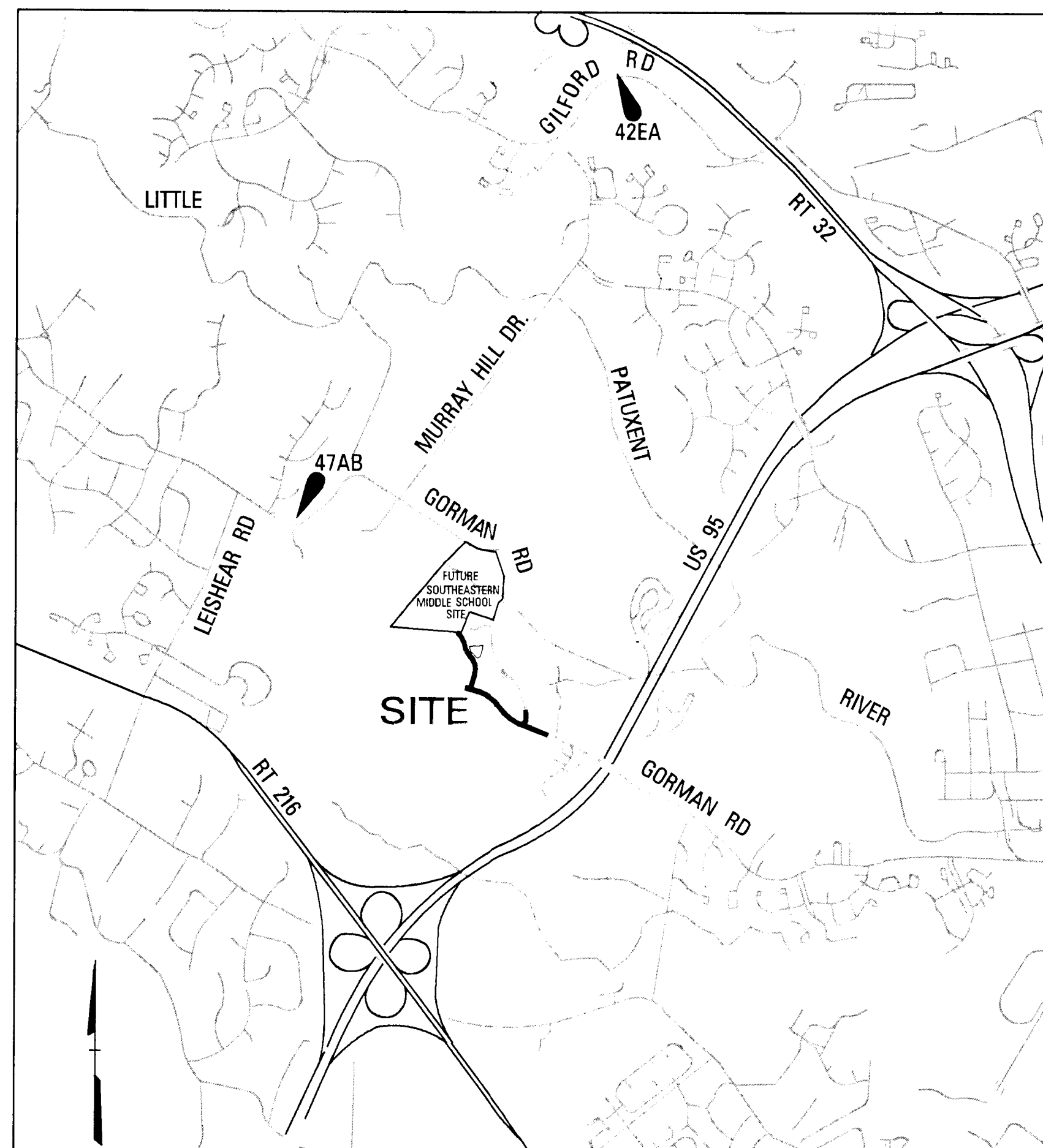


INDEX OF DRAWINGS

SHEET	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3	TYPICAL SECTIONS
4	ROADWAY PLAN
5	ROADWAY PLAN
6	SEDIMENT AND EROSION CONTROL PLAN
7	SEDIMENT AND EROSION CONTROL PLAN
8	SEDIMENT AND EROSION CONTROL DETAILS
9	ROADWAY PROFILES
10	ROADWAY PROFILES
11	ROADWAY PROFILES
12	STORM DRAIN PROFILES
13	GRADING\WATER QUALITY PLAN
14	GRADING\WATER QUALITY PLAN
15-20	CROSS SECTIONS

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

GORMAN ROAD REALIGNMENT CAPITOL PROJECT E-0935



LOCATION MAP

SCALE: 1" = 2000'

General Notes

- All construction shall be performed in accordance with the latest standards and specifications of Howard County, plus MSHA standards and specifications if applicable or as specified.
- Approximate location of existing utilities are shown from best available information. The contractor shall take all necessary precautions to protect the existing utilities and maintain uninterrupted service. Any damage incurred due to contractor's operation shall be repaired immediately at the contractor's expense.
- The contractor shall test all existing utilities at least five (5) days before starting work shown on these drawings to verify their location and elevation. The contractor shall notify the engineer immediately if location of utilities is other than shown.
- The contractor shall notify "Miss Utility" at 1-800-257-777 at least 48 hours prior to any excavation work being done, and shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
- Traffic control devices, markings, and signing shall be in accordance with the latest edition of the Manual Uniform Traffic Control Devices (MUTCD). All street and regulatory signs be in place prior to the placement of any asphalt.
- Any damage caused by the Contractor to existing public right-of-way, existing paving, existing curb and gutter, existing utilities, etc. shall be at the Contractor's expense.
- The existing topography in the area of Road 'B' is taken from a field run survey with two foot contour intervals prepared by Schmidt Pfeitz & McDonald, Inc., dated January 1995. The existing topography in the area of Road 'A' is taken from field run survey with two foot contour intervals prepared by Daft McCune Walker Inc., dated October 1995.
- All inlets shall be constructed in accordance with Howard County Standards or MSHA Standards as specified on structure schedule.
- All hydraulic data is for the 10-year storm unless otherwise noted.
- Required silt erosion and sedimentation control measures shall be provided, installed and maintained.
- Gorman Road is a scenic road on the Howard County Scenic Road Inventory.
- The subsurface exploration and geotechnical engineering analysis for this project was prepared by Herbst & Associates, January 1996.
- All fill areas shall be compacted to a minimum of 95% of the maximum dry density as determined and verified in accordance with AASHTO T-180.
- All plan dimensions are to face of curb unless otherwise noted.
- The coordinates shown hereon are based upon the Howard County geodetic control which is based upon the Maryland State plane coordination system. Howard County monument nos. 47E4 and 47E4 were used for this project.
- The Design Speed of Road 'A' and Road 'C' is 40 MPH. The Design Speed of Road 'B' is 30 MPH.

BENCHMARK

HORIZONTAL (NAD 83) AND VERTICAL (NVD 29)
CONTROL BASED UPON HOWARD COUNTY TRAVERSE
POINTS 47AB, 42EA, AND 1941005

OWNER /DEVELOPERS CERTIFICATE:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER
PRINT NAME BELOW SIGNATURE

DATE

ENGINEERS CERTIFICATE:

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.

SIGNATURE OF ENGINEER
PRINT NAME BELOW SIGNATURE

DATE

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.

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE

DATE

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

APPROVED: _____
HOWARD SOIL CONSERVATION DISTRICT

DATE

PENDING COUNTY APPROVAL

NOT FOR CONSTRUCTION
DO NOT SET
1/18/96

Tue Jan 16 20:54:57 1996 d:\94400\944001.dwg

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS _____ DATE _____
CHIEF, BUREAU OF ENGINEERING _____ DATE _____
CHIEF, BUREAU OF HIGHWAYS _____ DATE _____
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT _____ DATE _____

DMCW
Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue
Towson, Maryland 21286
410 296 3333
Fax 296 4705

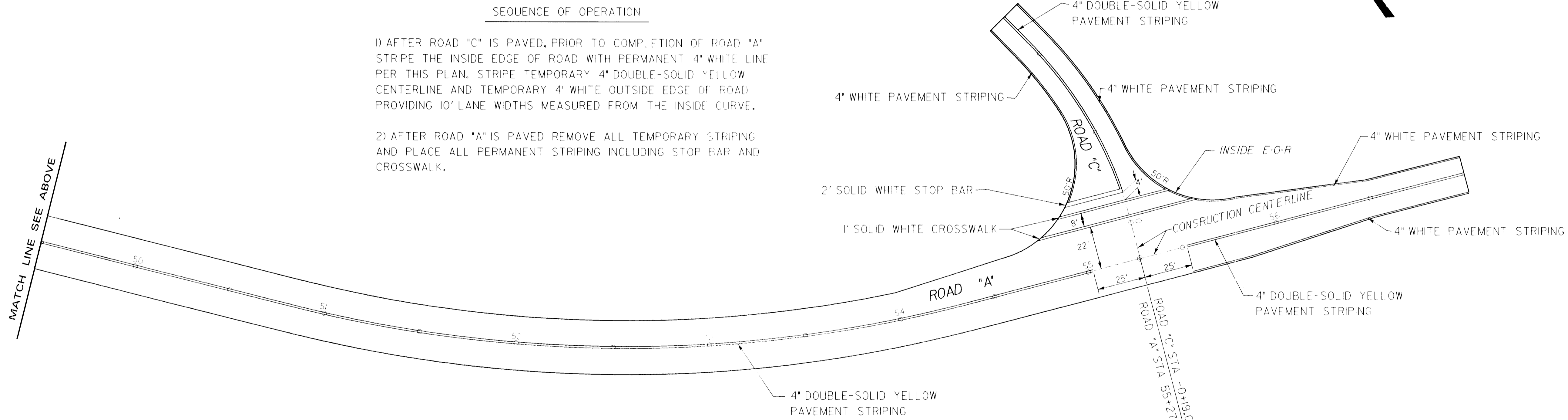
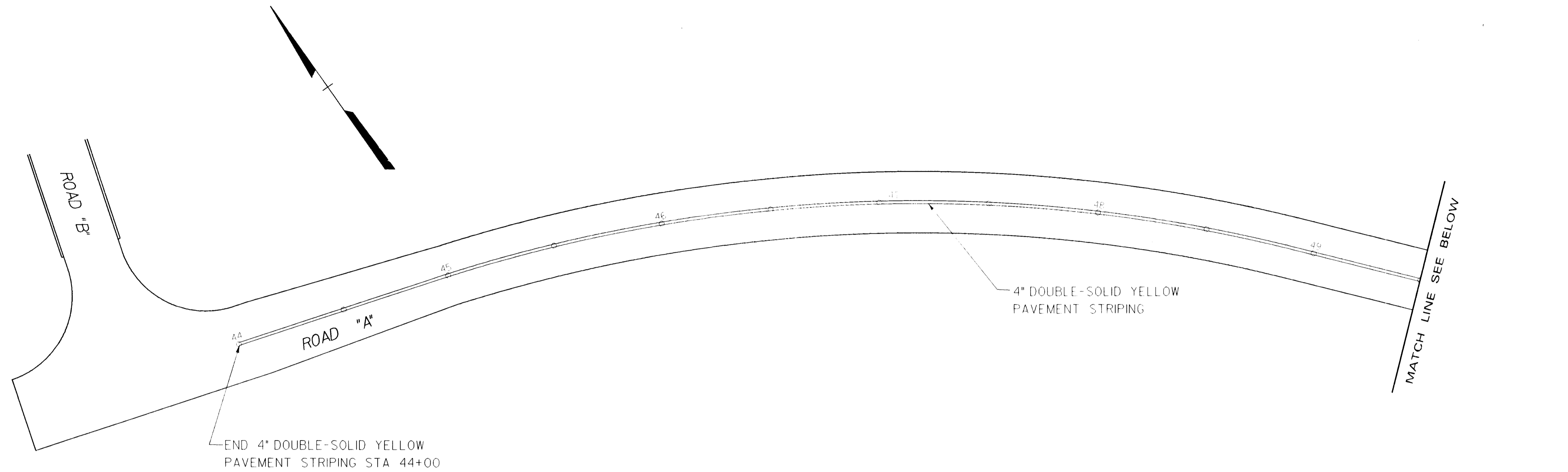
DESIGN BY:	JWS				
DRAWN BY:	JWS				
CHECKED BY:					
DATE:	JAN. 18, 1996	BY	NO.	REVISION	DATE

TITLE SHEET

600 SCALE MAP NO. 47 BLOCK NO. 2

GORMAN ROAD REALIGNMENT
CAPITOL PROJECT E-0935
ELECTION DISTRICT NO. 6
HOWARD COUNTY MARYLAND

SCALE AS SHOWN
SHEET 1 OF 20



SEQUENCE OF OPERATION

- 1) AFTER ROAD "C" IS PAVED, PRIOR TO COMPLETION OF ROAD "A" STRIPE THE INSIDE EDGE OF ROAD WITH PERMANENT 4" WHITE LINE PER THIS PLAN. STRIPE TEMPORARY 4" DOUBLE-SOLID YELLOW CENTERLINE AND TEMPORARY 4" WHITE OUTSIDE EDGE OF ROAD PROVIDING 10' LANE WIDTHS MEASURED FROM THE INSIDE CURVE.
- 2) AFTER ROAD "A" IS PAVED REMOVE ALL TEMPORARY STRIPING AND PLACE ALL PERMANENT STRIPING INCLUDING STOP BAR AND CROSSWALK.

C416B2Φ1

TOP: JUL 2 12:23:52 1996. D:\1944\06\9414\0623.dwg

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND		Daft · McCune · Walker, Inc. <small>A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals</small>	DESIGN BY: JWS				
DIRECTOR <i>James P. Lee</i>	DATE 7/3/96		CHIEF, BUREAU OF HIGHWAYS <i>Robert M. Daniels</i>	DATE 7/3/96	CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT <i>Steve Shuman</i>	DATE 7/3/96	STATE OF MARYLAND PROFESSIONAL ENGINEER

BY	NO.	REVISION	DATE

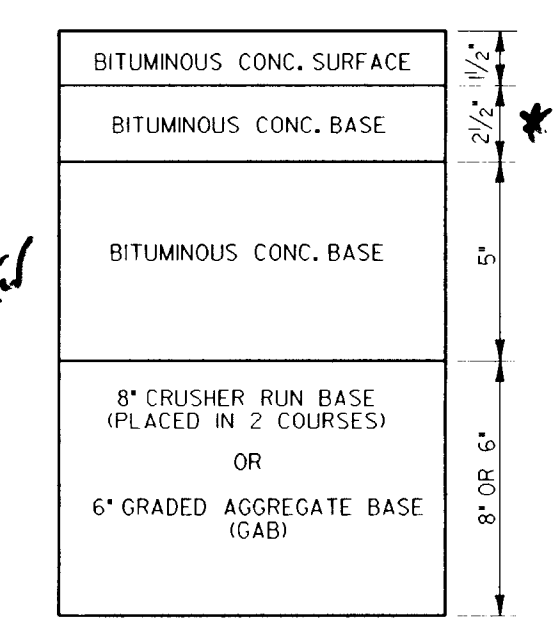
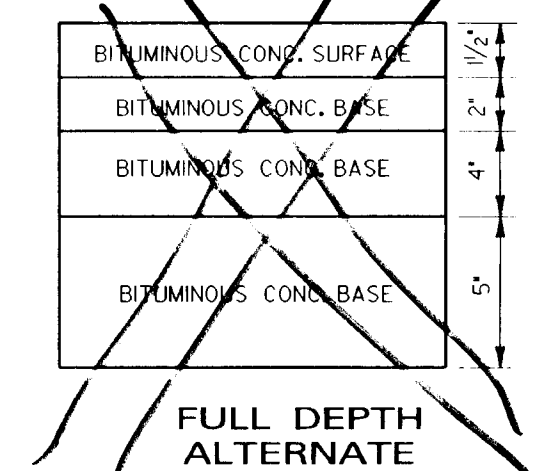
PAVEMENT STRIPING PLAN

600 SCALE MAP NO. 47 BLOCK NO. 2

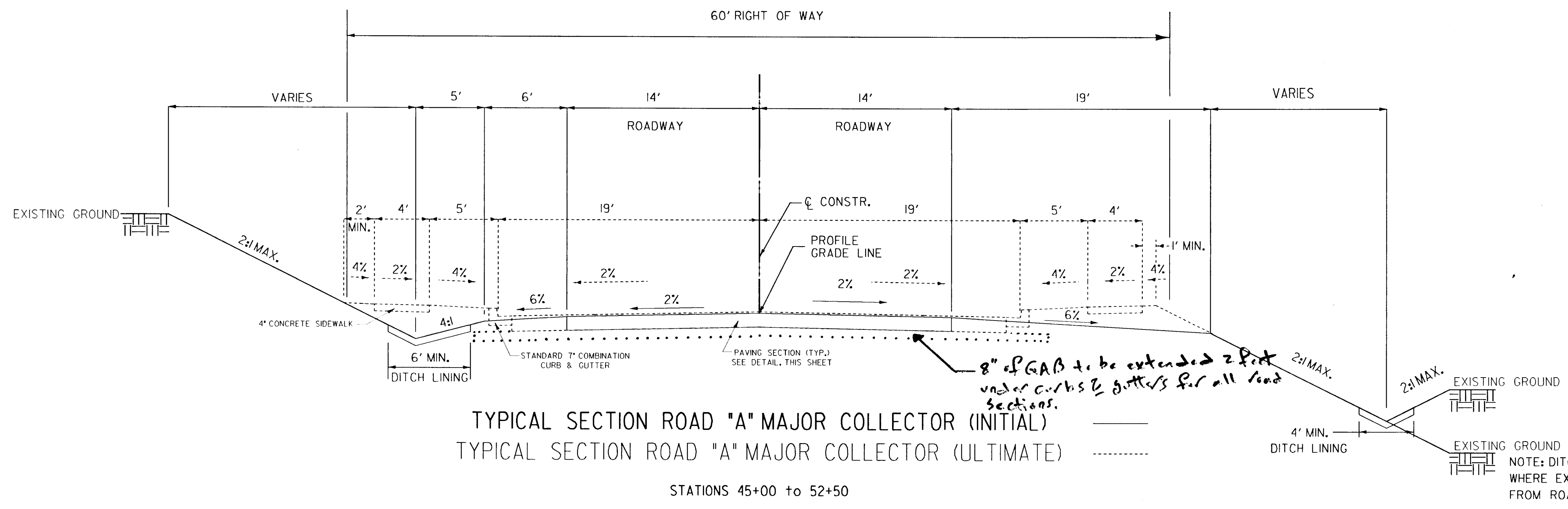
GORMAN ROAD REALIGNMENT
 CAPITAL PROJECT E-0935
 ELECTION DISTRICT NO. 6
 HOWARD COUNTY MARYLAND

SCALE
 1" = 30'
 SHEET
 1 OF 1

Not Recommended J.K.
P.S. Commercial-Industrial zones, major collector, all 1 1/2" surface 5" Base 8" GAB based on CLR of 5' or better

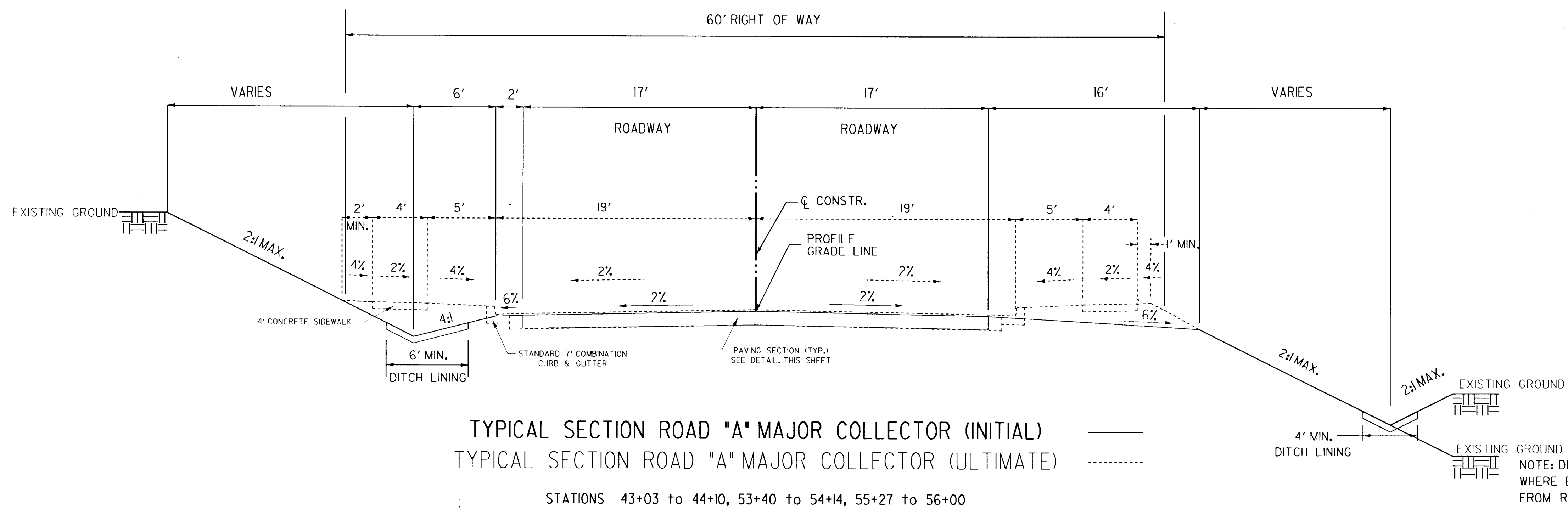


ROAD "A" & ROAD "C" PAVING SECTION
 NO TO SCALE



8" GAB to be extended 2 feet under curbs & gutters for all lead sections.

NOTE: DITCH NOT REQUIRED WHERE EXISTING GROUND SLOPES AWAY FROM ROADWAY.



NOTE: DITCH NOT REQUIRED WHERE EXISTING GROUND SLOPES AWAY FROM ROADWAY.

NOT FOR CONSTRUCTION
PID SET
 1/18/26

PENDING COUNTY APPROVAL

C416B202

NOTE: SEE ROADWAY PLAN, SHEET 5, FOR DITCH LOCATIONS.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	
DIRECTOR OF PUBLIC WORKS	DATE
CHEF, BUREAU OF ENGINEERING	DATE
CHEF, BUREAU OF HIGHWAYS	DATE
CHEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT	DATE

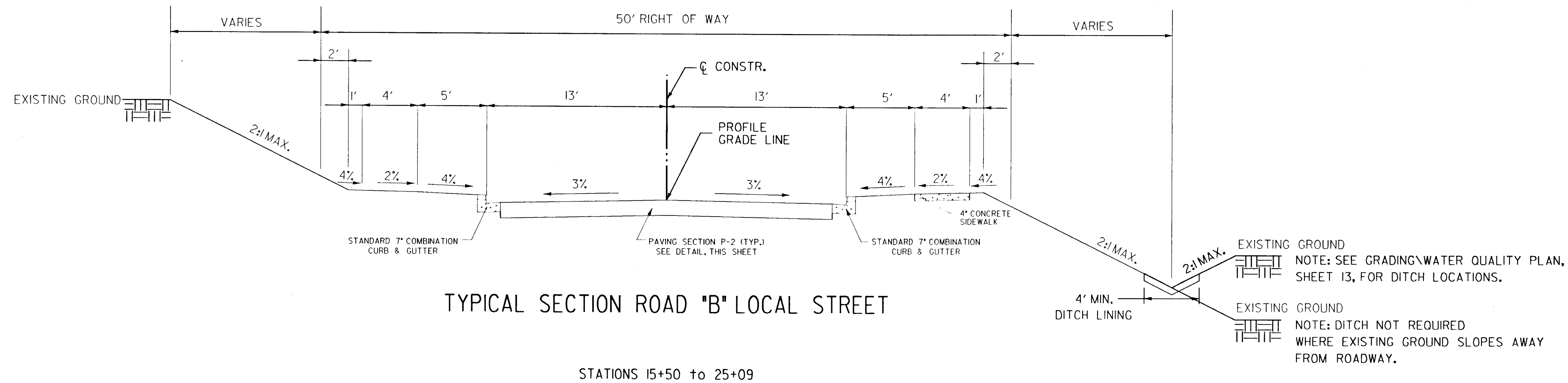
DMW
Daft · McCune · Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 410 296 3333
 Fax 296 4705

DESIGN BY:	JWS
DRAWN BY:	JWS
CHECKED BY:	
DATE:	JAN. 18, 1996
BY NO.	
REVISION	
DATE	

TYPICAL SECTION	
600 SCALE MAP NO.	47
BLOCK NO.	2

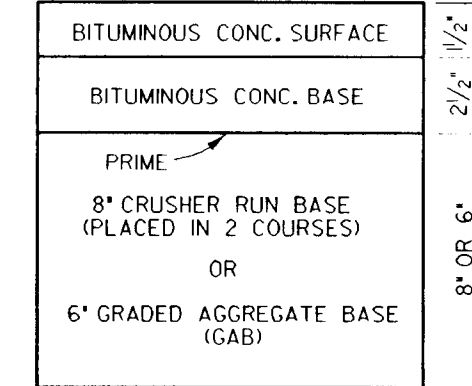
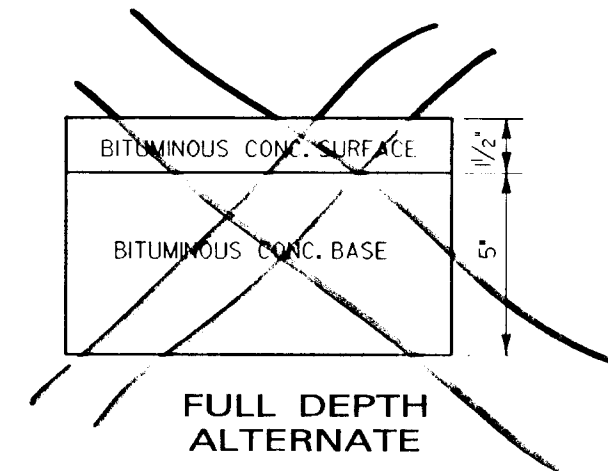
GORMAN ROAD REALIGNMENT	SCALE
CAPITAL PROJECT E-0935	1" = 5'
ELECTION DISTRICT NO. 6	SHEET
HOWARD COUNTY MARYLAND	2 OF 20

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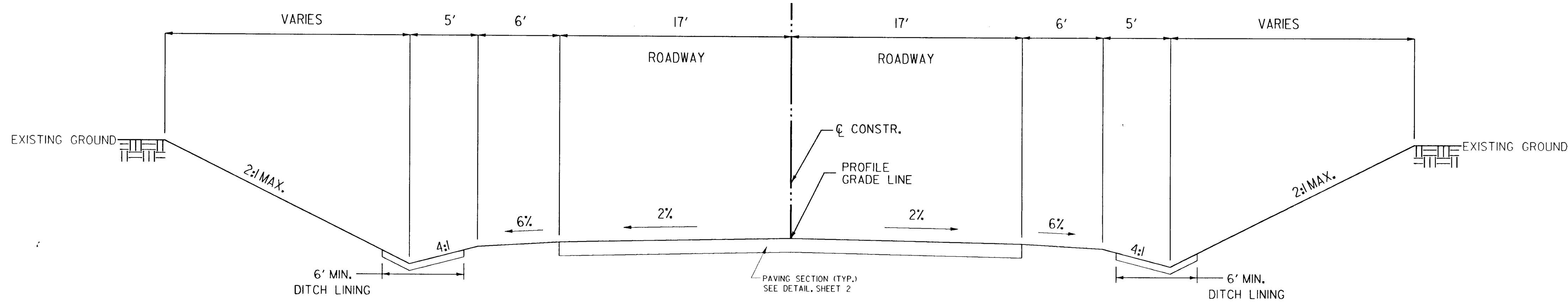
TYPICAL SECTION ROAD "B" LOCAL STREET

STATIONS 15+50 to 25+09



* See Page 2 of 20

PAVING SECTION P-2 (ROAD "B" PAVING SECTION)
NOT TO SCALE



TYPICAL SECTION ROAD "C" MAJOR COLLECTOR

STATIONS 100+75 to 100+90

NOTE: SEE ROADWAY PLAN, SHEET 5, FOR DITCH LOCATIONS.

NOT FOR CONSTRUCTION

BID SET
DAFT McCUNE WALKER, INC.
DATE 1-18-96

PENDING COUNTY APPROVAL

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND			
DIRECTOR OF PUBLIC WORKS	DATE	CHEF. BUREAU OF ENGINEERING	DATE
CHEF. BUREAU OF HIGHWAYS	DATE	CHEF. DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT	DATE

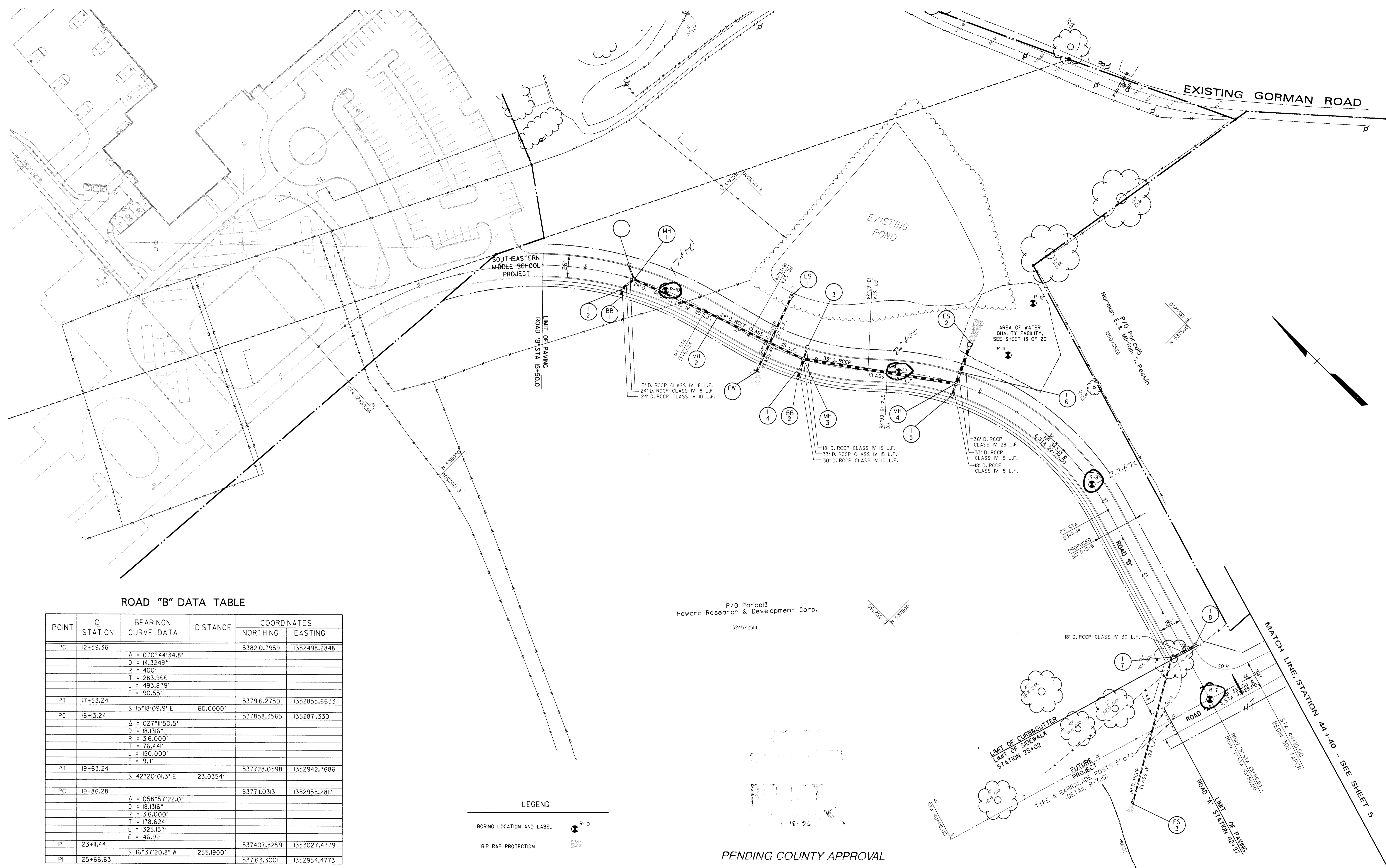
DMW
Daft McCune Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue
Towson, Maryland 21286
410.296.3333
Fax 296.4705

DESIGN BY:	JWS
DRAWN BY:	JWS
CHECKED BY:	
DATE:	JAN. 18, 1996
BY NO.	
REVISION	
DATE	

TYPICAL SECTION	
600 SCALE MAP NO.	47
BLOCK NO.	2

GORMAN ROAD REALIGNMENT CAPITAL PROJECT E-0935 ELECTION DISTRICT NO. 6 HOWARD COUNTY MARYLAND	SCALE 1" = 5' SHEET 3 OF 20
--------------------------------------------------------------------------------------------------------	--------------------------------------

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ROAD "B" DATA TABLE

POINT	STATION	BEARING \ CURVE DATA	DISTANCE	COORDINATES	
				NORTHING	EASTING
PC	12+59.36	$\Delta = 070^{\circ}44'34.8"$ D = 14,324.9' R = 400' T = 283.966' L = 493.879' E = 90.55'		538210.7959	1352498.2848
PT	17+53.24	S 15°18'09.9" E	60.0000'	537916.2750	1352855.6633
PC	18+13.24	$\Delta = 027^{\circ}11'50.5"$ D = 18,131.6' R = 316,000' T = 76,441' L = 150,000' E = 9.11'		537858.3565	1352871.3301
PT	19+63.24	S 42°20'01.3" E	23.0354'	537728.0598	1352942.7686
PC	19+86.28	$\Delta = 058^{\circ}57'22.0"$ D = 18,131.6' R = 316,000' T = 178,624' L = 325,157' E = 46.99'		537711.0313	1352958.2817
PT	23+11.44	S 16°37'20.8" W	255.1900'	537407.8259	1353027.4779
PI	25+66.63			537163.3001	1352954.4773

LEGEND

- BORING LOCATION AND LABEL
- RIP RAP PROTECTION

PENDING COUNTY APPROVAL

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS _____ DATE _____
 CHIEF, BUREAU OF ENGINEERING _____ DATE _____
 CHIEF, BUREAU OF HIGHWAYS _____ DATE _____
 CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT _____ DATE _____

DMW
Daft · McCune · Walker, Inc.
 A Team of Land Planners, 200 East Pennsylvania Avenue
 Landscape Architects, Towson, Maryland 21286
 Engineers, Surveyors & Environmental Professionals 410-296-3333
 Fax 296-4705

DESIGN BY:	JWS			
DRAWN BY:	JWS			
CHECKED BY:				
DATE:	JAN. 18, 1996	BY	NO.	REVISION

ROADWAY PLAN

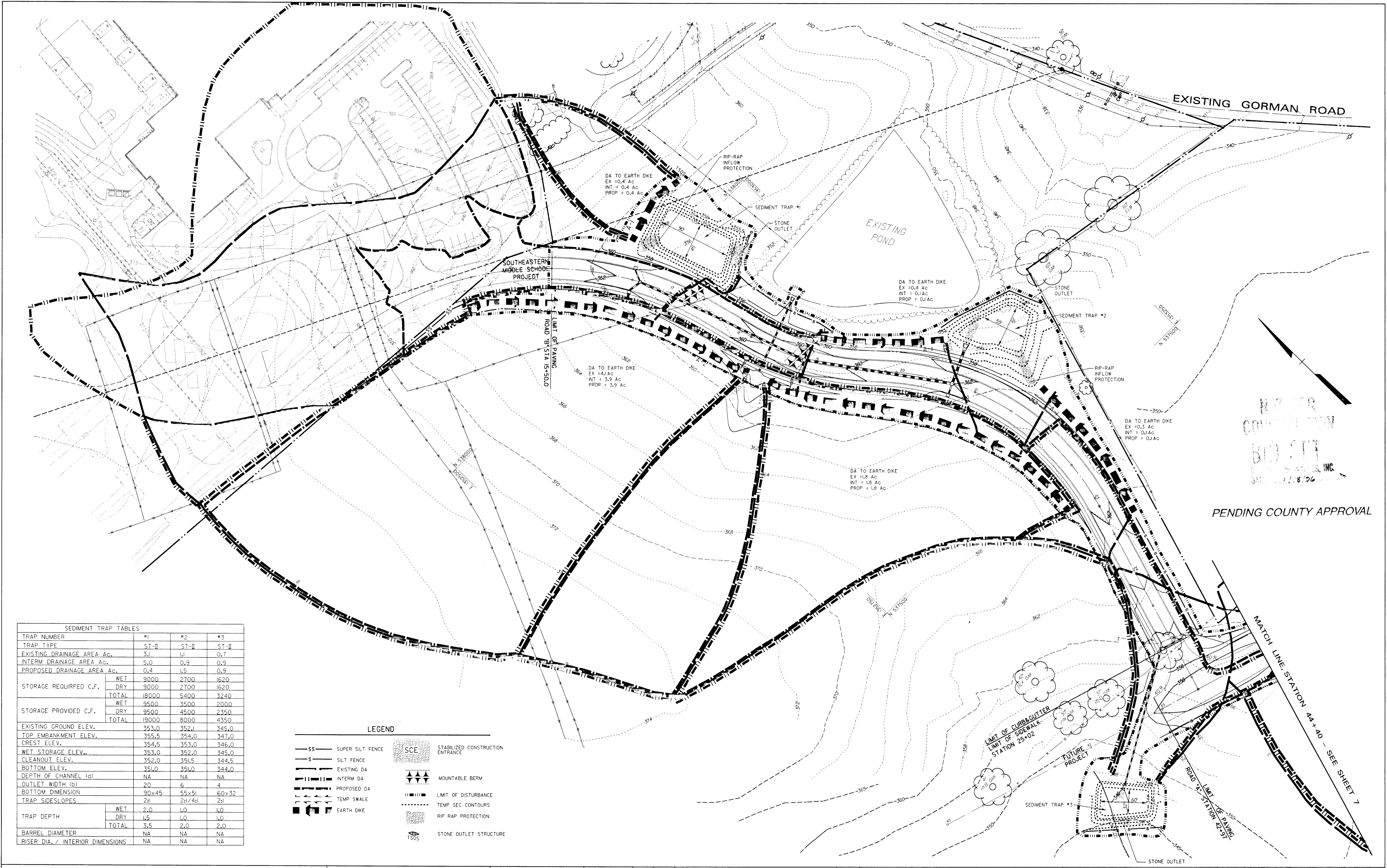
600 SCALE MAP NO. 47 BLOCK NO. 2

GORMAN ROAD REALIGNMENT
 CAPITAL PROJECT E-0935
 ELECTION DISTRICT NO. 6
 HOWARD COUNTY MARYLAND

SCALE
 1" = 50'
 SHEET
 4 OF 20

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HETAR
 CONSULTING
 805 S.W.
 3000 AVE., INC.
 JAN 11 1996

PENDING COUNTY APPROVAL

SEDIMENT TRAP TABLES			
TRAP NUMBER	#1	#2	#3
TRAP TYPE	ST-II	ST-II	ST-II
EXISTING DRAINAGE AREA AC.	3.1	1.1	0.7
INTERM DRAINAGE AREA AC.	5.0	0.9	0.9
PROPOSED DRAINAGE AREA AC.	0.4	1.5	0.9
STORAGE REQUIRED C.F.	WET	2700	1620
	DRY	2700	1620
	TOTAL	5400	3240
STORAGE PROVIDED C.F.	WET	3500	2000
	DRY	4500	2350
	TOTAL	8000	4350
EXISTING GROUND ELEV.	353.0	352.1	345.0
TOP EMBANKMENT ELEV.	355.5	354.0	347.0
CREST ELEV.	354.5	353.0	346.0
WET STORAGE ELEV.	353.0	352.0	345.0
CLEANOUT ELEV.	352.0	351.5	344.5
BOTTOM ELEV.	351.0	351.0	344.0
DEPTH OF CHANNEL (a)	NA	NA	NA
OUTLET WIDTH (b)	20	6	4
BOTTOM DIMENSION	90x45	55x51	60x32
TRAP SIDESLOPES	WET	2:1	2:1
	DRY	1:0	1:0
TRAP DEPTH	WET	2.0	1.0
	DRY	1.5	1.0
BARREL DIAMETER	WET	3.5	2.0
	DRY	NA	NA
RISER DIA. / INTERIOR DIMENSIONS	WET	NA	NA
	DRY	NA	NA

LEGEND	
SS	SUPER SILT FENCE
S	SILT FENCE
---	EXISTING DA
---	INTERM DA
---	PROPOSED DA
---	TEMP SWALE
---	EARTH DIKE
SCE	STABILIZED CONSTRUCTION ENTRANCE
▲▲▲	MOUNTABLE BERM
---	LIMIT OF DISTURBANCE
---	TEMP SEC CONTOURS
---	RIP RAP PROTECTION
TSOS	STONE OUTLET STRUCTURE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DMW
Daft · McCune · Walker, Inc.
 A Team of Land Planners, 200 East Pennsylvania Avenue
 Landscape Architects, Towson, Maryland 21286
 Engineers, Surveyors & Environmental Professionals 410 296 3333
 Fax 296 4705

DESIGN BY:	JWS\RLH		
DRAWN BY:	JWS\PSN		
CHECKED BY:			
DATE:	JAN. 18, 1996		
BY	NO.	REVISION	DATE

SEDIMENT AND EROSION CONTROL PLAN

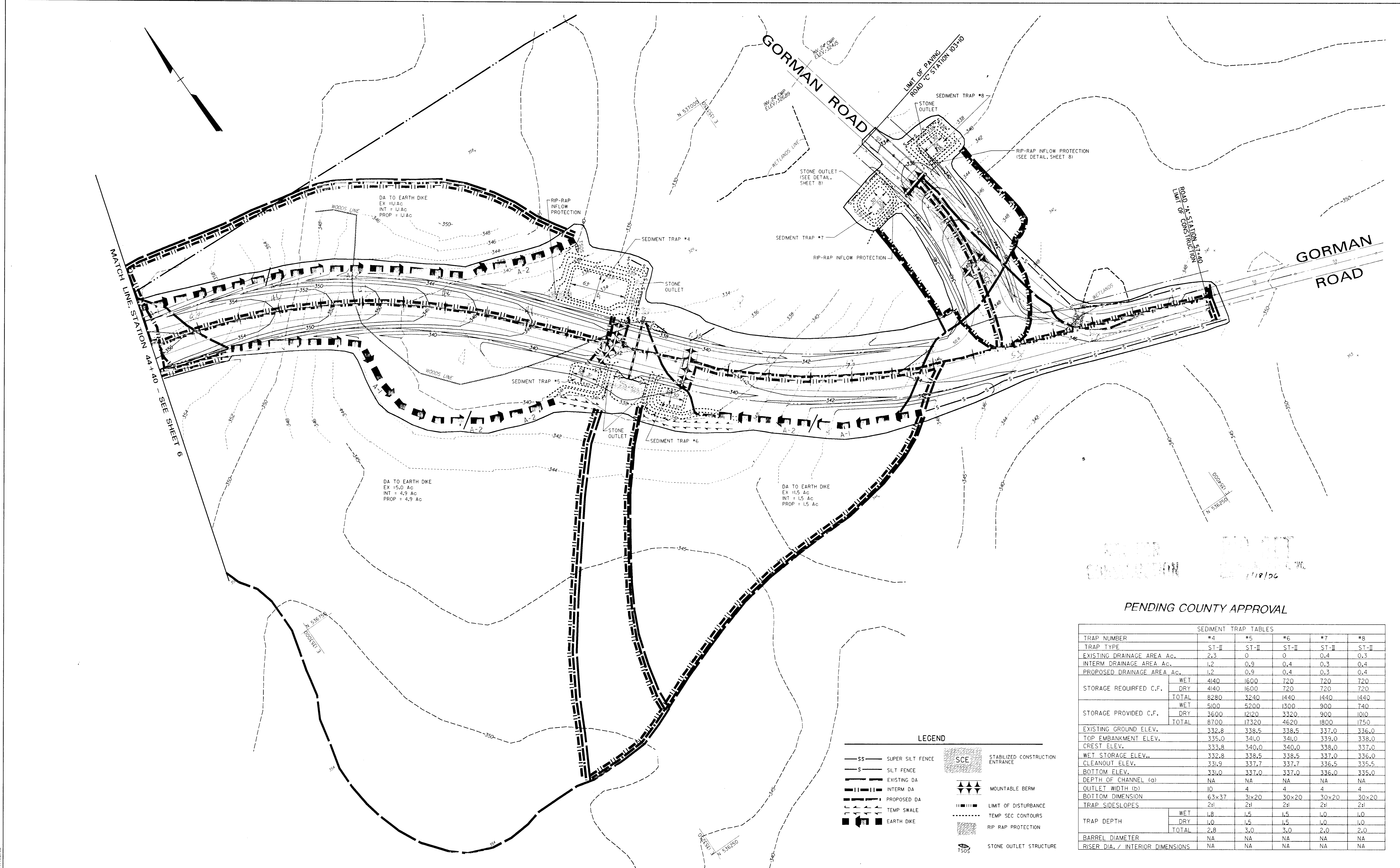
600 SCALE MAP NO. 47 BLOCK NO. 2

GORMAN ROAD REALIGNMENT
 CAPITAL PROJECT E-0935
 ELECTION DISTRICT NO. 6
 HOWARD COUNTY MARYLAND

SCALE
 1" = 50'
 SHEET
 6 OF 20

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APPROVED FOR CONSTRUCTION
 1/19/96

