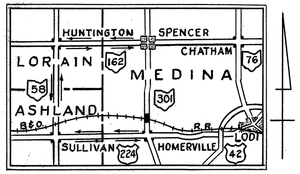


DETOUR MAP

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
MED-301-3.24

MICROFILMED
MAR 26 1965

S-SG-199(5)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	S-SG-199(5)	

1/29

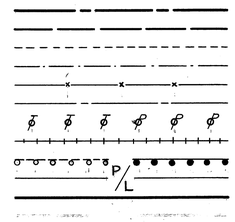
MEDINA COUNTY
MED-301-3.24

RECONSTRUCTION OF EXISTING SEPARATED CROSSING WITH BALTIMORE AND OHIO RAILROAD CO.
MEDINA COUNTY
HOMER TOWNSHIP

FEB 5 1964
GROUND PHOTOLA

CONVENTIONAL SIGNS

COUNTY LINE
TOWNSHIP LINE
SECTION LINE
CORPORATION LINE
FENCE LINE
CENTER LINE
POLE LINE (TELEPHONE & POWER)
RAILROAD
GUARD RAIL (EXISTING & PROPOSED)
PROPERTY LINE
RIGHT OF WAY



INDEX OF SHEETS

TITLE SHEET	1
TYPICAL SECTIONS	2
CONSTRUCTION DETAILS	2
GENERAL NOTES	3
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PLAN AND PROFILE	4-6
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CHANNEL DETAILS	19
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RIGHT OF WAY PLANS	26-28
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RAILROAD FORCE ACCOUNT	25A

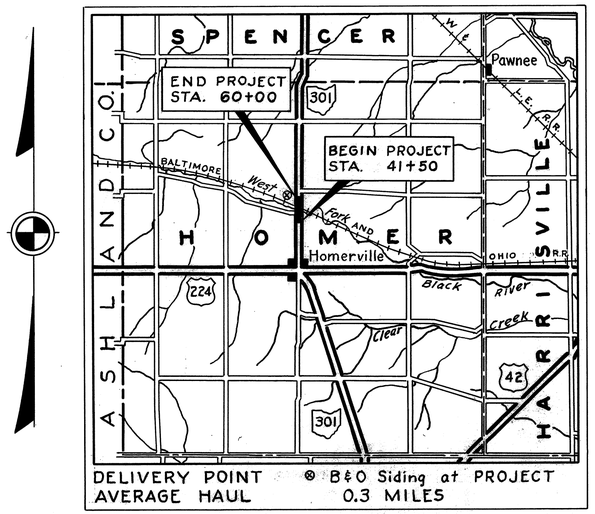
LINE DATA

SG-199(5)	PROJECT	WORK
BEGIN	Sta. 43+00	Sta. 43+00
SUSPEND	Sta. 48+60.19	Sta. 48+60.19
RESUME	Sta. 49+79.53	Sta. 49+79.53
END	Sta. 58+50	Sta. 58+50
ADD C.R.# 81		590.00 LIN.FT.
NET LENGTH	1430.66 LIN.FT.	2020.66 LIN.FT.
	OR 0.270 MILE	0.382 MILE

S-199(5)		
BEGIN	Sta. 41+50	Sta. 41+00
SUSPEND	Sta. 43+00	Sta. 43+00
RESUME	Sta. 48+60.19	Sta. 48+60.19
SUSPEND	Sta. 49+79.53	Sta. 49+79.53
RESUME	Sta. 58+50	Sta. 58+50
END	Sta. 60+00	Sta. 61+00
NET LENGTH	419.34 LIN.FT.	569.34 LIN.FT.
	OR 0.079 MILE	0.107 MILE

TOTAL S-SG-199(5)		
	1850.00 LIN.FT.	2590.00 LIN.FT.
	OR 0.350 MILE	0.490 MILE

FILE Nº	MEDINA COUNTY MED-301-3.24
230-M	DATE OF LETTING _____
	CONTRACT Nº _____



DELIVERY POINT ⊗ B&O Siding at PROJECT
AVERAGE HAUL 0.3 MILES

LOCATION MAP

Scale of Miles

0 1 2 3 4

PORTION TO BE IMPROVED
STATE HIGHWAYS
OTHER ROADS
DETOUR

SCALES

PLAN	1" = 50'
PROFILE HORIZONTAL	1" = 50'
PROFILE VERTICAL	1" = 5'
CROSS SECTIONS	1" = 5'
OTHER SHEETS AS SHOWN	

The Standard Specifications of the State of Ohio, Department of Highways, including changes and supplemental specifications listed in the proposal shall govern this improvement.

The right of way for this improvement will be provided by the State of Ohio.

I hereby approve these plans and declare that the making of this improvement will require the closing of the highway to traffic and that detours will be provided as indicated on the plans.

Approved E. L. Jokum
Date 3-9-60 Division Deputy Director

OK WWG 8-1-60

Approved Guy E. Keesler
Date 8-4-60 Deputy Director of Planning and Programming

Approved H. H. Herrman
Date 7-28-60 Engineer of Bridges

Approved W. J. Sumner
Date 8-1-60 Engineer of Location and Design

Approved C. W. McCaughey
Date 8-1-60 Deputy Director of Design and Construction

Approved G. A. Berry
Date 8-4-60 First Assistant Director

Approved E. L. Preston
Date 8-4-60 Director of Highways

FEB 5 1964
GROUND PHOTOLA

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS							
G-7.07	6-1-56	L-3	4-1-50	DR-1	1-3-55		
I-1,2,3,4 & 5	4-24-58	L-3-A	4-1-50	AS-1-54	12-1-54		
I-8 C.B. 2-3 & 2-4	1-26-59	RI-1	7-15-58	AR-1-57	2-2-59		
I-8 M.H. NO. 1	1-26-59	S-27 P.C. 3	2-20-45	RB-1-55	2-2-59		
I-8 M.H. NO. 1-A	1-26-59	S-27 P.C. 4	1-4-54				
I-146	1-22-52	T-35	1-2-56				
I-15 NO. 1	5-21-59	I-15 NO. 4	12-1-54				
I-15 NO. 2	6-1-57	CSB-256 Sh. 2 & 3	2-2-59				
L-1	4-1-50						

SUPPLEMENTAL SPECIFICATIONS			
S-101	12-2-59		

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:

