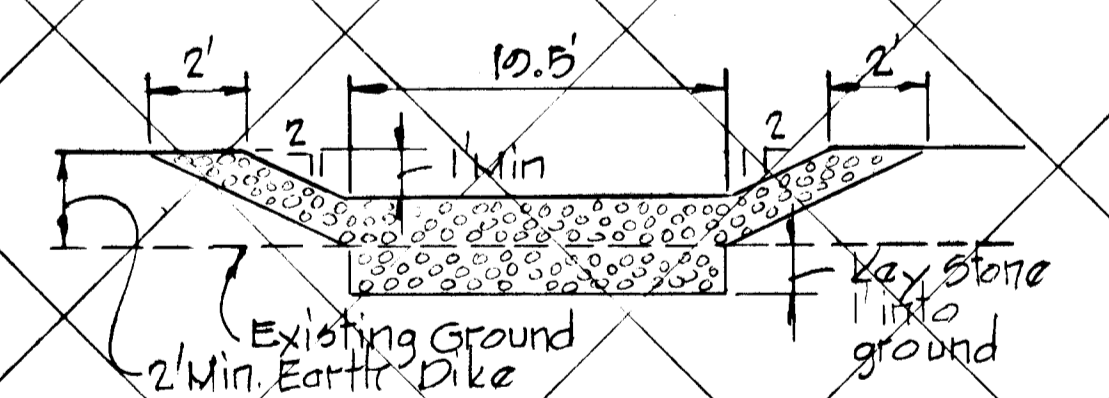
DETAIL - STONE OUTLET
No Scale



PLAN



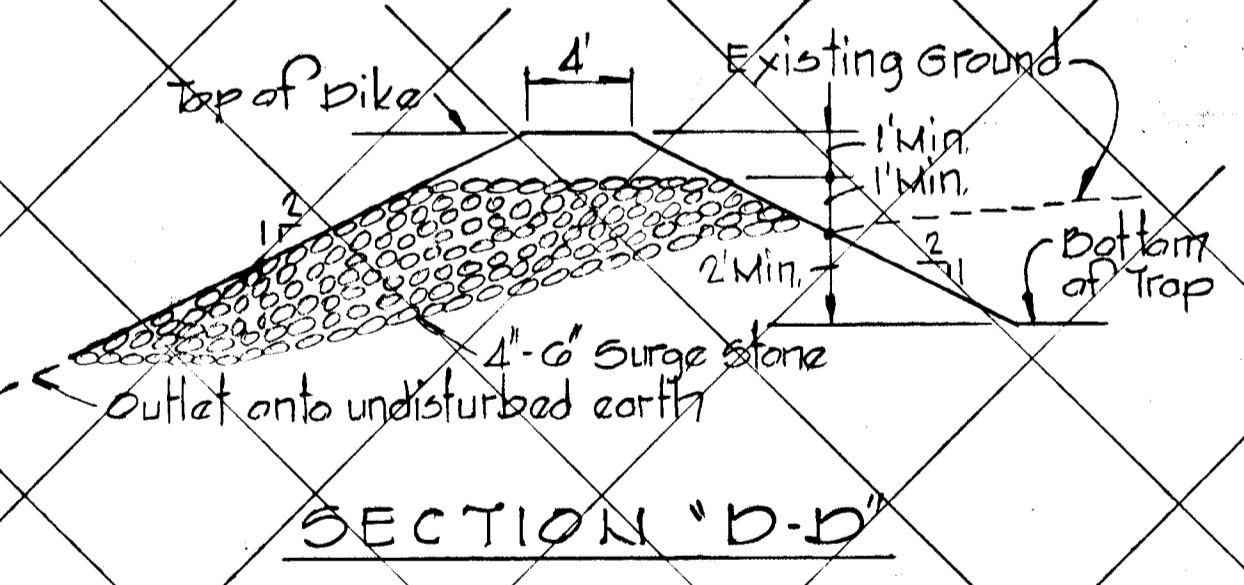
TYPICAL PLAN - EXCAVATED TRAP



SECTION 'C-C'