PENDING COUNTY APPROVAL

LEGEND

SS	SUPER SILT FENCE	SCE	STABILIZED CONSTRUCTION ENTRANCE
S	SILT FENCE	▲▲▲	MOUNTABLE BERM
---	EXISTING DA	----	LIMIT OF DISTURBANCE
---	INTERM DA	----	TEMP SEC CONTOURS
---	PROPOSED DA	---	RIP RAP PROTECTION
---	TEMP SWALE	○	STONE OUTLET STRUCTURE
█	EARTH DIKE		

SEDIMENT TRAP TABLES

TRAP NUMBER	#4		#5		#6		#7		#8	
	ST-II	ST-II	ST-II	ST-II	ST-II	ST-II	ST-II	ST-II	ST-II	ST-II
TRAP TYPE	2-3	0	0	0	0.4	0.3	0.4	0.3	0.4	0.3
EXISTING DRAINAGE AREA AC.	1.2	0.9	0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.4
INTERM DRAINAGE AREA AC.	1.2	0.9	0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.4
PROPOSED DRAINAGE AREA AC.	1.2	0.9	0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.4
STORAGE REQUIRED C.F.	WET	4140	1600	720	720	720	720	720	720	720
	DRY	4140	1600	720	720	720	720	720	720	720
STORAGE PROVIDED C.F.	WET	8280	3240	1440	1440	1440	1440	1440	1440	1440
	DRY	5100	5200	1300	900	900	740	900	740	900
TOTAL	WET	3600	12120	3320	300	300	1010	300	1010	1010
	DRY	8700	17320	4620	1800	1800	1750	1800	1750	1750
EXISTING GROUND ELEV.	332.8	338.5	338.5	337.0	336.0	336.0	336.0	336.0	336.0	336.0
TOP EMBANKMENT ELEV.	335.0	341.0	341.0	339.0	338.0	338.0	338.0	338.0	338.0	338.0
CREST ELEV.	333.8	340.0	340.0	338.0	337.0	337.0	337.0	337.0	337.0	337.0
WET STORAGE ELEV.	332.8	338.5	338.5	337.0	336.0	336.0	336.0	336.0	336.0	336.0
CLEANOUT ELEV.	331.9	337.7	337.7	336.5	335.5	335.5	335.5	335.5	335.5	335.5
BOTTOM ELEV.	331.0	337.0	337.0	336.0	335.0	335.0	335.0	335.0	335.0	335.0
DEPTH OF CHANNEL (d)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OUTLET WIDTH (b)	10	4	4	4	4	4	4	4	4	4
BOTTOM DIMENSION	6.3x37	3x20	30x20	30x20	30x20	30x20	30x20	30x20	30x20	30x20
TRAP SIDESLOPES	2H	2H	2H	2H	2H	2H	2H	2H	2H	2H
TRAP DEPTH	WET	1.8	1.5	1.5	1.0	1.0	1.0	1.0	1.0	1.0
	DRY	1.0	1.5	1.5	1.0	1.0	1.0	1.0	1.0	1.0
TOTAL	2.8	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
BARREL DIAMETER	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RISER DIA. / INTERIOR DIMENSIONS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS _____ DATE _____
 CHIEF, BUREAU OF ENGINEERING _____ DATE _____

CHIEF, BUREAU OF HIGHWAYS _____ DATE _____
 CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT _____ DATE _____

DMW
Daft · McCune · Walker, Inc.
 A Team of Land Planners, 200 East Pennsylvania Avenue
 Landscape Architects, Towson, Maryland 21286
 Engineers, Surveyors & Environmental Professionals 410 296 3333
 Fax 296 4705

DESIGN BY: JWS\RLH
 DRAWN BY: JWS\PSN
 CHECKED BY: _____
 DATE: JAN, 1996

BY	NO.	REVISION	DATE

SEDIMENT AND EROSION CONTROL PLAN

600 SCALE MAP NO. 47 BLOCK NO. 2

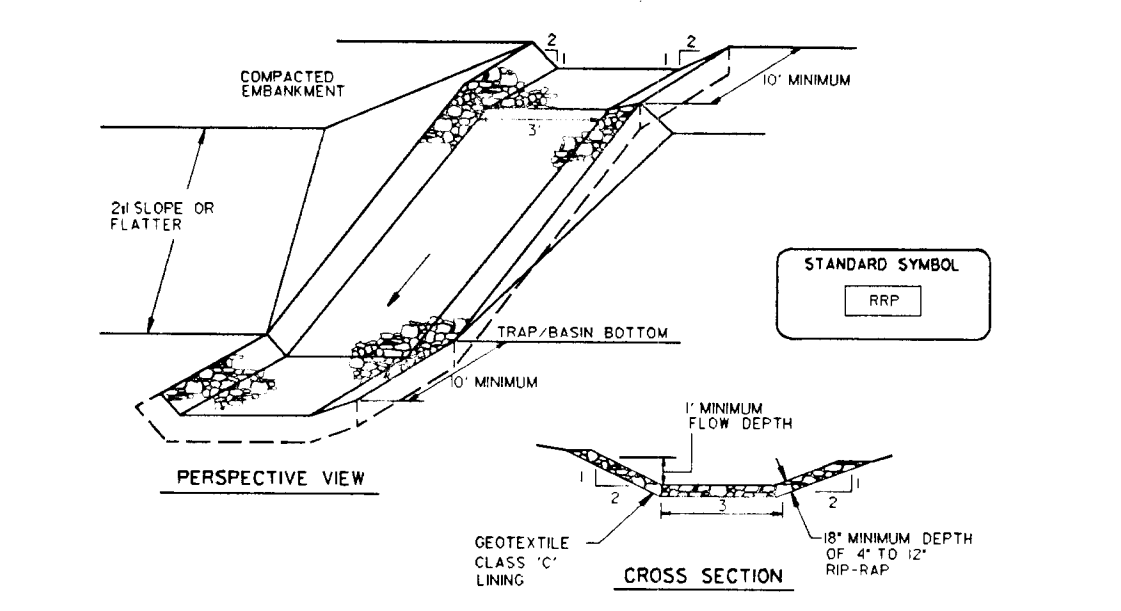
GORMAN ROAD REALIGNMENT
 CAPITAL PROJECT E-0935
 ELECTION DISTRICT NO. 6
 HOWARD COUNTY MARYLAND

SCALE
 1" = 50'

SHEET
 7 OF 20

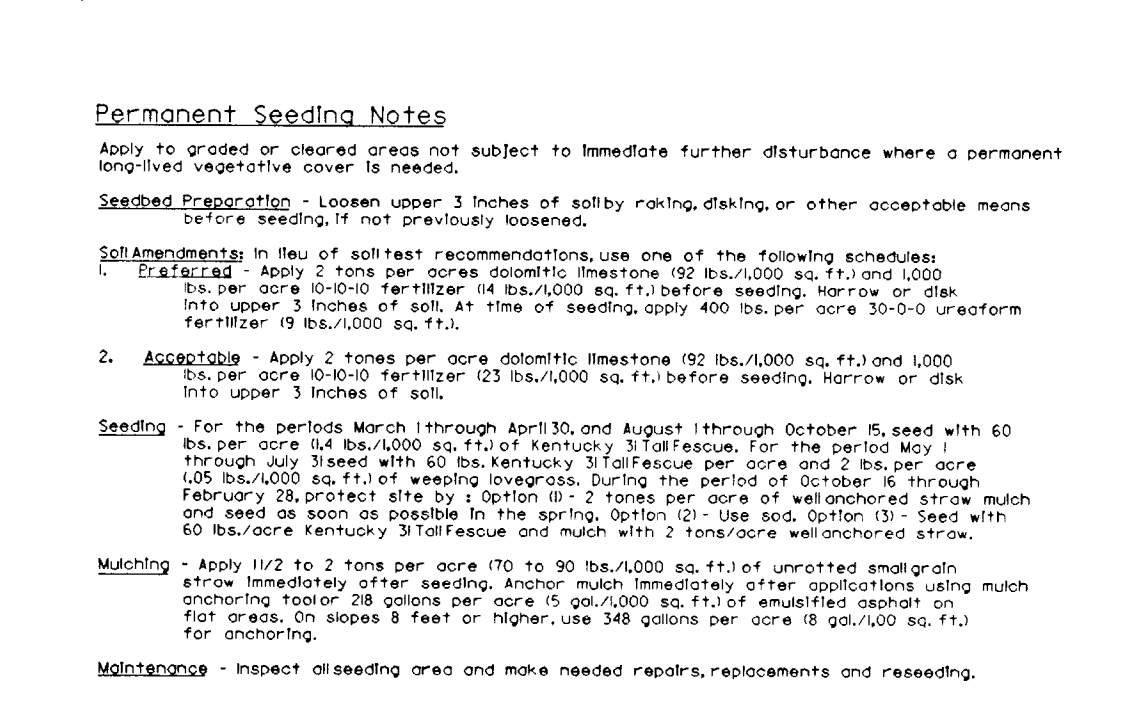
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EARTH DIKE
A - 1 - 6



- Construction Specifications**
1. Temporary earth dikes shall have unimproved positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
 2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
 3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed stabilized area of a non-erodible velocity.
 4. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
 5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of rock projections or other irregularities which will impede normal flow.
 6. Fill shall be compacted by earth moving equipment.
 7. All sod removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
 8. Inspection and maintenance must be provided periodically and after each rain event.

RIP-RAP INFLOW PROTECTION
B - 1 - 2

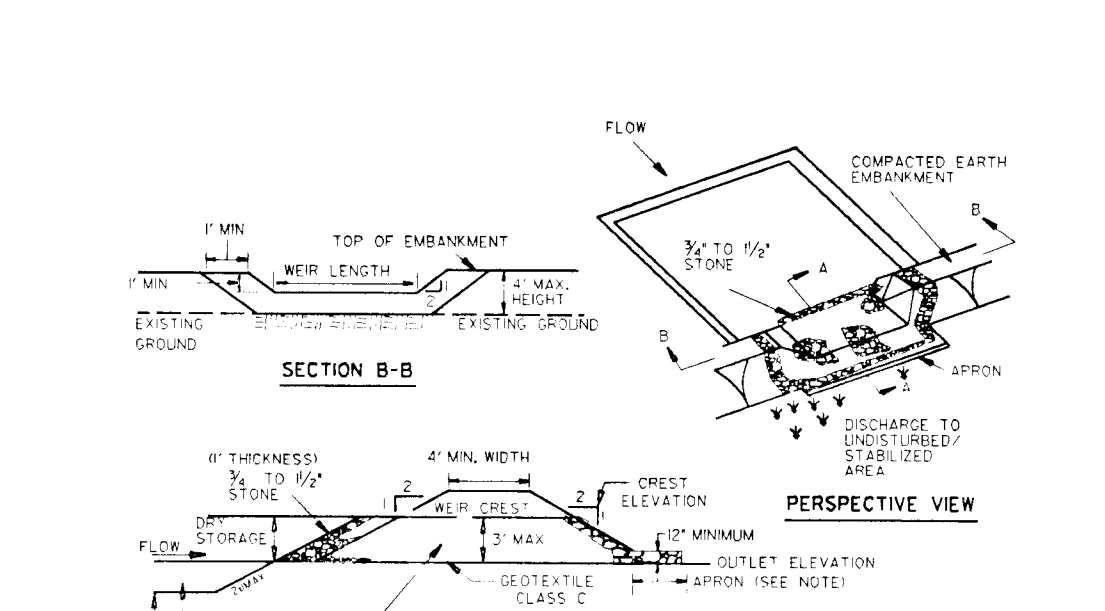


- Construction Specifications**
1. Rip-rap lined inflow channels shall be 18 inches deep, have a trapezoidal cross section with 2:1 slope on both sides and 3 inch bottom width. The channel shall be lined with 4 inch to 12 inch rip-rap to a depth of 18 inches.
 2. Filter cloth shall be installed under rip-rap. Filter cloth shall be Geotextile Class C.
 3. Entrance and exit sections shall be installed as shown on the detail section.
 4. Rip-rap used for the lining may be recycled for permanent outlet protection if the basin is to be converted to a stormwater management facility.
 5. Catch Inflow Protection may be used in lieu of Rip-rap inflow protection.
 6. Rip-rap should blend into existing ground.

SEEDING NOTES

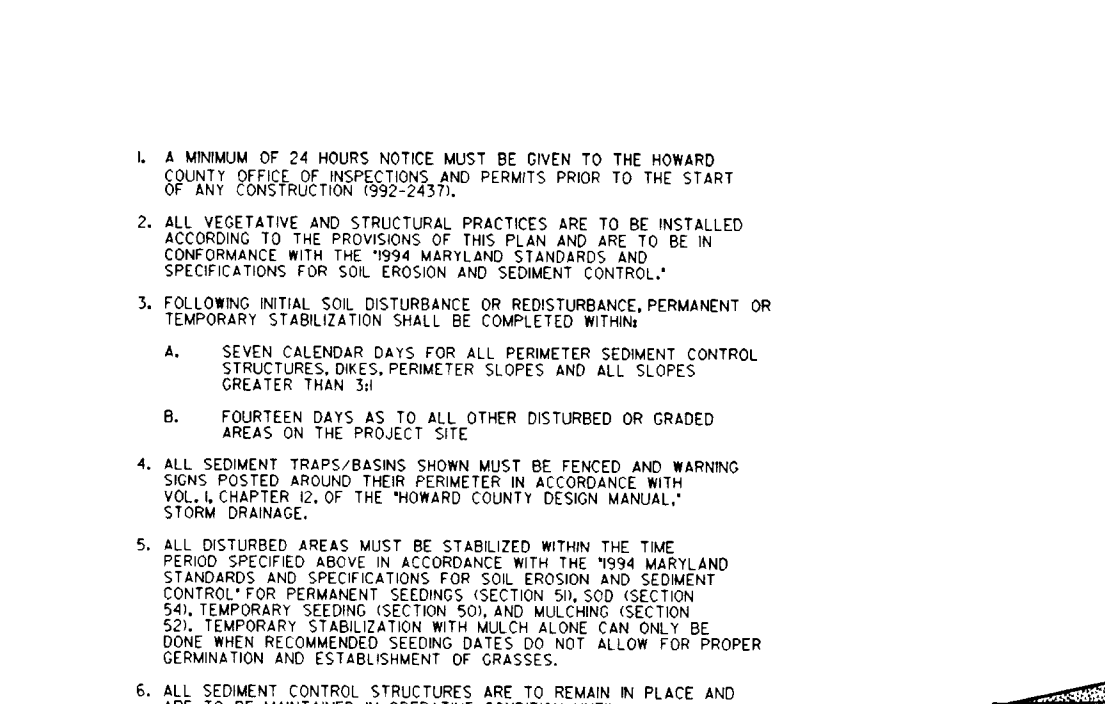
DIRECTOR OF PUBLIC WORKS	DATE	CHEF, BUREAU OF ENGINEERING	DATE
CHEF, BUREAU OF HIGHWAYS	DATE	CHEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT	DATE

SILT FENCE
E - 1 - 6



- Construction Specifications**
1. Fence posts shall be a minimum of 30 inch long driven 48 inches into the ground. Wood posts shall be 2 inch diameter minimum and shall be of sound quality hardwood. Steel posts shall be 1/2 inch diameter minimum and shall be of sound quality galvanized steel.
 2. Geotextile shall be fastened securely to each fence post with wire ties or staples of top and mid-section and shall meet the following requirements for Geotextile Class F:
 - Tensile Strength 50 lbs/in (min)
 - Tensile Modulus 20 lbs/in (min)
 - Flow Rate 0.3 gpm/ft (min)
 - Filtering Efficiency 75% (min)
 3. Where ends of geotextile fabric come together, they shall be overlapped, double stapled and secured to prevent sediment bypass.
 4. Silty fence shall be inspected after each rainfall event and maintained when silt accumulation reaches 50% of the fabric height.

STONE OUTLET SEDIMENT TRAP - ST II
C - 1 - 20

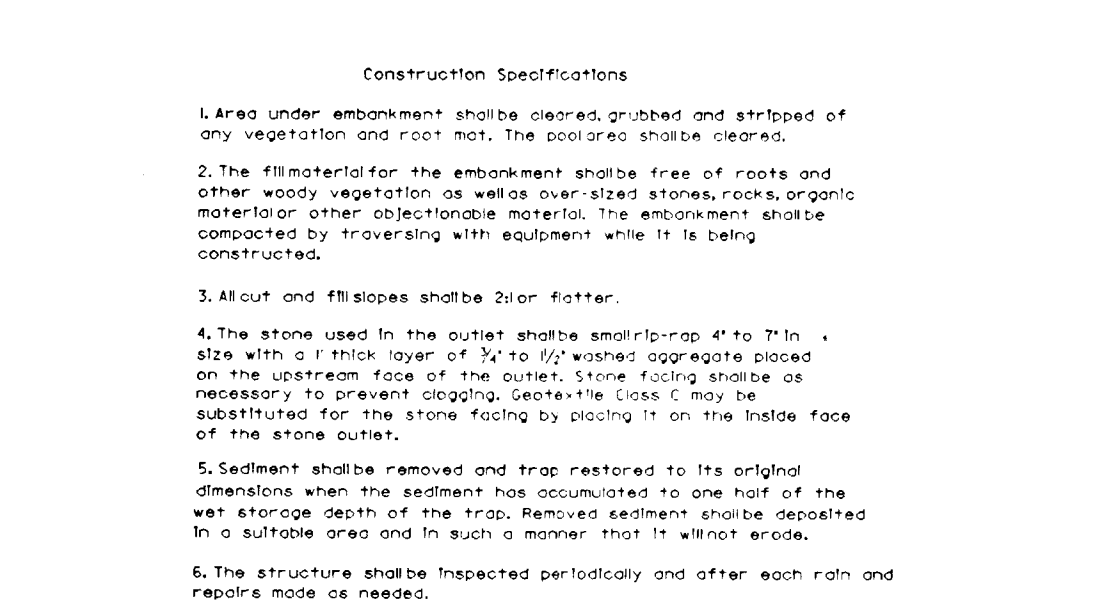


- Construction Specifications**
1. Rip-rap lined inflow channels shall be 18 inches deep, have a trapezoidal cross section with 2:1 slope on both sides and 3 inch bottom width. The channel shall be lined with 4 inch to 12 inch rip-rap to a depth of 18 inches.
 2. Filter cloth shall be installed under rip-rap. Filter cloth shall be Geotextile Class C.
 3. Entrance and exit sections shall be installed as shown on the detail section.
 4. Rip-rap used for the lining may be recycled for permanent outlet protection if the basin is to be converted to a stormwater management facility.
 5. Catch Inflow Protection may be used in lieu of Rip-rap inflow protection.
 6. Rip-rap should blend into existing ground.

SEEDING NOTES

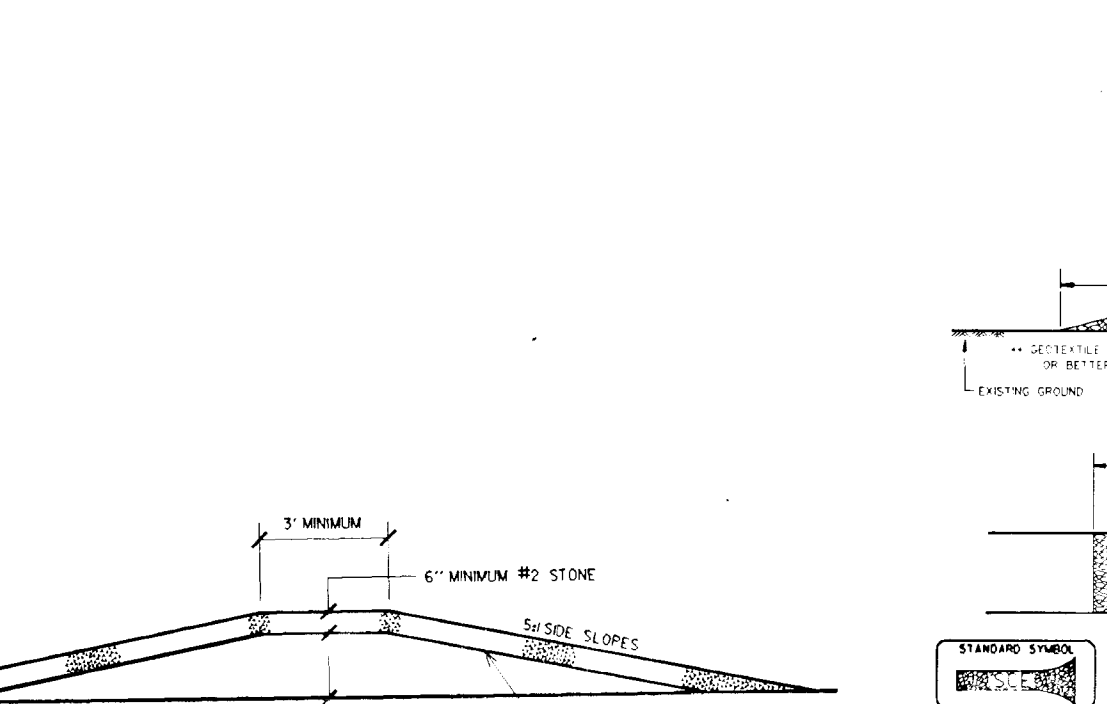
DIRECTOR OF PUBLIC WORKS	DATE	CHEF, BUREAU OF ENGINEERING	DATE
CHEF, BUREAU OF HIGHWAYS	DATE	CHEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT	DATE

SUPER SILT FENCE
D - 1 - 6



- Construction Specifications**
1. Fence posts shall be a minimum of 30 inch long driven 48 inches into the ground. Wood posts shall be 2 inch diameter minimum and shall be of sound quality hardwood. Steel posts shall be 1/2 inch diameter minimum and shall be of sound quality galvanized steel.
 2. Geotextile shall be fastened securely to each fence post with wire ties or staples of top and mid-section and shall meet the following requirements for Geotextile Class F:
 - Tensile Strength 50 lbs/in (min)
 - Tensile Modulus 20 lbs/in (min)
 - Flow Rate 0.3 gpm/ft (min)
 - Filtering Efficiency 75% (min)
 3. Where ends of geotextile fabric come together, they shall be overlapped, double stapled and secured to prevent sediment bypass.
 4. Silty fence shall be inspected after each rainfall event and maintained when silt accumulation reaches 50% of the fabric height.

STONE OUTLET SEDIMENT TRAP - ST II
C - 1 - 20

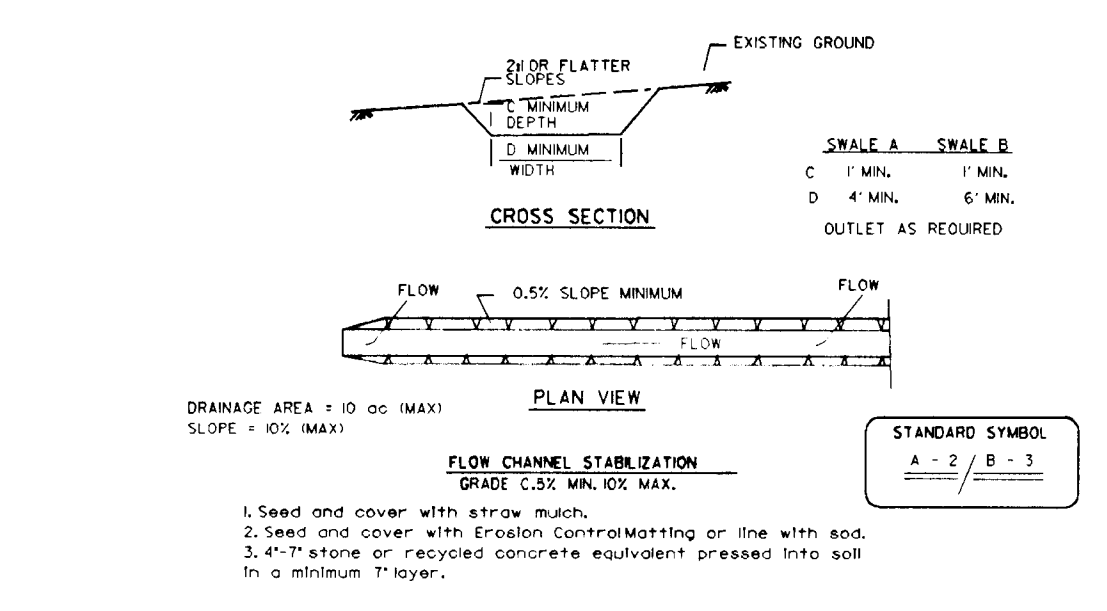


- Construction Specifications**
1. Rip-rap lined inflow channels shall be 18 inches deep, have a trapezoidal cross section with 2:1 slope on both sides and 3 inch bottom width. The channel shall be lined with 4 inch to 12 inch rip-rap to a depth of 18 inches.
 2. Filter cloth shall be installed under rip-rap. Filter cloth shall be Geotextile Class C.
 3. Entrance and exit sections shall be installed as shown on the detail section.
 4. Rip-rap used for the lining may be recycled for permanent outlet protection if the basin is to be converted to a stormwater management facility.
 5. Catch Inflow Protection may be used in lieu of Rip-rap inflow protection.
 6. Rip-rap should blend into existing ground.

SEEDING NOTES

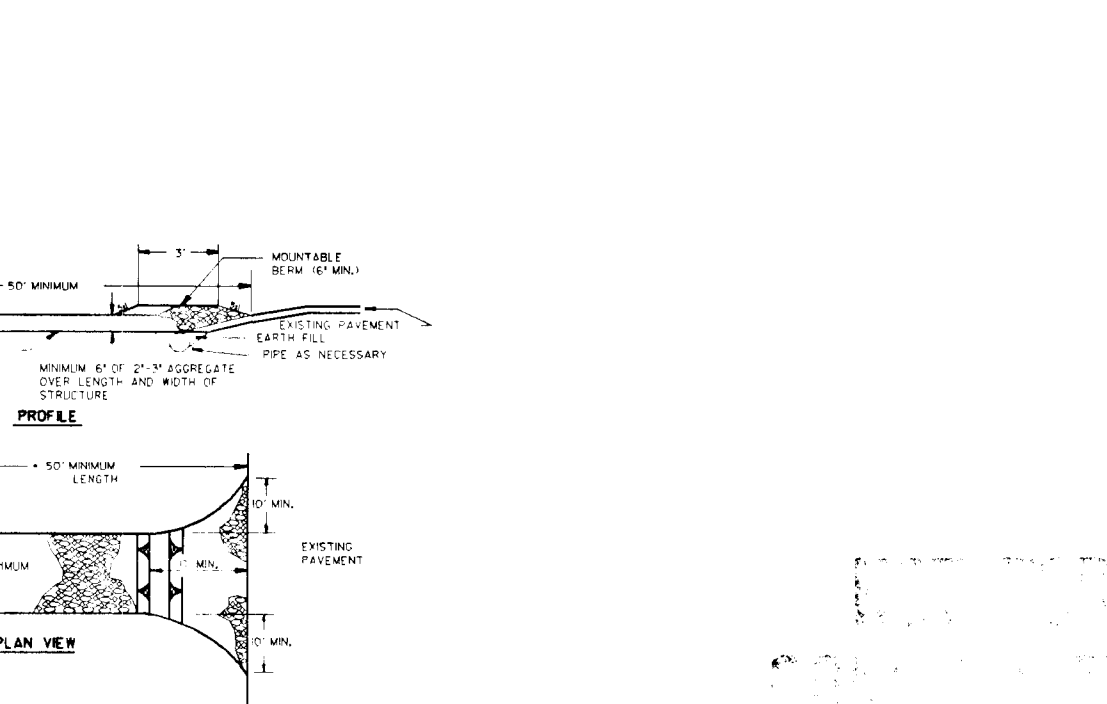
DIRECTOR OF PUBLIC WORKS	DATE	CHEF, BUREAU OF ENGINEERING	DATE
CHEF, BUREAU OF HIGHWAYS	DATE	CHEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT	DATE

TEMPORARY SWALE
A - 2 - 2



- Construction Specifications**
1. Seed and cover with straw mulch.
 2. Seed and cover with Erosion Control Matting or the like with sod.
 3. If a stone or recycled concrete equivalent pressed into the soil in a minimum 18 inches.
 1. Temporary swale shall have unimproved positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
 2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
 3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed stabilized area of a non-erodible velocity.
 4. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the swale.
 5. The swale shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of rock projections or other irregularities which will impede normal flow.
 6. Fill, if necessary, shall be compacted by earth moving equipment.
 7. All sod removed and not needed for construction shall be placed so that it will not interfere with the functioning of the swale.
 8. Inspection and maintenance must be provided periodically and after each rain event.

TEMPORARY SWALE
A - 2 - 2



- Construction Specifications**
1. Seed and cover with straw mulch.
 2. Seed and cover with Erosion Control Matting or the like with sod.
 3. If a stone or recycled concrete equivalent pressed into the soil in a minimum 18 inches.
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 7. All sod removed and not needed for construction shall be placed so that it will not interfere with the functioning of the swale.
 8. Inspection and maintenance must be provided periodically and after each rain event.

SEEDING NOTES

DIRECTOR OF PUBLIC WORKS	DATE	CHEF, BUREAU OF ENGINEERING	DATE
CHEF, BUREAU OF HIGHWAYS	DATE	CHEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT	DATE

SEQUENCE OF OPERATIONS

1. Obtain all necessary permits for construction.
2. Notify Howard County Office of Inspections and Permits 410/313-1855 a minimum of 48 hours prior to the start of any construction (2 days).
3. Clear, grub and install the stabilized construction entrance (2 days).
4. Clear, grub and install all of the sediment traps, silt fence, and the culvert from EW-1 to ES-1 and the culvert from EW-2 to ES-4 (5 weeks).
5. Clear, grub and install the remainder of the sediment control devices (3 weeks).
6. With the approval of the ESC inspector, clear and grub the remainder of the site (2 weeks). Now the sediment control for the Southeastern Middle School (SP 96-42) may begin at sequence of operation item #6.
7. Mass grade the site and provide dust controls as needed (5 weeks).
8. Install all utilities. Stabilize all non-active grading surfaces with temporary seeding (3 weeks).
9. Fine grade all paved surfaces. Install curb and gutter. Apply road subbase (3 weeks).
10. Fine grade all lawn areas and stabilize with permanent seeding. Install sidewalk (2 weeks).
11. Pave roadway (2 weeks).
12. With the prior permission of the Sediment Control Inspector and the Howard County Sediment Control Division, remove the sediment control devices and convert Sediment Trap #2 to the Water Quality Facility (Bioswale) Area. Install Water Quality stone check dams. Fine grade and stabilize these areas (3 weeks).

DUST CONTROL SPECIFICATIONS

- Temporary Methods:**
1. Mulches - See standards for mulch stabilization with mulches only. Specific instructions for use are provided in the manual.
 2. Vegetative Cover - See standards for temporary vegetative cover.
 3. Spray-on Adhesives - On materials not effective on mulch, keep traffic off these areas.
- Permanent Methods:**
1. Permanent vegetation - See standards for permanent vegetative cover, and erosion protection if left in place.
 2. Topsoils - Covering with less erodible materials. See standards for mulches.
 3. Stone - Cover surface with crushed stone or coarse gravel.

HOWARD COUNTY SEDIMENT CONTROL GENERAL NOTES

DESIGN BY: RLH					
DRAWN BY: JWS					
CHECKED BY:					
DATE: JAN. 18, 1996	BY NO.	REVISION	DATE	600 SCALE MAP NO.	BLOCK NO.

PENDING COUNTY APPROVAL

DIRECTOR OF PUBLIC WORKS	DATE	CHEF, BUREAU OF ENGINEERING	DATE
CHEF, BUREAU OF HIGHWAYS	DATE	CHEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT	DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

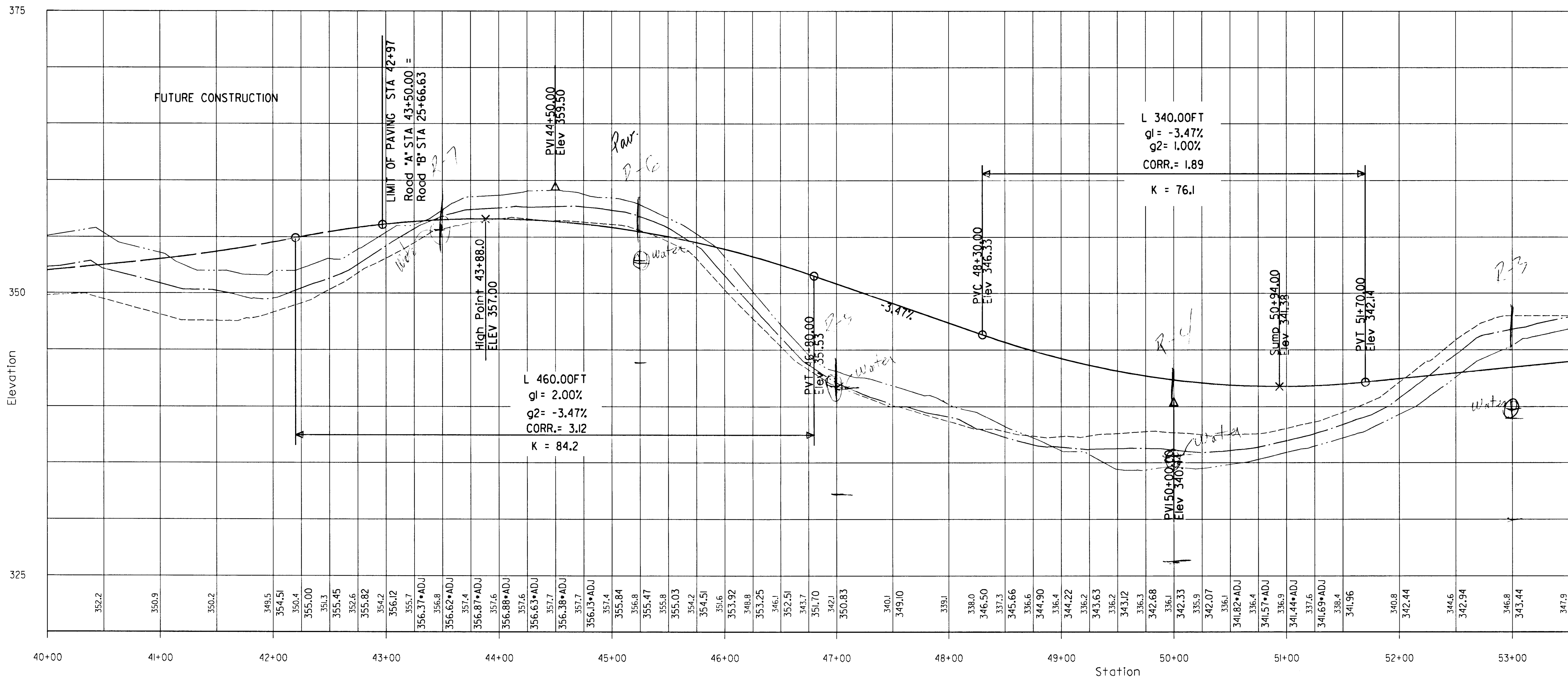
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A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SEDIMENT & EROSION CONTROL DETAILS

GORMAN ROAD REALIGNMENT
CAPITAL PROJECT E-0935
ELECTION DISTRICT NO. 6
HOWARD COUNTY MARYLAND

SCALE AS SHOWN
SHEET 8 OF 20

ROAD "A" PROFILE



Station	Elevation
40+00	352.2
41+00	350.9
42+00	350.2
42+50	349.5
43+00	354.51
43+10	350.4
43+20	355.00
43+30	351.3
43+40	355.45
43+50	352.6
44+00	354.2
44+10	356.12
44+20	355.7
44+30	356.37*ADJ
44+40	356.8
44+50	357.4
44+60	356.62*ADJ
44+70	357.6
44+80	356.87*ADJ
44+90	357.4
45+00	356.88*ADJ
45+10	357.6
45+20	356.63*ADJ
45+30	357.4
45+40	356.38*ADJ
45+50	357.7
45+60	356.13*ADJ
45+70	357.4
45+80	355.84
45+90	356.8
46+00	355.47
46+10	355.8
46+20	355.03
46+30	354.2
46+40	354.51
46+50	351.6
46+60	348.8
46+70	353.25
46+80	346.1
46+90	352.51
47+00	343.70
47+10	342.1
47+20	350.83
47+30	340.1
47+40	349.10
47+50	339.1
47+60	338.0
47+70	346.50
47+80	337.3
47+90	345.66
48+00	336.6
48+10	344.90
48+20	336.4
48+30	344.22
48+40	336.2
48+50	343.63
48+60	336.2
48+70	343.12
48+80	336.3
48+90	342.68
49+00	336.1
49+10	342.33
49+20	335.9
49+30	342.07
49+40	336.1
49+50	341.82*ADJ
49+60	336.4
49+70	341.57*ADJ
49+80	336.9
49+90	341.44*ADJ
50+00	337.6
50+10	341.69*ADJ
50+20	338.4
50+30	341.96
50+40	340.8
50+50	342.44
50+60	344.6
50+70	342.94
50+80	346.8
50+90	343.44
51+00	347.9

LEGEND

LINE	SURFACE	OFFSET
—	PROPOSED CENTERLINE	0.00
- - -	EXISTING CENTERLINE	0.00
- - -	EXISTING LEFT R/W	-30.00
- - -	EXISTING RIGHT R/W	30.00
EXISTING @ GROUND ELEVATION		340.8
PROPOSED @ ELEVATION		342.44

VERTICAL SCALE 1"=5'
HORIZONTAL SCALE 1"=50'

PENDING COUNTY APPROVAL

Tue Jan 16 21:44:20 1996 d:\94400\944003.plt

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND			
DIRECTOR OF PUBLIC WORKS	DATE	CHIEF, BUREAU OF ENGINEERING	DATE
CHIEF, BUREAU OF HIGHWAYS	DATE	CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT	DATE

DMTWP
Daft · McCune · Walker, Inc.

A Team of Land Planners, 200 East Pennsylvania Avenue, Towson, Maryland 21286
Landscape Architects, Engineers, Surveyors & Environmental Professionals
410 296 3333 Fax 296 4705

DESIGN BY:	JWS		
DRAWN BY:	JWS/PSN		
CHECKED BY:			
DATE:	JAN, 18, 1996		
BY	NO.	REVISION	DATE

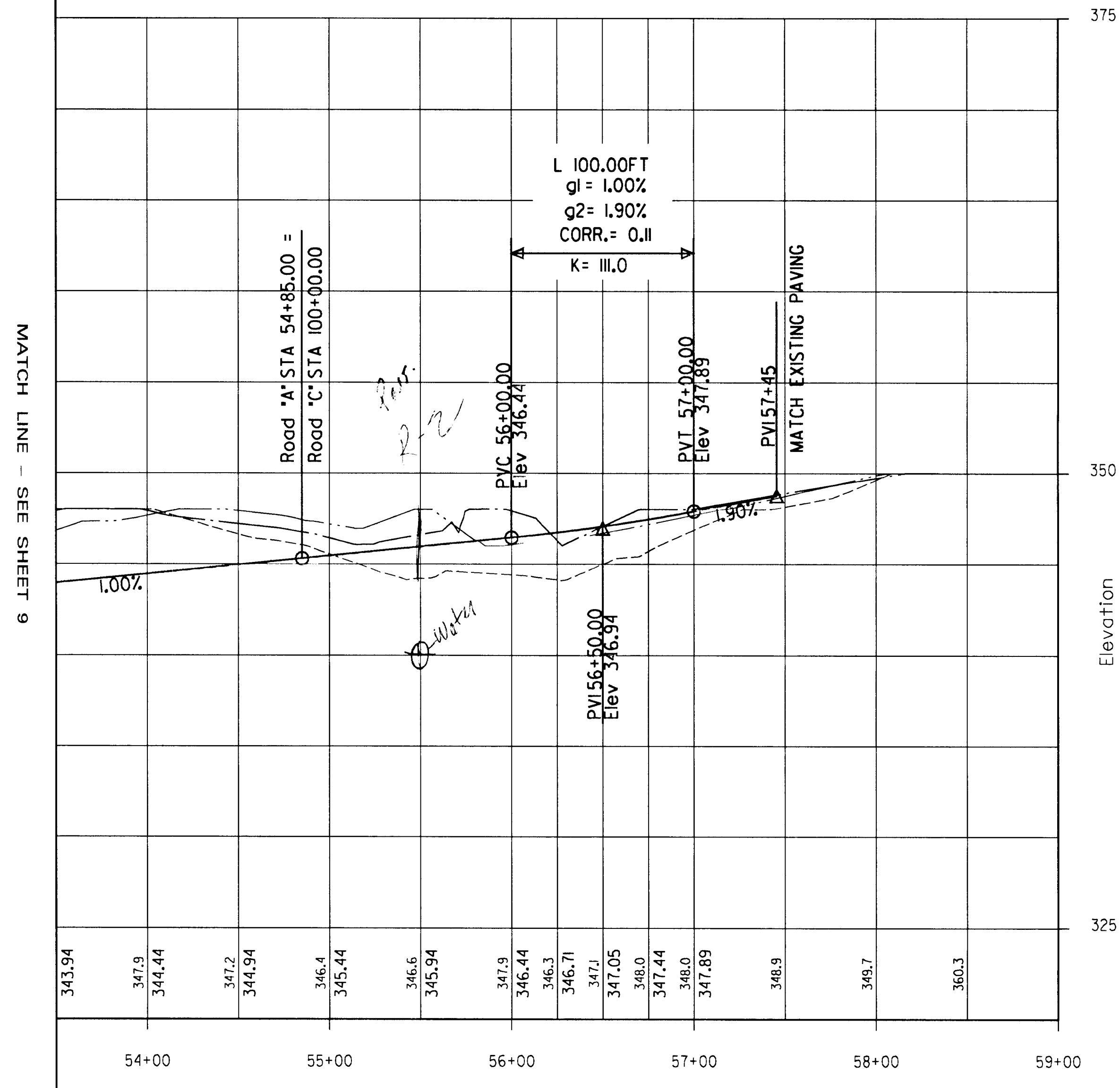
ROADWAY PROFILES

600 SCALE MAP NO. 47 BLOCK NO. 2

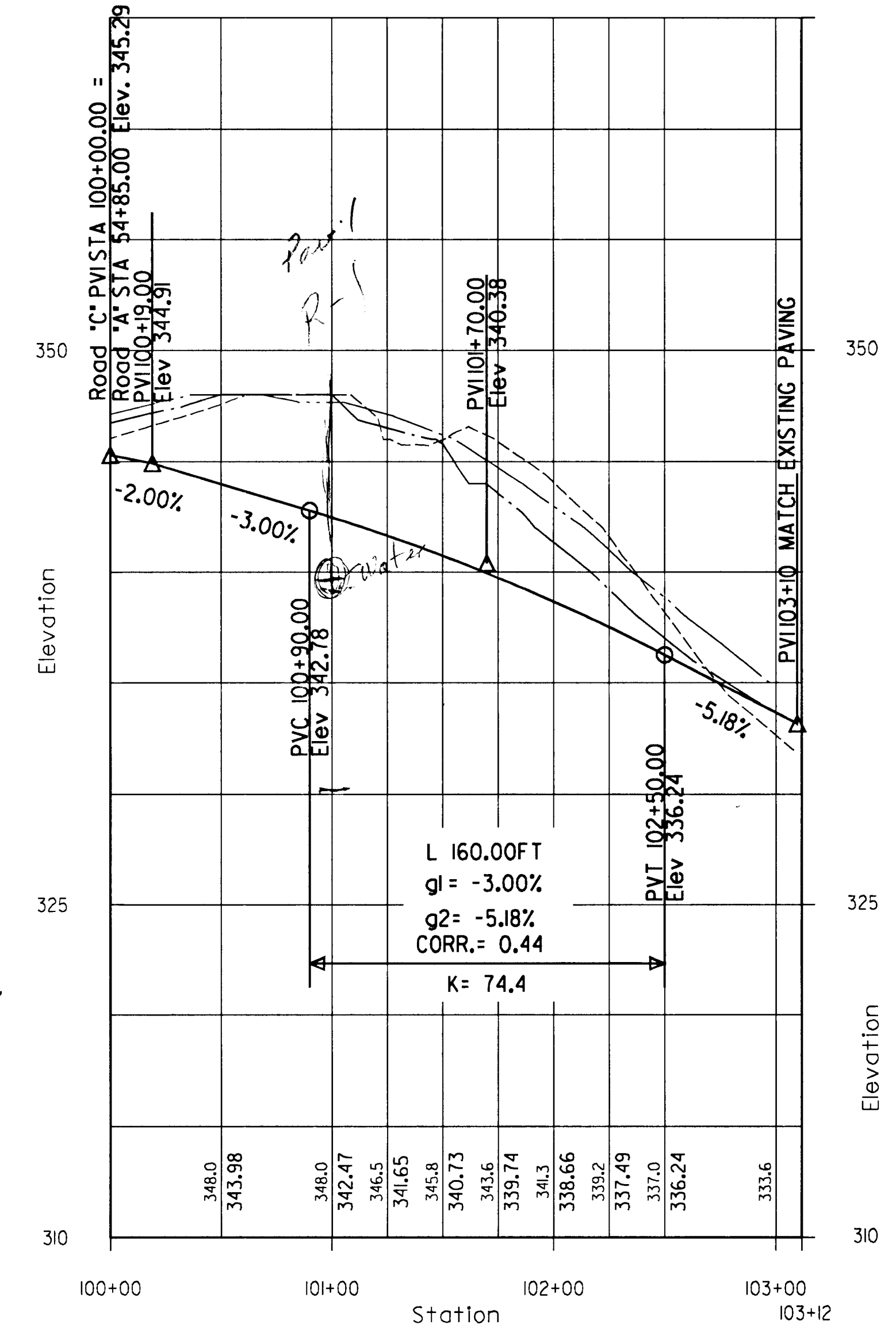
GORMAN ROAD REALIGNMENT
CAPITAL PROJECT E-0935
ELECTION DISTRICT NO. 6
HOWARD COUNTY MARYLAND