_____ DIVISION ENGINEER

_____ DATE

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

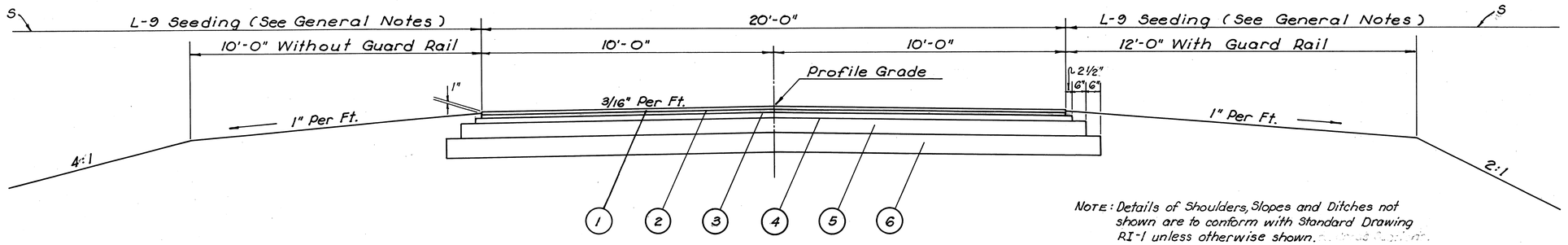
2
29

MED-301-3.24

TYPICAL SECTION

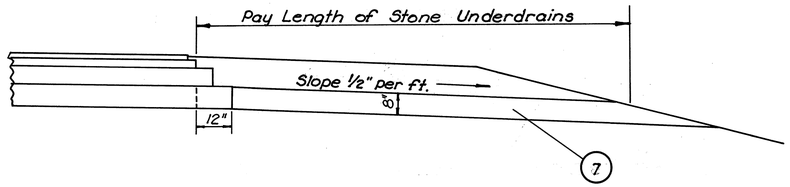
TYPE T-35 ON B-19

CODE 6201



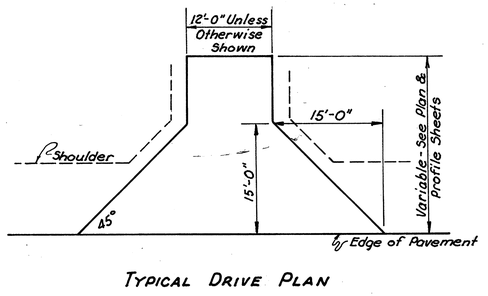
NOTE: Details of Shoulders, Slopes and Ditches not shown are to conform with Standard Drawing RI-1 unless otherwise shown.

STA. 41+50.00 to STA. 48+35.19 = 685.19 LIN. FT.
STA. 51+23.87 to STA. 60+00.00 = 876.13 LIN. FT.
TOTAL = 1561.32 LIN. FT.

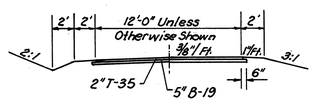


DETAIL OF STONE UNDERDRAINS No. 2

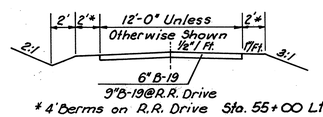
(1) T-35 1¼" Asphaltic Concrete Surface Course Type "C" (70-85)
(2) B-35 1¼" Asphaltic Concrete Leveling Course (70-85)
(3) B-35 1½" Asphaltic Concrete Leveling Course (70-85)
(4) T-30 Bituminous Prime Coat Sec. M-5.7, RT-2 or RT-3 Applied at the rate of 0.40 Gal. per Sq. Yd.
(5) B-19 6" Aggregate Base Course
(6) I-22 8" Subbase
(7) I-9 Stone Underdrains No. 2 (Located as directed by the Engineer)



TYPICAL DRIVE PLAN

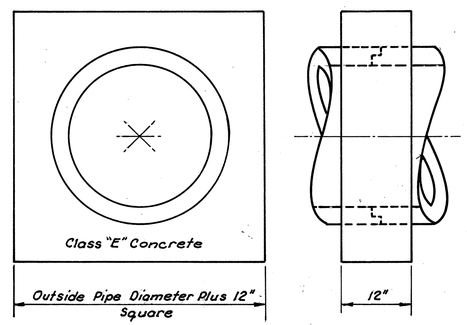


TYPICAL DRIVE SECTION T-35 ON B-19

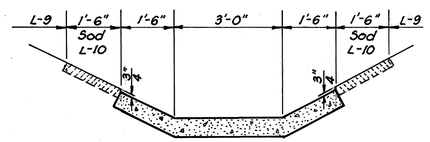


* 4' Berms on R.R. Drive Sta. 55+00 Lt.

TYPICAL AGGREGATE DRIVE



CONCRETE PIPE COLLAR



PAVED GUTTER
Standard Type 1 Modified

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

3 / 29

MED-301-3.24

GENERAL NOTES

DESIGN SPEED: 50 Miles per Hour.

FIELD OFFICE: The Contractor shall provide a suitable field office in accordance with Sec. S-0.01(b) having a minimum floor area of 300 Sq. Ft. The Contractor shall have a telephone installed and maintained during the construction of this project.

UTILITIES: Any and all work required for the adjustment of public or private Utilities shall be done by and at the expense of their respective owners.

SUBGRADE COMPACTION: Subgrade under drives shall be compacted for a depth of Six (6) inches to the density requirements of Table III, Sec. E-1.09. Payment for Subgrade Compaction as specified above shall be included in the unit price bid Item E-1

I-9 STONE UNDERDRAINS No. 2: A quantity of Stone Underdrains No. 2, to be used as directed by the Engineer, has been estimated on this project at approximately 50 Ft. intervals on each side. The Contractor shall grade, finish, seed and mulch the slopes so as not to impede the free drainage of the Stone Underdrains.

MAINTAINING LOCAL TRAFFIC: The following estimated quantities are included in the General Summary for Maintaining Local Traffic as directed by the Engineer.
300 Cu.Yds. Traffic Compacted Surface Course for Maintaining Local Traffic.
6 Tons, Calcium Chloride furnished and Applied for Maintaining Local Traffic.

GUARD RAIL ADJUSTMENT: The Stationing of individual runs of Guard Rail shall be adjusted, if necessary, by the Engineer at the time of Construction to accomodate the standard panel lengths furnished.

SANITARY: No drains, either existing or proposed, carrying domestic waste shall be connected to any portion of the proposed drainage system of this project.

CALCULATIONS: All calculations are on file in the Division Office.

MATERIAL REMOVED under Items E-12, S-22 and S-24 shall become the property of the Contractor. Under Item E-12 the Contractor may, in lieu of pipe removal, uncover the pipe, break it, and compact backfill in accordance with Sec. E-1.08 of the specifications.