TRAP AND STONE FILTER DETAILS

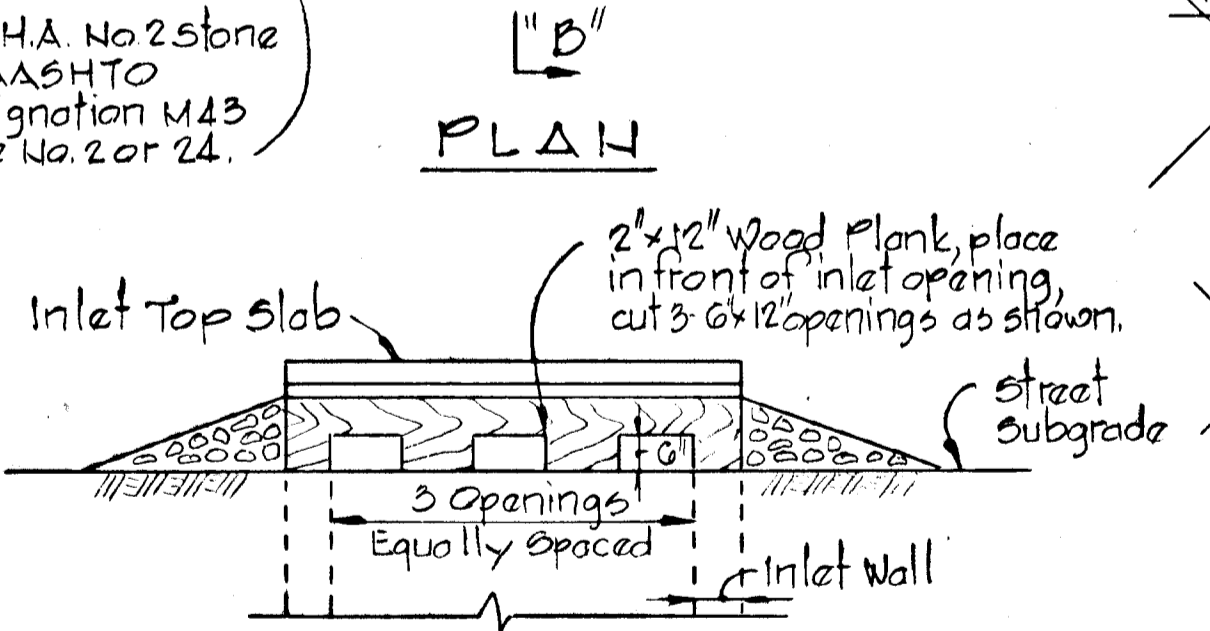
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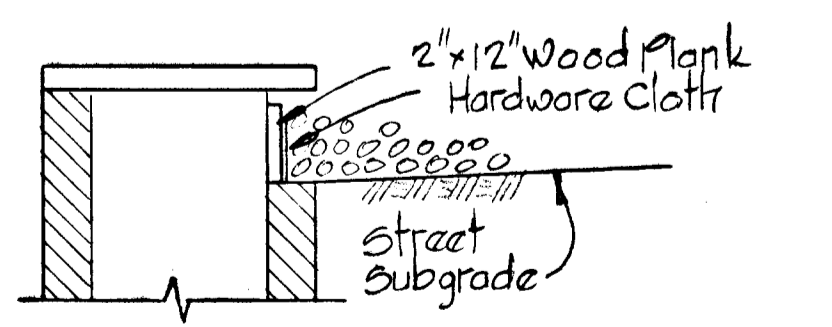
SECTION 'D-D'

- Notes:**
- Woven wire fence to be fastened securely to fence posts by use of wire ties.
 - Filter Cloth to be fastened securely to woven wire fence by use of wire ties spaced every 24"x24".
 - Silt Fence may be placed in lieu of Straw Bales.

SILT FENCE DETAIL
No Scale



SECTION 'A-A'



SECTION 'B-B'
BLOCKED INLET DETAIL
No Scale

REVIEWED FOR HOWARD S.C.D.
 AND MEETS TECHNICAL REQUIREMENTS
 Signature: James W. Nelson
 U.S. SOIL CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: Robert W. Zielhuis
 HOWARD S.C.D.

REV. DATE	REV. NO.	REVISION DESCRIPTION
4/15/80	2	As per DPW Comments
3/10/80	1	As per DPW Comments

COLUMBIA
 6TH. ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 PROJECT AREA:
 SECTION 3 AREA 2
 PROJECT TITLE:
 SEDIMENT CONTROL
 SCALE: 1" = 50' DATE:
 WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21202
 Signature: Kenneth A. McCord
 KENNETH A. McCORD
 REGISTERED ENGINEER
 NO. 1974

CERTIFICATION BY THE DEVELOPER
 "I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL, AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."
 Signature: Walter Woodford
 WALTER WOODFORD
 DATE: 11-8-79

CERTIFICATION BY THE ENGINEER
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 Signature: Kenneth A. McCord
 KENNETH A. McCORD, P.E. NO. 1974
 DATE: 11-8-79