SCALE AS SHOWN
SHEET 9 OF 20

ROAD "A" PROFILE



ROAD "C" PROFILE



NOT FOR CONSTRUCTION
 DID SET
 1/18/96

LEGEND

LINE	SURFACE	OFFSET
—	PROPOSED CENTERLINE	0.00
- - -	EXISTING CENTERLINE	0.00
- - -	EXISTING LEFT R/W	-30.00
- - -	EXISTING RIGHT R/W	30.00
EXISTING @ GROUND ELEVATION		340.8
PROPOSED @ ELEVATION		342.44
VERTICAL SCALE 1"=5'		
HORIZONTAL SCALE 1"=50'		

PENDING COUNTY APPROVAL

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS	DATE	CHIEF, BUREAU OF ENGINEERING	DATE
CHIEF, BUREAU OF HIGHWAYS	DATE	CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT	DATE

DMW
Daft · McCune · Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 410 296 3333
 Fax 296 4705

DESIGN BY:	JWS		
DRAWN BY:	JWS\PSN		
CHECKED BY:			
DATE:	JAN. 18, 1996		
BY	NO.	REVISION	DATE

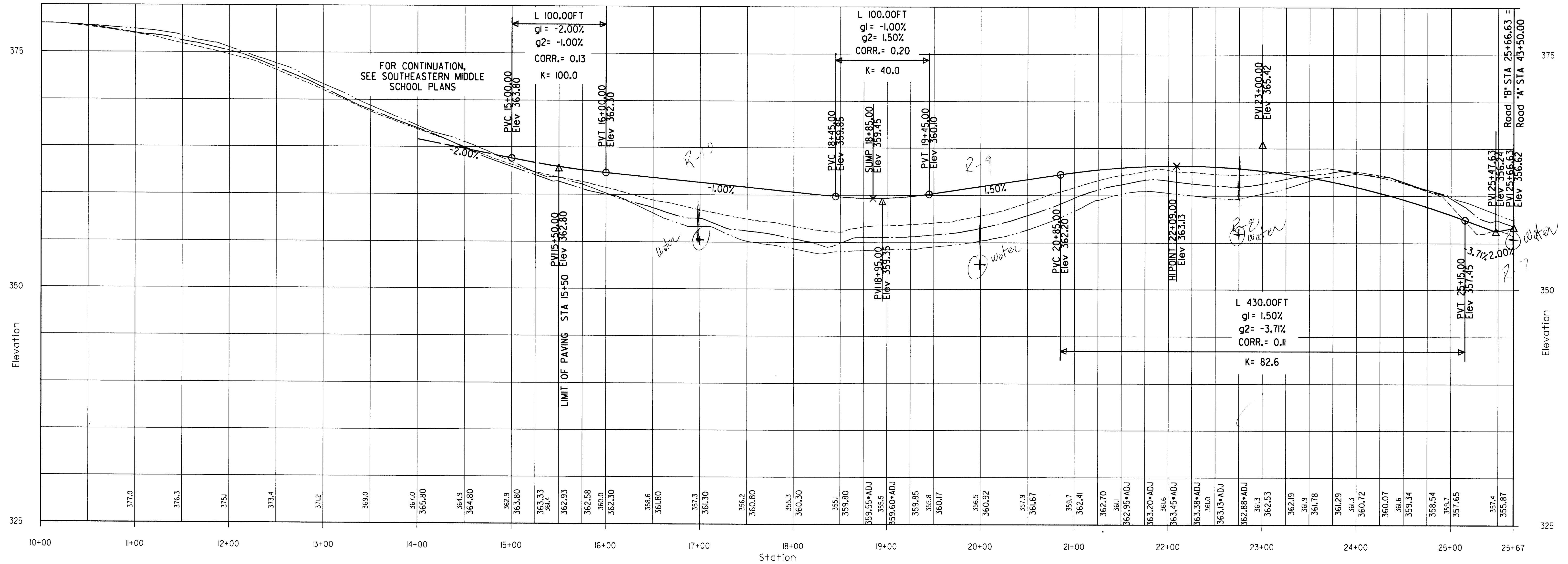
ROADWAY PROFILES

600 SCALE MAP NO. 47 BLOCK NO. 2

GORMAN ROAD REALIGNMENT
 CAPITAL PROJECT E-0935
 ELECTION DISTRICT NO. 6
 HOWARD COUNTY MARYLAND

SCALE AS SHOWN
 SHEET 10 OF 20

ROAD "B" PROFILE



LEGEND

LINE	SURFACE	OFFSET
—	PROPOSED CENTERLINE	0.00
---	EXISTING CENTERLINE	0.00
---	EXISTING LEFT R/W	-30.00
---	EXISTING RIGHT R/W	30.00
---	EXISTING GROUND ELEVATION	340.8
---	PROPOSED GROUND ELEVATION	342.44

VERTICAL SCALE 1"=5'
HORIZONTAL SCALE 1"=50'

NOT FOR
CONSTRUCTION
NOT SET
DATE 1/18/96

PENDING COUNTY APPROVAL

Tue Jan 16 21:25:30 1996 d:\p1\400\94\400.dwg

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, 200 East Pennsylvania Avenue
Landscape Architects, Towson, Maryland 21286
Engineers, Surveyors & Environmental Professionals 410 296 3333
Fax 296 4705

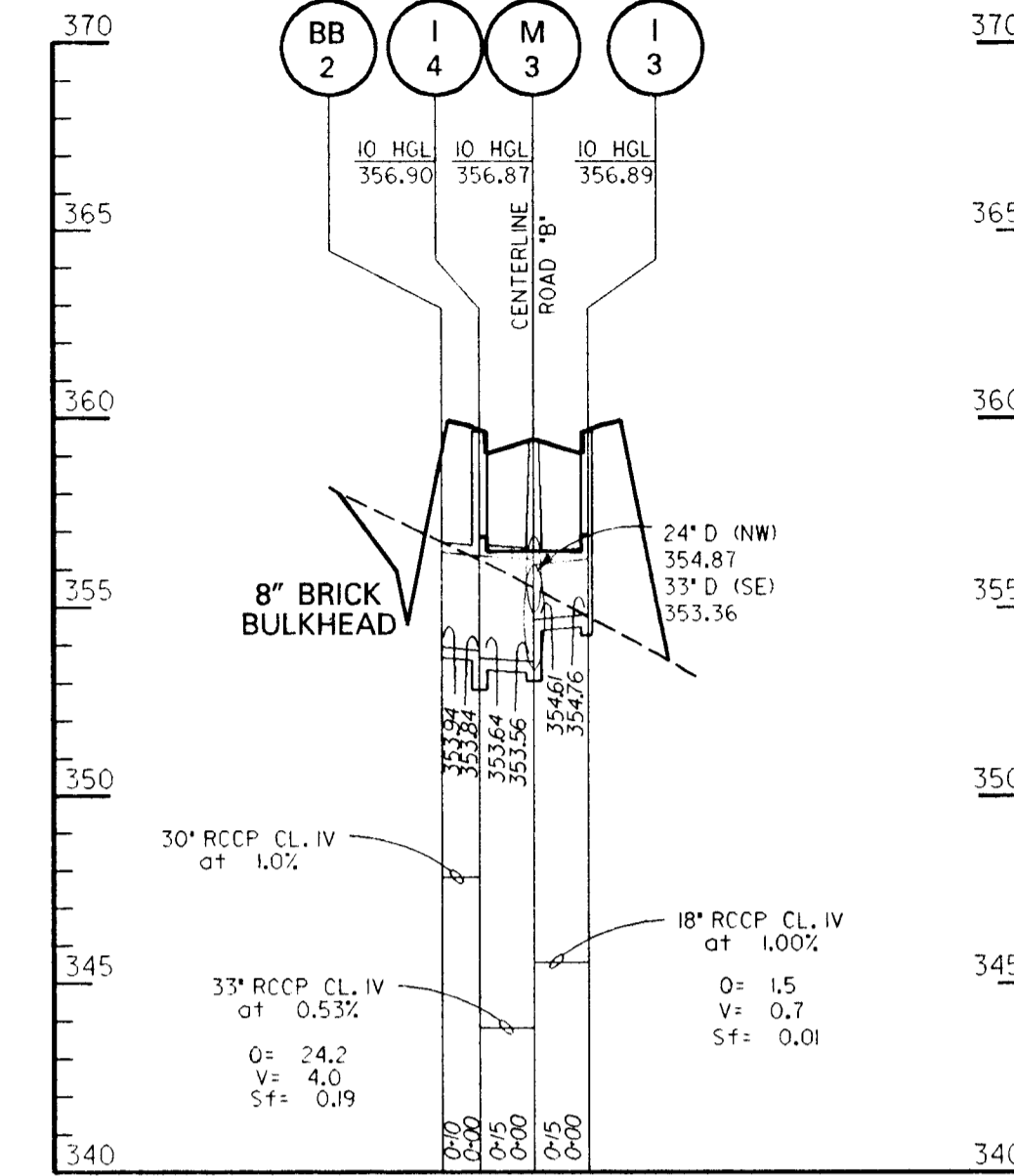
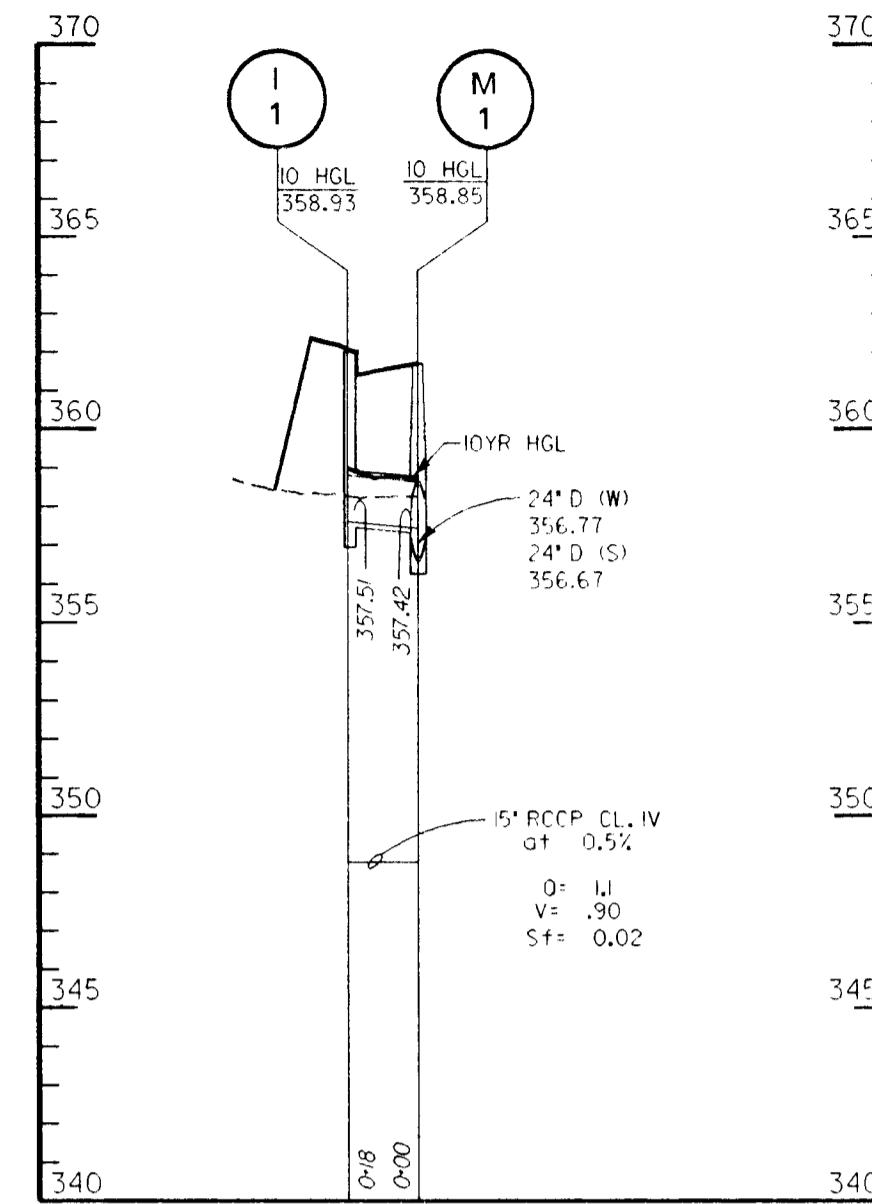
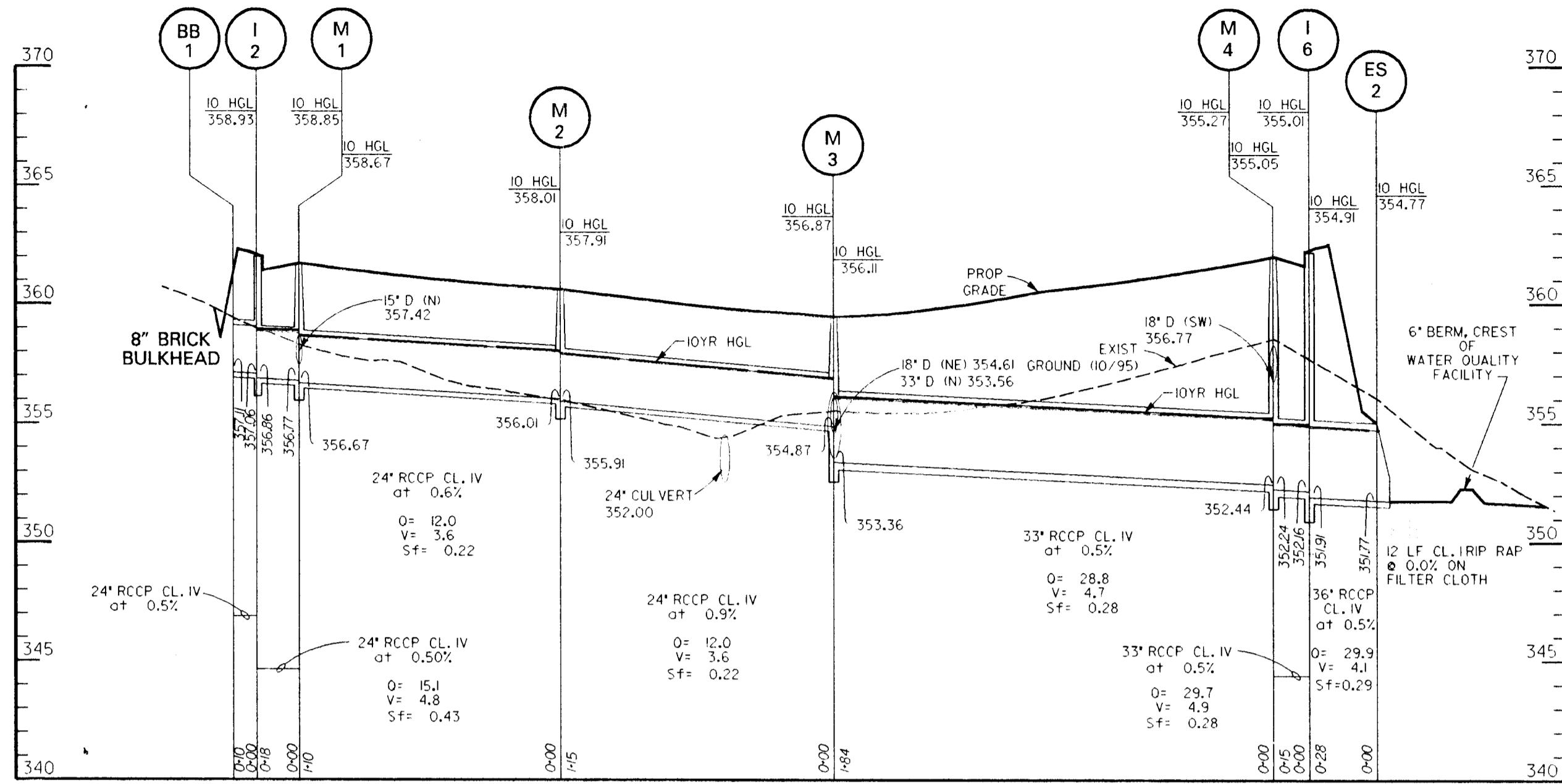
DESIGN BY:	JWS		
DRAWN BY:	JWS\PSN		
CHECKED BY:			
DATE:	JAN. 18, 1996		
BY	NO.	REVISION	DATE

ROADWAY PROFILES

GORMAN ROAD REALIGNMENT
CAPITAL PROJECT E-0935
ELECTION DISTRICT NO. 6
HOWARD COUNTY MARYLAND

SCALE AS SHOWN
SHEET 11 OF 20

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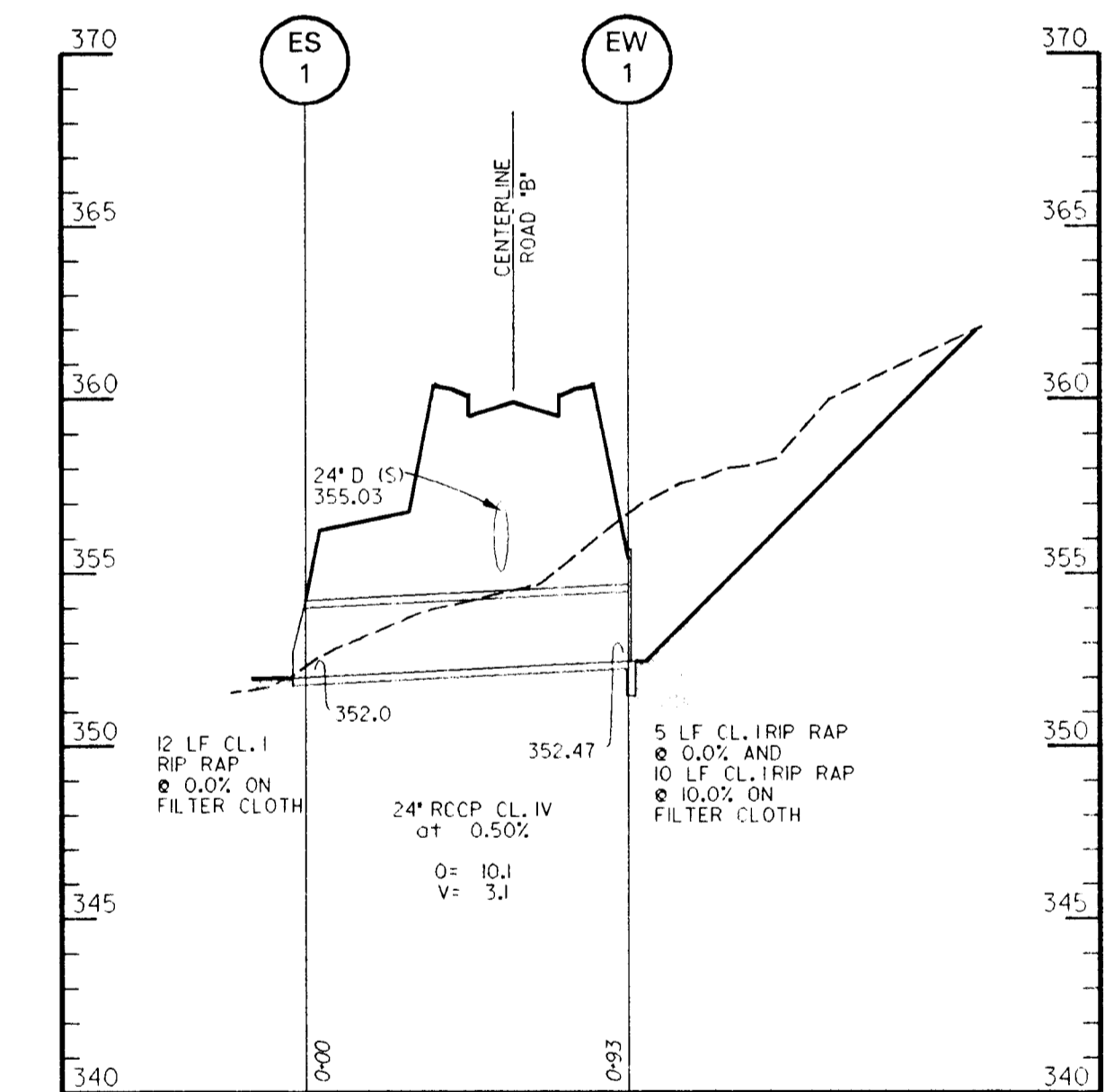
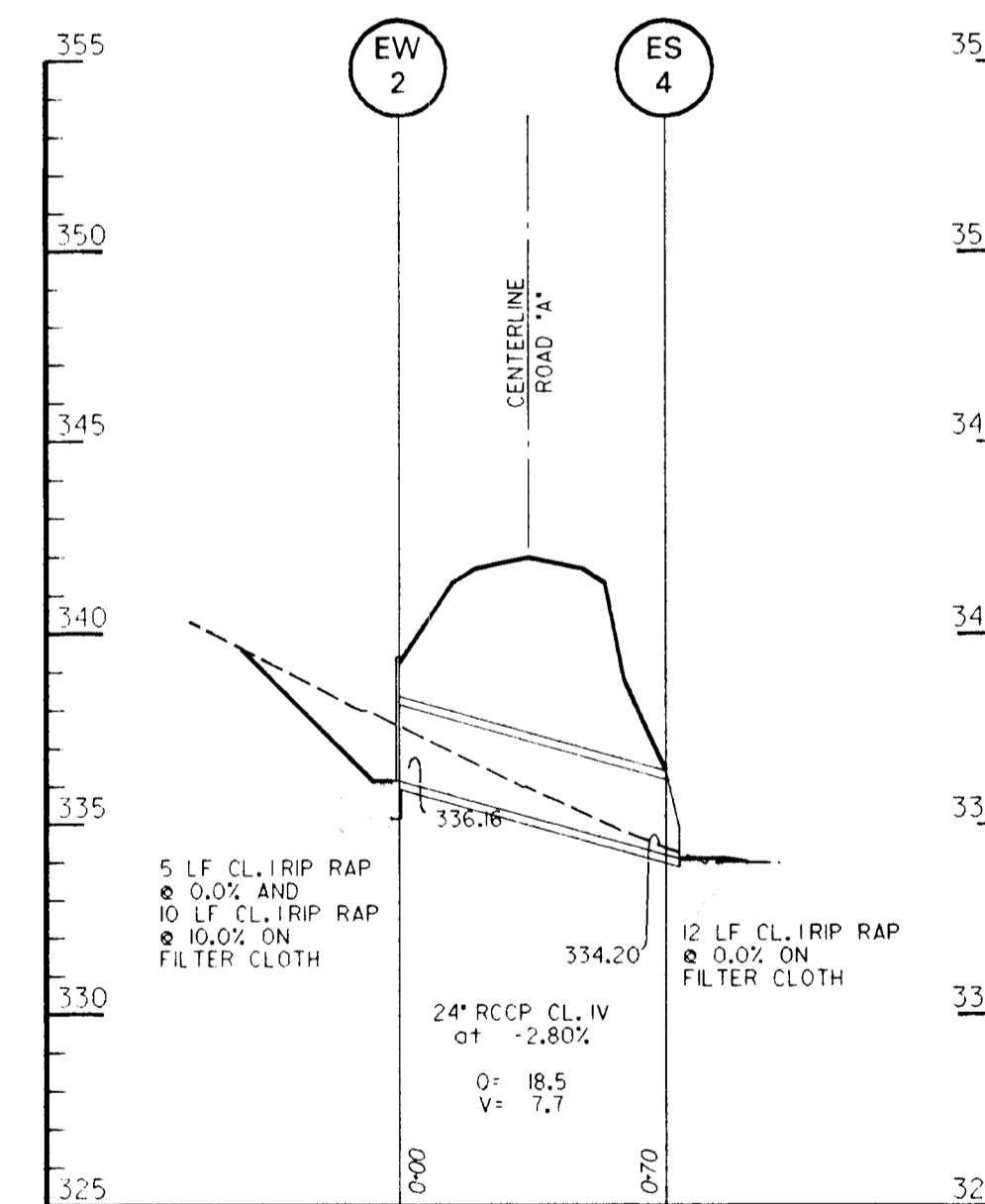
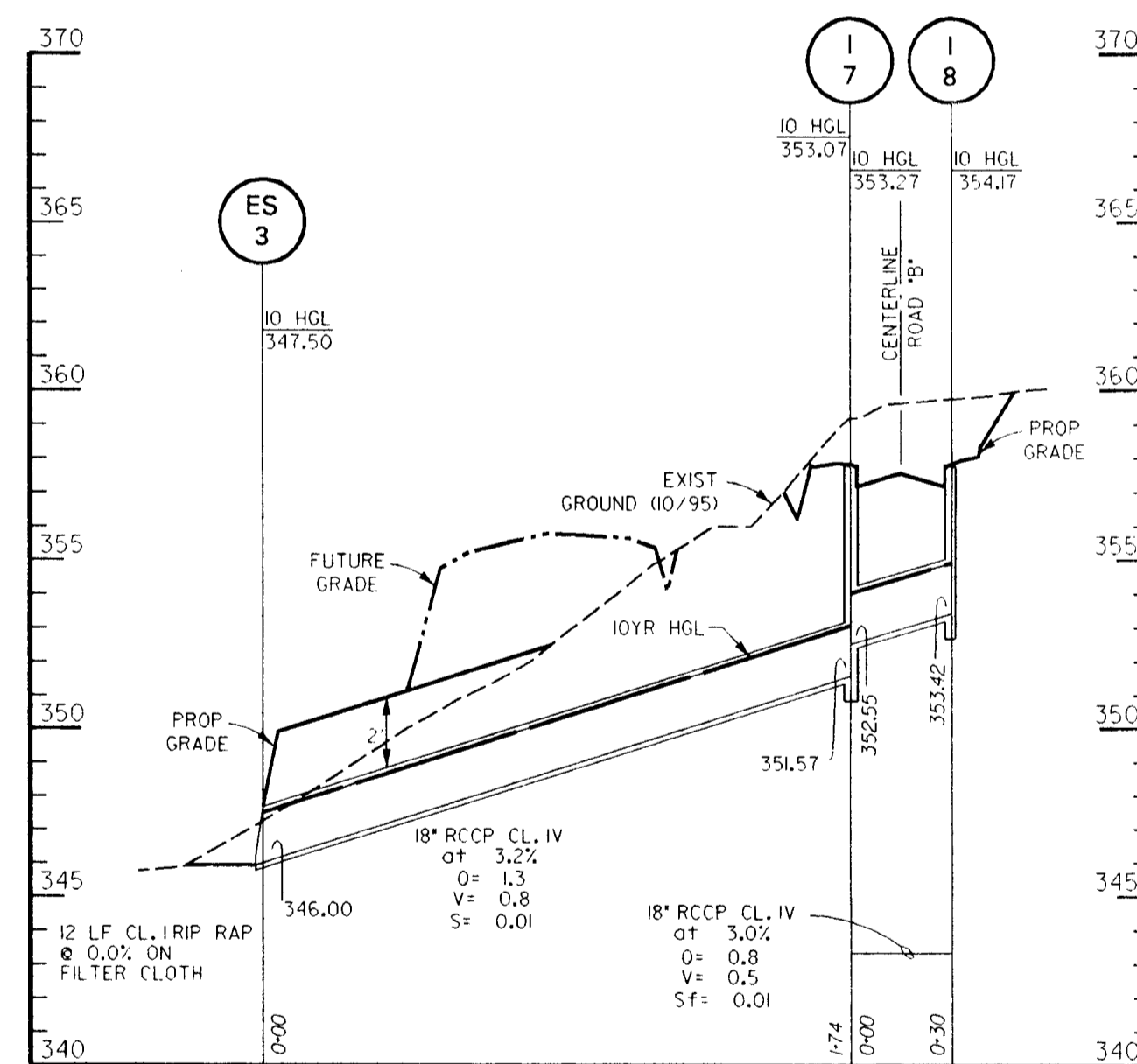
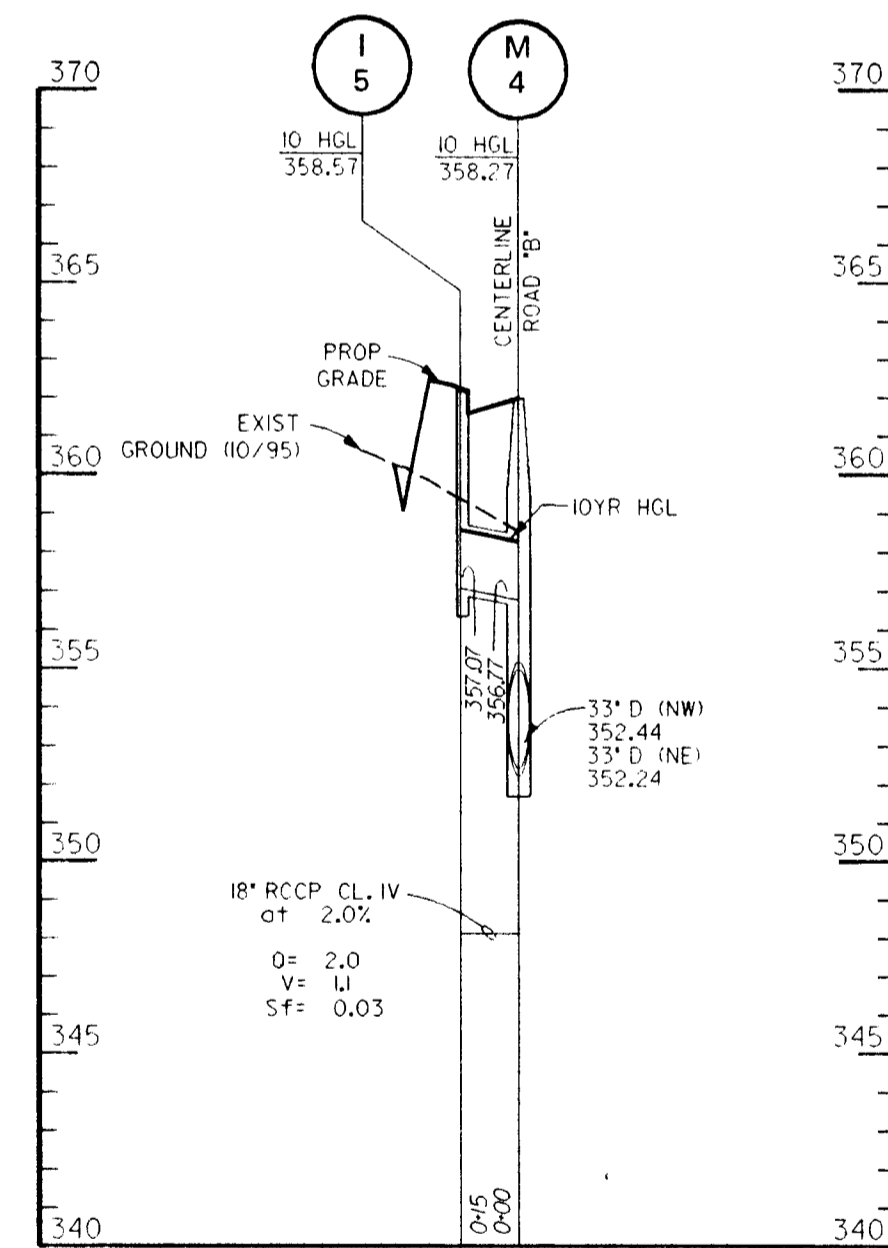


INLET SCHEDULE									
NO.	TYPE	Q(2 yr)	INV. OUT	TOP ELEV.	DETAIL	WIDTH	STATION	OFFSET	
I-1	A-5	0.8	357.51	362.00	S.D. 4.01	2'-6"	16+50.00	13' R	
I-2	A-5	0.5	356.86	362.00	S.D. 4.01	2'-6"	16+50.00	13' L	
I-3	A-5	0.9	354.76	359.65	S.D. 4.01	2'-6"	18+85.00	13' R	
I-4	A-5	1.0	353.64	359.65	S.D. 4.01	2'-6"	18+85.00	13' R	
I-5	A-5	1.4	357.07	362.17	S.D. 4.01	2'-6"	20+70.00	13' R	
I-6	A-5	0.2	351.91	362.17	S.D. 4.01	2'-6"	20+70.00	13' L	
I-7	A-5	0.6	351.57	357.77	S.D. 4.01	2'-6"	25+02.00	13' R	
I-8	A-5	0.5	353.42	357.77	S.D. 4.01	2'-6"	25+02.00	13' L	

* NOTE: ELEVATIONS REPRESENT TOP OF CURB @ HEADPIECE FOR A-5 INLETS
 NOTE: OFFSETS REPRESENT DISTANCE FROM ROADWAY CENTERLINE TO FACE OF CURB

STRUCTURE SCHEDULE						
NO.	TYPE	SIZE	INV. OUT	DETAIL NO.	STATION	OFFSET
ES1	CONE END SECTION	24"	352.00	S05.52	18+40.00	6.0' L
ES2	CONE END SECTION	36"	351.77	S05.52	20+70.00	43.5' L
ES3	CONE END SECTION	18"	346.00	S05.52	42+14.72	6' R
ES4	CONE END SECTION	24"	334.20	S05.52	50+35.00	36' L
EW1	'C' END WALL	24"	352.47	S05.21	18+40.00	33' R
EW2	'C' END WALL	24"	336.16	S05.21	50+35.00	34' R

MANHOLE SCHEDULE						
NO.	TYPE	INV. OUT	TOP ELEV.	DETAIL NO.	STATION	OFFSET
1	48" DIA	356.67	361.70	G 5.12	16+60.00	0
2	48" DIA	355.91	360.60	G 5.12	17+70.00	0
3	60" DIA	353.36	359.45	G 5.13	18+85.00	0
4	60" DIA	352.74	361.97	G 5.13	20+70.00	0



EXISTING GROUND - - - - -
 PROPOSED GRADE - - - - -

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS _____ DATE _____
 CHIEF, BUREAU OF ENGINEERING _____ DATE _____

CHEF, BUREAU OF HIGHWAYS _____ DATE _____
 CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT _____ DATE _____

DMW
Daft · McCune · Walker, Inc.

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

200 East Pennsylvania Avenue
 Towson, Maryland 21286
 410 296 3333
 Fax 296 4705

DESIGN BY: JWS
 DRAWN BY: JWS
 CHECKED BY:

DATE: JAN. 18, 1996

BY NO. REVISION DATE

STORM DRAIN PROFILES

600 SCALE MAP NO. 47 BLOCK NO. 2

GORMAN ROAD REALIGNMENT
 CAPITAL PROJECT E-0935
 ELECTION DISTRICT NO. 6
 HOWARD COUNTY MARYLAND

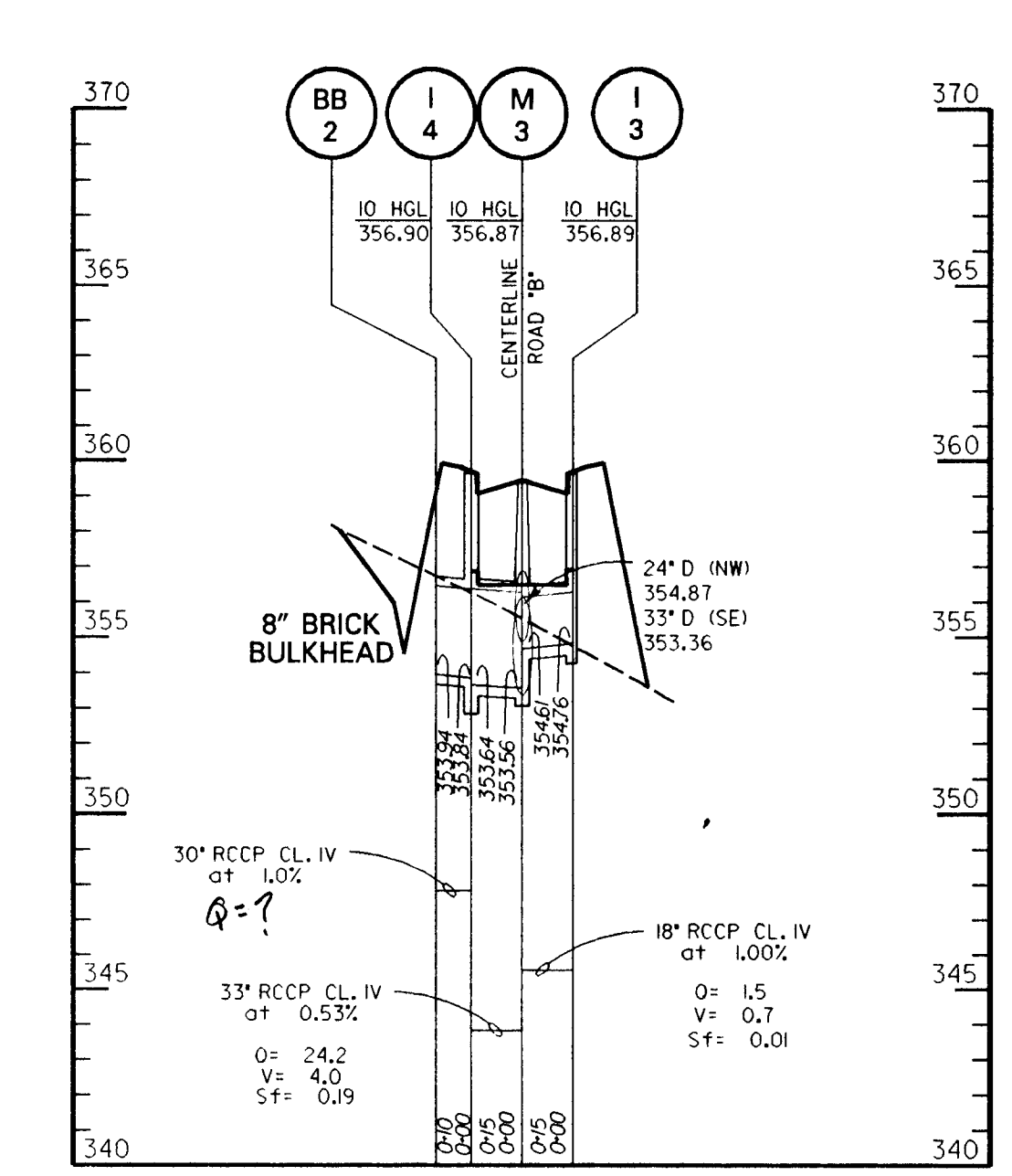
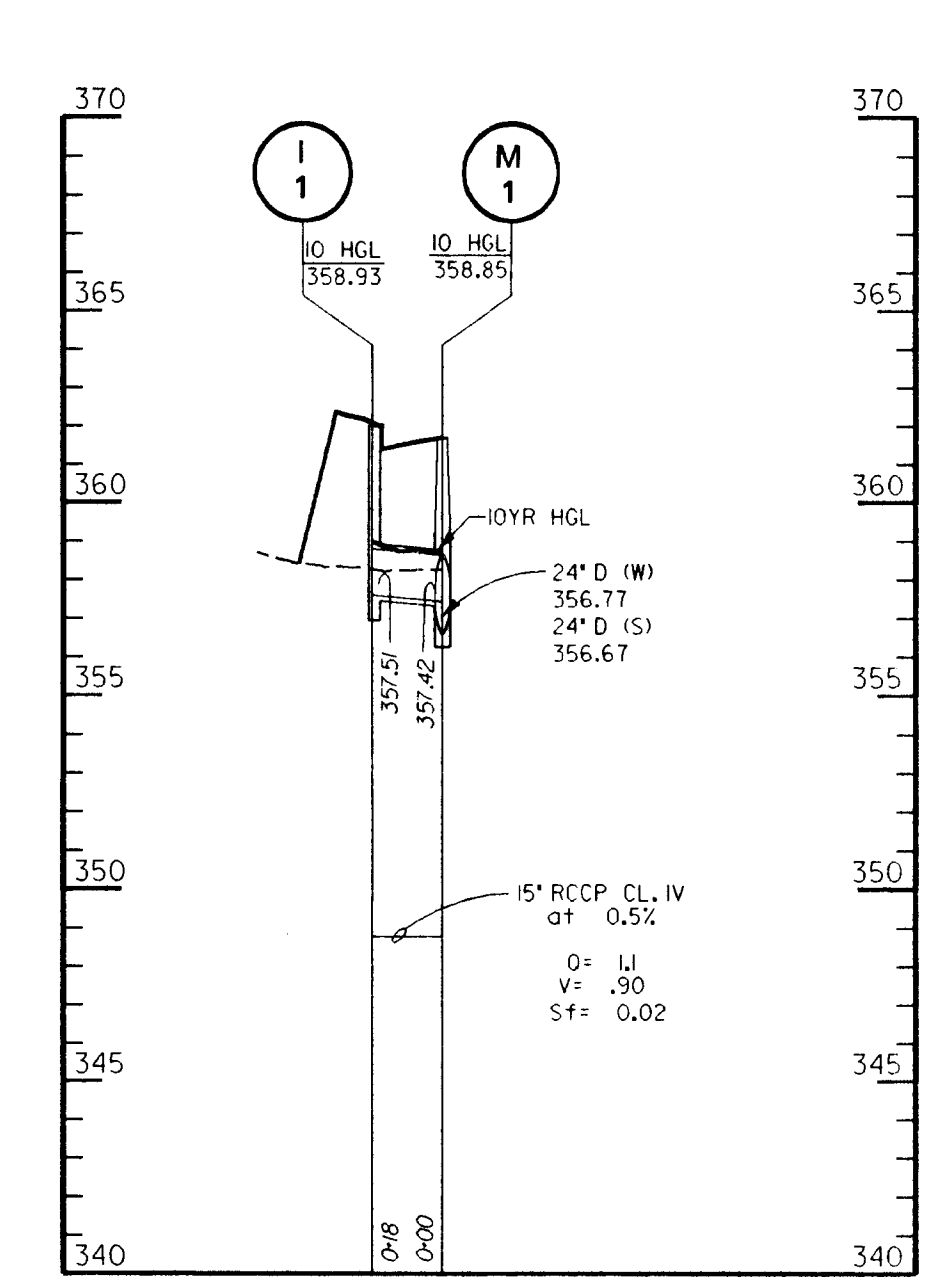
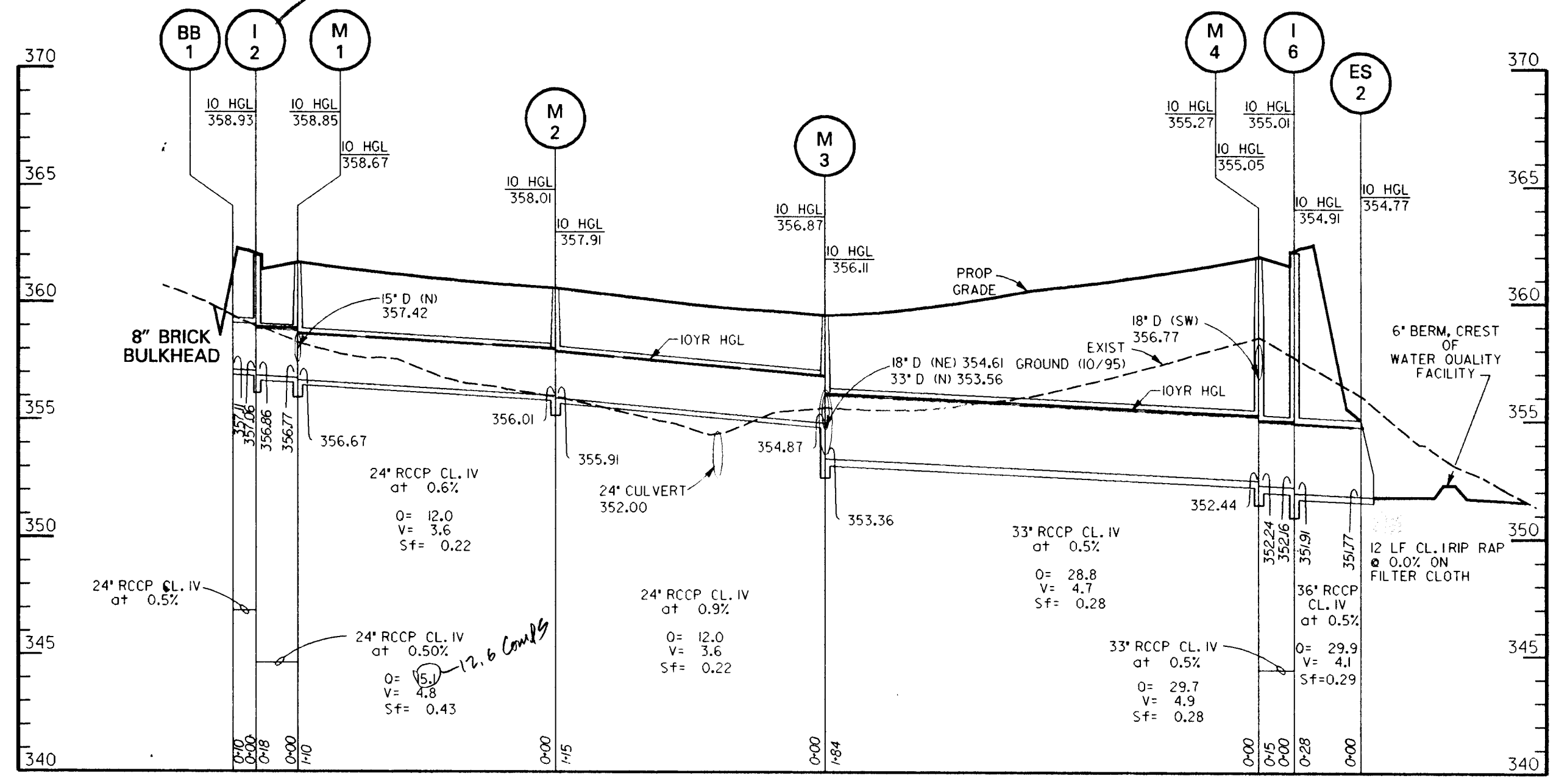
SCALE
 HOR 1" = 50'
 VERT 1" = 5'