E-1 ROADWAY EXCAVATION: Sec. E-1.03(c) of the Specifications shall include the complete filling of old basements, wholly or partially within the Right-of-Way with material suitable for E-1.08 Embankment. Building foundations, steps, basement floors etc. shall be removed and disposed of in their entirety, even though the item is only partially within the Right-of-Way.

ITEM I-15 GUARD RAIL REMOVED AND STORED, AS PER PLAN: This item shall include storage only of the rail elements and incidental hardware. The posts shall become the property of the Contractor and be disposed of by him.

REMOVAL OF TREES AND STUMPS shall be paid for by a Lump Sum bid. The number of trees and stumps shown in the following table is for estimating purposes only. Sizes under 12" are not listed. The State does not guarantee the accuracy of the table.

SIZE	12"-18"	18"-24"	24"-30"	30"-36"	36"-42"	OVER 48"
TREES	10	6	3			
STUMPS	1					

SEEDING: Quantities for Seeding are calculated for the soil areas to the work limits as shown on the cross sections by the symbol S. Areas to be seeded or sodded shall be fertilized using a commercial fertilizer having a formula of 12-12-12 and seeded with the following mixture: 70% Kentucky 31 Fescue, 25% Kentucky Bluegrass and 5% Alsike Clover.

ESTIMATED QUANTITIES: Specific locations and usage of estimated quantities set up on this plan to be used "as directed by the Engineer" shall be made a matter of record by incorporation into the final change order governing completion of this project.

PLACING SOD IN DITCHES: All sod placed in ditches shall be laid with the long edges of the strips perpendicular to the flow line of the ditch. Successive strips shall be neatly matched and all joints staggered or broken. The sod shall be staked securely with stakes placed on maximum two (2) ft. centers in rows not more than two (2) ft. apart. Stakes in adjacent rows shall be staggered. The stakes shall be wood from ½"x ¾"x 12" to 1"x 1"x 24", as required to hold the sod and shall be driven flush with the top of the sod.

EARTHWORK TABLE

FROM SHEET	EXCAVATION	EMBANKMENT	EMBANKMENT + 20%
4	484	1857	2228
5	2880	38394	46,073
6	287	2329	2795
TOTALS	3651	42,580	51,096

BORROW = 51,096 - 3651 = 47,445 Cu. Yds.

PAVEMENT REMOVAL: Pavement removal quantities Item E-8 shall consist of rigid type pavement only. Non-rigid type pavement removal is included and paid for as Item E-1 Roadway Excavation. Areas of rigid type pavement removal are indicated by shading.

MULCHING OF JUTE MATTING AREAS: Where Item Special, Jute Matting is placed, the provisions of Item L-9 for mulching materials shall be waived. In lieu of the mulch, the jute matting areas shall be over-seeded with one (1) pound of Kentucky 31 Fescue per 1,000 sq. ft. after the matting is placed.

GENERAL SUMMARY

CODE G201 S-SG-199(5)

Quantities From Sheet No.						ITEM	TOTAL QUANTITIES	UNITS	DESCRIPTION	SG-199(5)	S-199(5)
3 & Calc.	4	5	6	16	26-29						
									ROADWAY		
3651						E-1	3651	Cu. Yds.	Roadway Excavation, Method "B", As Per Plan	3316	335
3581				1409		E-1	4990	Sq. Yds.	Compacted Subgrade	4323	667
47,445						E-4	47,445	Cu. Yds.	Borrow	47335	110
	153		334			E-8	487	Sq. Yds.	Removal and Disposal of Existing Pavement		487
Lump						E-9	Lump	Lump	Removal of Trees and Stumps	Lump	Lump
26.7						E-11	267	M. Gals.	Water	263	4
					Lump	S-24	Lump	Lump	Removal of One 1 Story Frame Residence, Parcel No. 3	Lump	
300						T-10	300	Cu. Yds.	Traffic Compacted Surface Course for Maintaining Local Traffic	275	25
6						M-10	6	Tons	Calcium Chloride furnished and Applied for Maintaining Local Traffic	5.5	0.5
		11				I-15	11	Each	Wood Guard Rail Posts Without Rail	11	
		1537.5				I-15	1537.5	Lin. Ft.	Guard Rail, Steel Beam Type Shallow or Flexible Steel Plate Tension Type, Standard Strength	1537.5	
		650				I-15	650	Lin. Ft.	Guard Rail Removed and Stored, As per Plan	650	
22,440						L-9	22,440	Sq. Yds.	Seeding and Protecting, As per Plan	21,590	850
2.05						L-9	2.05	Tons	Commercial Fertilizer (12-12-12)	1.97	0.08
		291				L-10	291	Sq. Yds.	Sodding, As per Plan	291	
		109				Special	109	Sq. Yds.	Jute Matting	109	
					5	I-8	5	Each	Standard Monument Assemblies	3	2
					Lump	S-24	Lump	Lump	Removal of One 1 and 2 Story Frame Residence, and One Frame Shed, Parcel No. 6	Lump	
									DRAINAGE		
		170				E-2	170	Cu. Yds.	Excavation for Structures	170	
		120				E-3	120	Cu. Yds.	Channel Excavation	120	
		52	200			E-12	252	Lin. Ft.	Pipe Removed, 15" and Under, as per plan	252	
		80				E-12	80	Lin. Ft.	Pipe Removed, Over 15", as per plan	80	
		2.6				S-1	2.6	Cu. Yds.	Concrete for Structures, Class "E"	2.6	
		3				S-22	3	Cu. Yds.	Removal of Portions of Existing Structure	3	
		Lump				S-24	Lump	Lump	Removal of Existing Structures, As per Plan	Lump	
		60				S-27	60	Lin. Ft.	24" Pipe for Roadway Culverts, Sec. M-6.6(b) or M-6.8(b)	60	
		100				S-27	100	Lin. Ft.	30" Pipe for Roadway Culverts	100	
		30				I-1	30	Lin. Ft.	36" Pipe for Driveways	30	
	236					I-2	236	Lin. Ft.	8" Storm Sewers Sec. M-6.5(a) or M-6.8(a)	236	
		40				I-2	40	Lin. Ft.	36" Storm Sewers Sec. M-6.6(a) or M-6.8(a)	40	
		60	200			I-3	260	Lin. Ft.	12" Roadway Drainage	260	
		10				I-3	10	Lin. Ft.	12" Outlets for Roadway Drainage, Sec. M-6.4(c)	10	
		1				I-8	1	Each	Standard No. 1 Manhole	1	
		1				I-8	1	Each	Standard No. 2-3 Catch Basin, Modified As per Plan	1	
832						I-9	832	Lin. Ft.	Stone Underdrains, No. 2	674	158
		6				I-10	6	Cu. Yds.	Dumped Rock Channel Protection	6	
		100				I-14	100	Lin. Ft.	Standard Type 1, Paved Gutter, Modified As per Plan	100	
		1				I-16	1	Each	Manhole Abandoned	1	
									PAVEMENT		
619.4	2.2	252.2	11.4	246.8		B-19	1132	Cu. Yds.	Aggregate Base Course	1009	123
268.6	0.9		0.9	14.6		B-35	285	Cu. Yds.	Asphaltic Concrete Leveling Course (70-85)	232	53
1417				84		T-30	1501	Gal.	Bituminous Prime Coat Sec. M-5.1, RT-2 or RT-3	1229	272
120.7	34		7.2	87		T-35	140	Cu. Yds.	Asphaltic Concrete Surface Course, Type "C" (70-85)	110	30
		111				I-7	111	Sq. Yds.	Reinforced Concrete Approach Slabs (T = 13")	111	
824.5		15.4	2.5	260.6		I-22	1143	Cu. Yds.	Subbase	974	169
									FOR STRUCTURE QUANTITIES OVER 20 FT. SPAN, SEE SHEET NO. 21		