SHEET
 12 OF 20

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Min depths as 24" + Pipe dia + 1" ft of Pipe dia + 1"



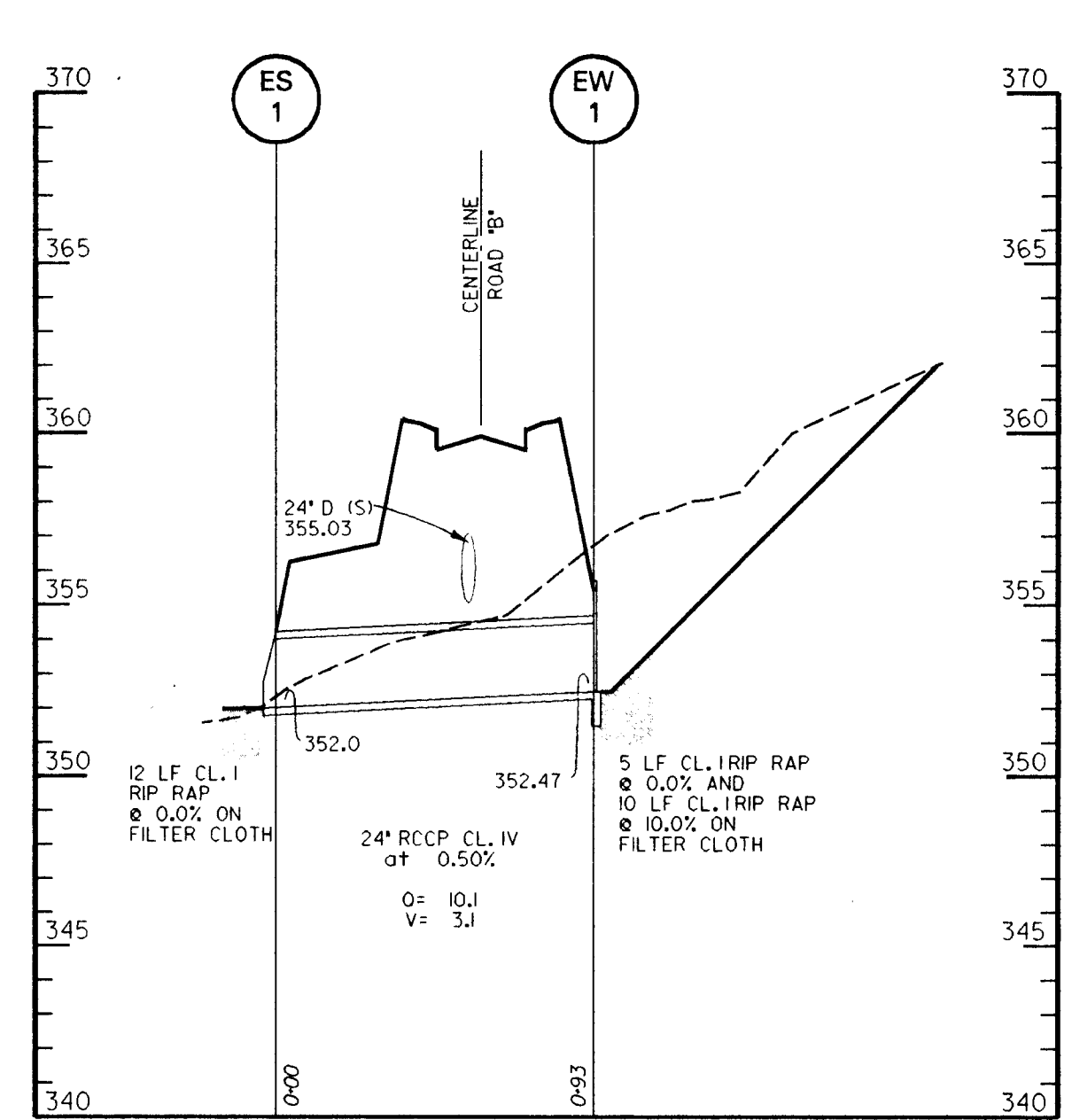
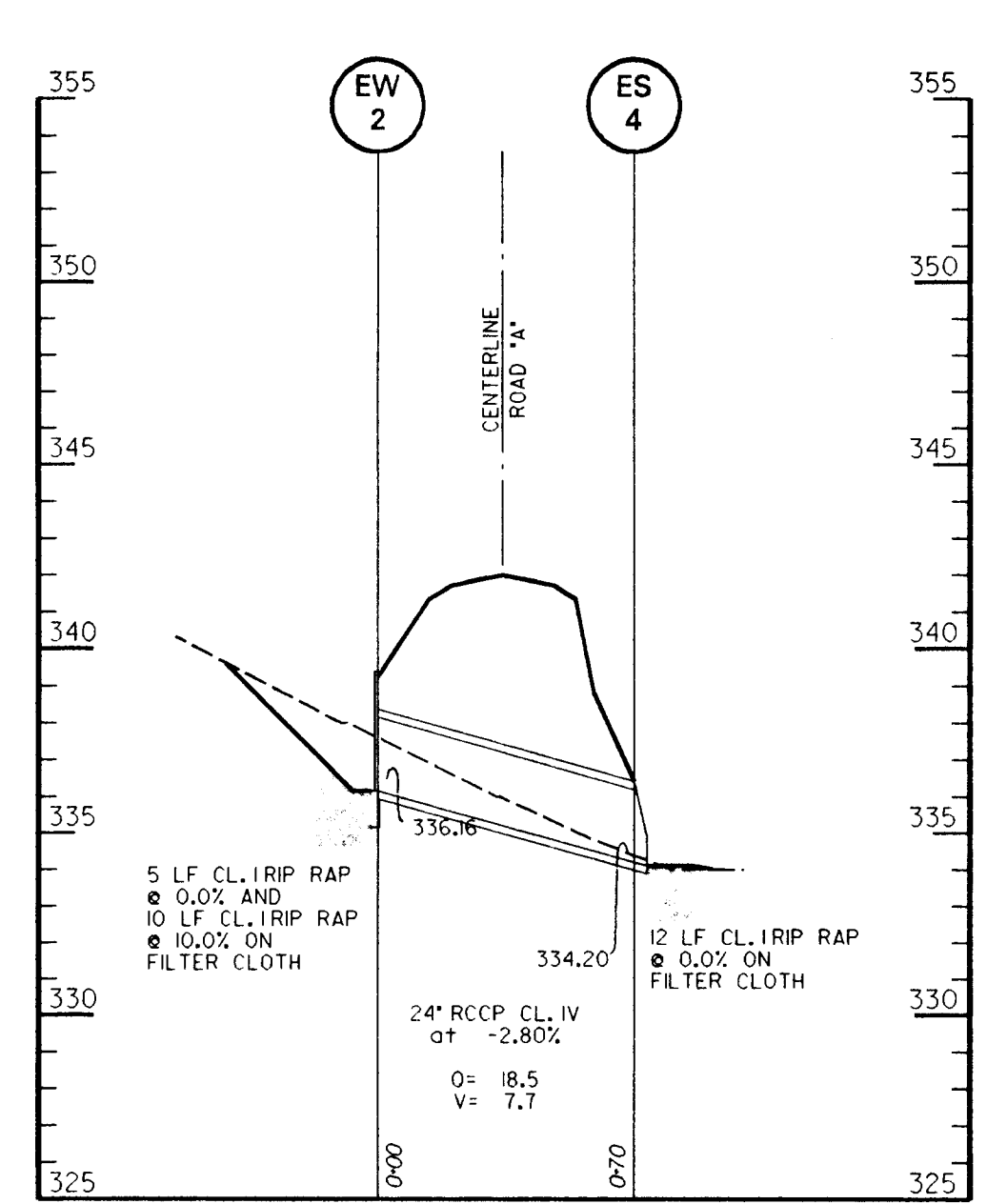
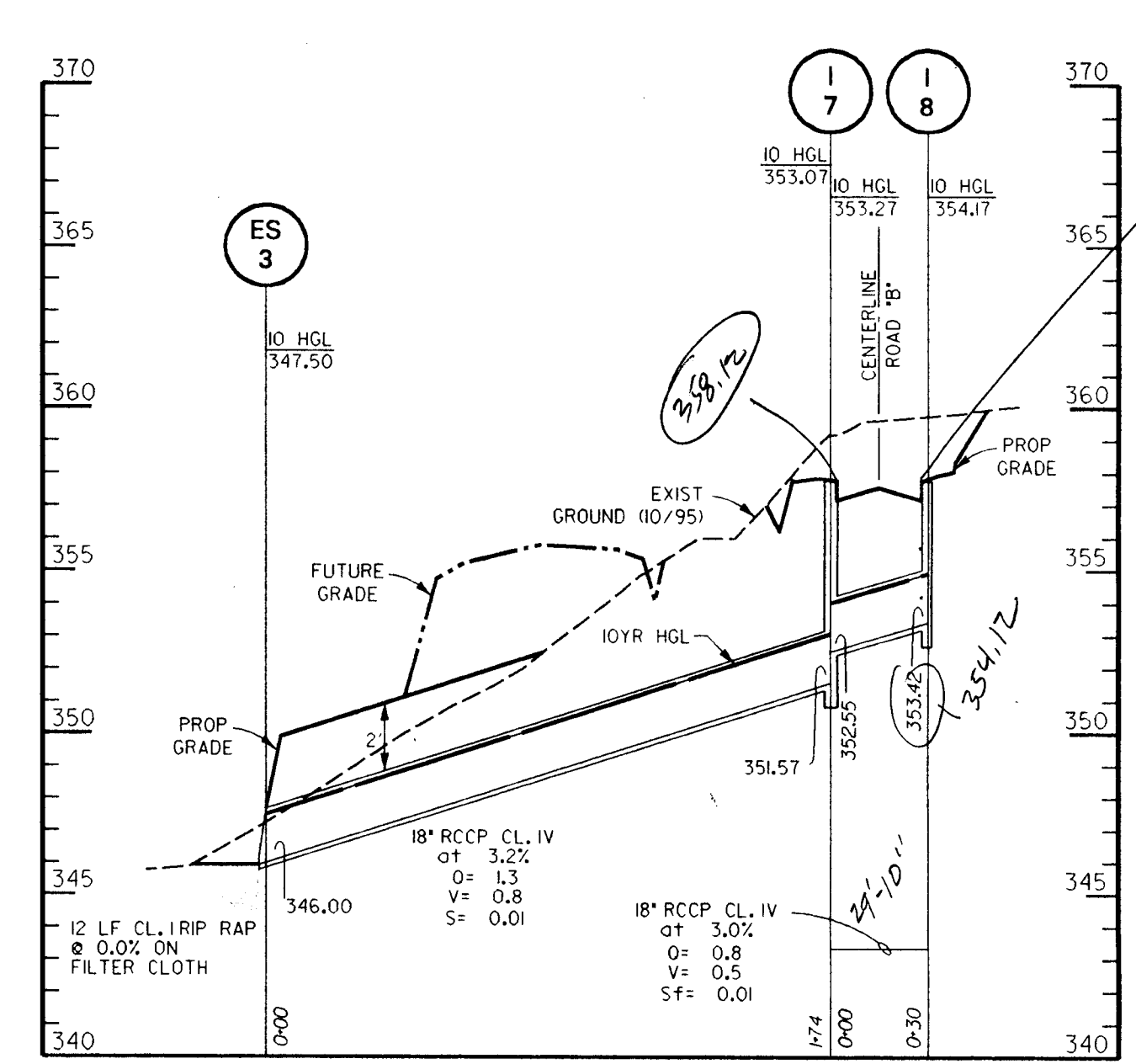
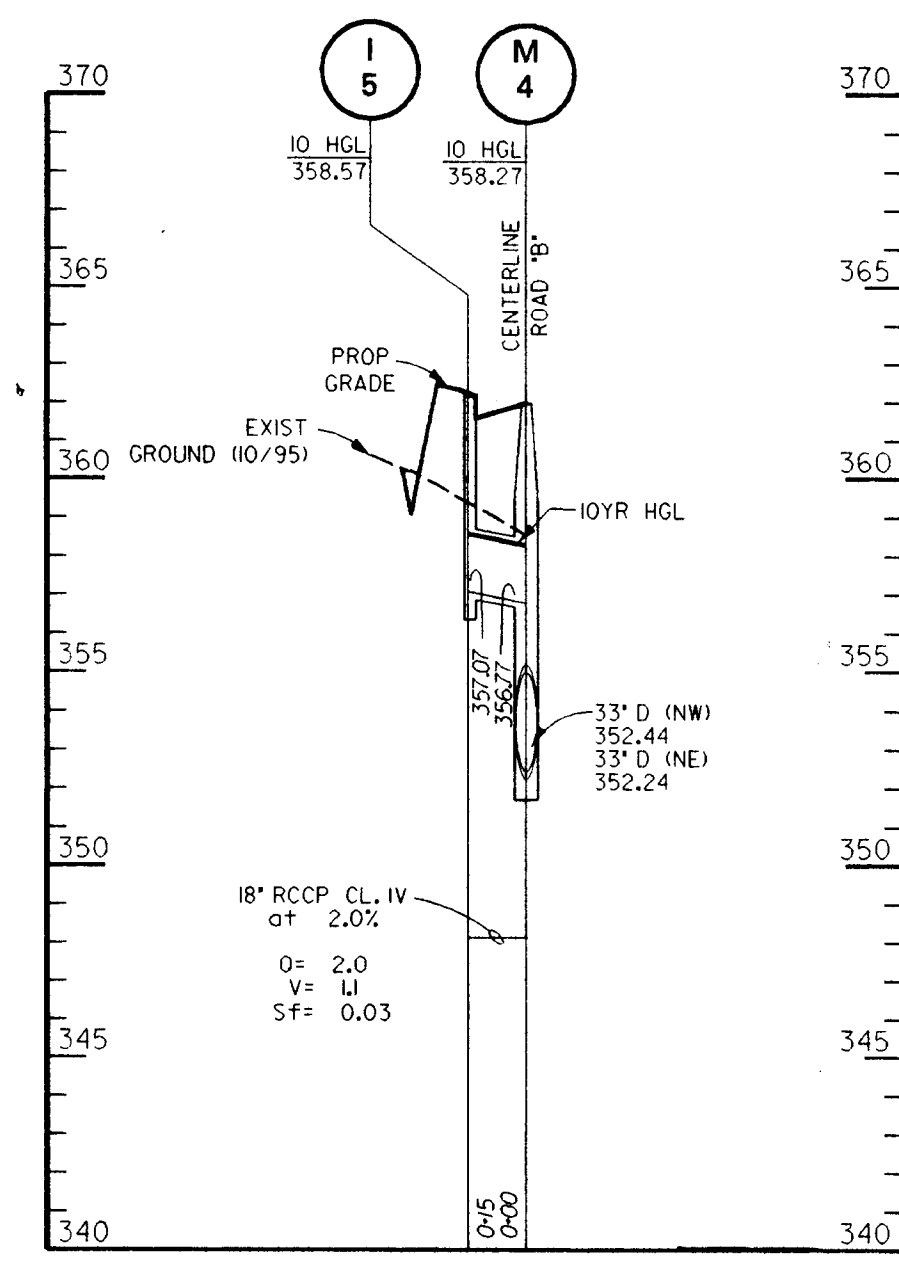
NO.	TYPE	Q(2 yr)	INV. OUT	TOP ELEV. +	DETAIL	WIDTH	STATION	OFFSET
I-1	A-5	0.8	357.51	362.00	S.D. 4.01	2'-6"	16+50.00	13' R
I-2	A-5	0.5	356.86	362.00	S.D. 4.01	2'-6"	16+50.00	13' L
I-3	A-5	0.9	354.76	359.65	S.D. 4.01	2'-6"	18+85.00	13' L
I-4	A-5	1.0	353.64	359.65	S.D. 4.01	2'-6"	18+85.00	13' L
I-5	A-5	1.4	357.07	362.17	S.D. 4.01	2'-6"	20+70.00	13' R
I-6	A-5	0.2	351.91	362.17	S.D. 4.01	2'-6"	20+70.00	13' L
I-7	A-5	0.6	351.57	357.77	S.D. 4.01	2'-6"	25+02.00	13' R
I-8	A-5	0.5	353.42	357.77	S.D. 4.01	2'-6"	25+02.00	13' L

* NOTE: ELEVATIONS REPRESENT TOP OF CURB & HEADPIECE FOR A-5 INLETS
NOTE: OFFSETS REPRESENT DISTANCE FROM ROADWAY CENTERLINE TO FACE OF CURB

NO.	TYPE	SIZE	INV. OUT	DETAIL NO.	STATION	OFFSET
ES1	CONC END SECTION	24"	352.00	SD5.52	18+40.00	60' L
ES2	CONC END SECTION	36"	351.77	SD5.52	20+70.00	43.5' L
ES3	CONC END SECTION	18"	346.00	SD5.52	42+14.72	6' R
ES4	CONC END SECTION	24"	334.20	SD5.52	50+35.00	36' L
EW1	"C" END WALL	24"	352.47	SD5.21	18+40.00	33' R
EW2	"C" END WALL	24"	336.16	SD5.21	50+35.00	34' R

NO.	TYPE	INV. OUT	TOP ELEV.	DETAIL NO.	STATION	OFFSET
1	48" DIA	356.67	361.70	C 5.12	16+60.00	0
2	48" DIA	355.91	360.60	C 5.12	17+70.00	0
3	60" DIA	353.36	359.45	C 5.13	18+85.00	0
4	60" DIA	352.24	361.97	C 5.13	20+70.00	0

BB-1 TO I-2 TO M-1
M-1 TO M-2
M-2 TO M-3
M-3 TO M-4
M-4 TO I-4
I-4 TO M-3
-3 TO M-3
I-1 TO M-1
BB-2 TO I-4
I-4 TO M-3
-3 TO M-3



M-1 TO M-2
M-2 TO M-3
M-3 TO M-4
M-4 TO I-4
I-4 TO M-3
-3 TO M-3

I-1 TO M-1
BB-2 TO I-4
I-4 TO M-3
-3 TO M-3

EW-2 TO ES-4
EW-1 TO ES-1

EW-1 TO ES-1
EW-2 TO ES-4

EXISTING GROUND - - - -
PROPOSED GRADE - - - -

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, 200 East Pennsylvania Avenue
Landscape Architects, 410 296 3333
Engineers, Surveyors & Environmental Professionals, Fax 296 4705

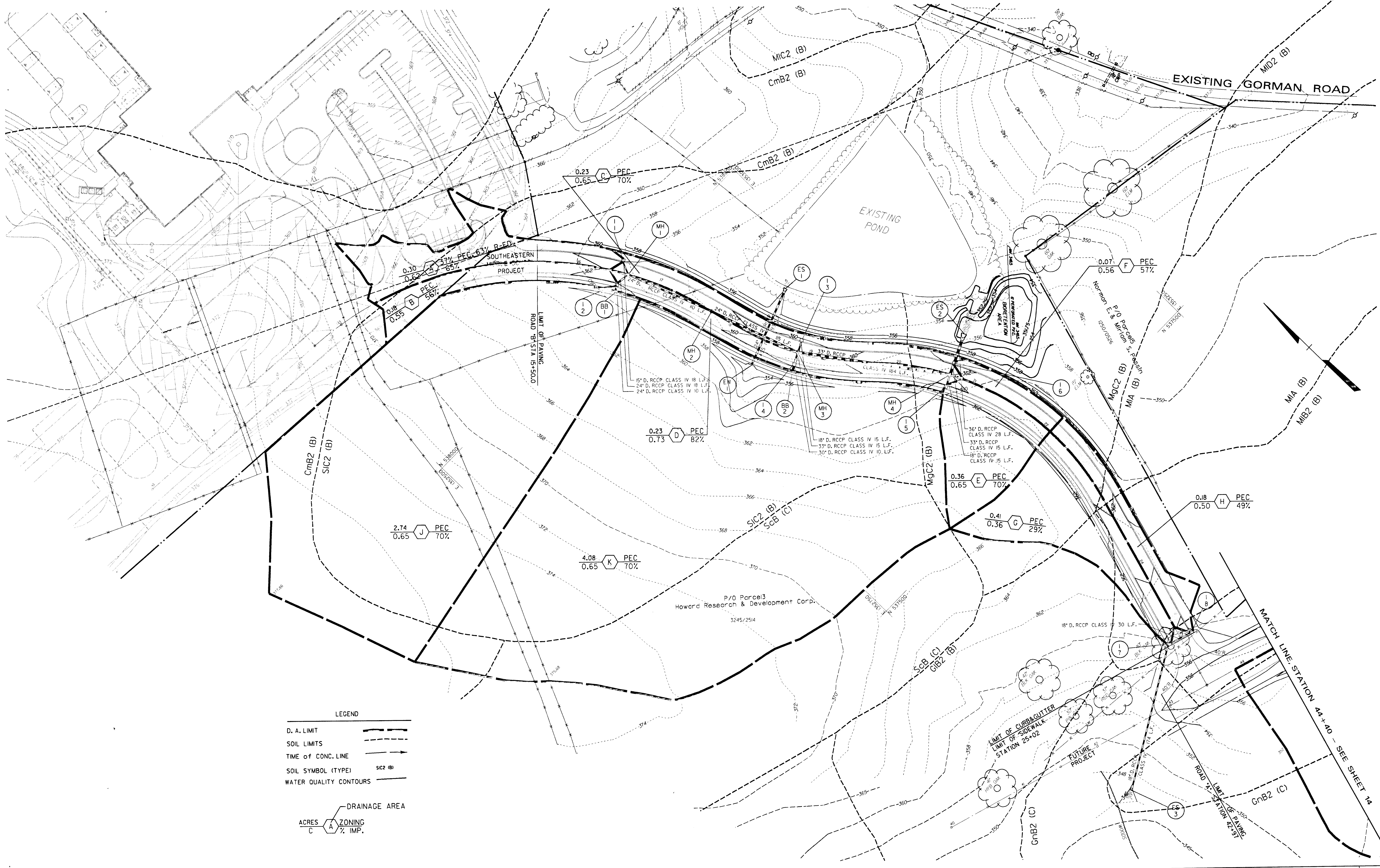
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DRAWN BY: JWS
CHECKED BY:
DATE: JAN. 18, 1996

600 SCALE MAP NO. 47 BLOCK NO. 2

STORM DRAIN PROFILES
GORM ROAD REALIGNMENT
CAPITAL PROJECT E-0935
ELECTION DISTRICT NO. 6
HOWARD COUNTY MARYLAND

SCALE
HOR. 1" = 50'
VERT 1" = 5'
SHEET
12 OF 20

F:\19 Jan 19 11:38:45 1996 d:\194400\04\001.dwg



LEGEND

D. A. LIMIT	
SOIL LIMITS	
TIME OF CONC. LINE	
SOIL SYMBOL (TYPE)	SIC2 (B)
WATER QUALITY CONTOURS	
DRAINAGE AREA	
ACRES	ZONING
C	% IMP.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

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Engineers, Surveyors & 410 296 3333
Environmental Professionals Fax 296 4705

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CHECKED BY:			
DATE:	JAN. 18, 1996		
BY	NO.	REVISION	DATE

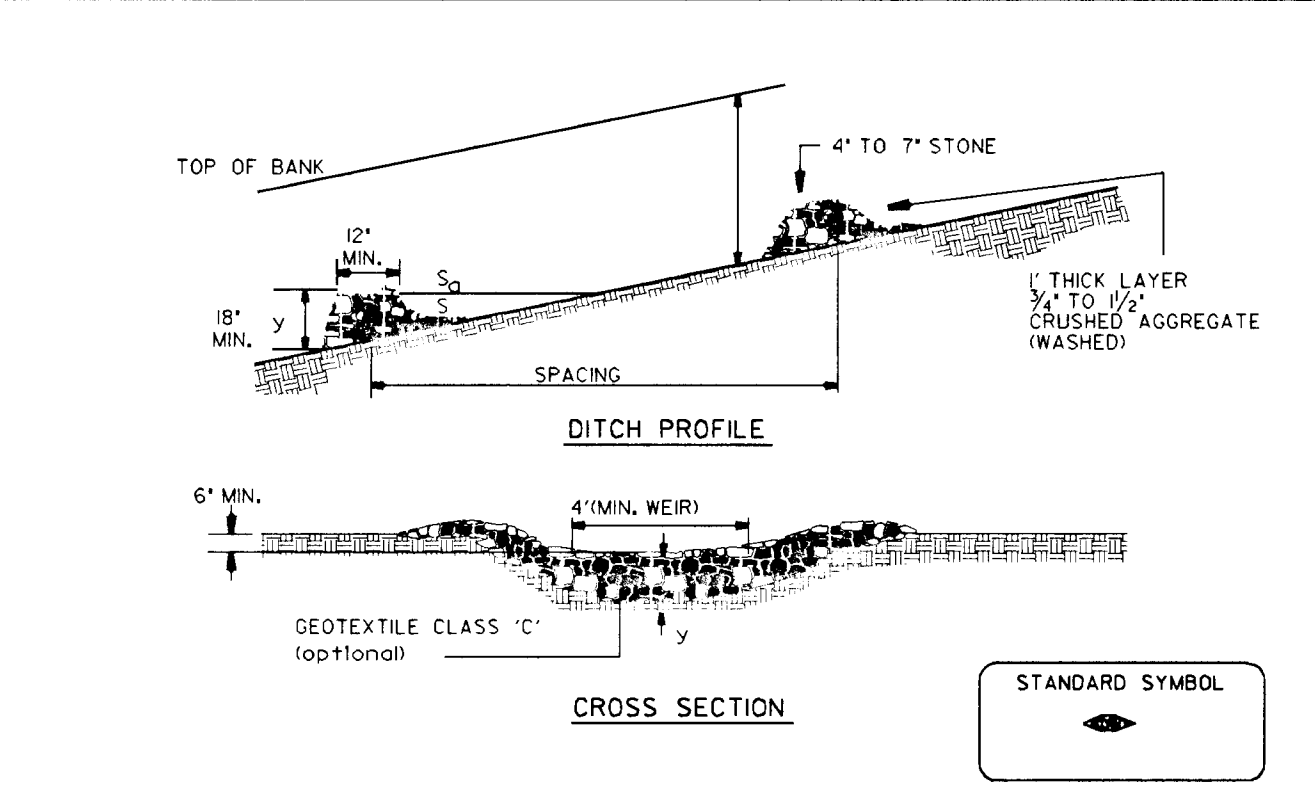
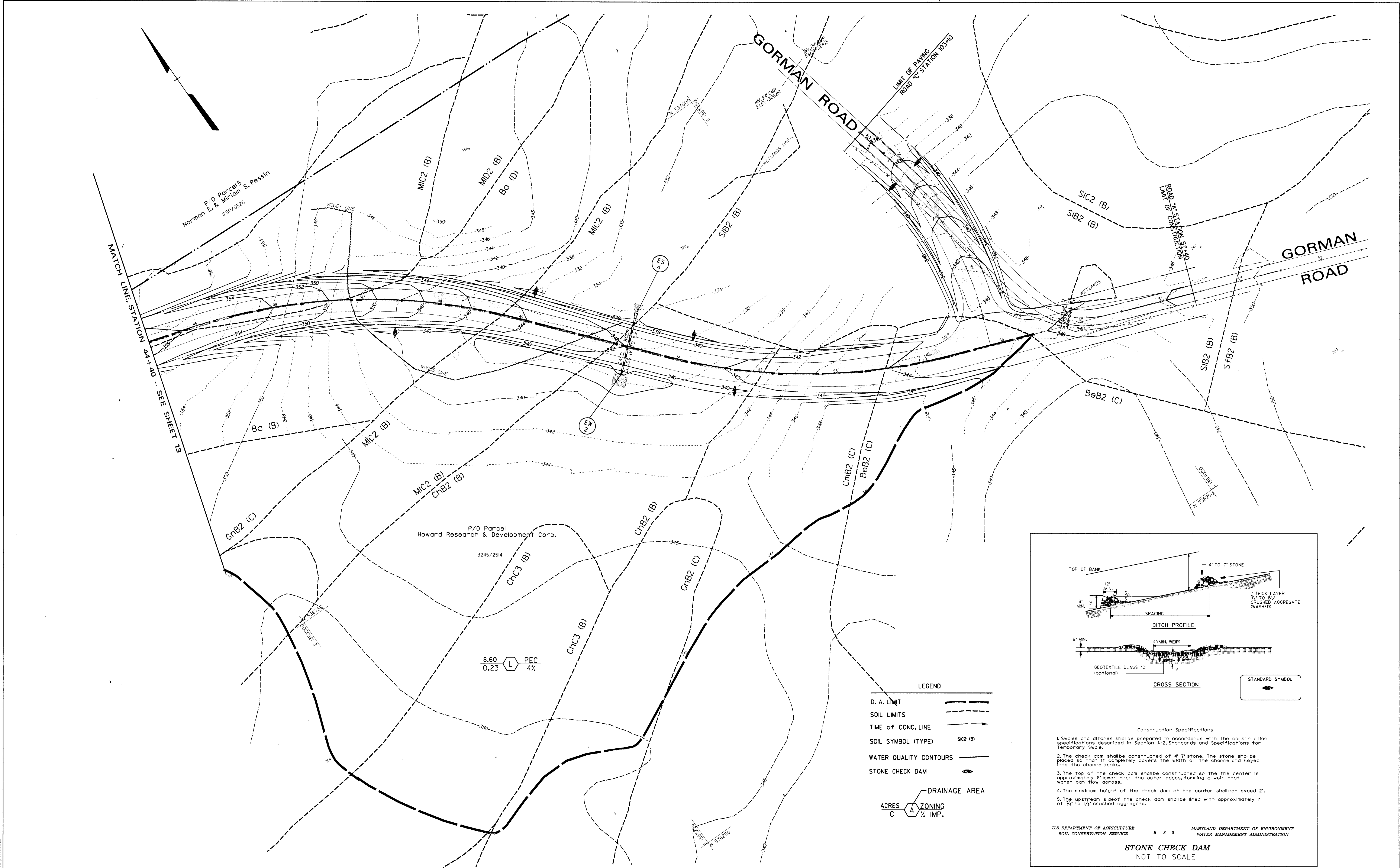
GRADING \ WATER QUALITY PLAN

GORMAN ROAD REALIGNMENT
CAPITAL PROJECT E-0935
ELECTION DISTRICT NO. 6
HOWARD COUNTY MARYLAND

SCALE
1" = 50'
SHEET
13 OF 20

DIRECTOR OF PUBLIC WORKS	DATE	CHEF, BUREAU OF ENGINEERING	DATE
CHEF, BUREAU OF HIGHWAYS	DATE	CHEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT	DATE

600 SCALE MAP NO. 47 BLOCK NO. 2



Construction Specifications

- Swales and ditches shall be prepared in accordance with the construction specifications described in Section A-2, Standards and Specifications for Temporary Swale.
- The check dam shall be constructed of 4'-7" stone. The stone shall be placed so that it completely covers the width of the channel and keyed into the channel banks.
- The top of the check dam shall be constructed so the center is approximately 6" lower than the outer edges, forming a weir that water can flow across.
- The maximum height of the check dam at the center shall not exceed 2'.
- The upstream side of the check dam shall be lined with approximately 1" of 3/4" to 1/2" crushed aggregate.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE B-8-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

STONE CHECK DAM
NOT TO SCALE

- LEGEND**
- D. A. LIMIT
 - SOIL LIMITS
 - TIME OF CONC. LINE
 - SOIL SYMBOL (TYPE)
 - WATER QUALITY CONTOURS
 - STONE CHECK DAM
 - DRAINAGE AREA

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE

CHIEF, BUREAU OF ENGINEERING DATE

CHIEF, BUREAU OF HIGHWAYS DATE

CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE

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A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

200 East Pennsylvania Avenue
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410 296 3333
Fax 296 4705

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BY NO.	
REVISION	
DATE	

GRADING \ WATER QUALITY PLAN

600 SCALE MAP NO. 47 BLOCK NO. 2

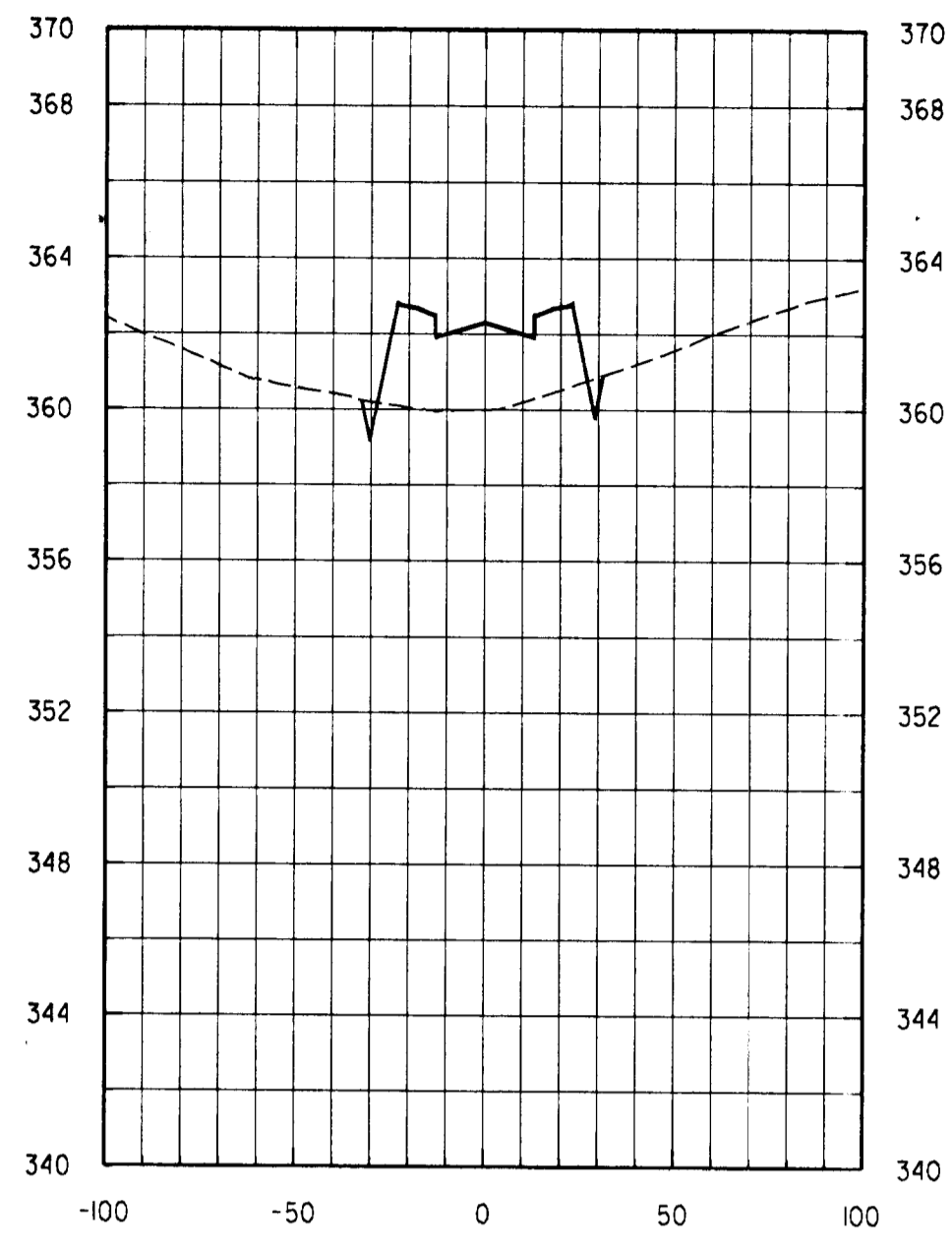
GORMAN ROAD REALIGNMENT
CAPITAL PROJECT E-0935
ELECTION DISTRICT NO. 6
HOWARD COUNTY MARYLAND

SCALE
1" = 50'

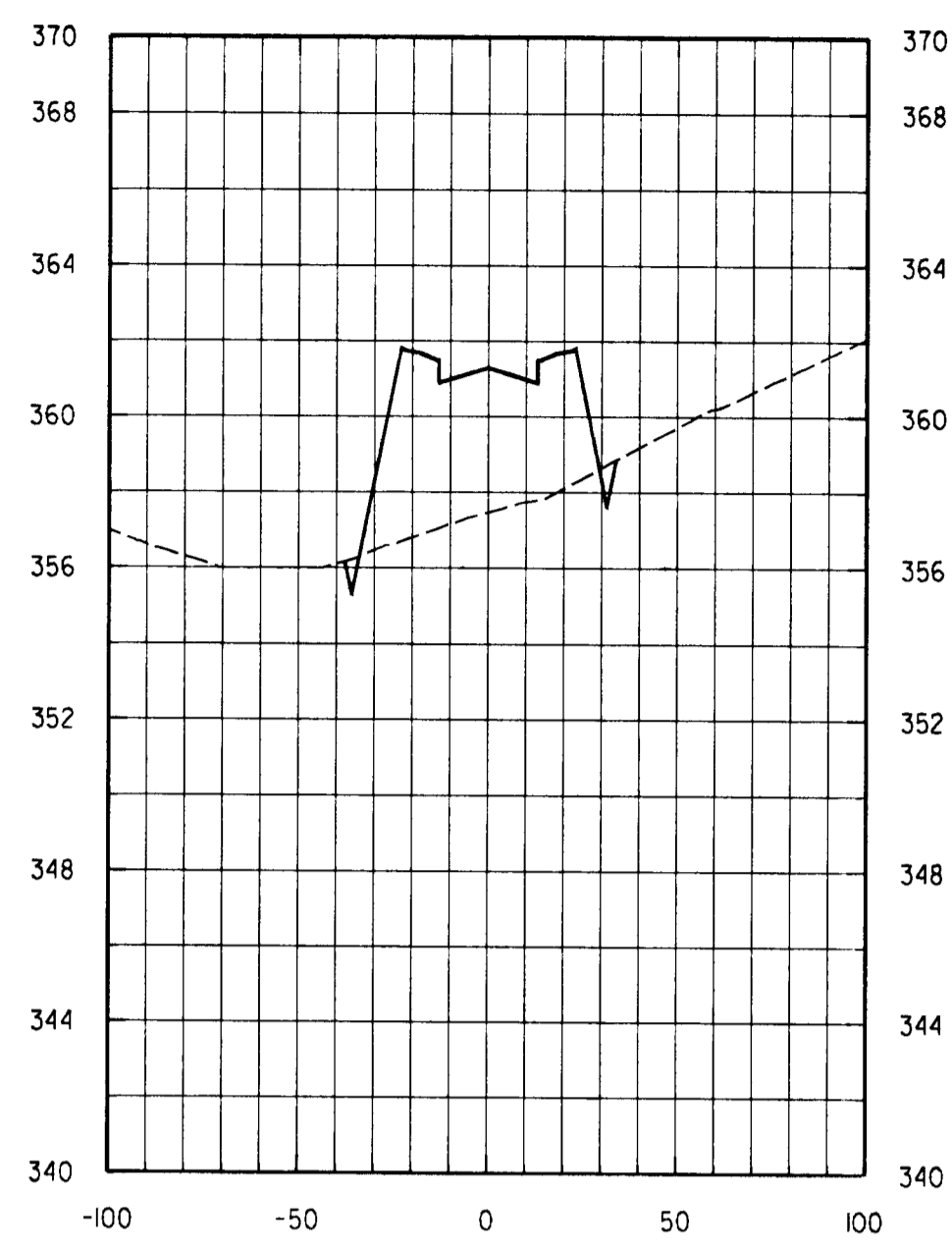
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14 OF 20

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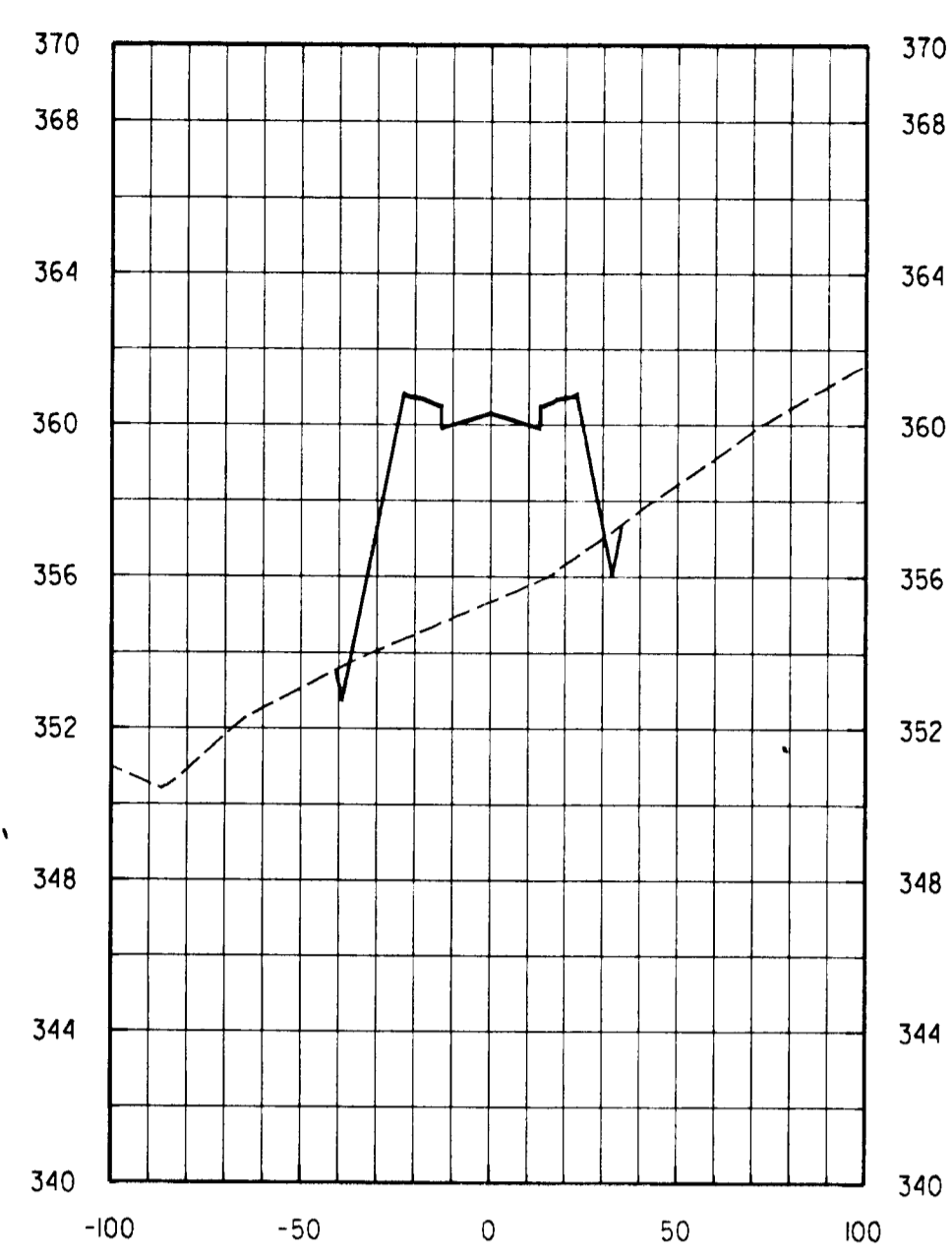
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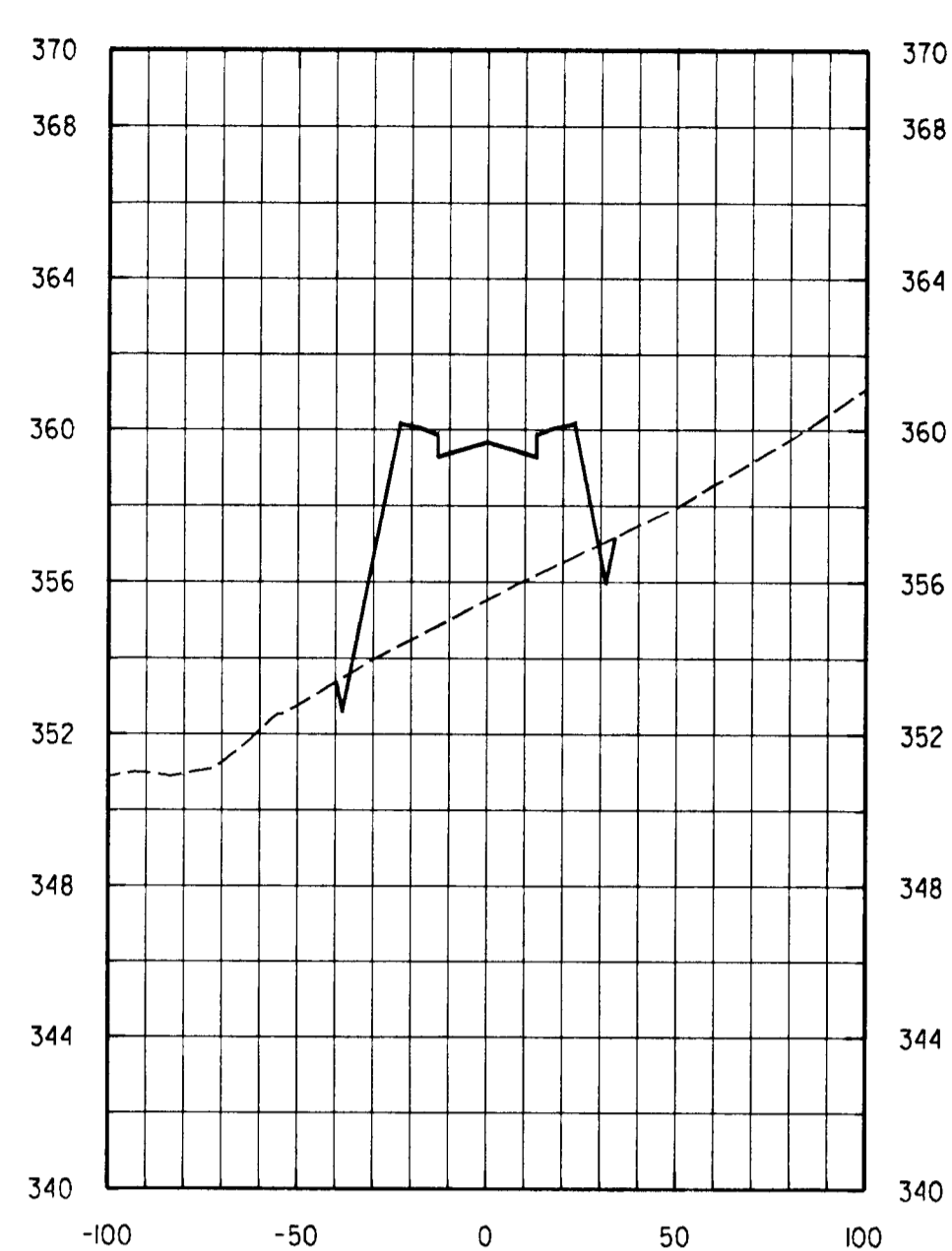
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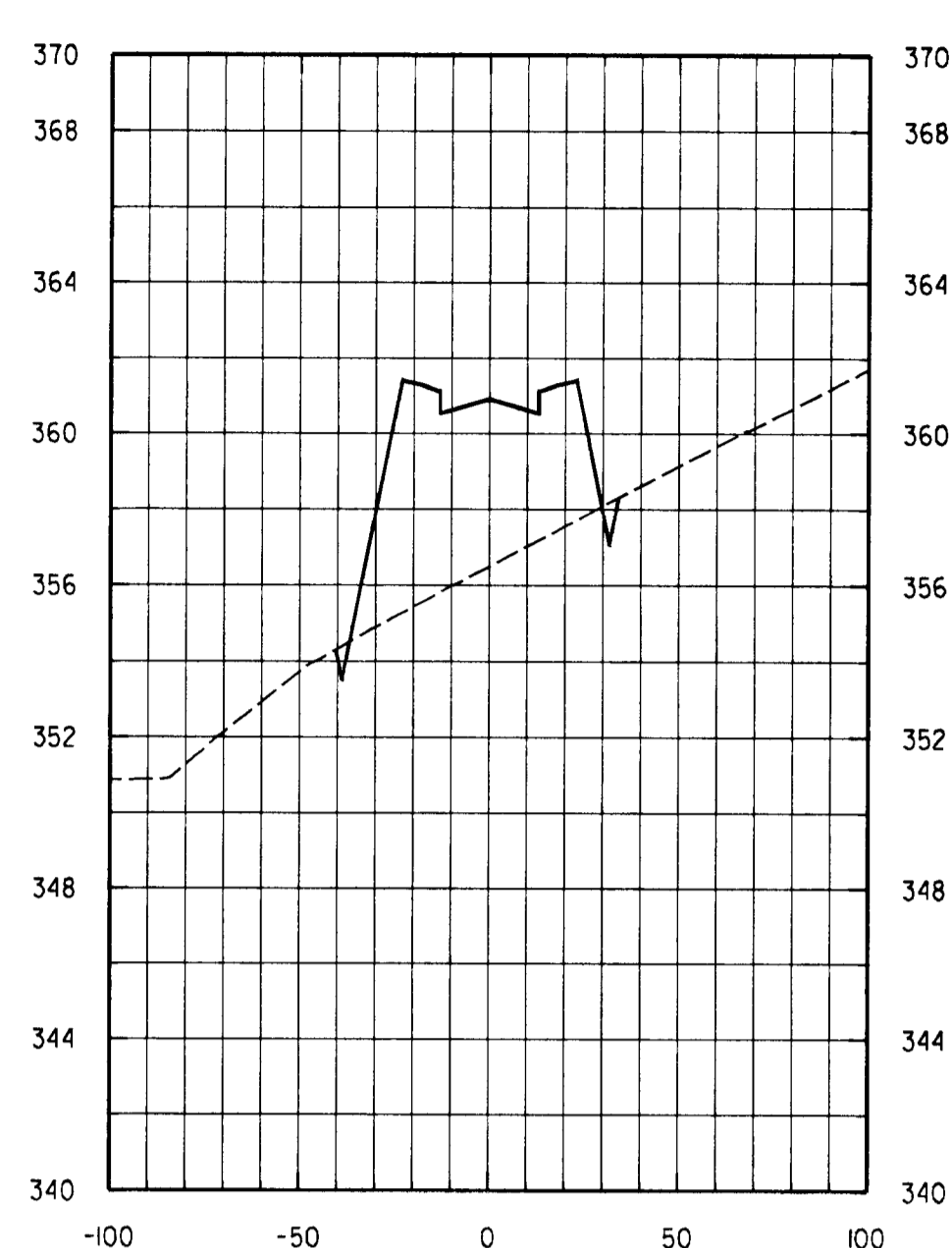
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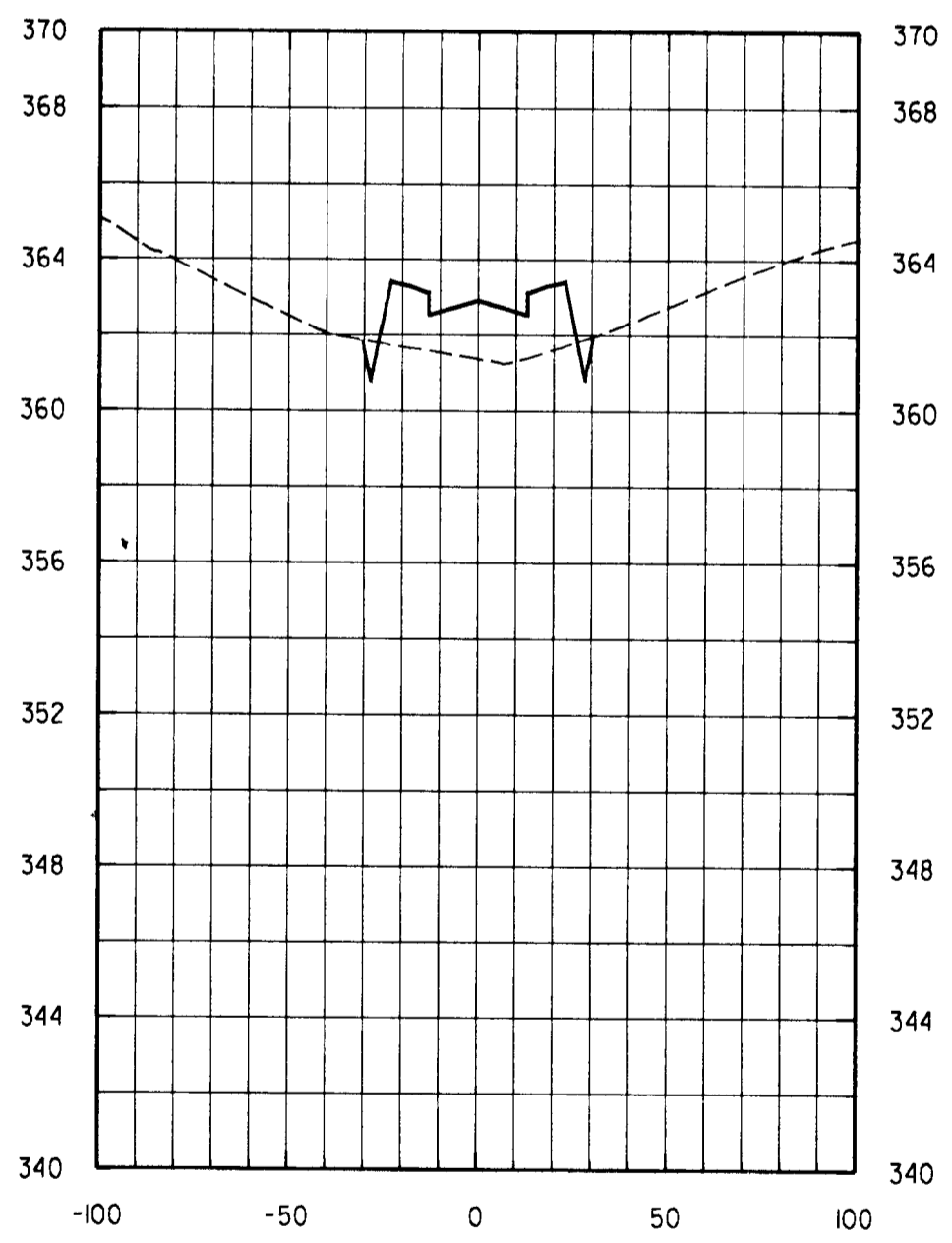
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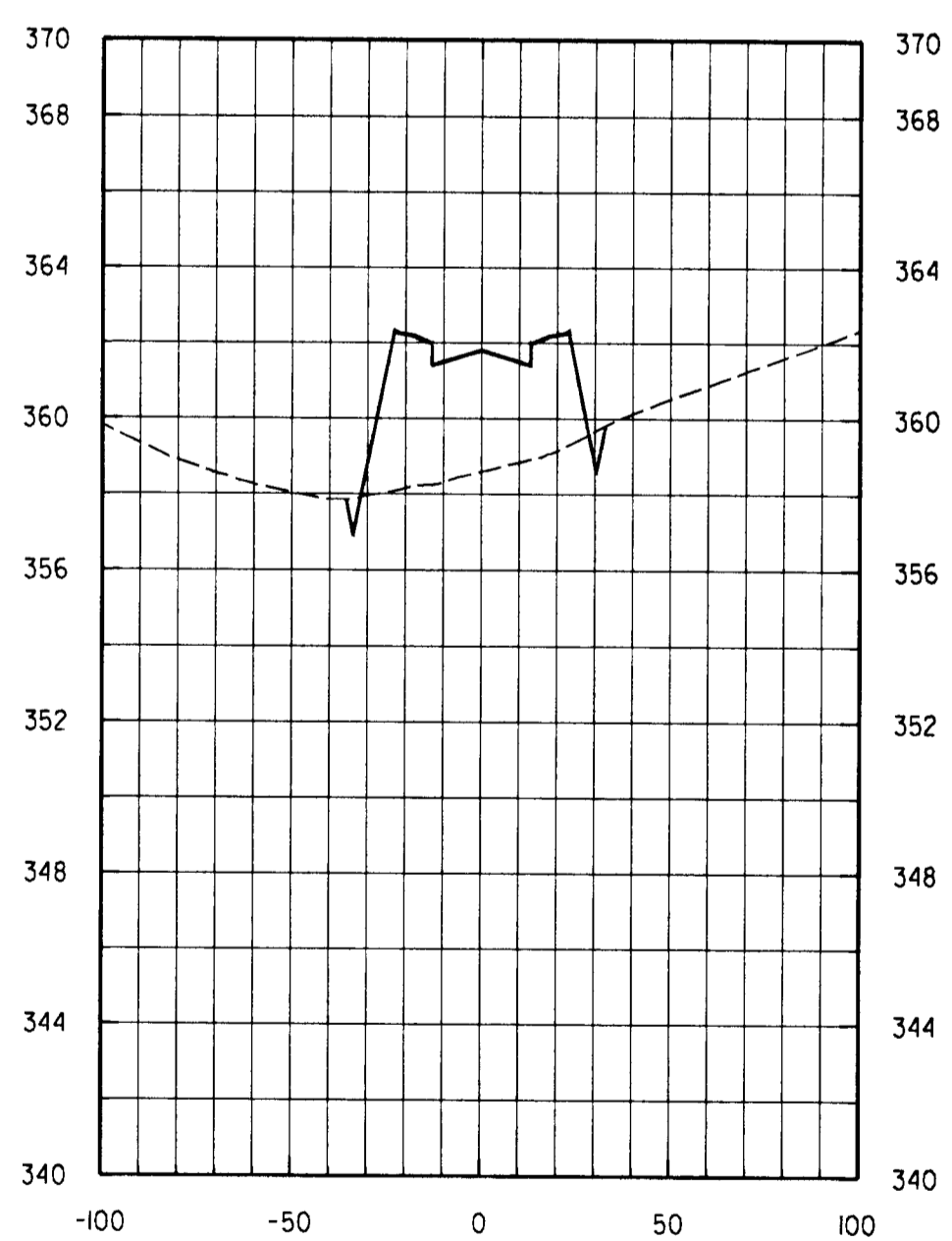
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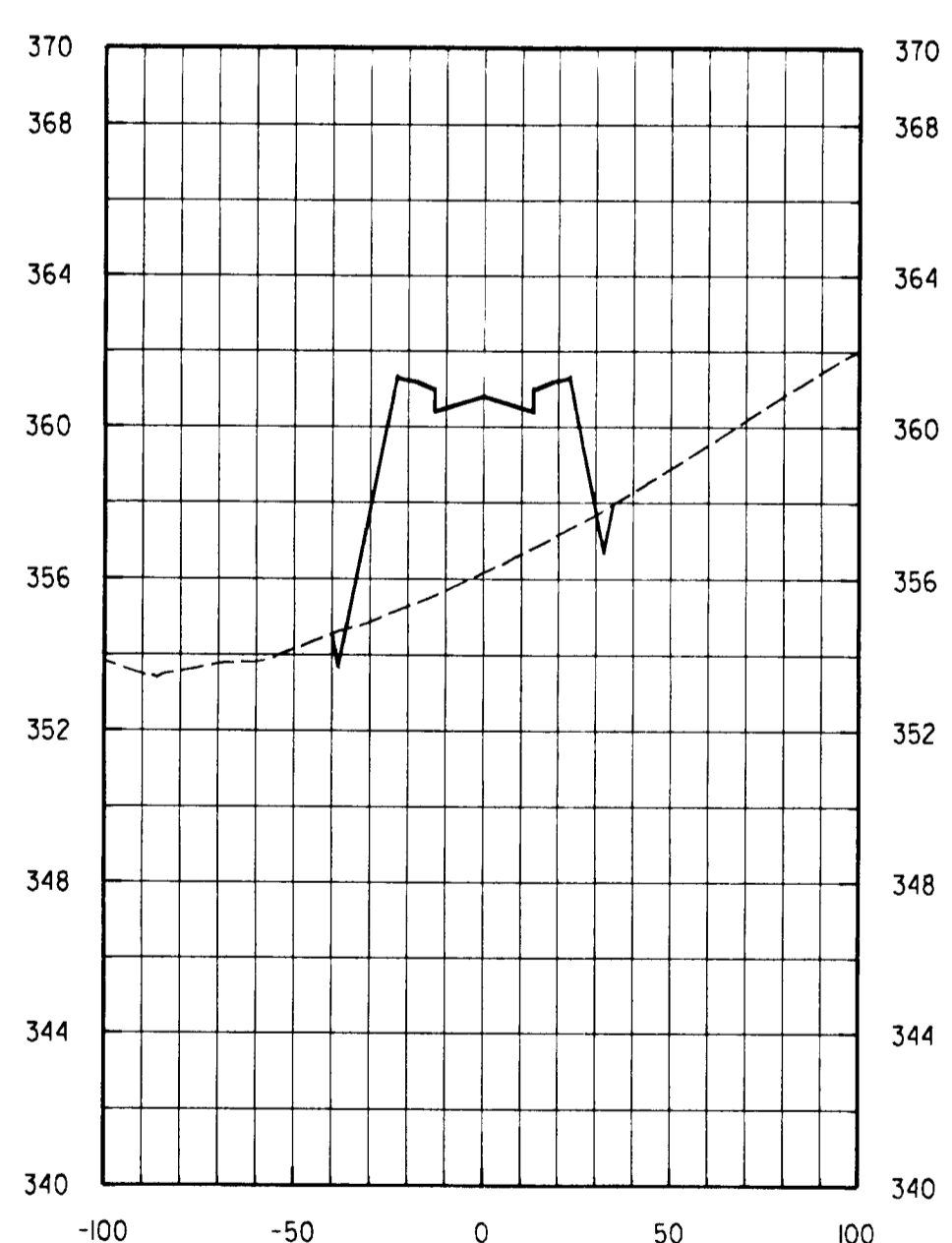
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15+50



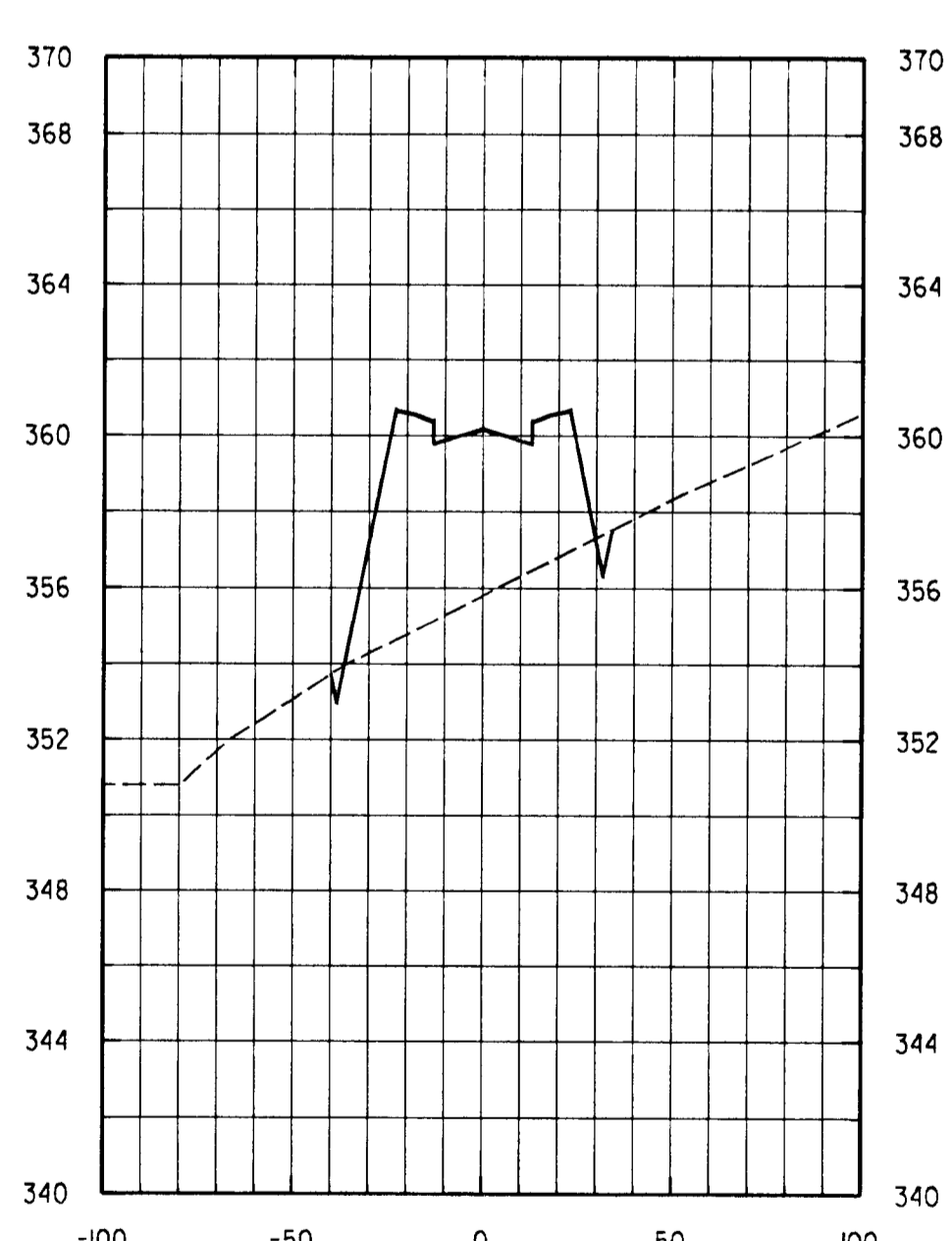
16+50



17+50



18+50



19+50

NOT FOR
CONSTRUCTION

BID SET
DAFT · McCUNE · WALKER, INC.
DATE 1/18/96

PENDING COUNTY APPROVAL

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS _____ DATE _____
CHEF, BUREAU OF ENGINEERING _____ DATE _____
CHEF, BUREAU OF HIGHWAYS _____ DATE _____
CHEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT _____ DATE _____

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A Team of Land Planners, 200 East Pennsylvania Avenue
Landscape Architects, Towson, Maryland 21286
Engineers, Surveyors & Environmental Professionals 410 296 3333
Fax 296 4705

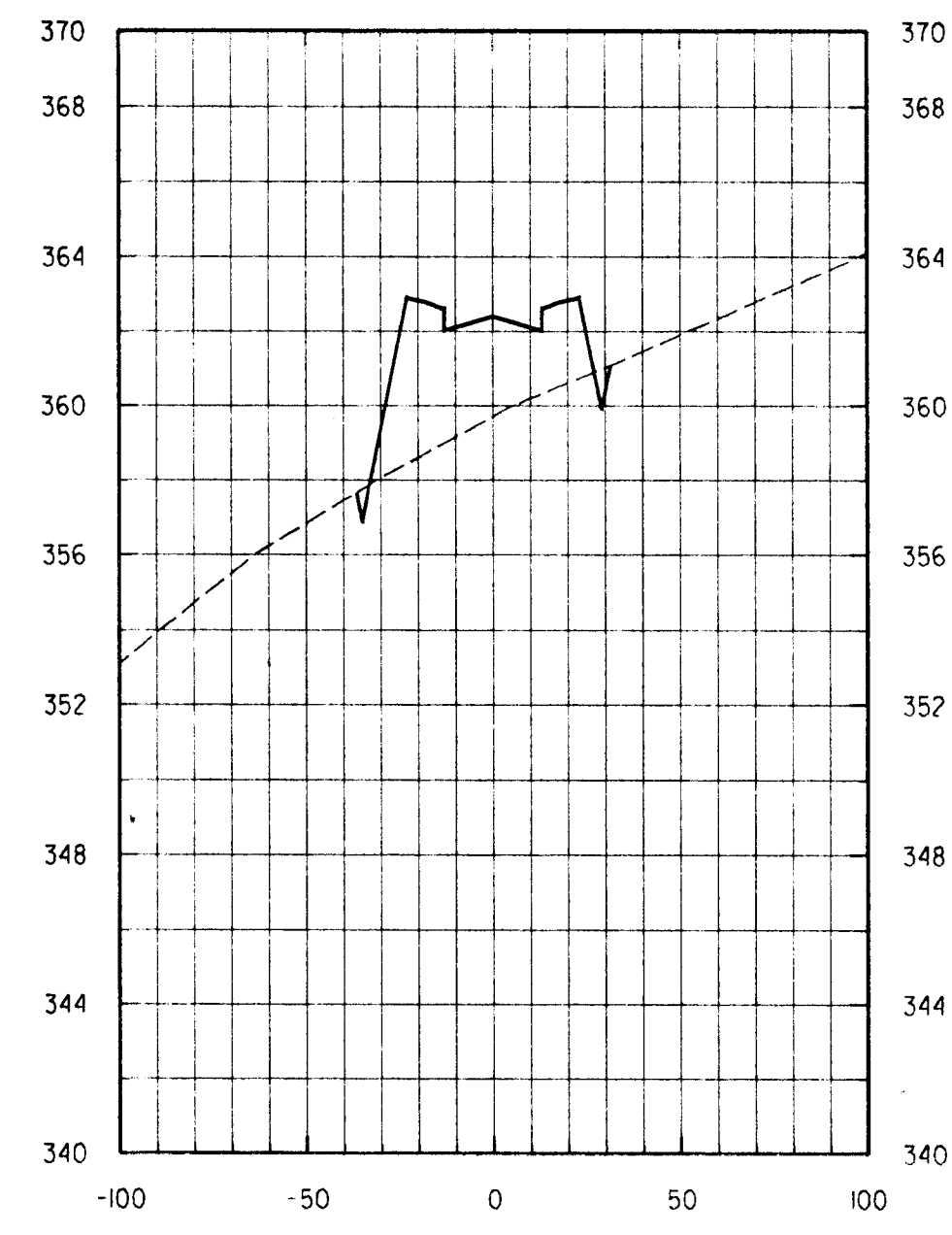
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DATE:	JAN. 18, 1996	BY	NO.	REVISION

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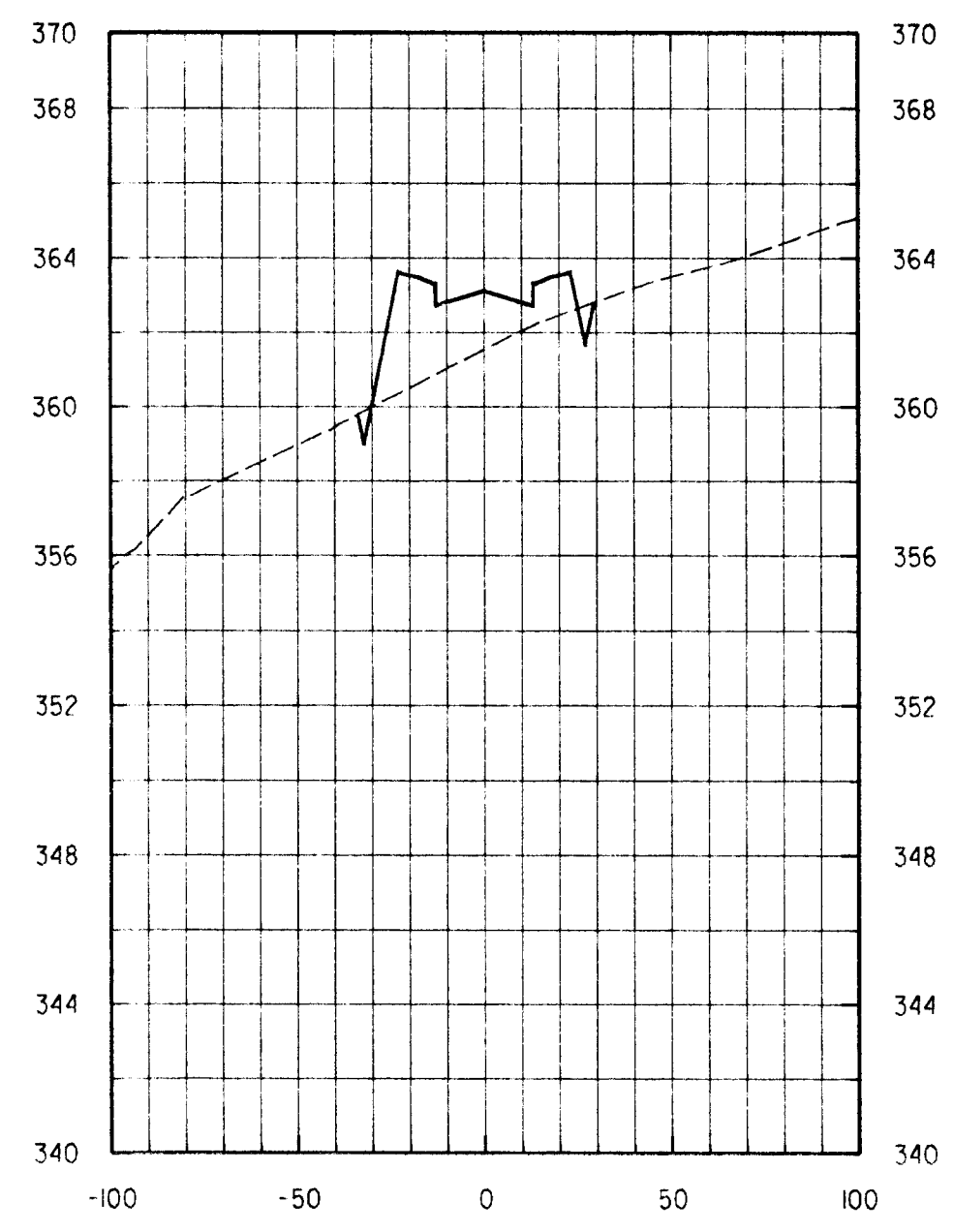
600 SCALE MAP NO. 47 BLOCK NO. 2

GORMAN ROAD REALIGNMENT
CAPITAL PROJECT E-0935
ELECTION DISTRICT NO. 6
HOWARD COUNTY MARYLAND

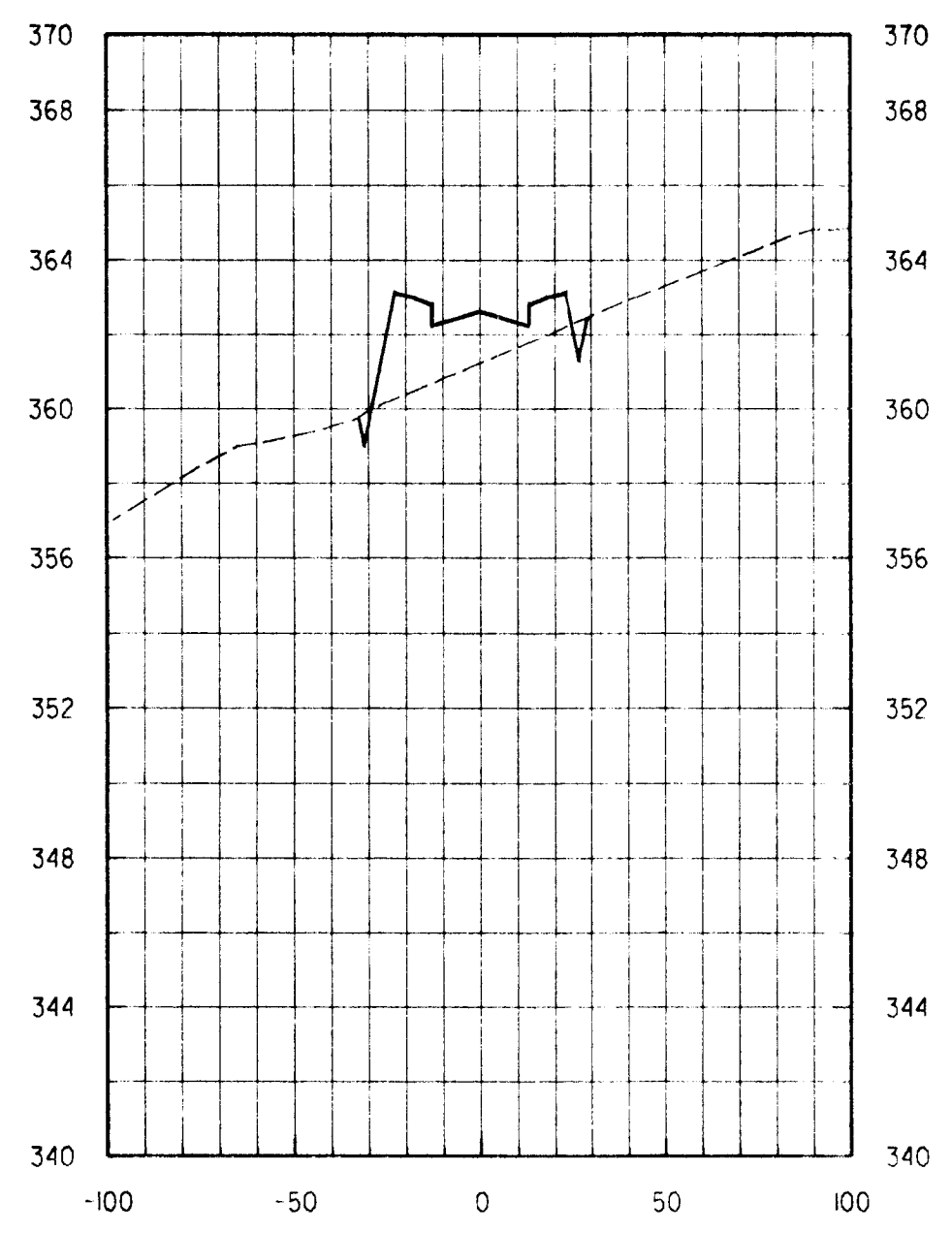
SCALE
VERT 1"=5'
HOR 1"=50'
SHEET
15 OF 20