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

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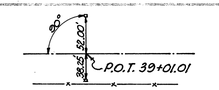
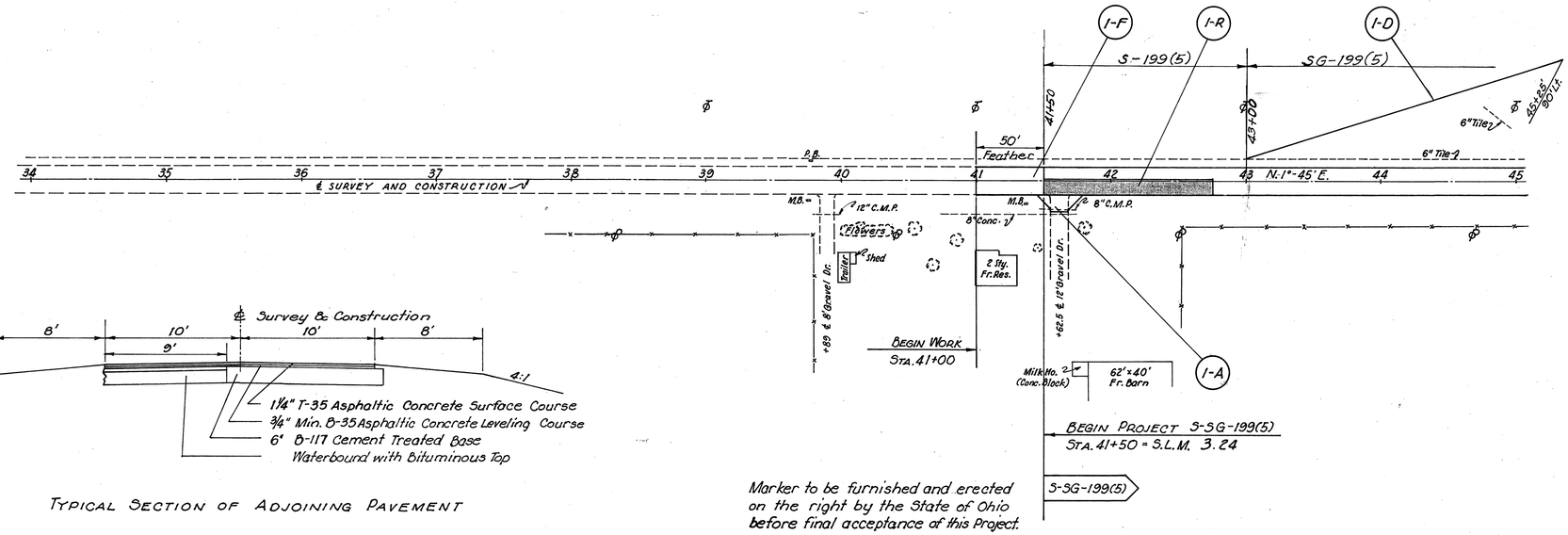
MED-301-3.24



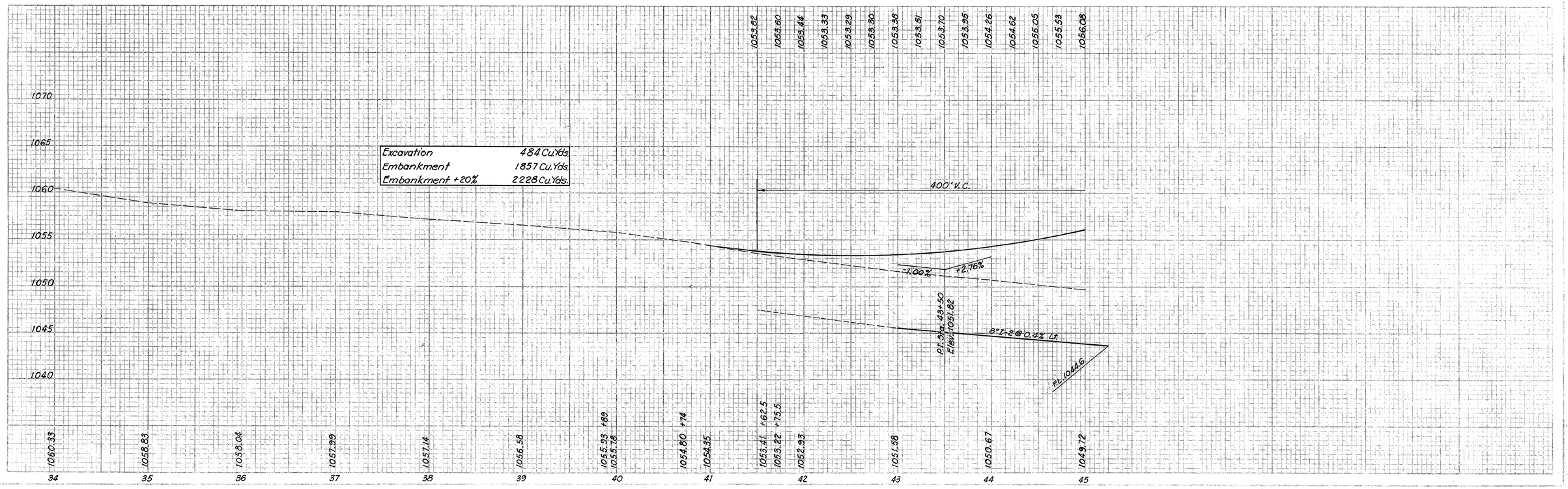
TYPICAL SECTION OF ADJOINING PAVEMENT



Marker to be furnished and erected on the right by the State of Ohio before final acceptance of this Project.

Ref. No.	Station	T-35 Asphaltic Concrete Surface Course	B-35 Asphaltic Concrete Leveling Course	B-19 Aggregate Base Course	I-2 Storm Sewer M-6.5(a) or M-6.8(a) 8"	E-8 Pavement Removal		
		Cu.Yds.	Cu.Yds.	Cu.Yds.	Lin.Ft.	Sq.Yds.		
I-A	41+61 Rt.			2.2 *				
I-F	41+00 to 41+50	3.4	0.9					
I-D	43+00 to 45+25				236			
I-R	41+50 to 42+75					153		
	TOTALS	3.4	0.9	2.2*	236	153		

* for adjusting grade of existing driveway; do not disturb existing drainage.



Sta. 34+00 to Sta. 45+00

MICROFILMED
MAR 26 1985

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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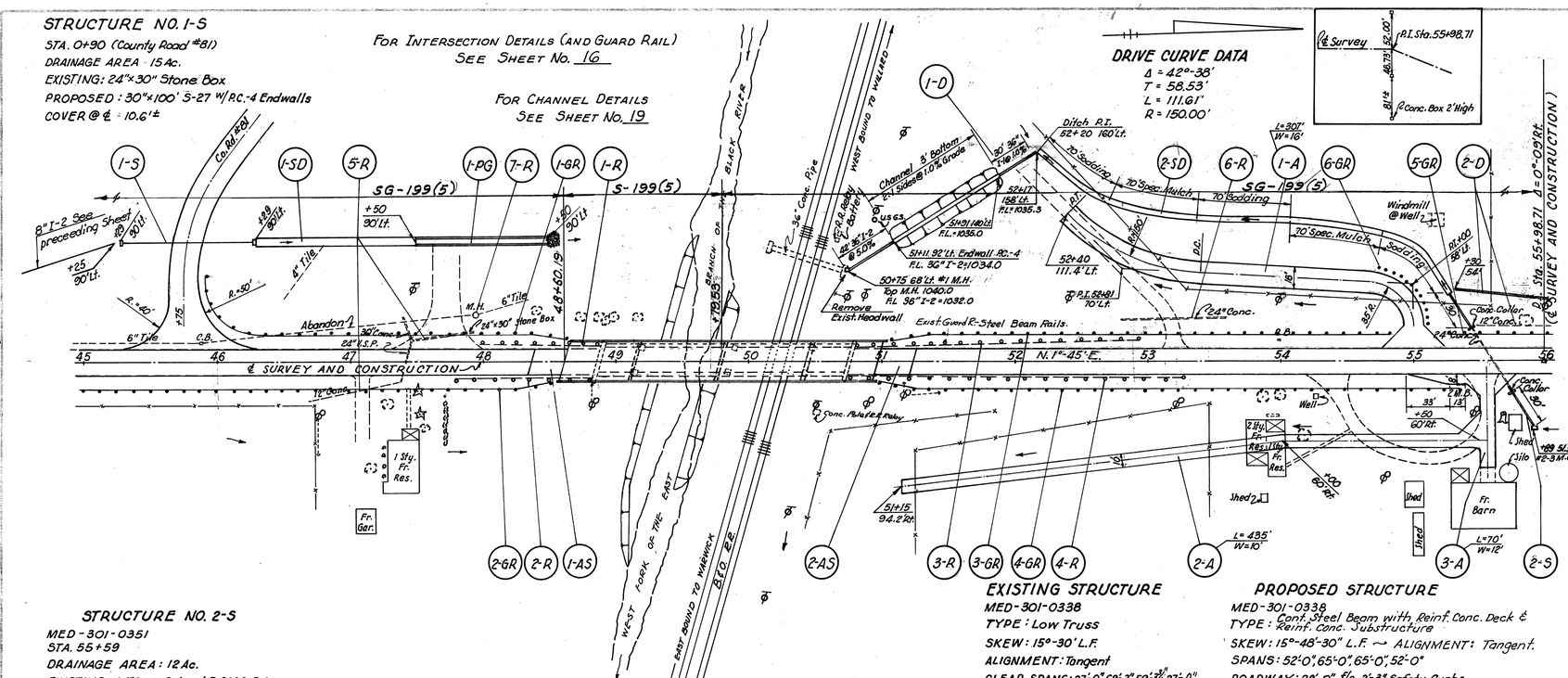
MED - 301- 324

STRUCTURE NO. 1-S

STA. 0+90 (County Road #81)
DRAINAGE AREA 15 Ac.
EXISTING: 24"x 30" Stone Box
PROPOSED: 30"x 100' S-27 w/R.C.-4 Endwalls
COVER @ ℄ = 10.6'±