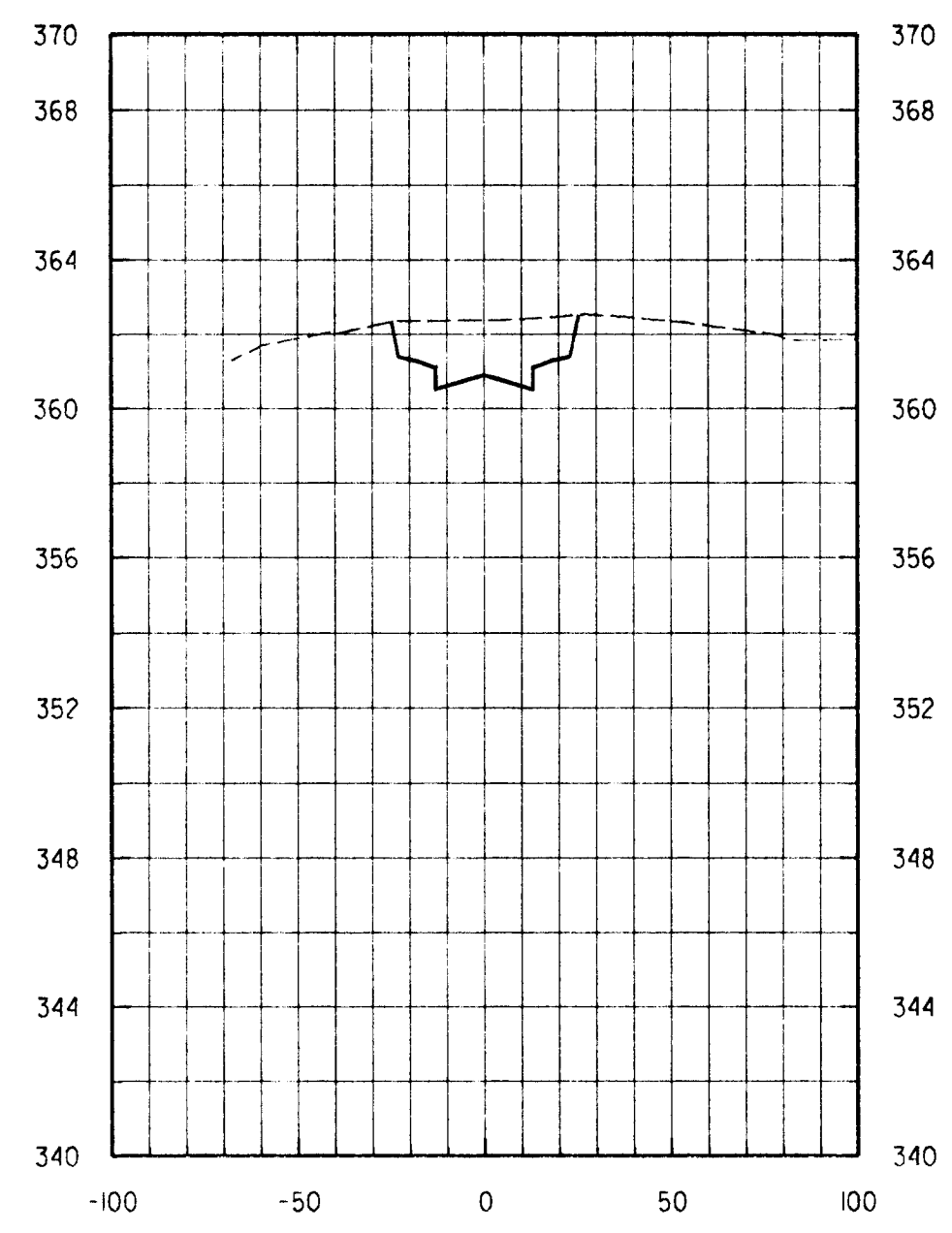
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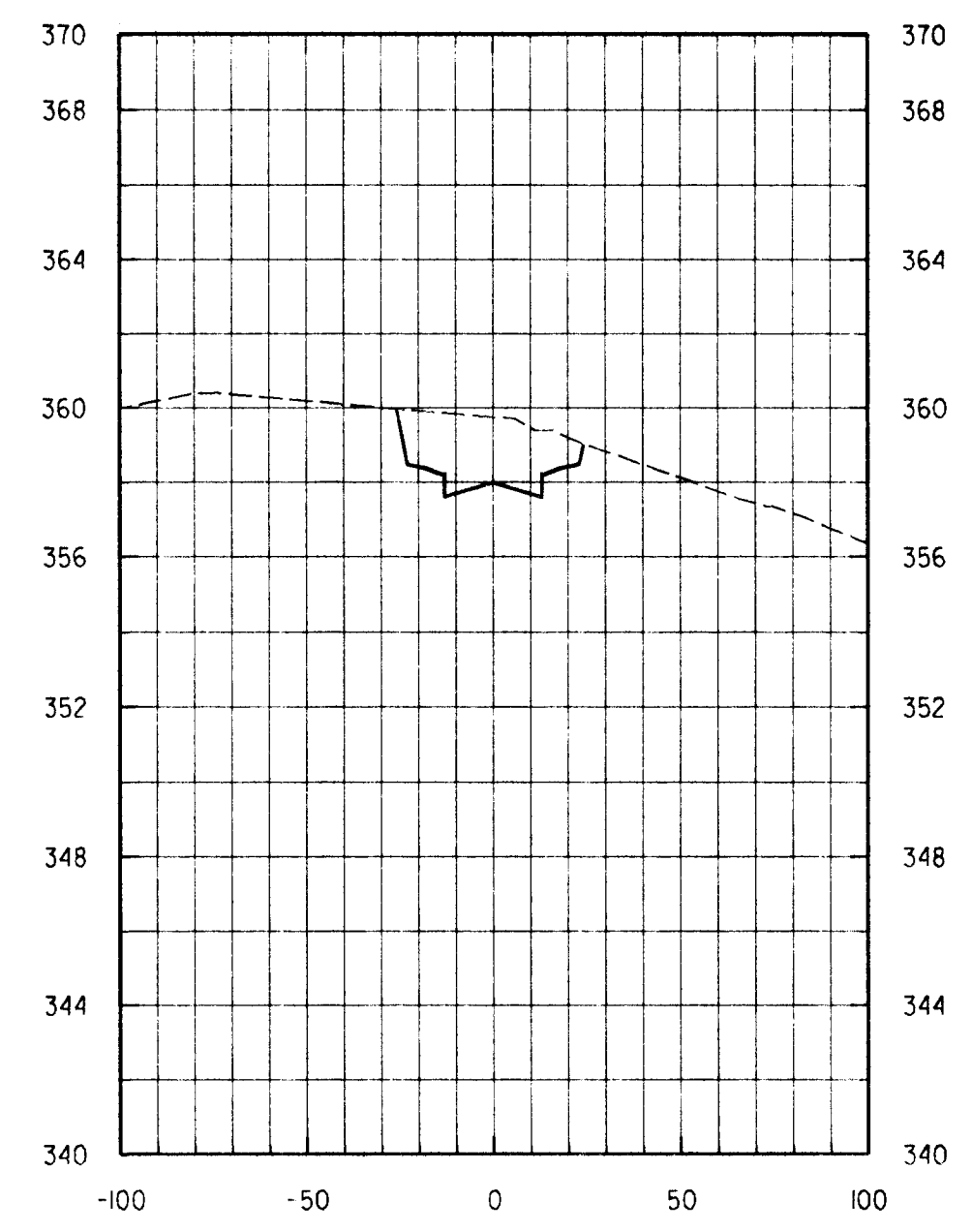
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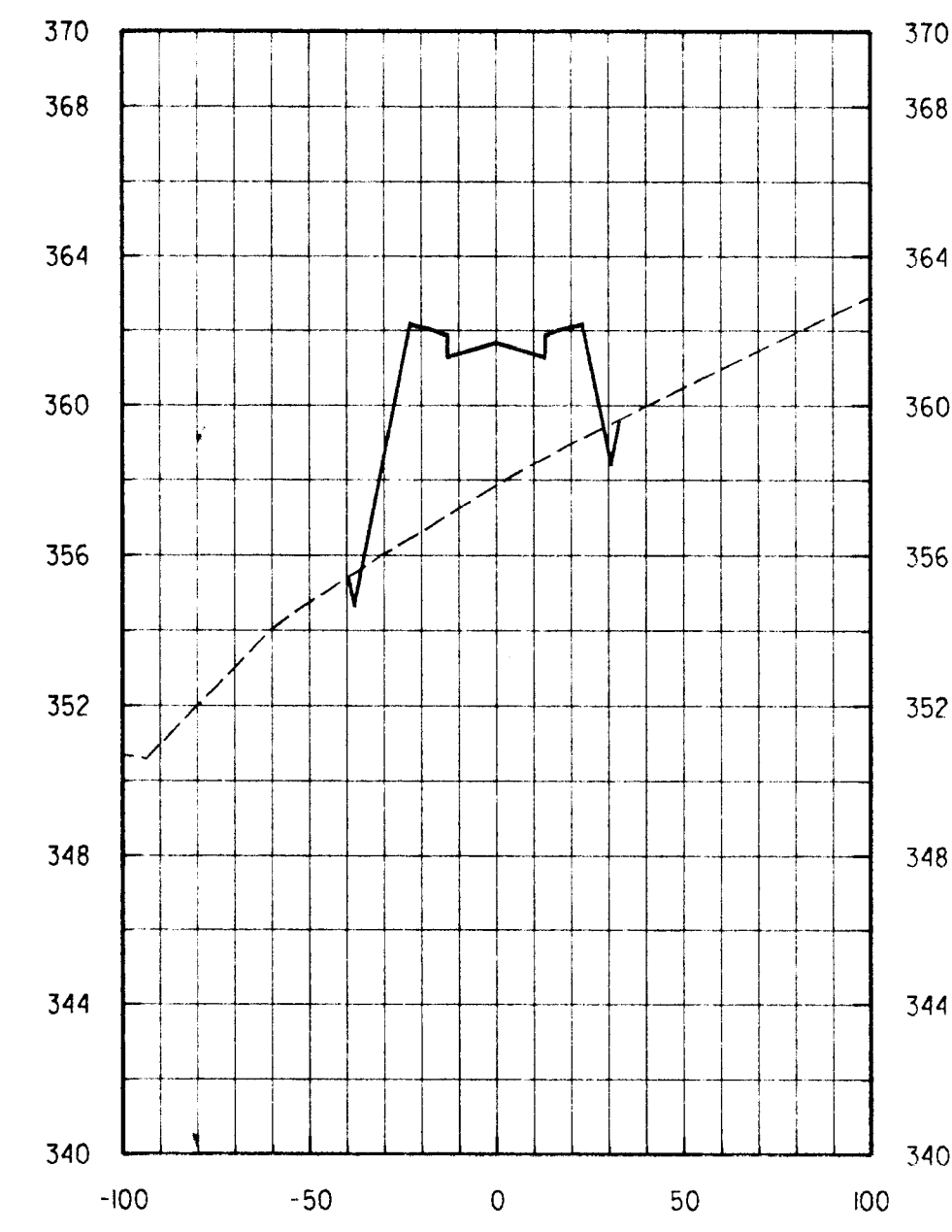
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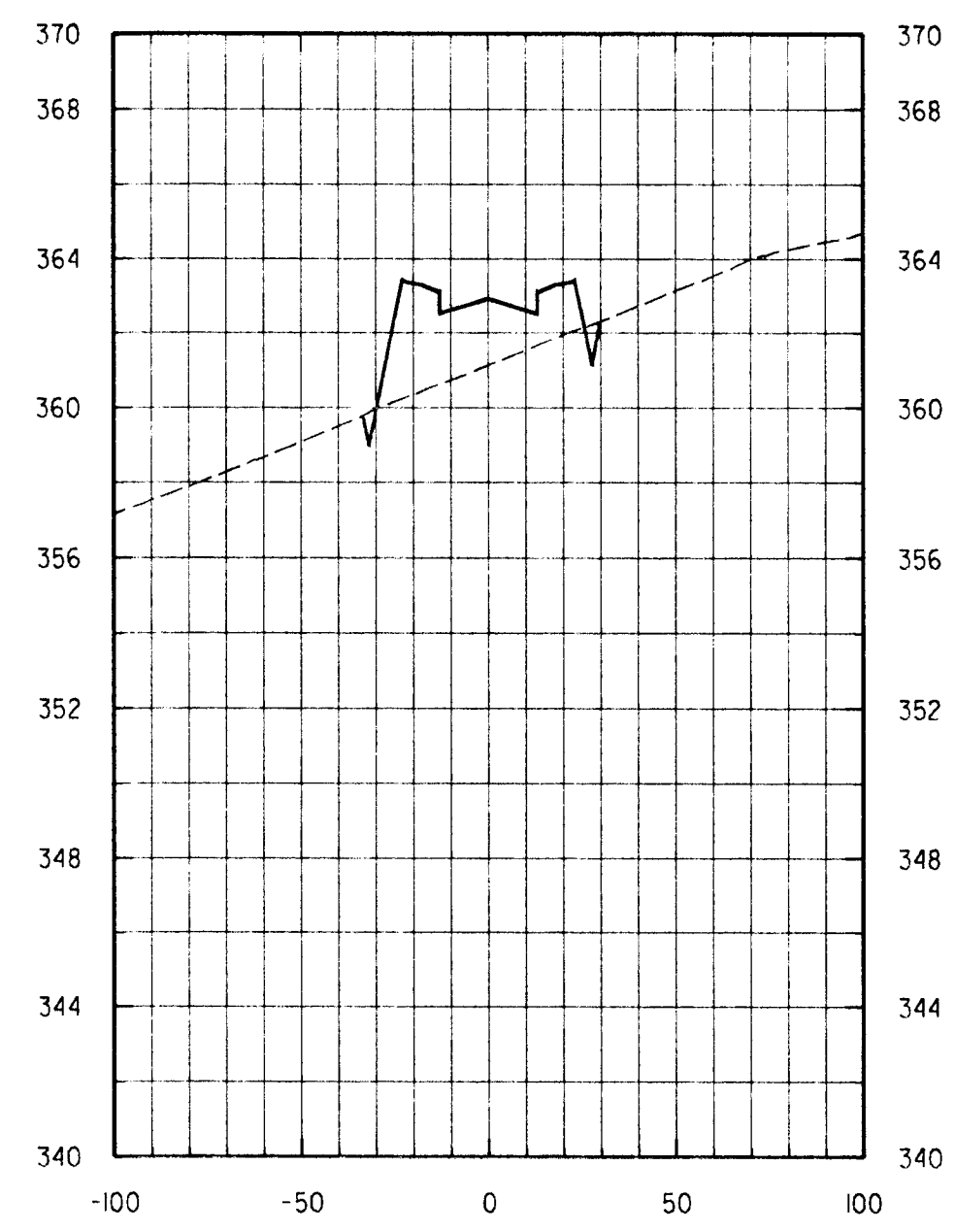
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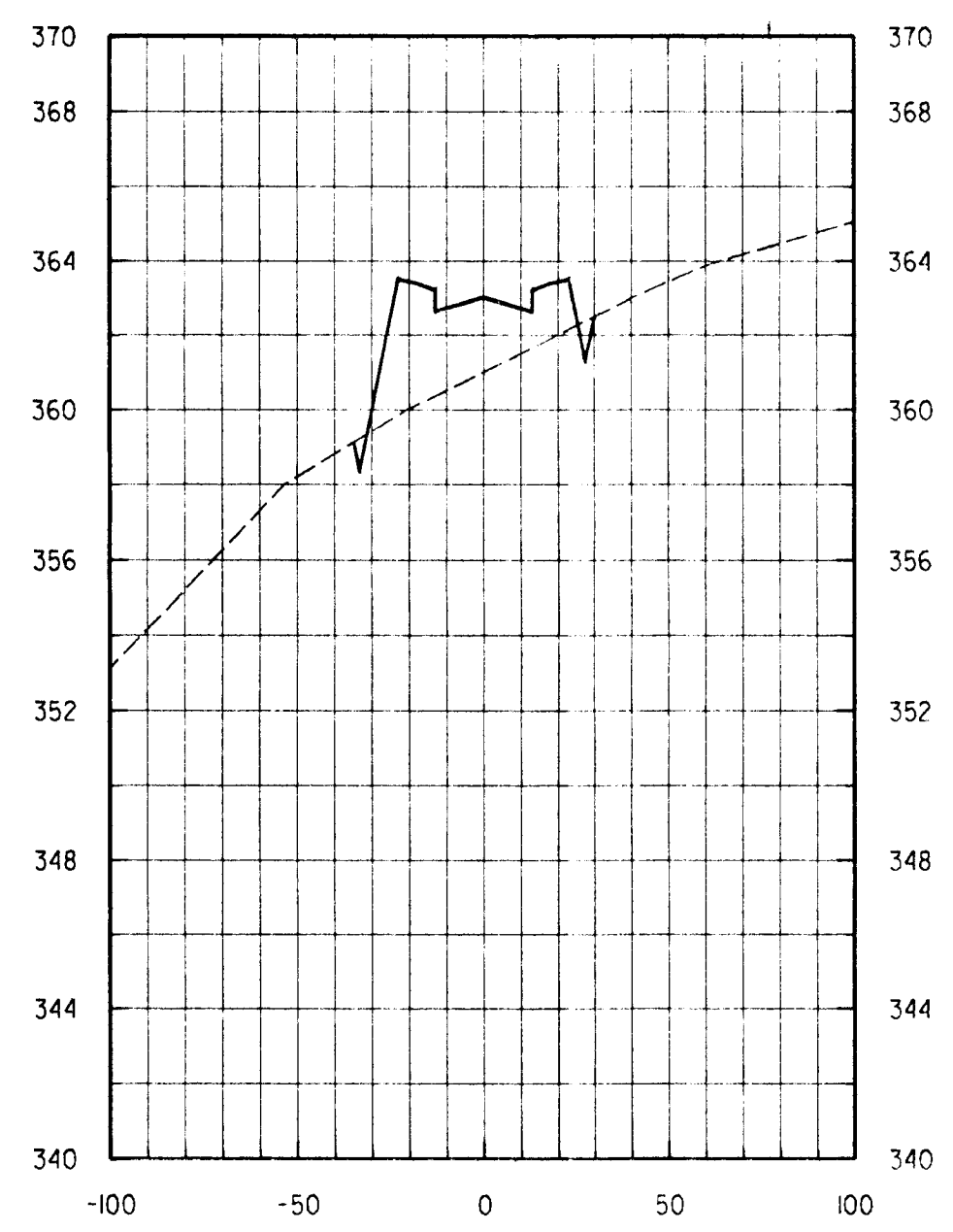
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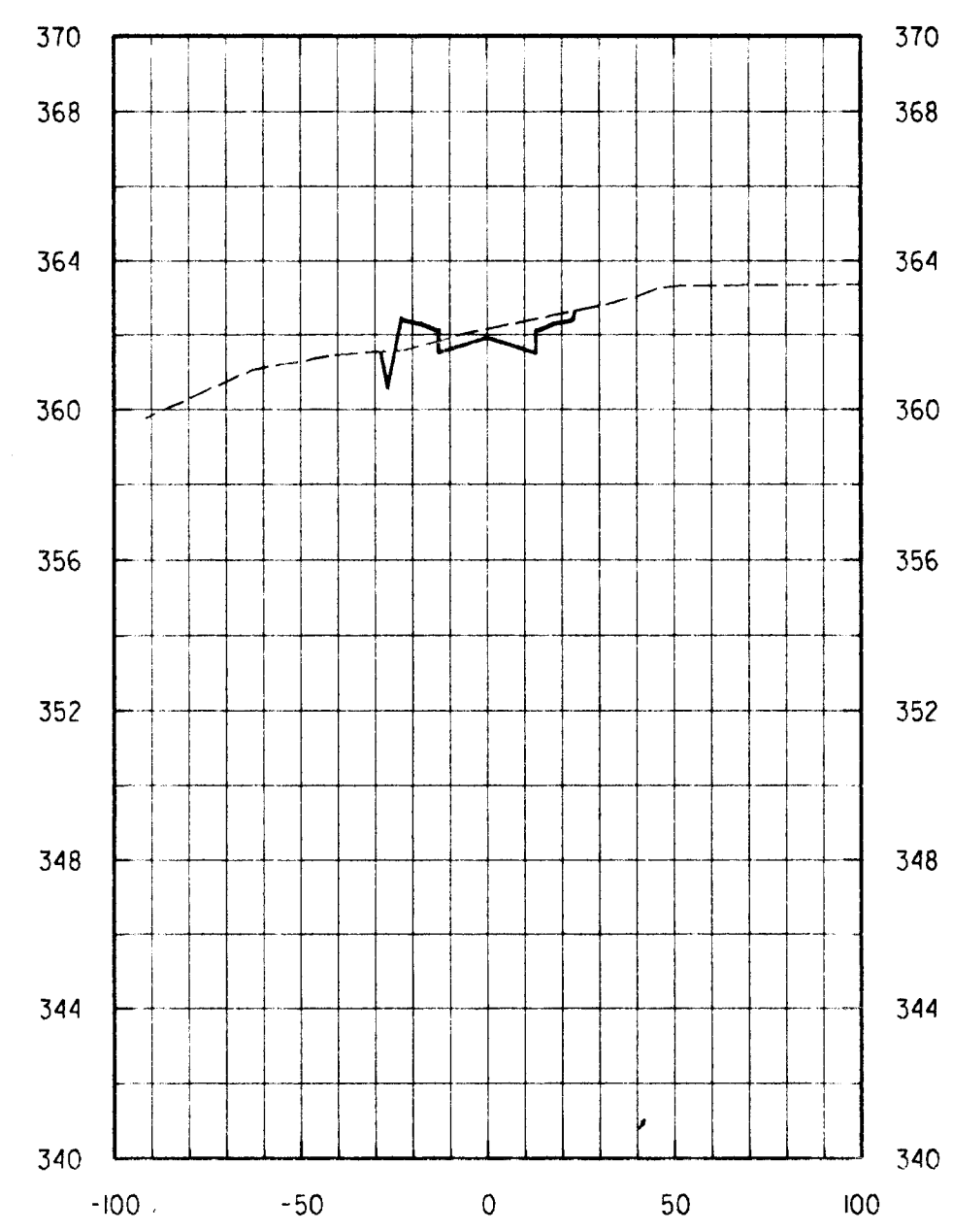
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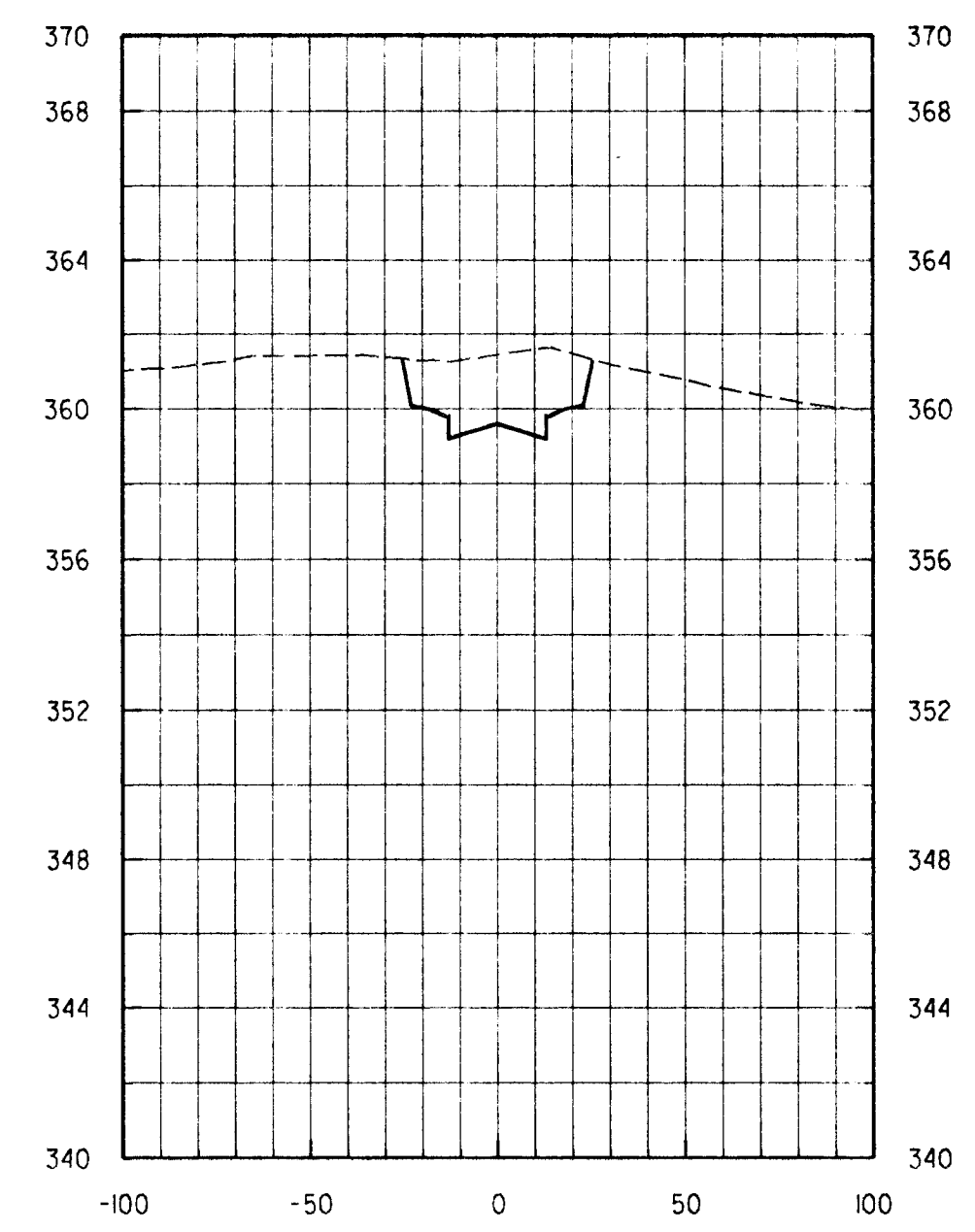
21+50



22+50



23+50



24+50

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1/18/96

PENDING COUNTY APPROVAL

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS	DATE	CHEF, BUREAU OF ENGINEERING	DATE
CHEF, BUREAU OF HIGHWAYS	DATE	CHEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT	DATE

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, 200 East Pennsylvania Avenue
Landscape Architects, Towson, Maryland 21286
Engineers, Surveyors & 410 296 3333
Environmental Professionals Fax 296 3704

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		REVISION	DATE

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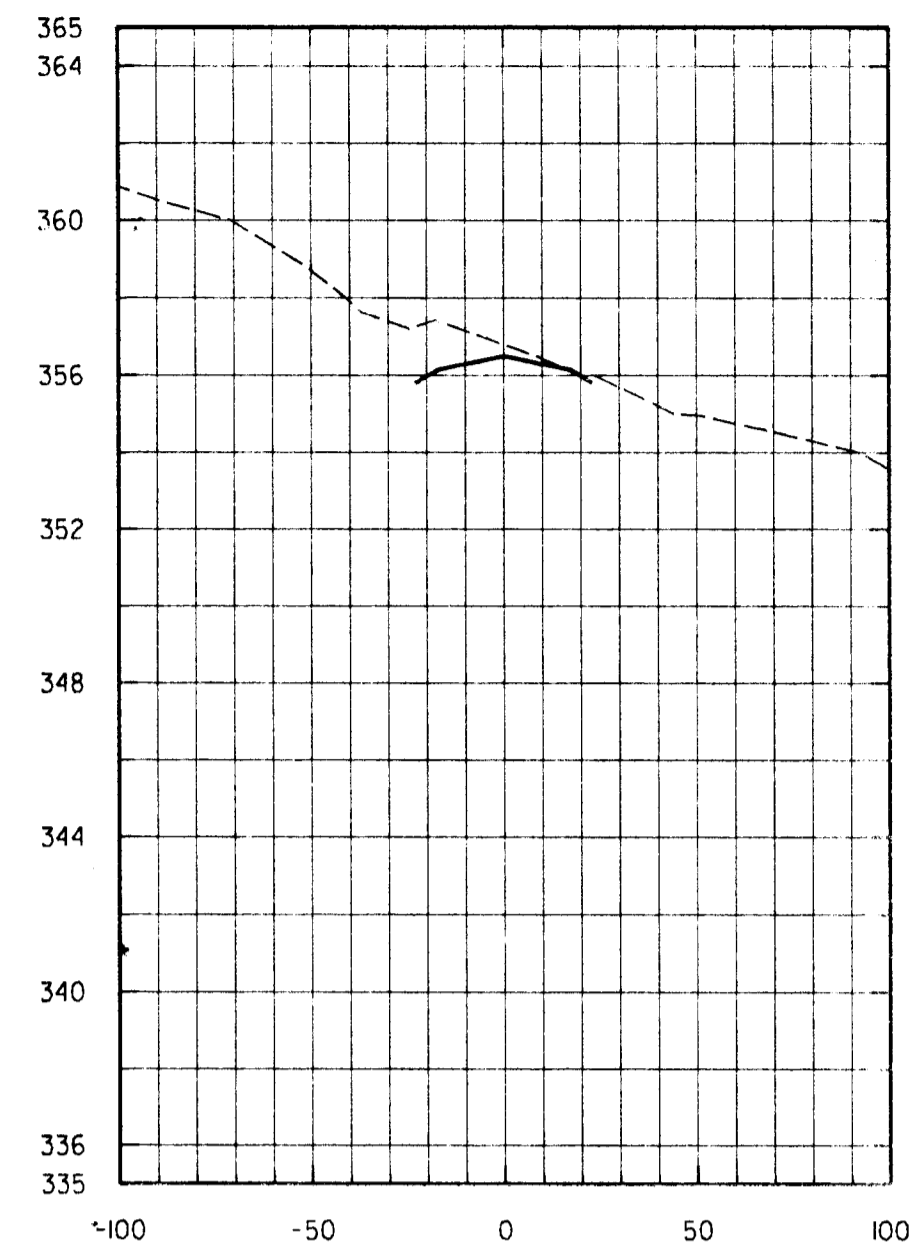
600 SCALE MAP NO. 47 BLOCK NO. 2

GORMAN ROAD REALIGNMENT
CAPITAL PROJECT E-0935
ELECTION DISTRICT NO. 6
HOWARD COUNTY MARYLAND

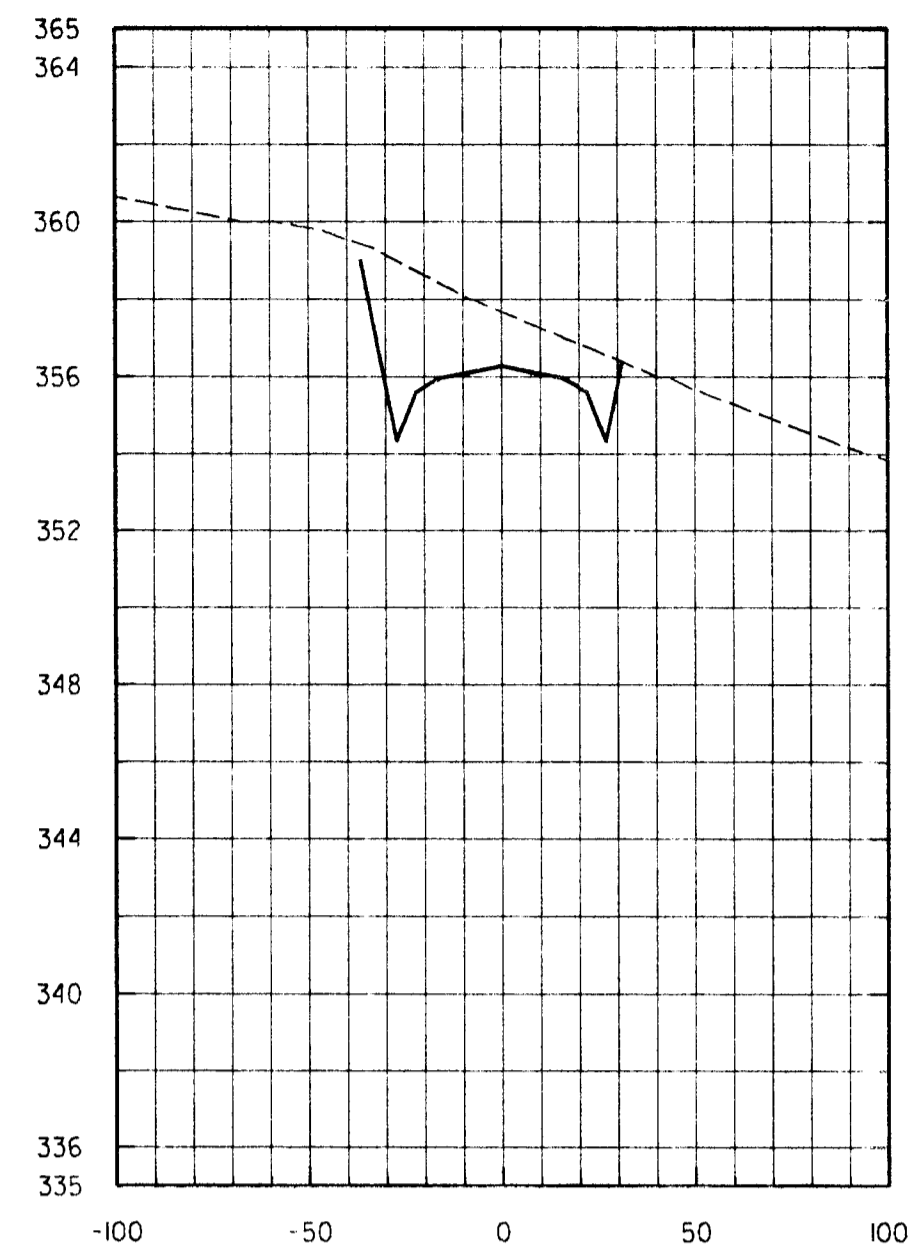
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HOR 1" = 50'
SHEET
16 OF 20

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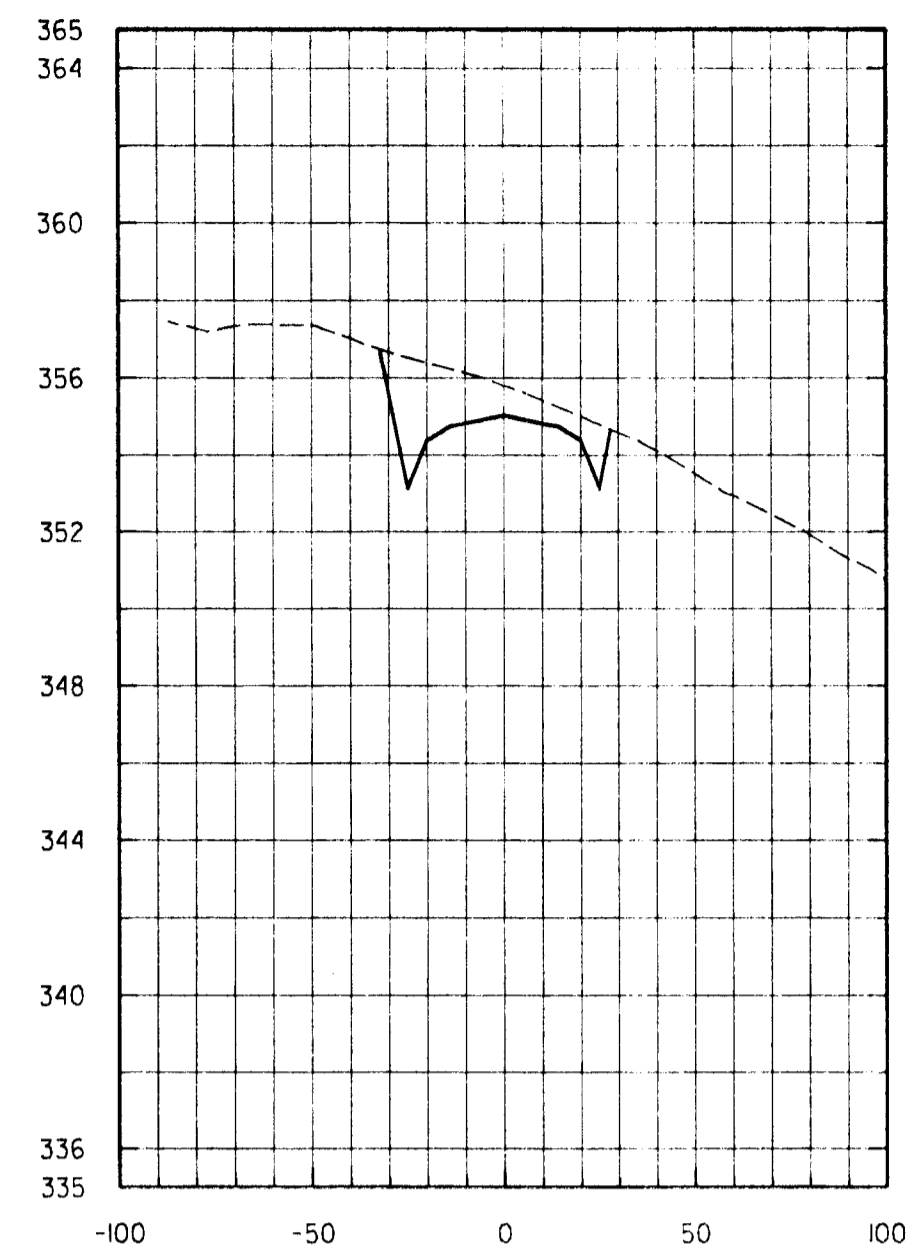
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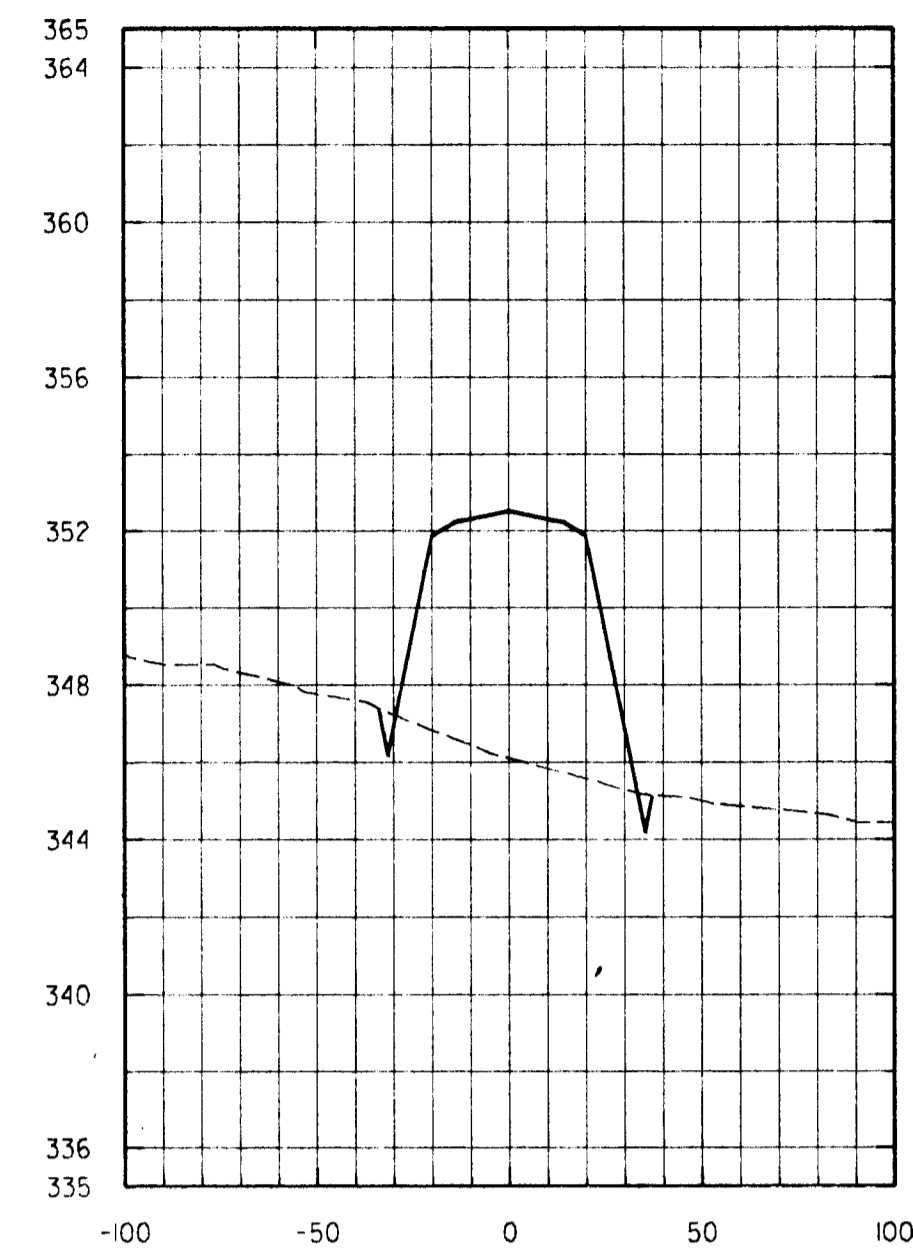
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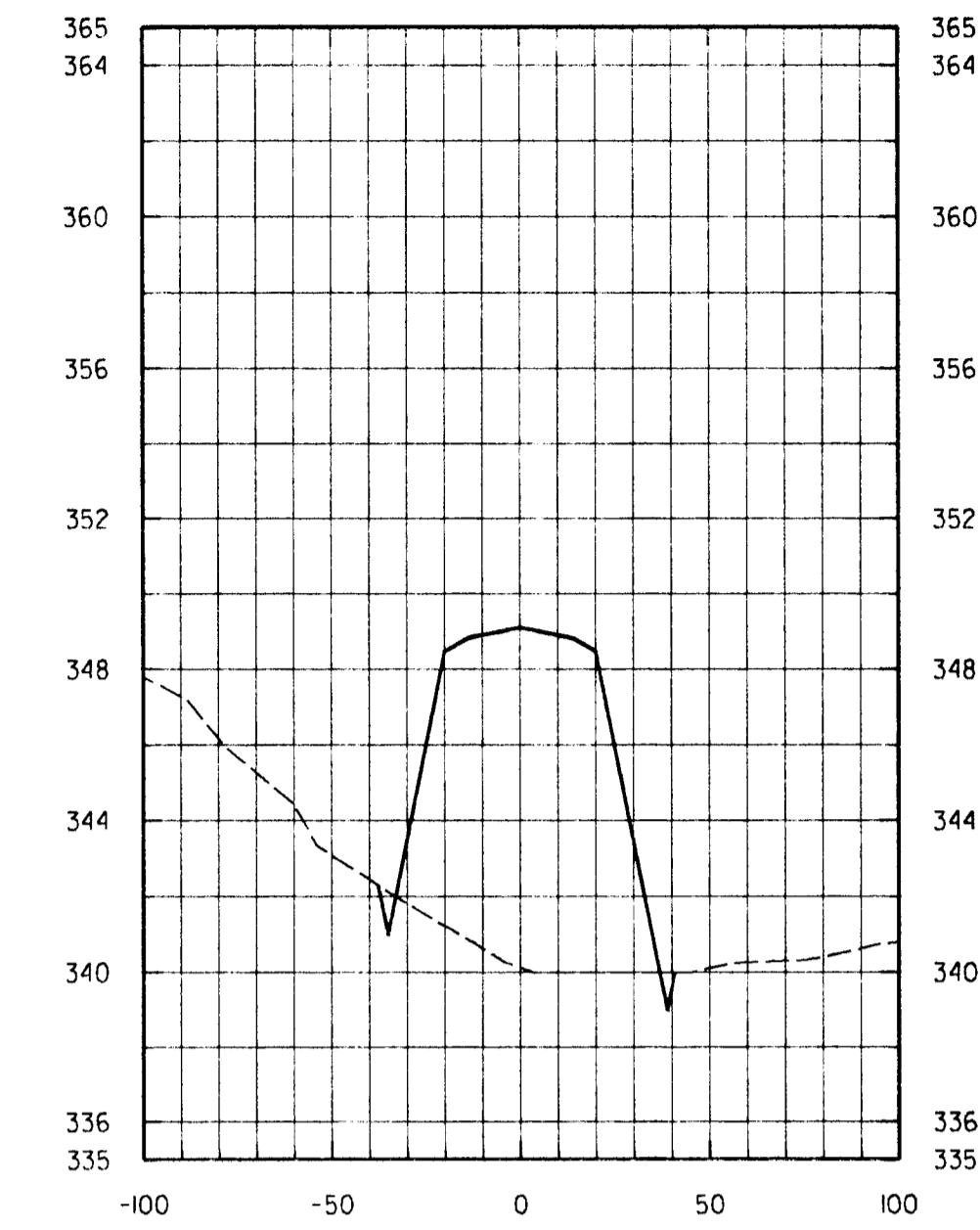
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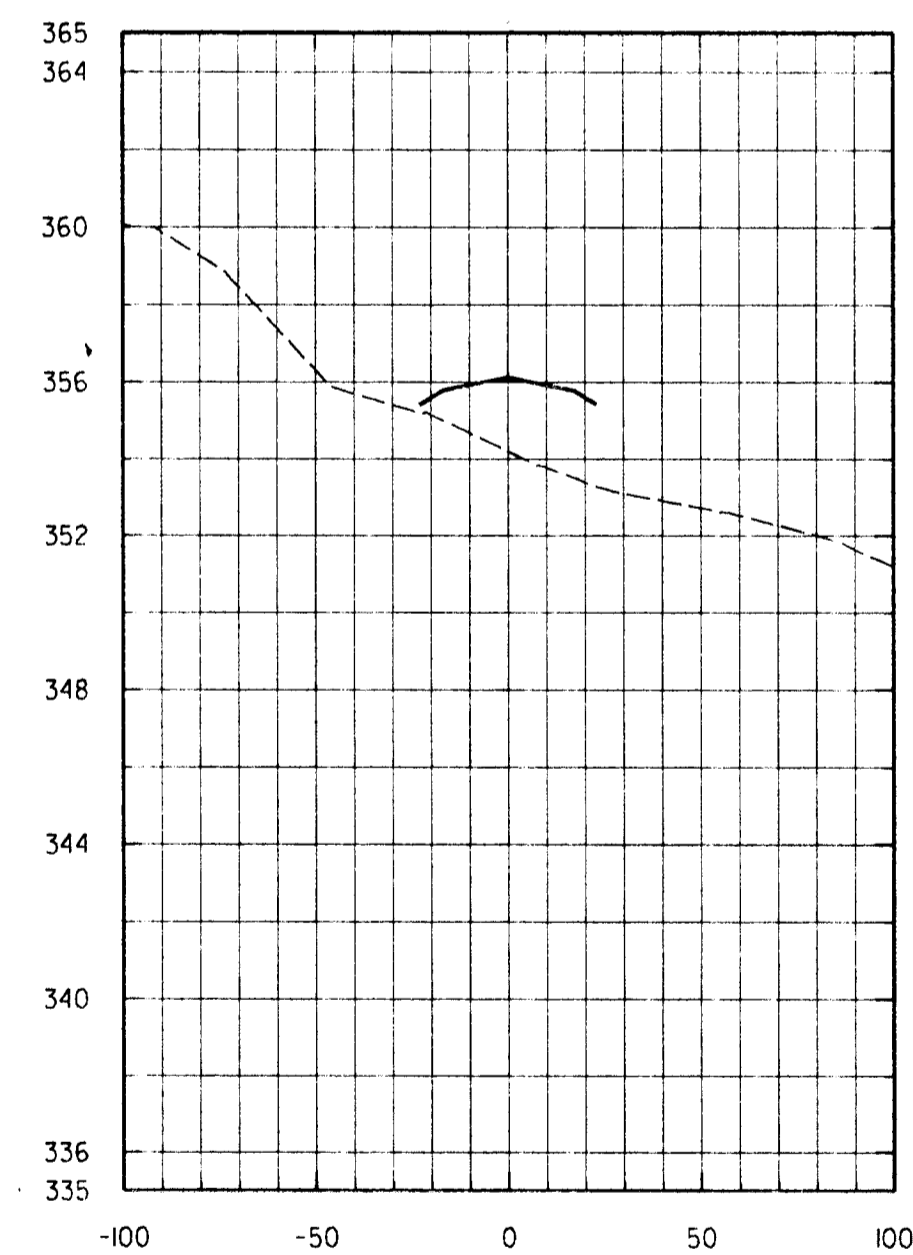
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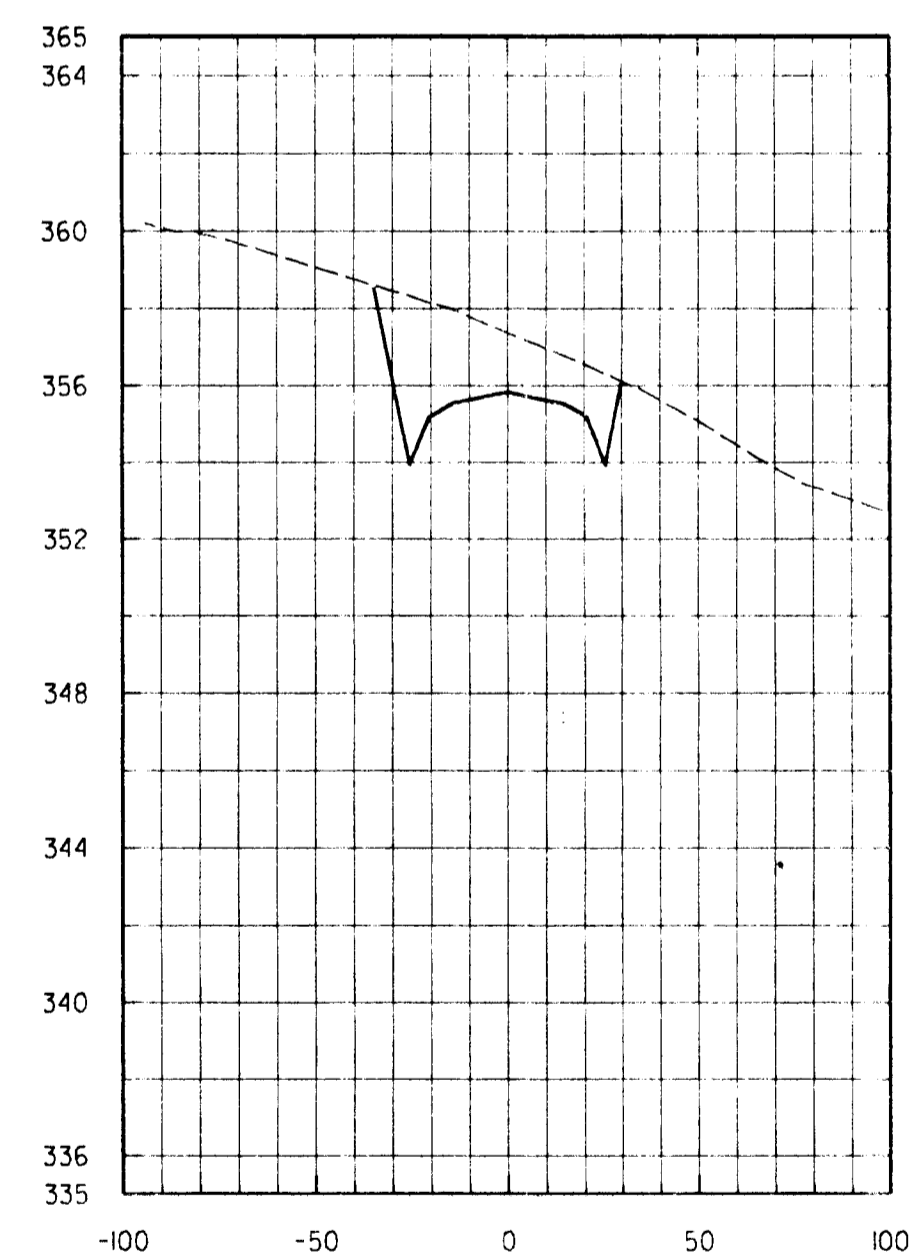
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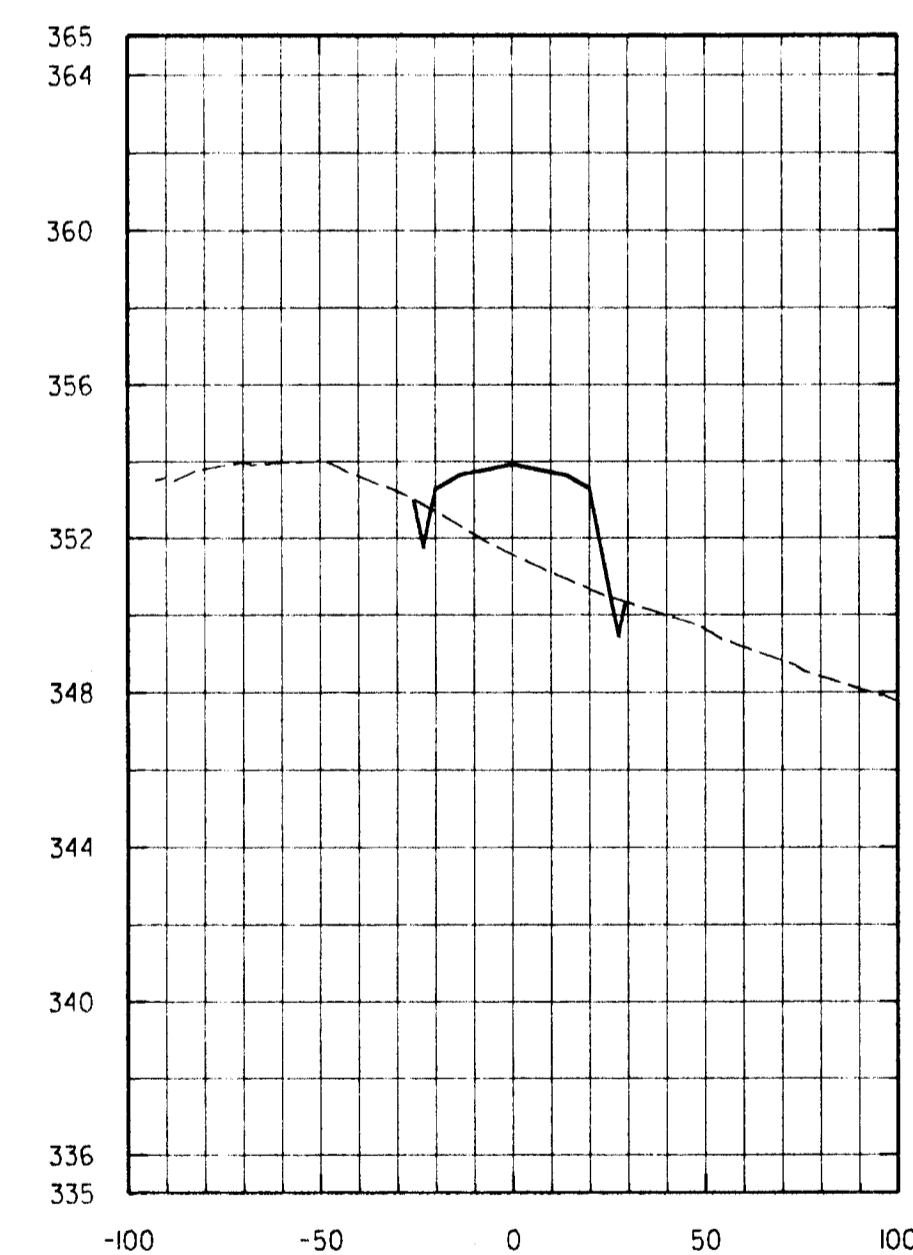
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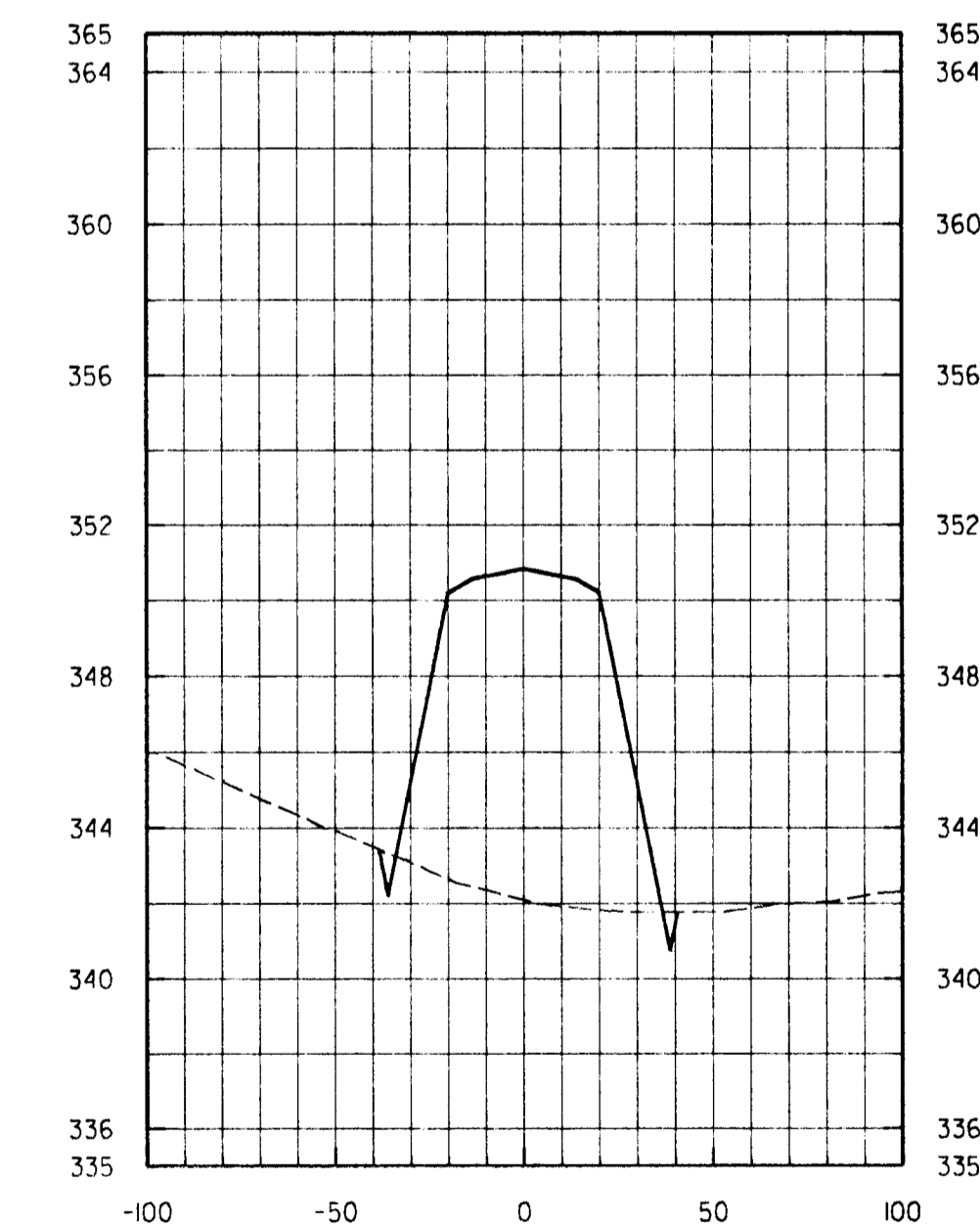
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45+00