FOR INTERSECTION DETAILS (AND GUARD RAIL) SEE SHEET No. 16

FOR CHANNEL DETAILS SEE SHEET No. 19



DRIVE CURVE DATA

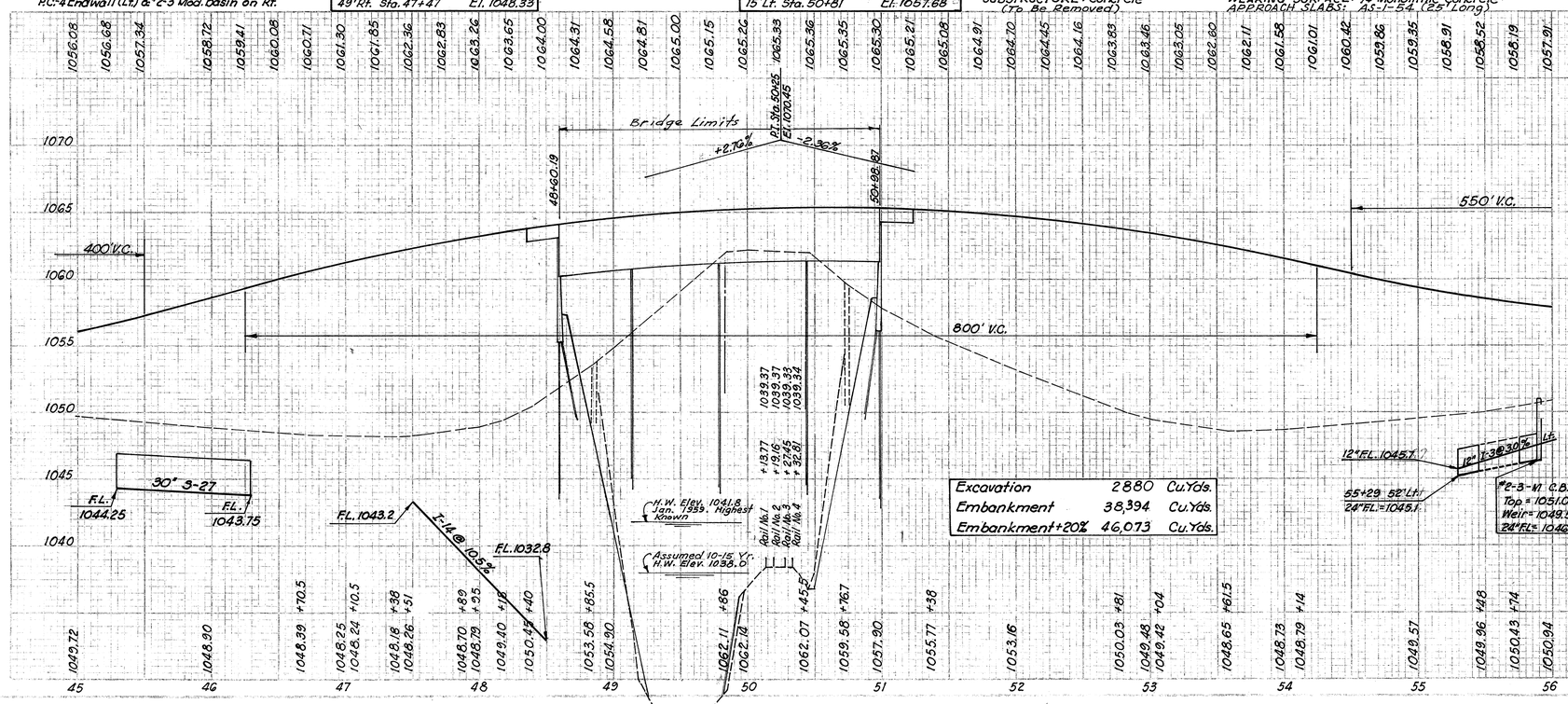
Δ = 42°-38'
T = 58.53'
L = 111.61'
R = 150.00'

STRUCTURE NO. 2-S

MED - 301 - 0351
STA. 55+59
DRAINAGE AREA: 12 Ac.
EXISTING: 24" Conc. Culvert @ 30° R.F. Skew
PROPOSED: 24" S-27 Extensions w/Collars, S-27 - P.C.-4 Endwall (Lt.) & #2-3 Mod. Basin on Rt.

B.M., N.W. Corner First Step
49' Rt. Sta. 47+47 El. 1048.33

B.M., N.W. Corner North Abutment
15' Lt. Sta. 50+61 El. 1057.68



Excavation	2880	Cu.Yds.
Embankment	38,394	Cu.Yds.
Embankment+20%	46,073	Cu.Yds.

EXISTING STRUCTURE

MED-301-0338
TYPE: Low Truss
SKEW: 15°-30' L.F.
ALIGNMENT: Tangent
CLEAR SPANS: 27'-0", 69'-3", 59'-3¾", 27'-0"
CLEAR ROADWAY: 16'-7"
LOADING: Spans 1, 4 & 5-14; Span 3 - S 8.2
SUBSTRUCTURE: Concrete (To Be Removed)

PROPOSED STRUCTURE

MED-301-0338
TYPE: Cont. Steel Beam with Reinf. Conc. Deck & Reinf. Conc. Substructure
SKEW: 15°-48'-30" L.F. — ALIGNMENT: Tangent
SPANS: 52'-0", 65'-0", 65'-0", 52'-0"
ROADWAY: 28'-0" f/f 2'-3" Safety Curbs
LOAD FREQUENCY: CF - 130 (57)
WEARING SURFACE: ¾" Monolithic Concrete
APPROACH SLABS: As: I-54 (25' Long)

Ref. No.	Station	E-2 Excavation for Structures Cu.Yds.	E-3 Channel Excavation Cu.Yds.	E-12 Pipe Removed 15" & Under Lin.Ft.	B-19 Aggregate Base Course Cu.Yds. 6"	B-19 9"	I-1 Pipe for Driveways 36" Lin.Ft.	I-2 Yarnlever or M-6.1(a) or M-6.8(a) 36" Lin.Ft.	I-3 Roadway Drainage 12" Lin.Ft. Std.	I-3 Out-let	I-8 Catch Basin #2-3 Mod. Each	I-8 Man hole #1 Std. Each	S-27 Roadway Culvert Lin.Ft. 24" (or 18"CSP)	S-27 Lin.Ft. 30"	S-1 Concrete for Structure Class "E" Cu.Yds.	S-22 Removal of Portions of Existing Structure Cu.Yds.
1-A	55+00 Lt.					142.7										
2-A	51+15 to 55+50 Rt.				82.6*											
3-A	55+56 Rt.				28.6*											
1-D	50+75 to 52+20 Lt.		120			34◎	30	40				1			0.6	3
2-D	55+30 to 56+00 Lt.			52					60	10						
1-S	45+29 to 46+29 Lt.	130												100	1.0	
2-S	55+59	40									1△		60		1.0	
	TOTAL	170	120	52	252.2	30	40	60	10	1△	1	60	100	2.6	3	

◎ Includes 3.8 Cu.Yds. B-19 for Mailbox Approach
* Omit one flare as shown on plan
◎ To be used to patch existing drive, 12' wide
△ Side opening shall be 12" high and 3'-0" wide using Two ½" x 18" bars, Modification to Std. #2-3 Catch Basin

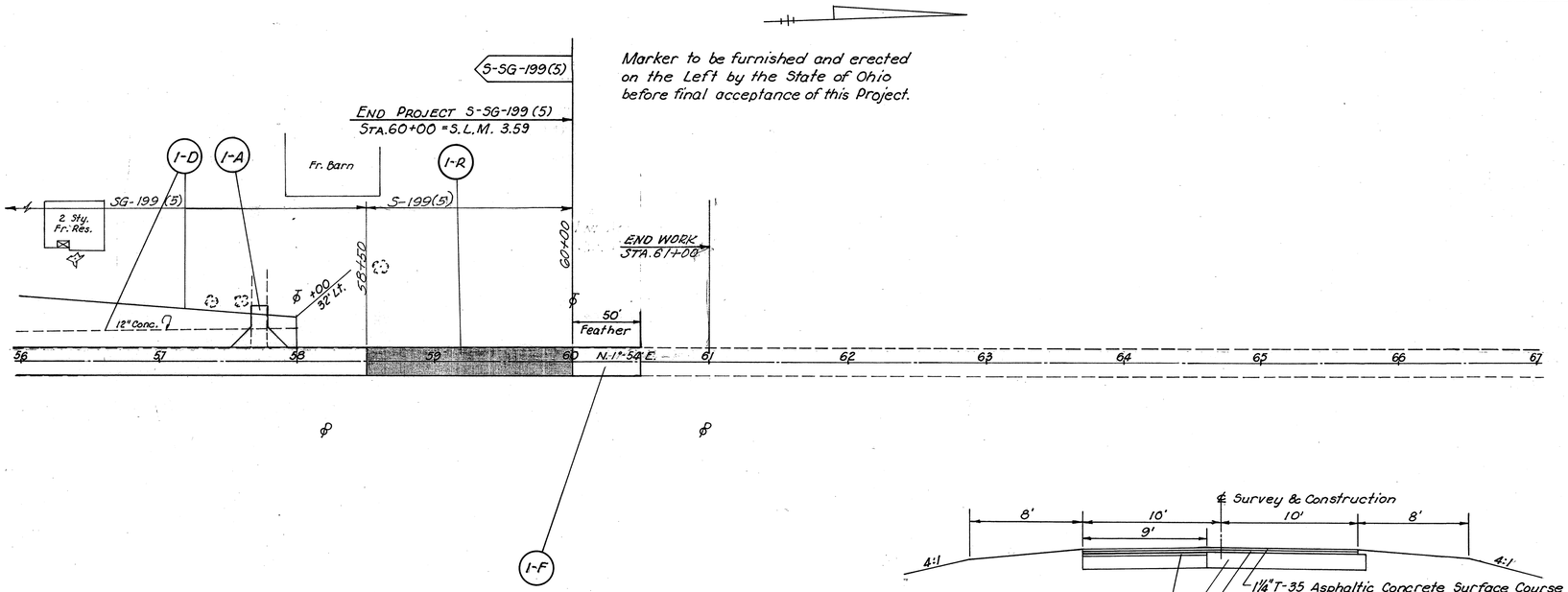
Ref. No.	Station	E-12 Pipe Removed Over 15" Lin.Ft.	I-7 Approach Slab T= 13" Sq.Yds.	I-15 Guard Rail Steel Beam Shallow Lin.Ft.	I-15 Guard Rail Removed & Stored Lin.Ft.	I-15 Guard Rail Wood Posts Only @6'-3" Each	I-16 Manholes Abandoned Each	I-22 Subbase Cu.Yds.	S-24 Removal of Existing Structure as per Plan Lump	I-10 Dumped Rock Channel Protection Cu.Yds.	I-14 Paved Gutter Type I Modified Lin.Ft.	L-10 Sodding 18" Wide Sq.Yds.	L-10 Sodding 7' Wide Sq.Yds.	Special Jute Matting 7' Wide Sq.Yds.
1-AS	48+35.19-48+60.19		55.56					7.7						
2-AS	50+98.87-51+23.87		55.56					7.7						
1-GR	0+67.7 Ctr. & 48+60.5 Lt.			300										
2-GR	45+00-48+50 Rt.			350										
3-GR	51+09 to 54+84 Lt.			375										
4-GR	60+98.5-55+36 Rt.			437.5										
5-GR	55+25 to 56+00 Lt.			75										
6-GR	55+00 Lt. As Shown					11								
1-R	47+97 to 48+84.5 Lt.				87.5									
2-R	47+82 to 48+82 Rt.				100									
3-R	50+82.5 to 52+95 Lt.				212.5									
4-R	50+77.5 to 53+27.5 Rt.				250									
5-R	46+69 Lt. 47+92 Lt.								Lump□					
6-R	52+61 to 53+61 Lt.	80												
T-R	47+95 Lt.						1							
1-PG	47+50 to 48+50 Lt.									6 ⋈	100	34		
1-SD	46+29 to 47+50 Lt.											94		
2-SD	52+20 to 55+29 Lt.											163	109	
	TOTAL	80	111.12	1537.5	650	11	1	15.4	Lump□	6 ⋈	100	291	109	

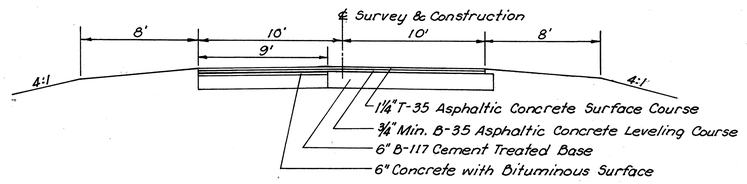
⋈ 8'x8'x2.5' at gutter outlet
□ Includes removal of existing 12" pipe, 30" pipe, 24"x30" stone box and concrete junction box. Ends of existing 24" V.S.P. under pavement shall be sealed in accordance with Sec. I-16.03 and paid for under Item S-24.