46+00



47+00

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1/18/96

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Wed Jan 17 10:45:17 1996 d:\gorman\gorman\c98

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS	DATE	CHEF, BUREAU OF ENGINEERING	DATE
CHEF, BUREAU OF HIGHWAYS	DATE	CHEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT	DATE

Daft McCune Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue
Towson, Maryland 21286
410.296.3333
Fax 296.4705

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DATE:	JAN. 18, 1996		
BY	NO.	REVISION	DATE

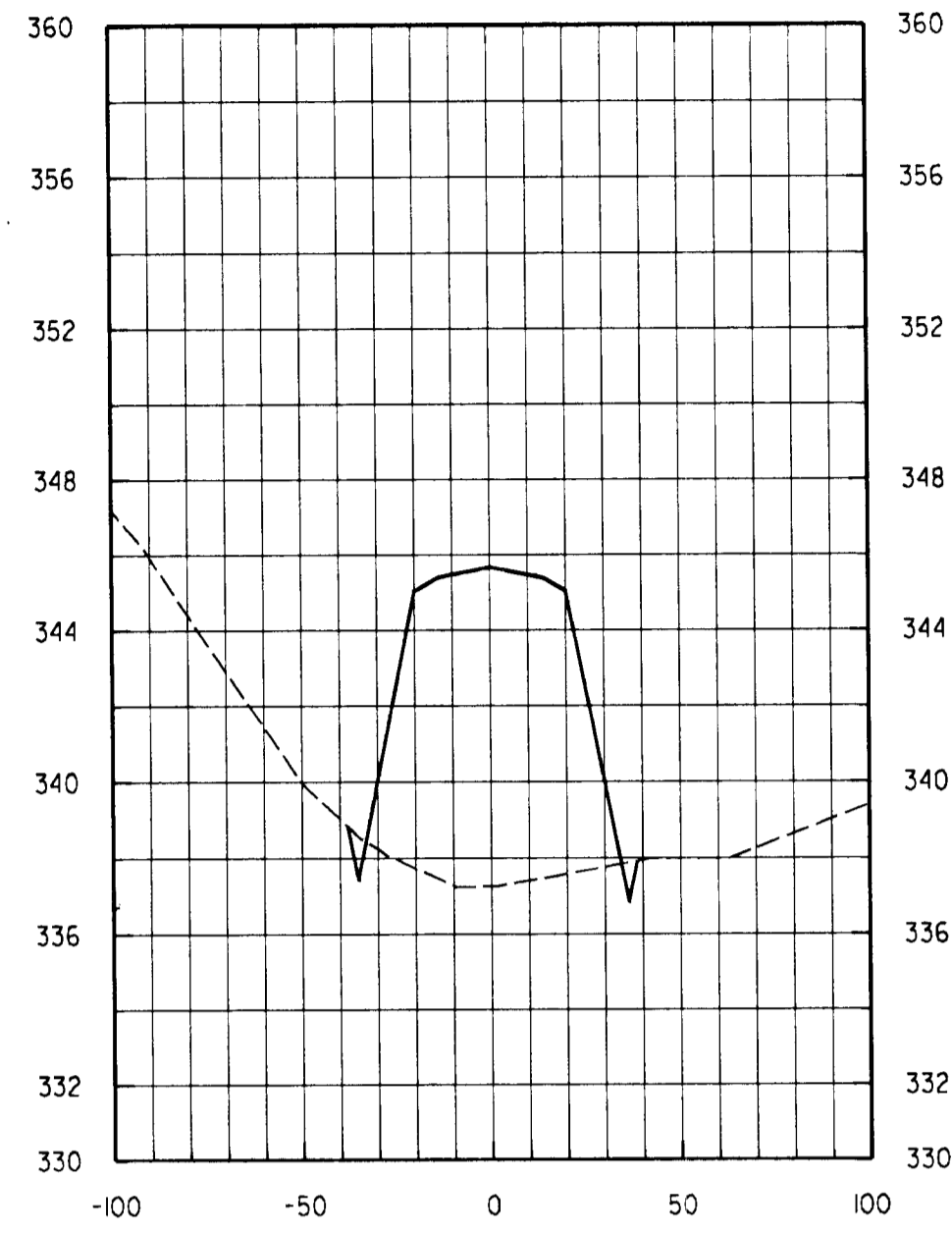
CROSS SECTIONS

600 SCALE MAP NO. 47 BLOCK NO. 2

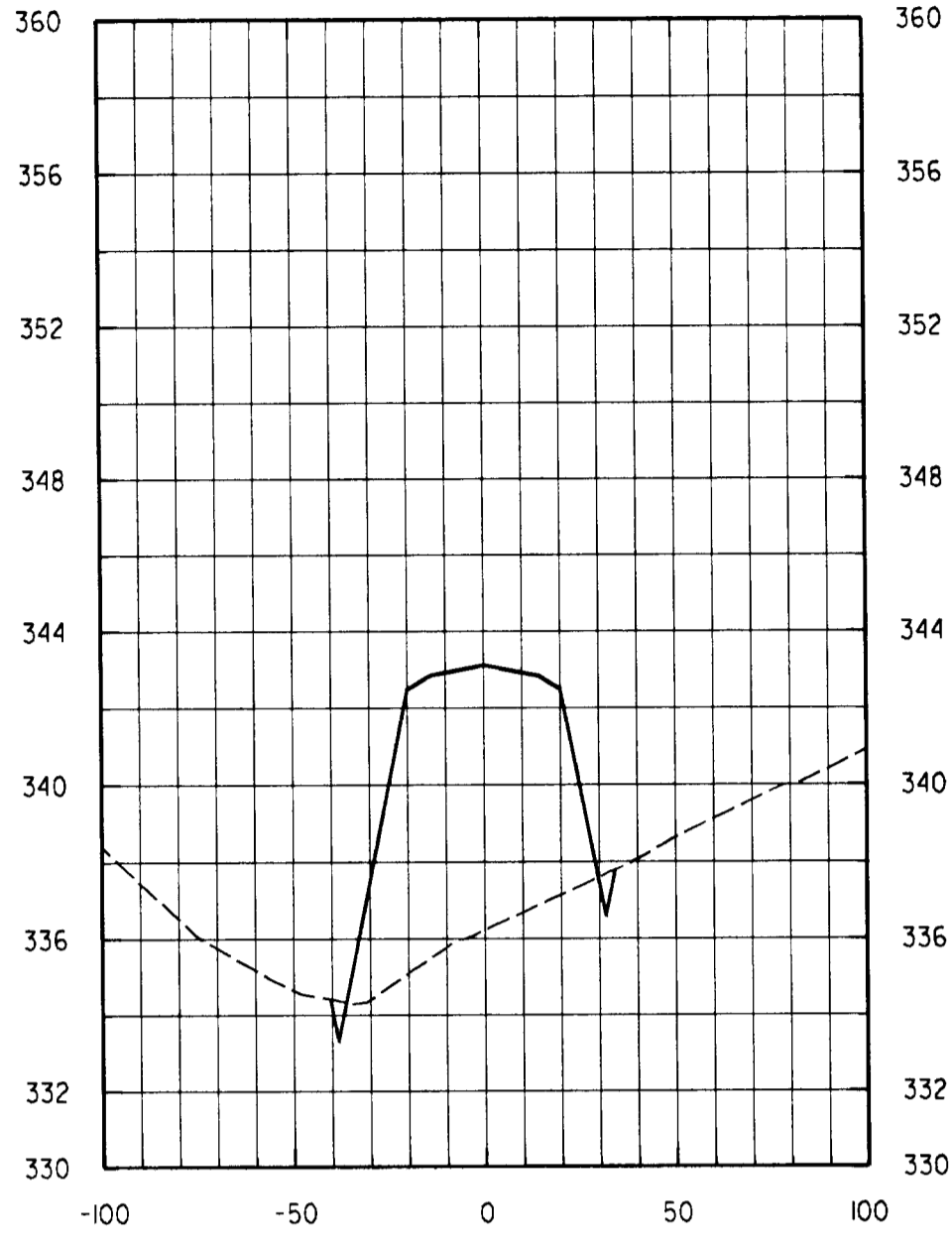
GORMAN ROAD REALIGNMENT
CAPITAL PROJECT E-0935
ELECTION DISTRICT NO. 6
HOWARD COUNTY MARYLAND

SCALE
VERT 1" = 5'
HOR 1" = 50'
SHEET
17 OF 20

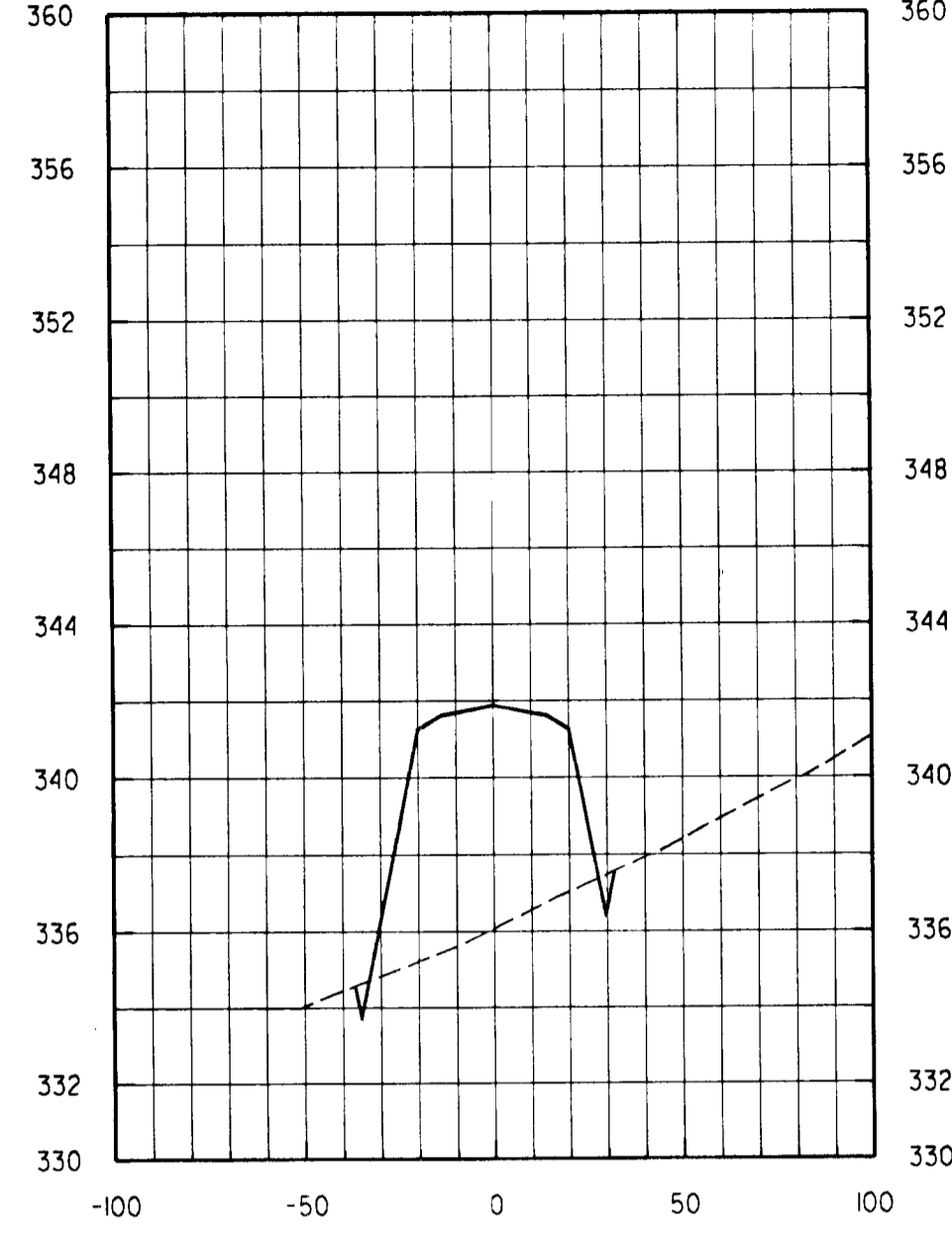
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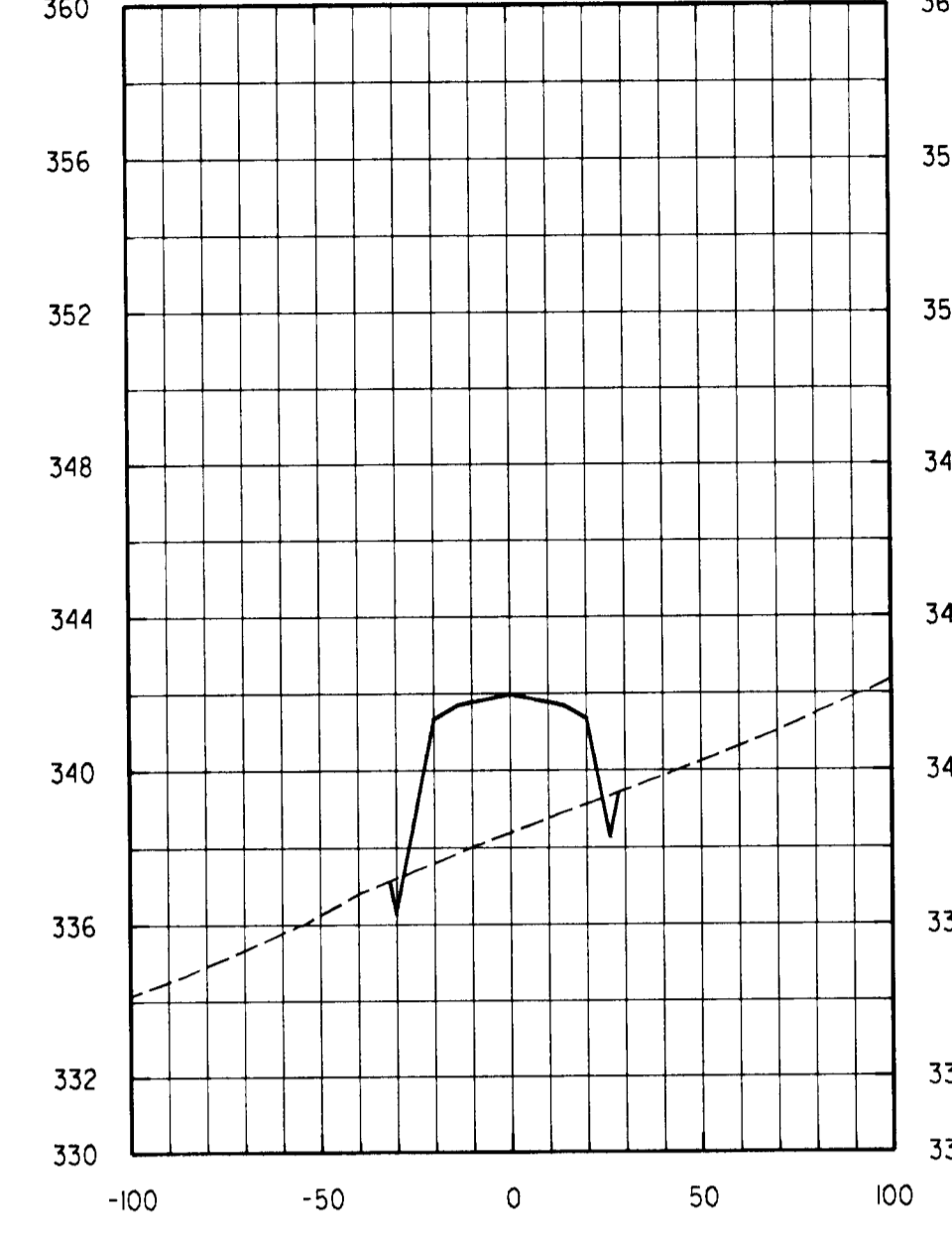
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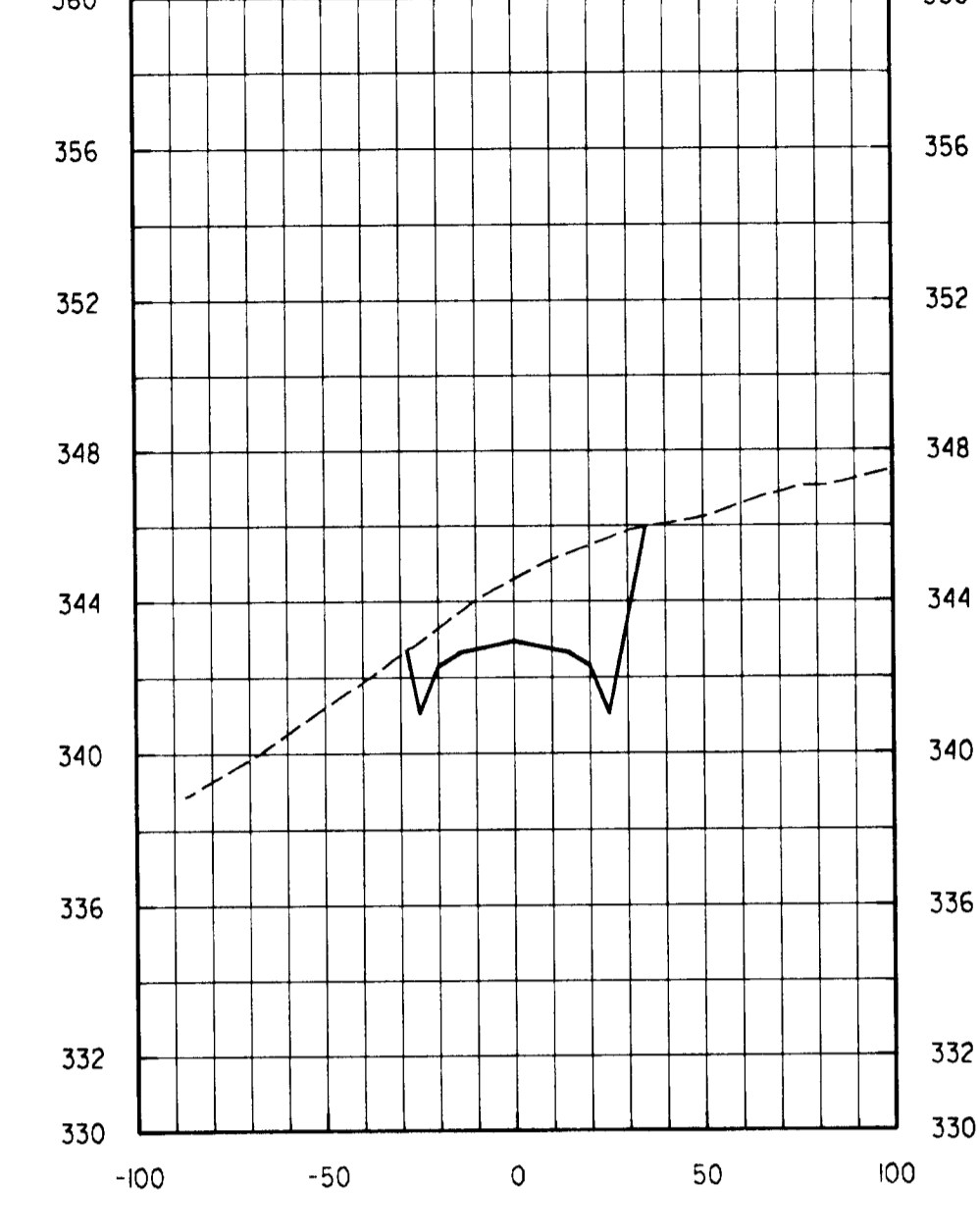
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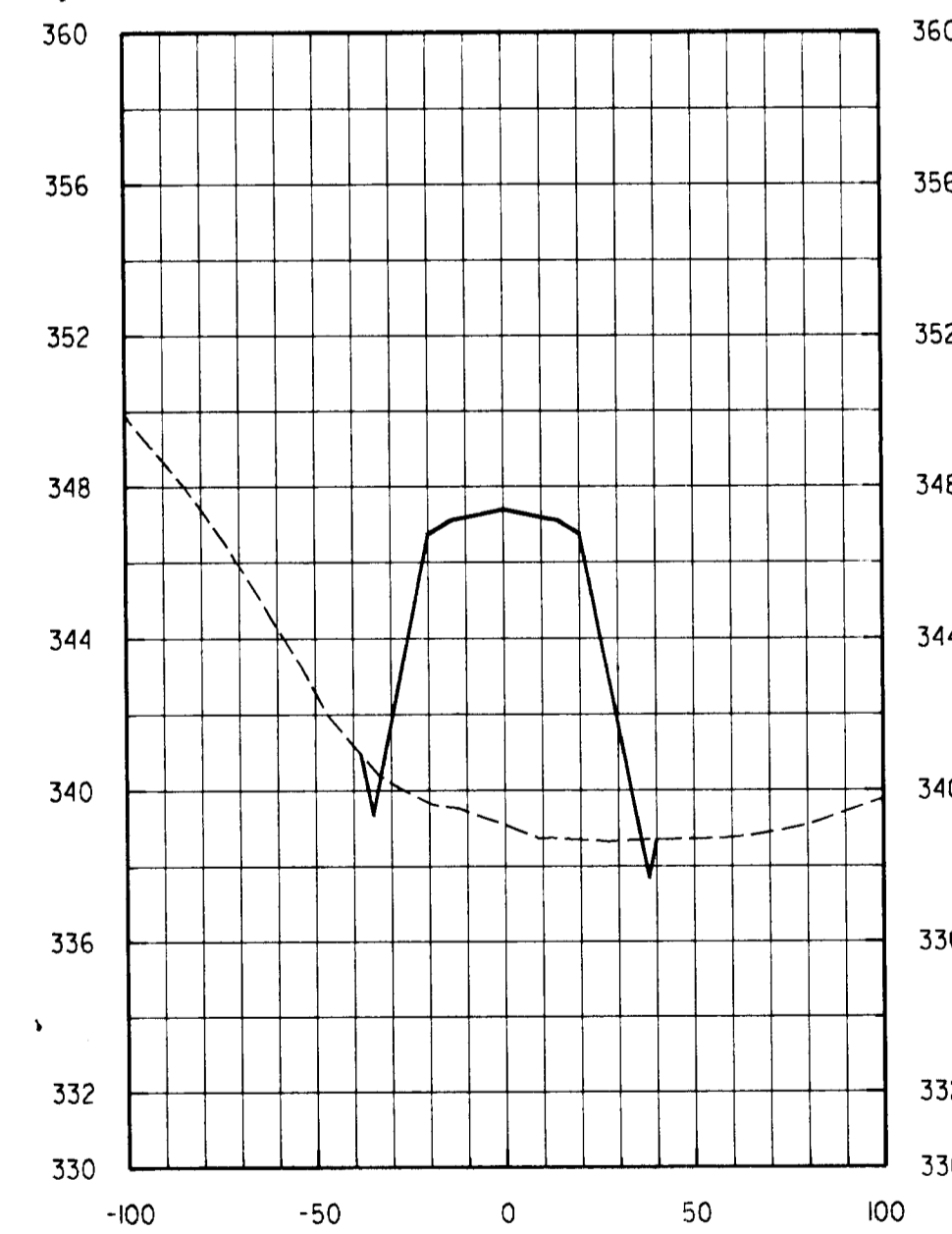
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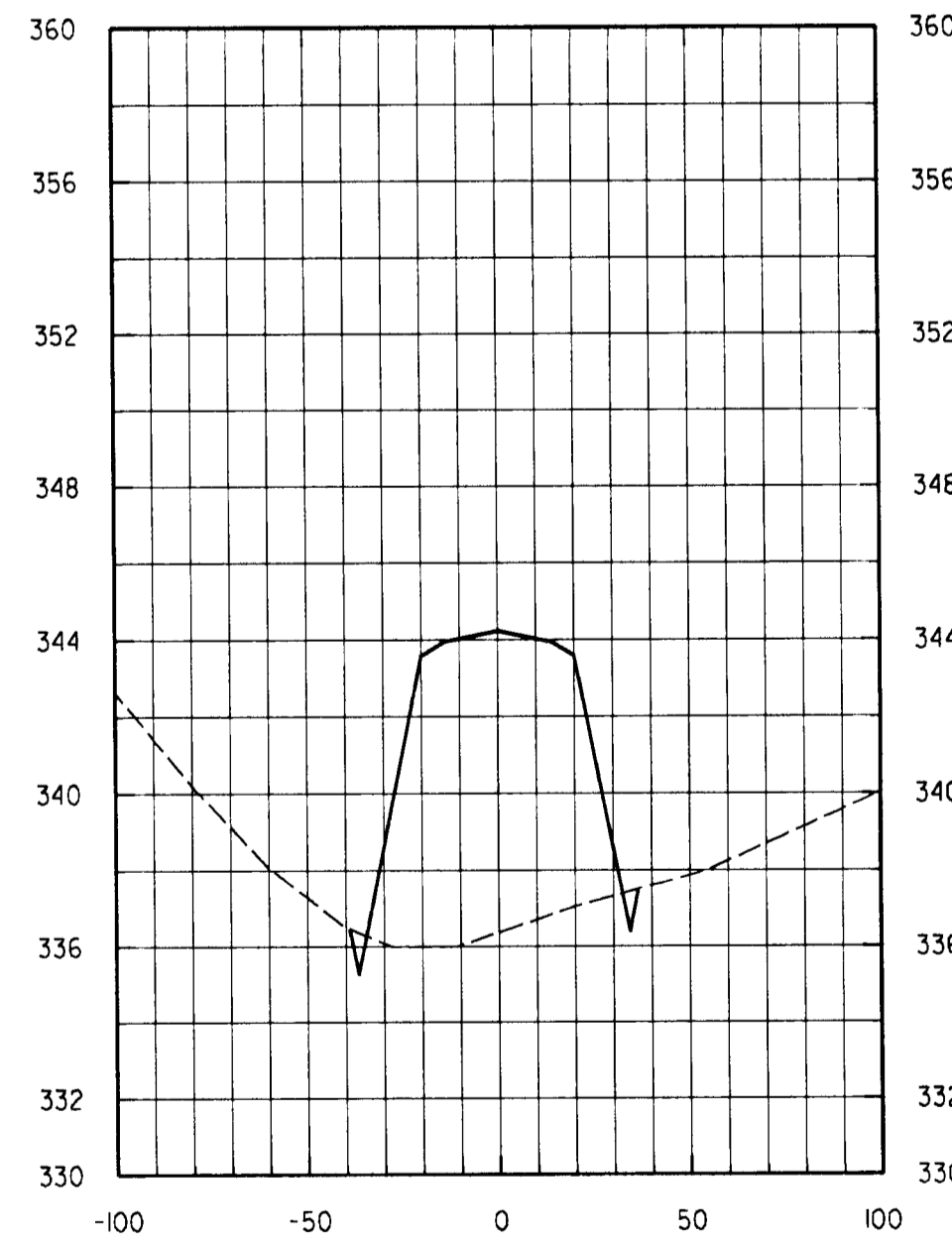
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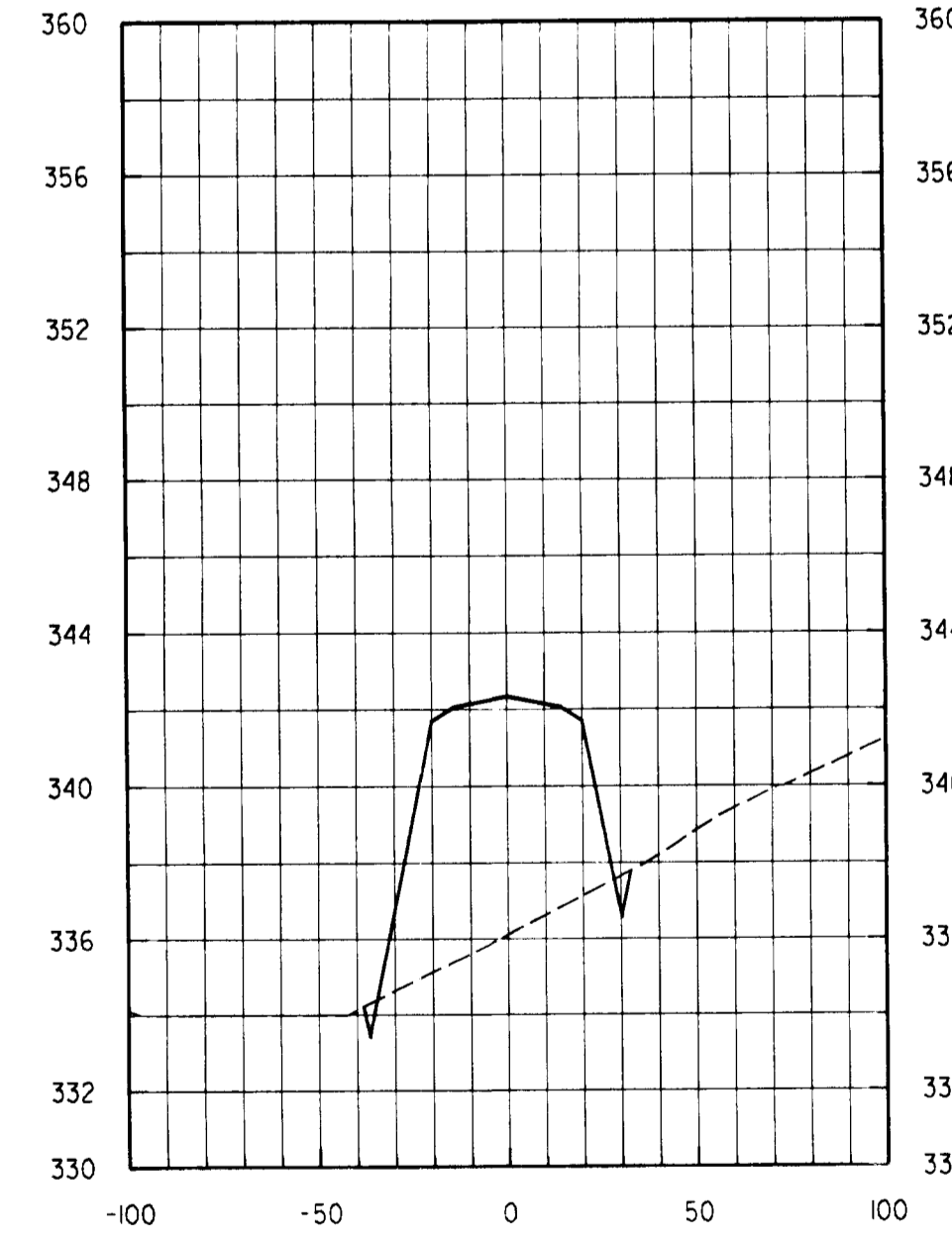
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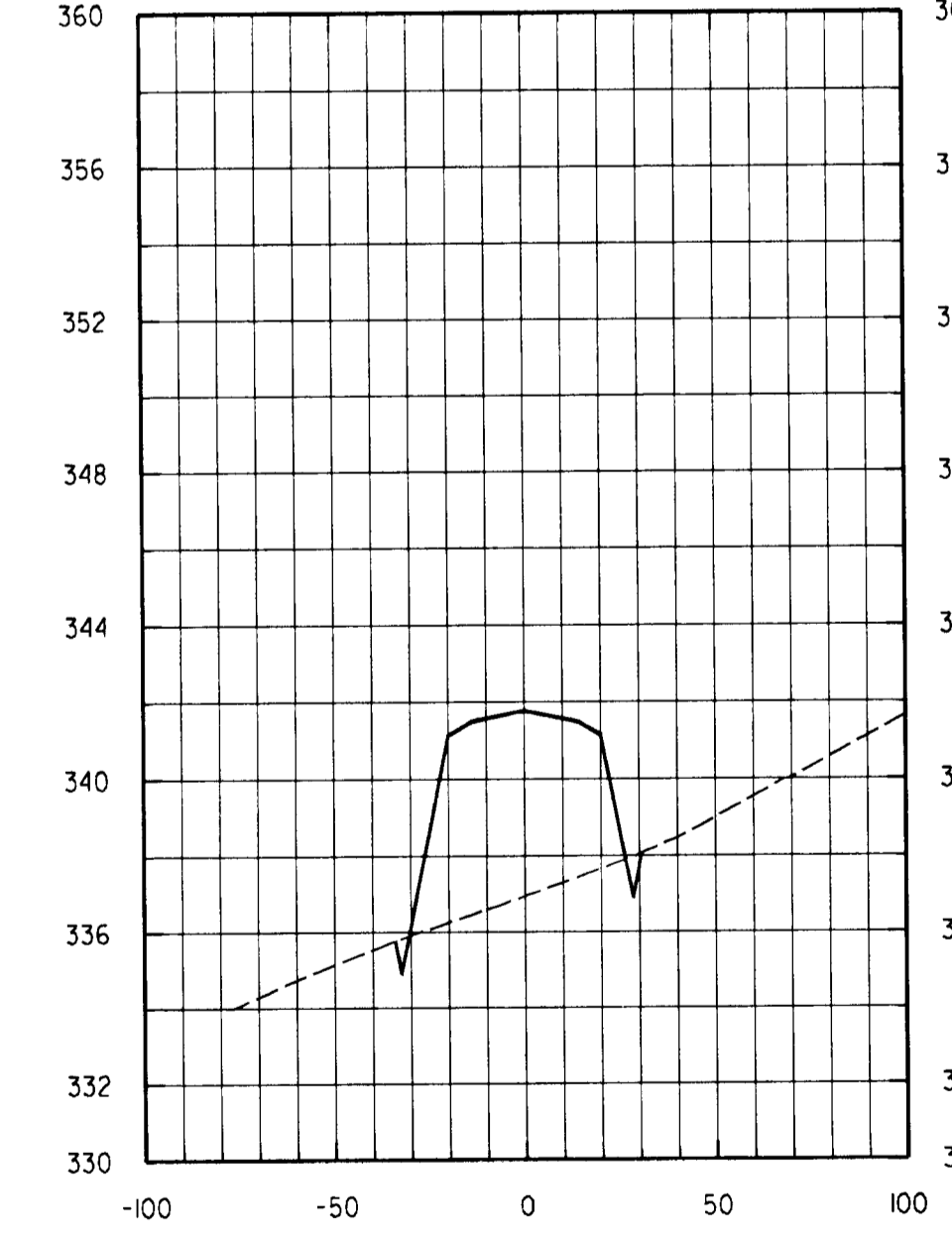
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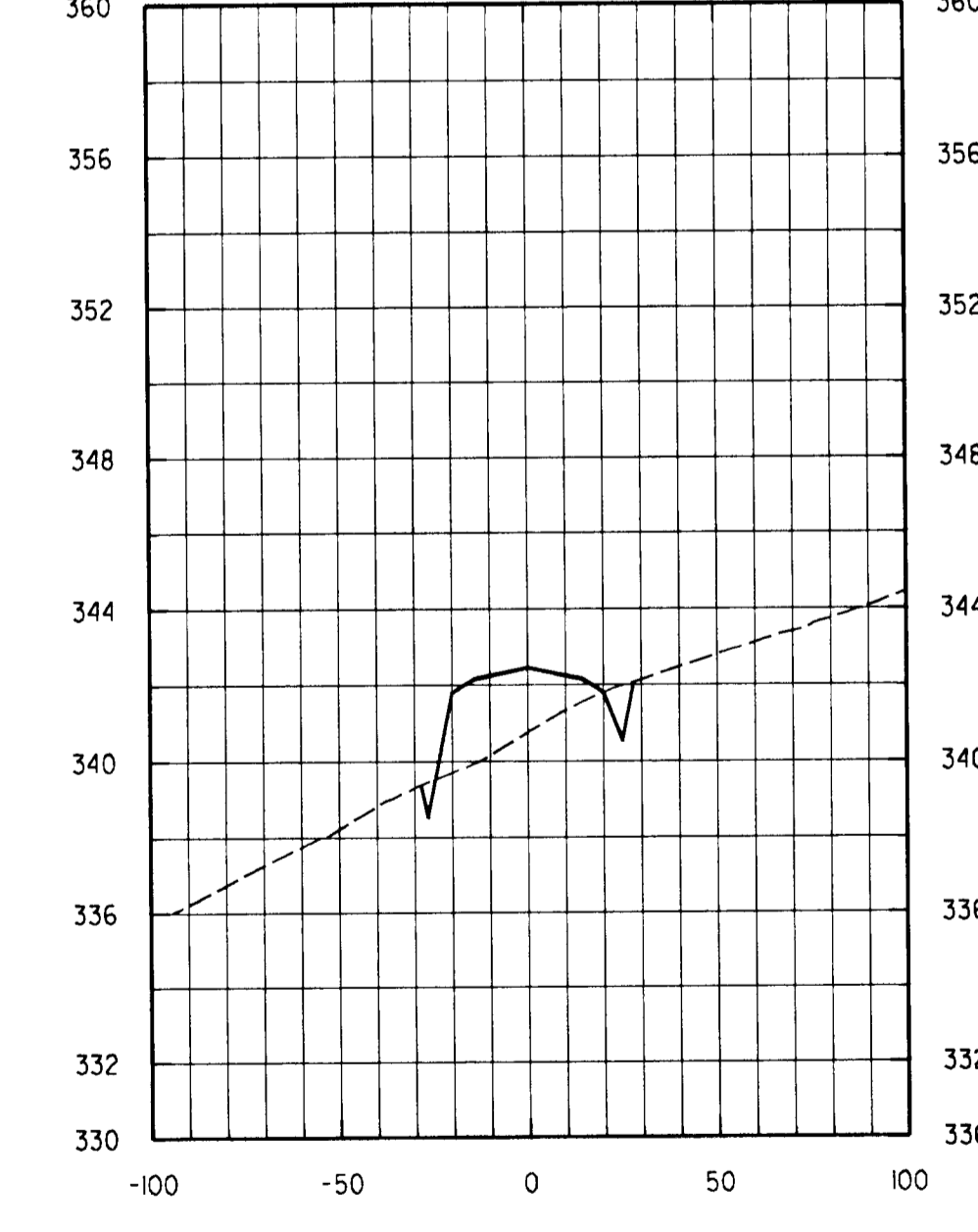
49+00



50+00



51+00



52+00

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PENDING COUNTY APPROVAL

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

DMW
Daft · McCune · Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 410 296 3333
 Fax 296 4705

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DATE:	JAN. 18, 1996		
BY	NO.	REVISION	DATE

CROSS SECTIONS

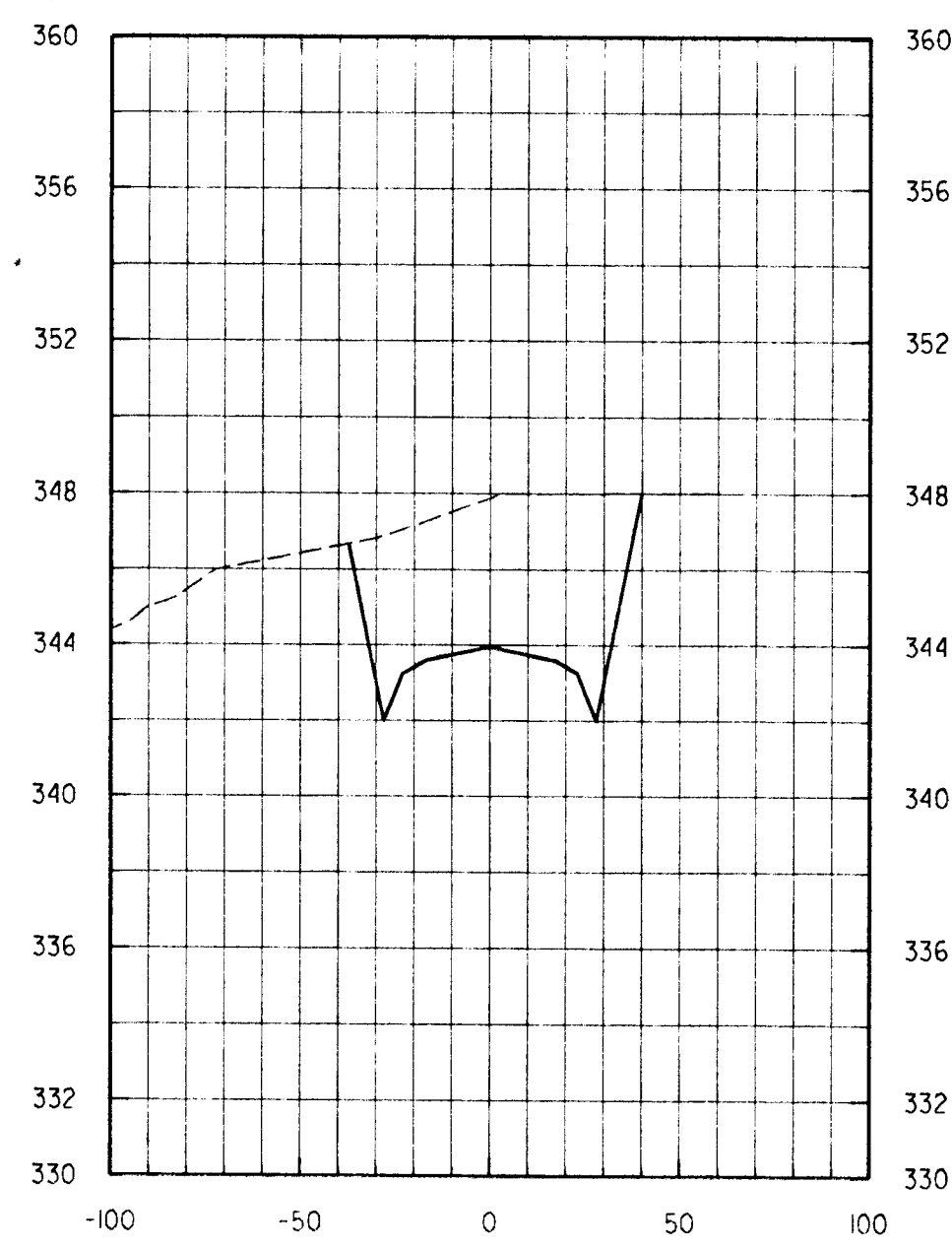
600 SCALE MAP NO. 47 BLOCK NO. 2

GORMAN ROAD REALIGNMENT
 CAPITAL PROJECT E-0935
 ELECTION DISTRICT NO. 6
 HOWARD COUNTY MARYLAND

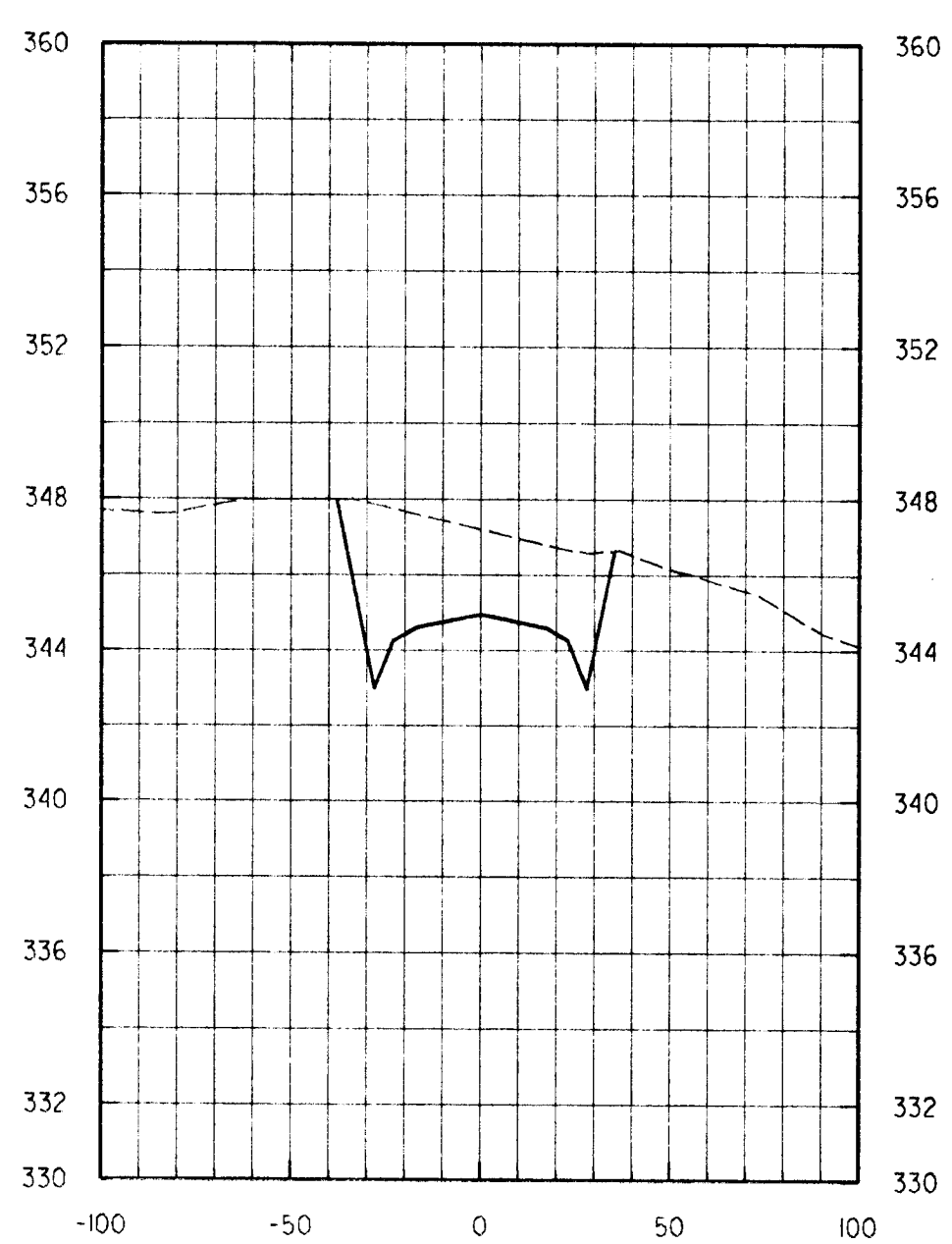
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 VERT 1" = 5'
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 SHEET
 18 OF 20

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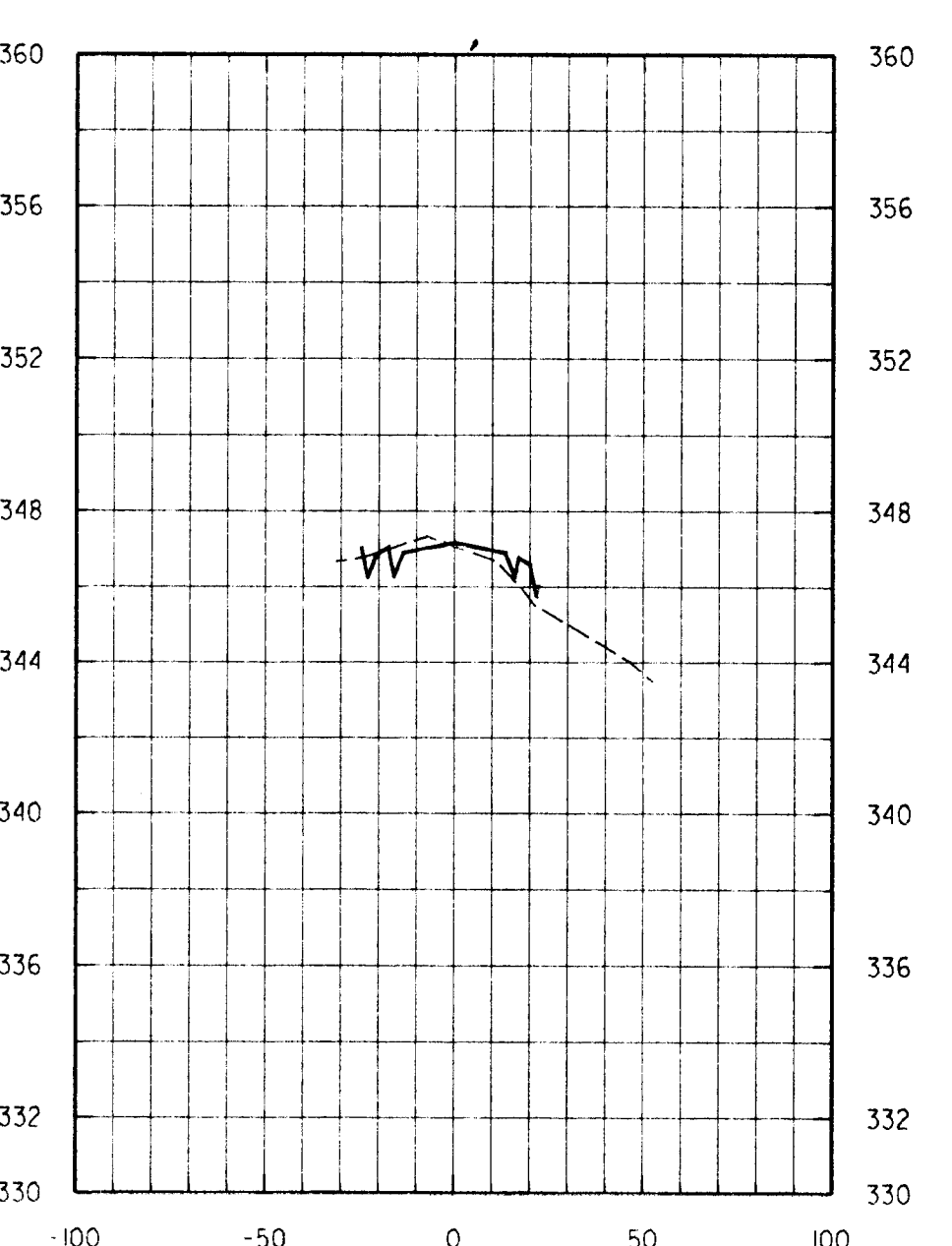
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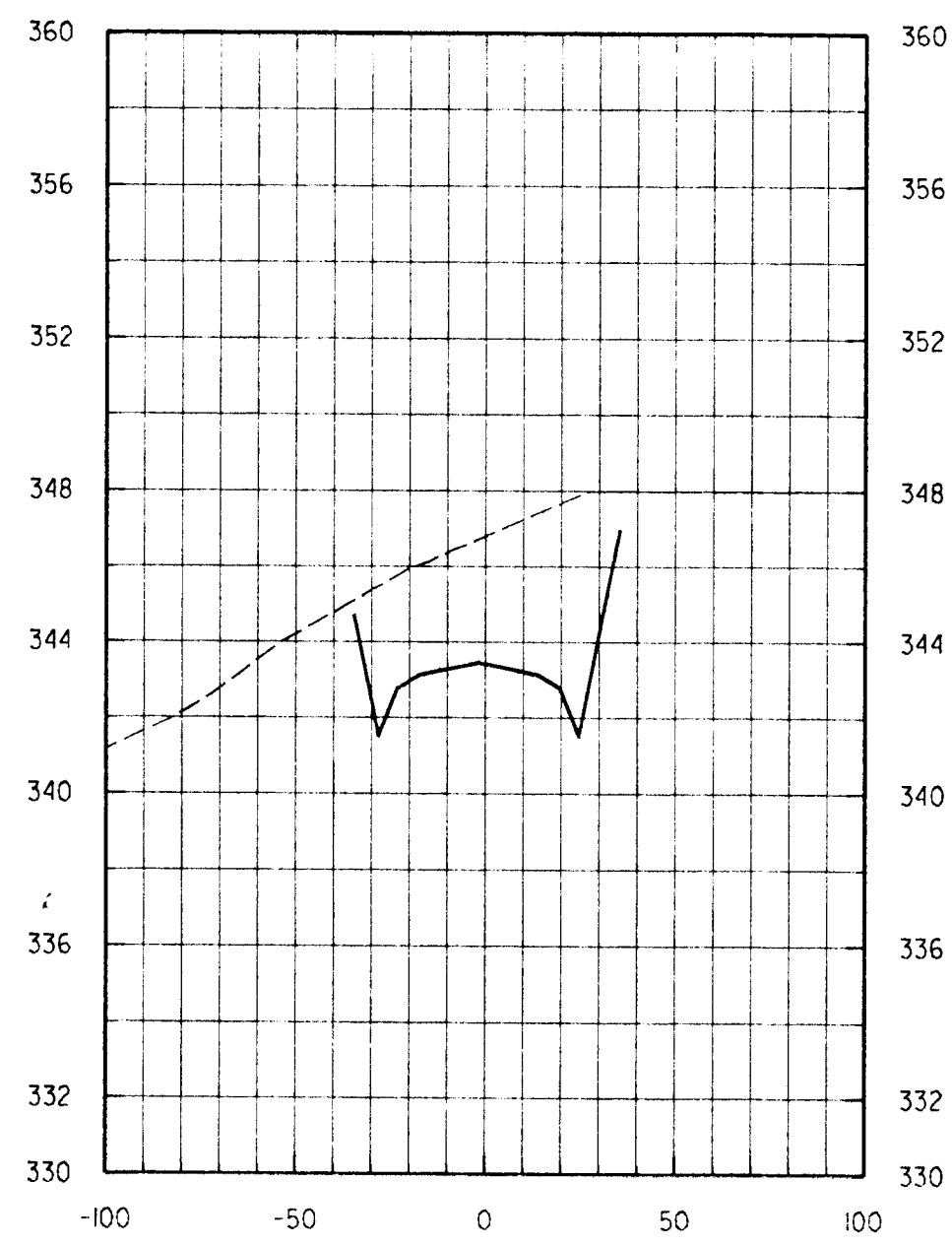
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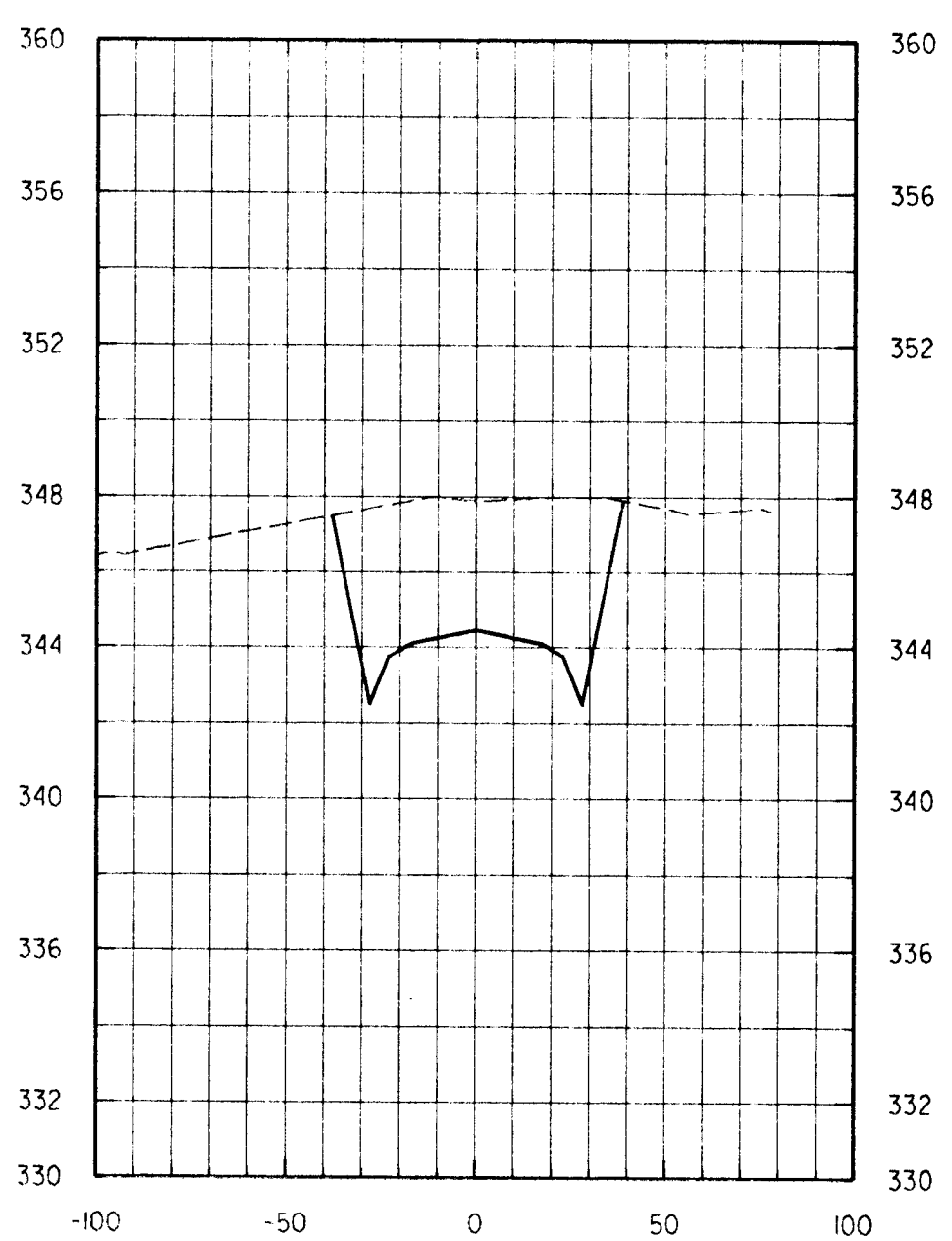
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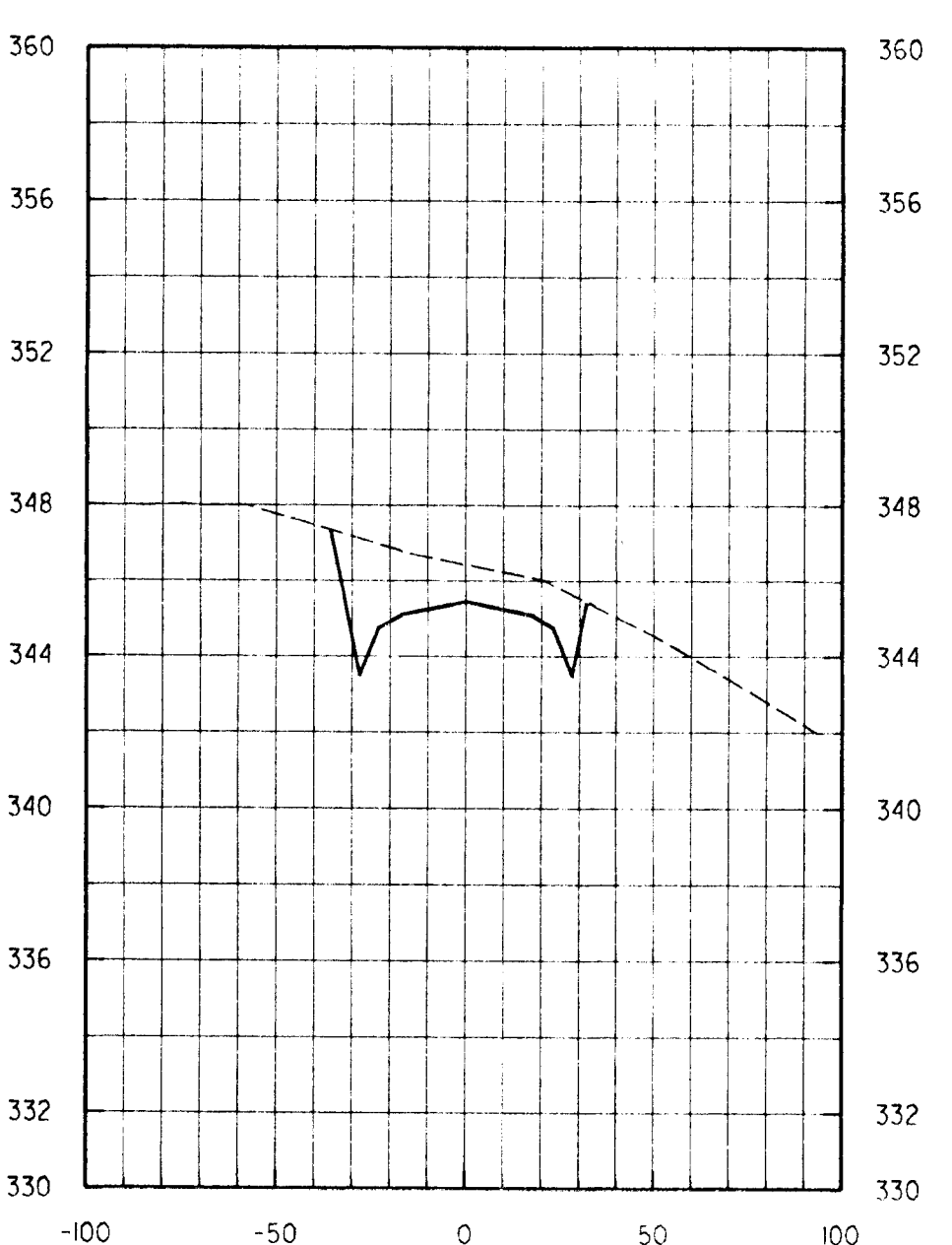
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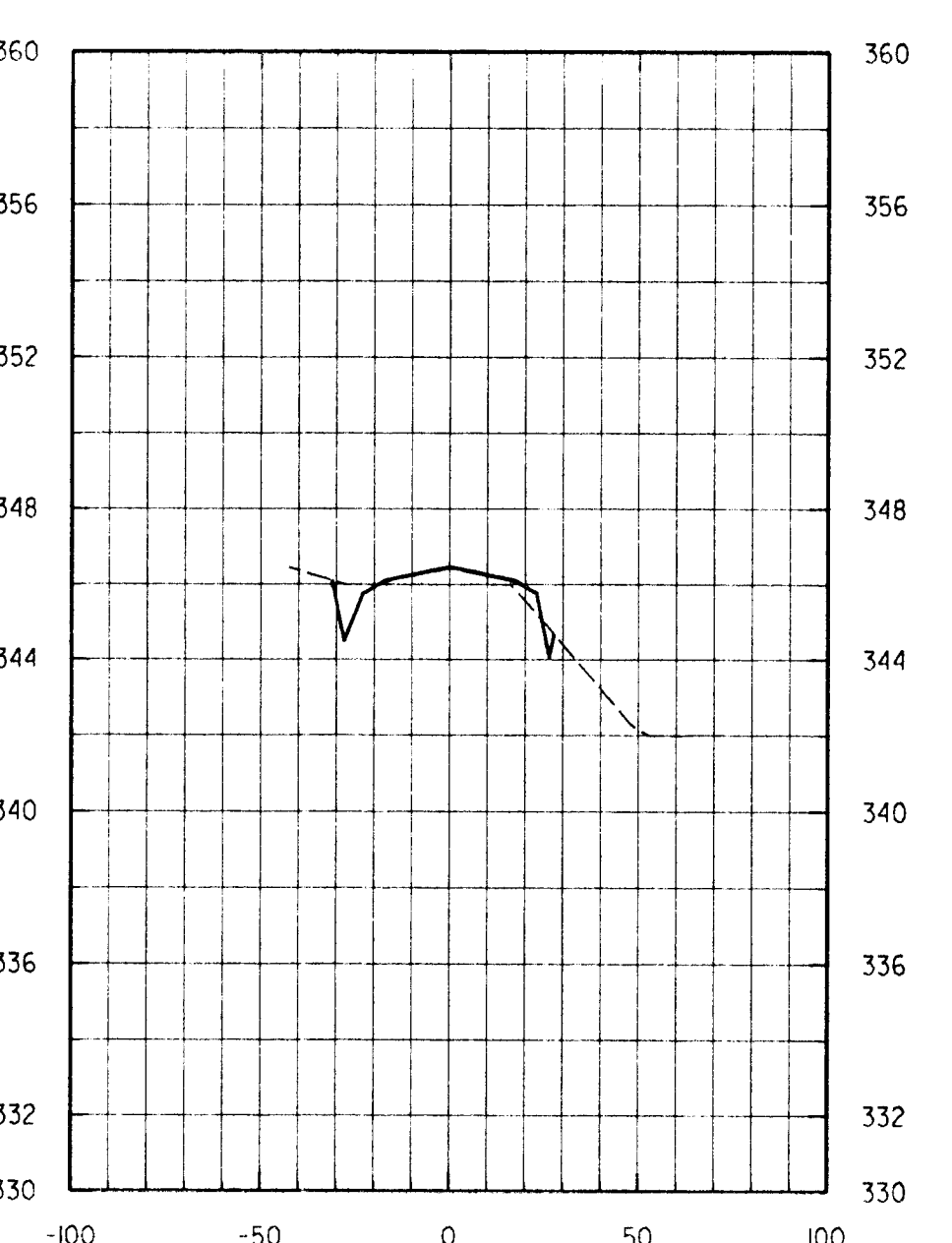
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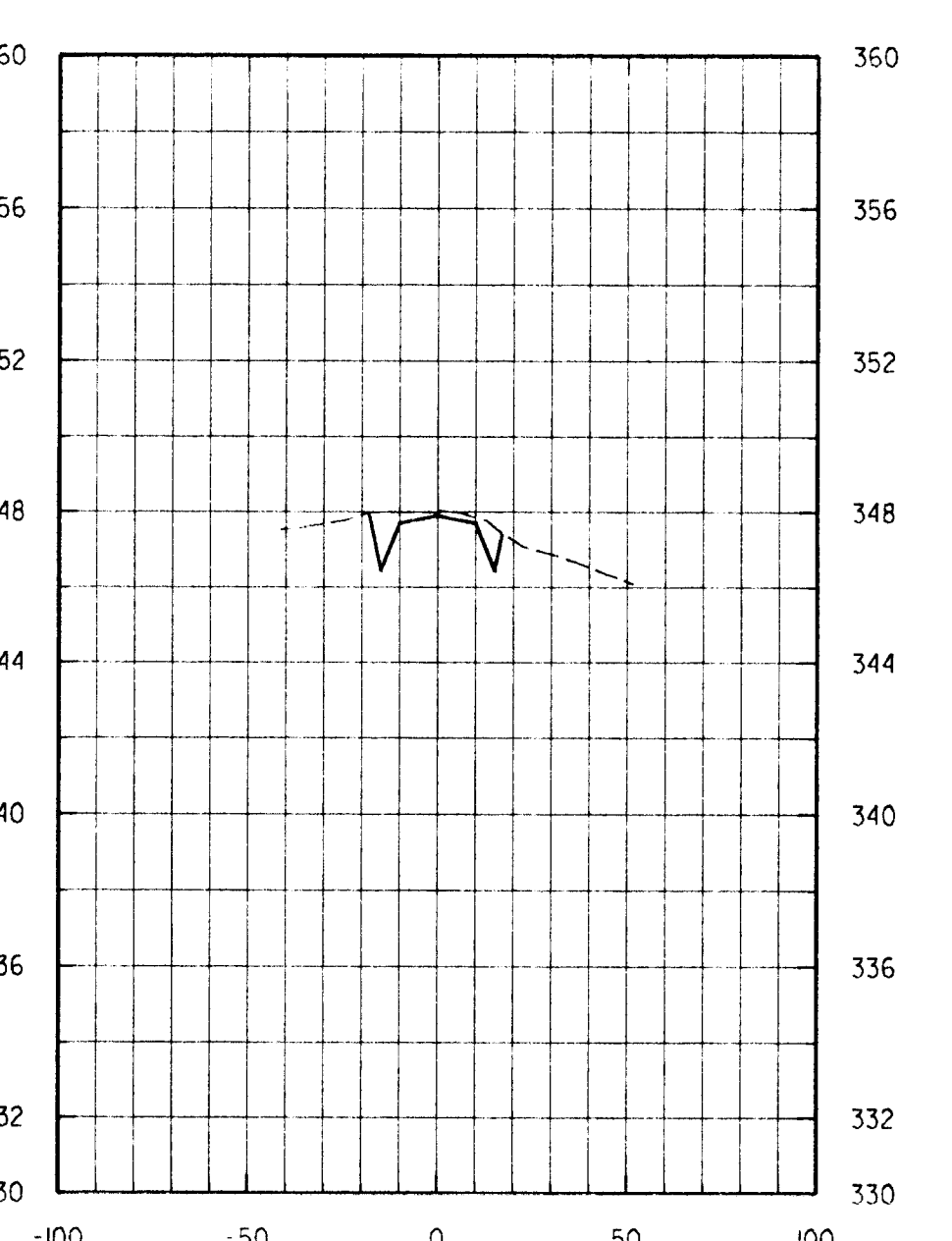
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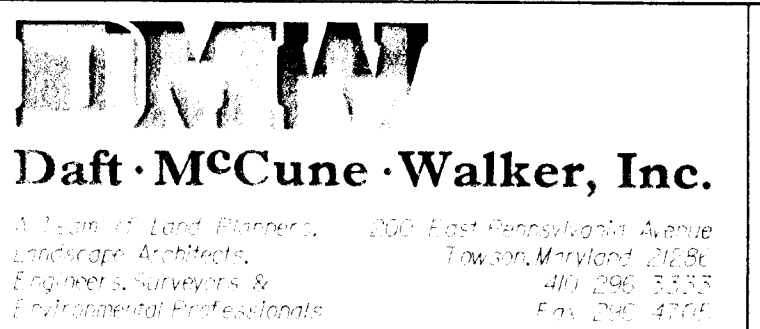


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 HOWARD COUNTY, MARYLAND



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BY NO.	
REVISION	
DATE	

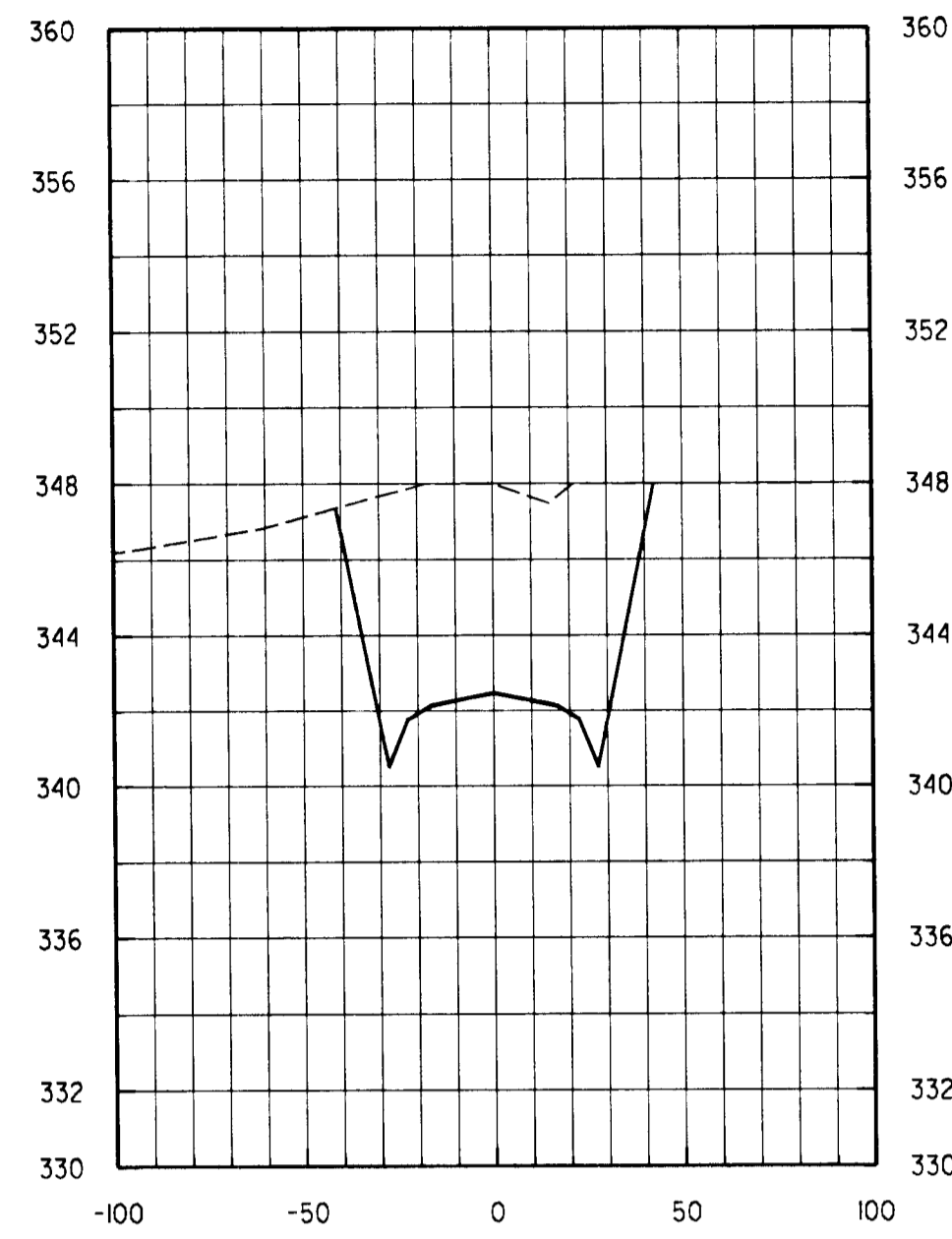
CROSS SECTIONS

GORMAN ROAD REALIGNMENT
 CAPITAL PROJECT E-0935
 ELECTION DISTRICT NO. 6
 HOWARD COUNTY MARYLAND

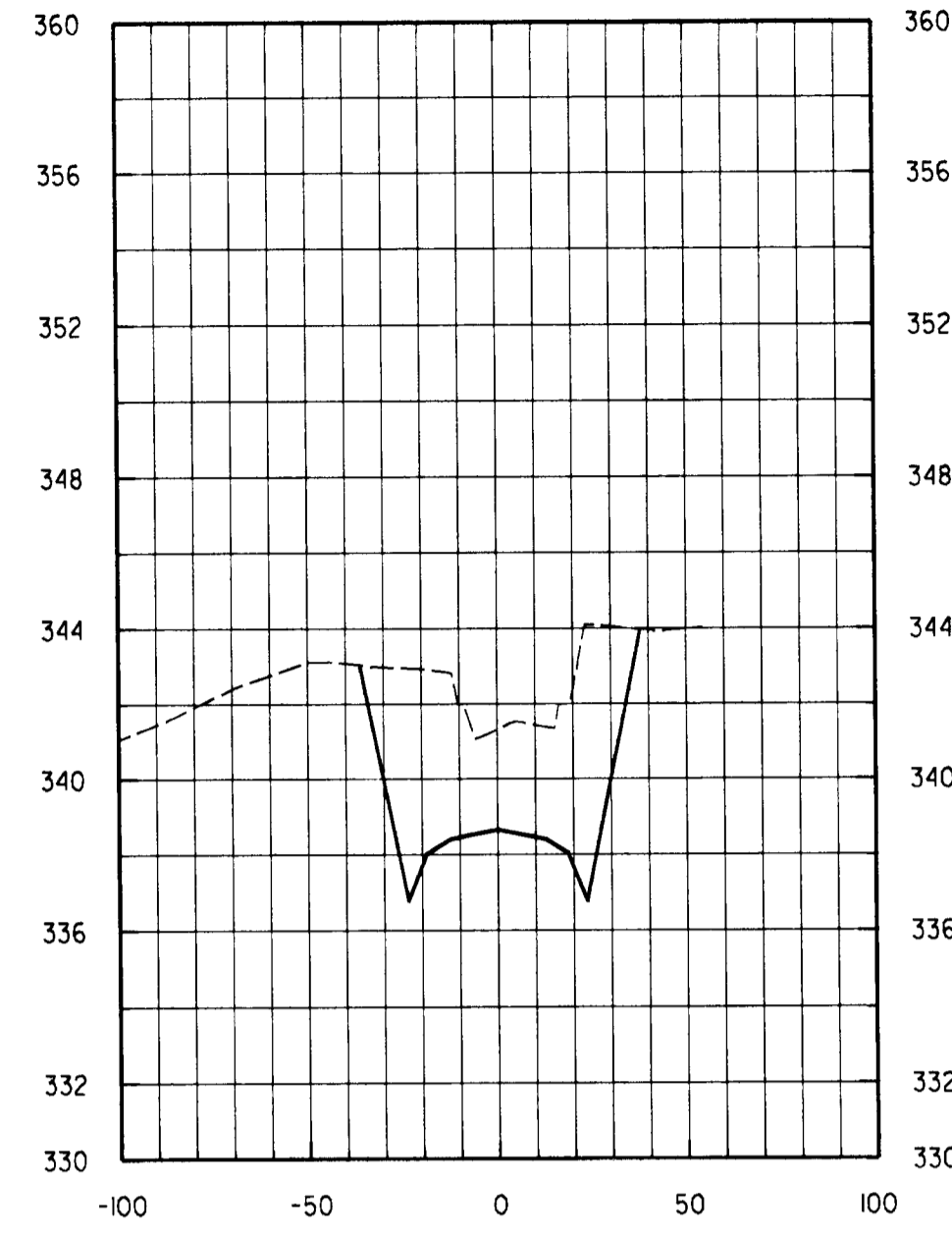
SCALE
 VERT 1" = 5'
 HOR 1" = 50'
 SHEET
 19 OF 20

11/18/96 11:58:52 AM d:\1996\01\19\0196.dwg

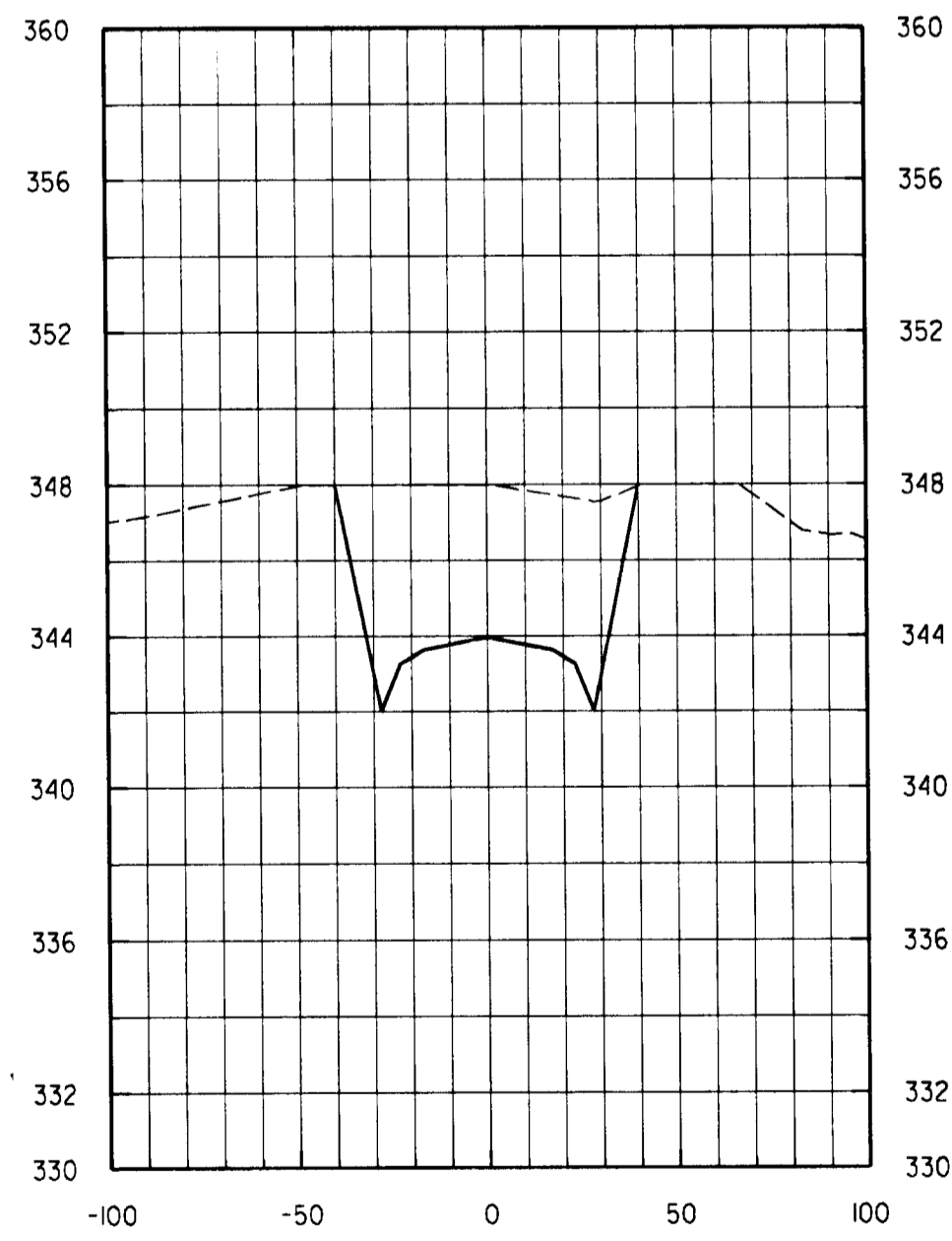
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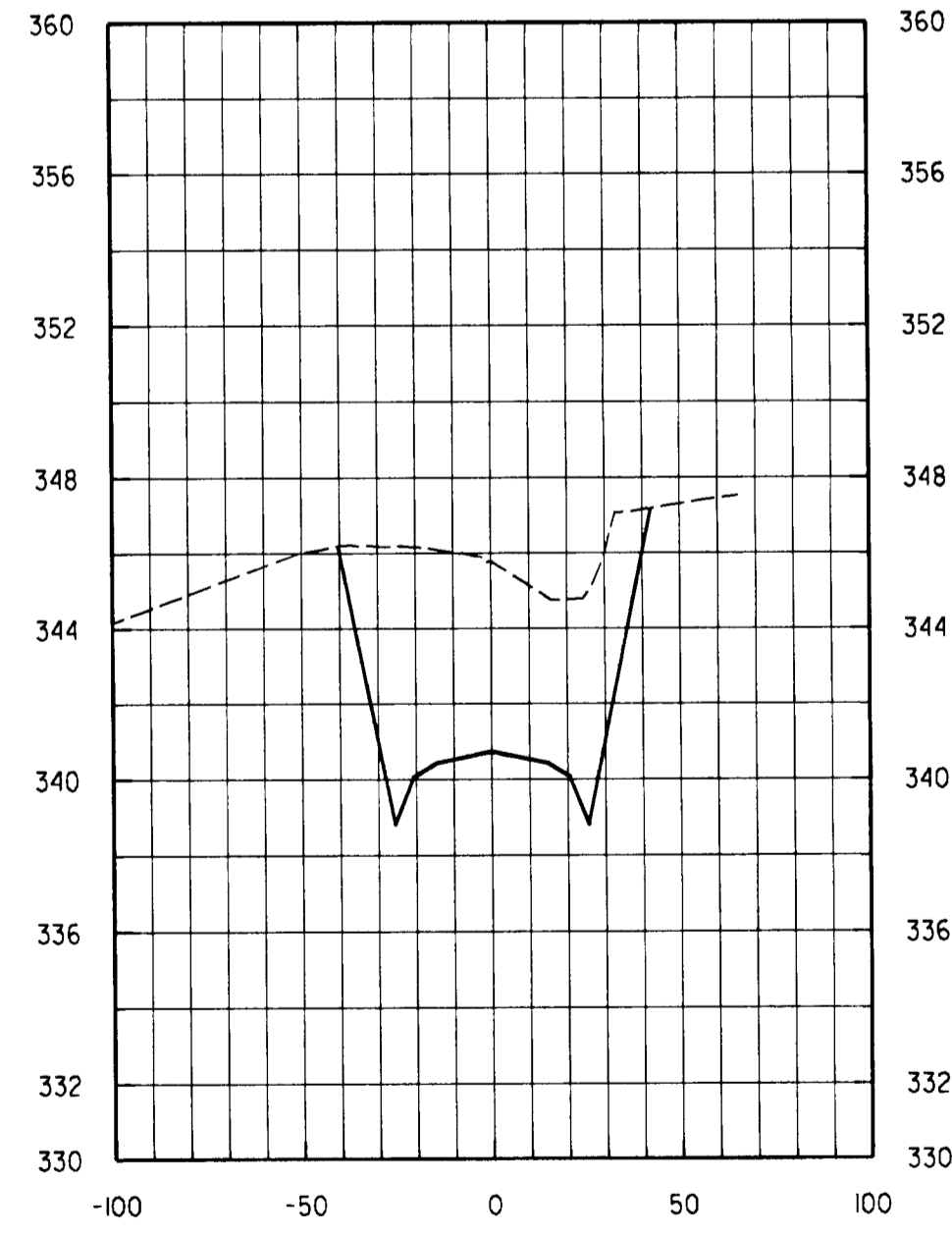
101+00



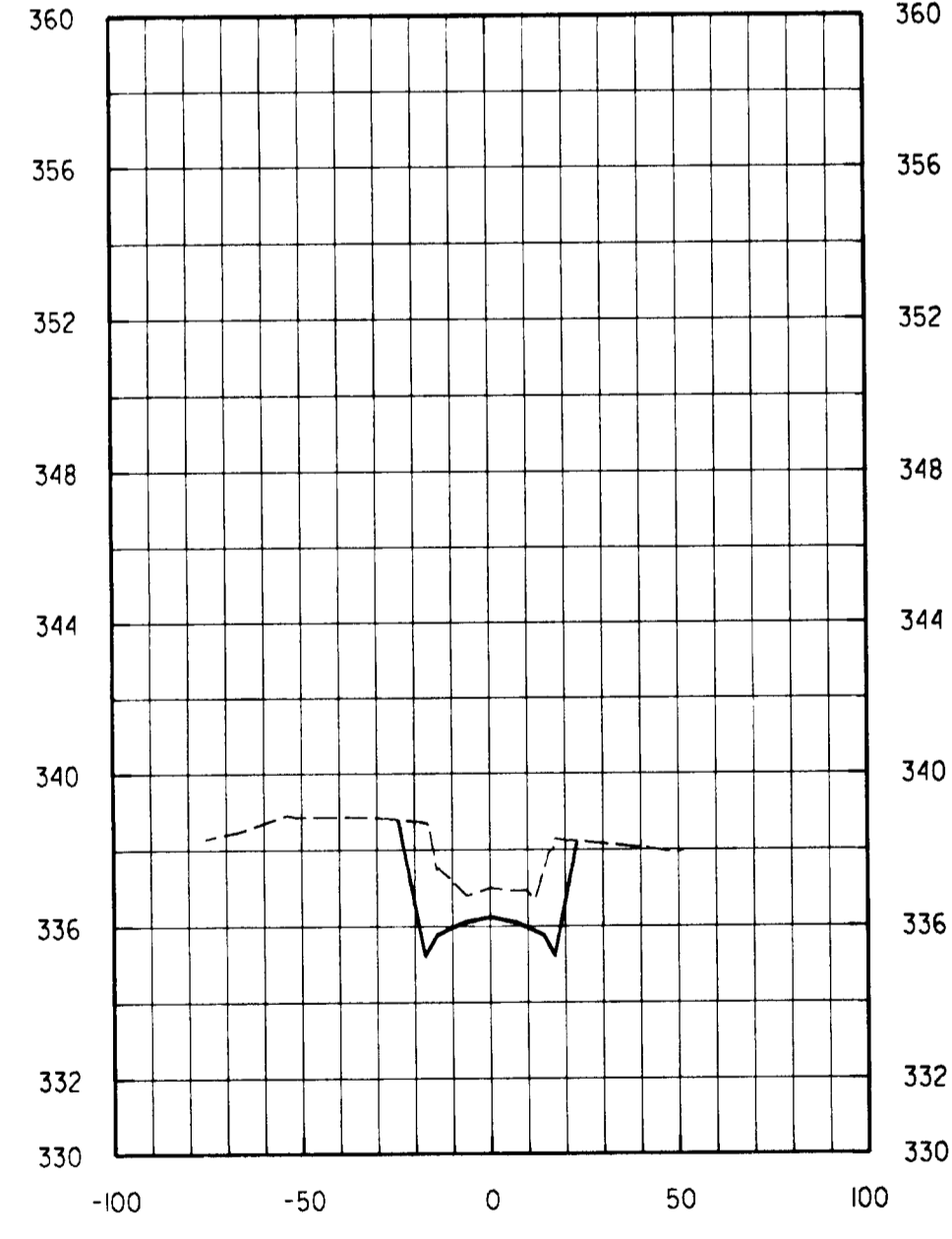
102+00



100+50



101+50



102+50

NOT FOR
CONSTRUCTION

BID SET
1/18/96

PENDING COUNTY APPROVAL

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS	DATE	CHEF, BUREAU OF ENGINEERING	DATE
CHEF, BUREAU OF HIGHWAYS	DATE	CHEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT	DATE

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue
Towson, Maryland 21286
410 296 3333
Fax 296 4705

DESIGN BY:	JWS			
DRAWN BY:	JWS			
CHECKED BY:				
DATE:	JAN. 18, 1996	BY	NO.	REVISION

CROSS SECTIONS

600 SCALE MAP NO. 47 BLOCK NO. 2

GORMAN ROAD REALIGNMENT
CAPITAL PROJECT E-0935
ELECTION DISTRICT NO. 6
HOWARD COUNTY MARYLAND

SCALE
VERT 1" = 5'
HOR 1" = 50'
SHEET
20 OF 20