Sta. 45+00 to Sta. 56+00

FED. RD. DIVISION	STATE	PROJECT		6
2	OHIO			29

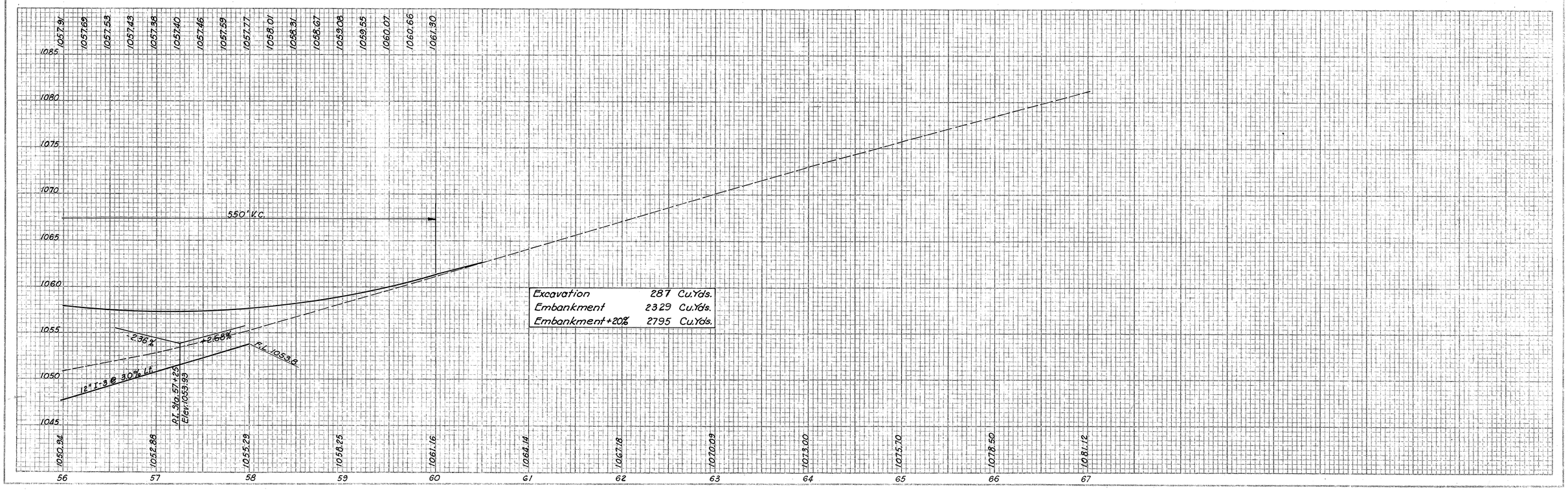
MED-301-3.24





TYPICAL SECTION OF ADJOINING PAVEMENT

Ref. No.	Station	T-35 Asphaltic Concrete Surface Course	B-35 Asphaltic Concrete Leveling Course	B-19 Aggregate Base Course	I-3 Roadway Drainage 12"	I-22 Subbase	E-12 Pipe Removed 15" & Under	E-8 Pavement Removal
		Cu.Yds.	Cu.Yds.	Cu.Yds.	Lin.Ft.	Cu.Yds.	Lin.Ft.	Sq.Yds.
1-A	57+73 Lt. L = 32'	3.8		10.0				
1-F	60+00 to 60+50	3.4	0.9	1.4		2.5		
1-D	56+00 to 58+00				200		200	
1-R	58+50 to 60+00							334
	TOTALS	7.2	0.9	11.4	200	2.5	200	334



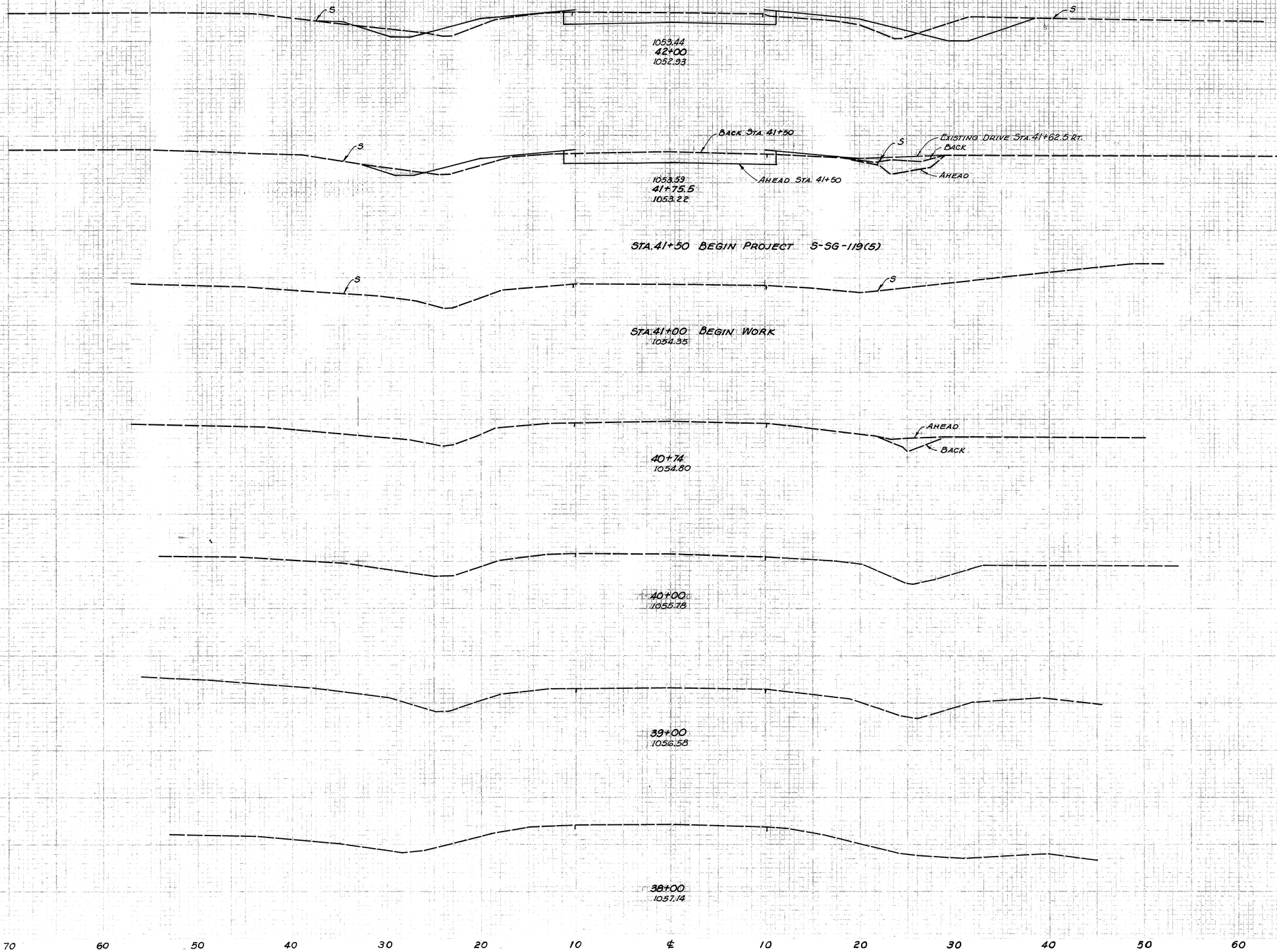
Excavation	287	Cu.Yds.
Embankment	2329	Cu.Yds.
Embankment+20%	2795	Cu.Yds.

Sta. 56+00 to Sta. 67+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

7
29

MED - 301-3,24



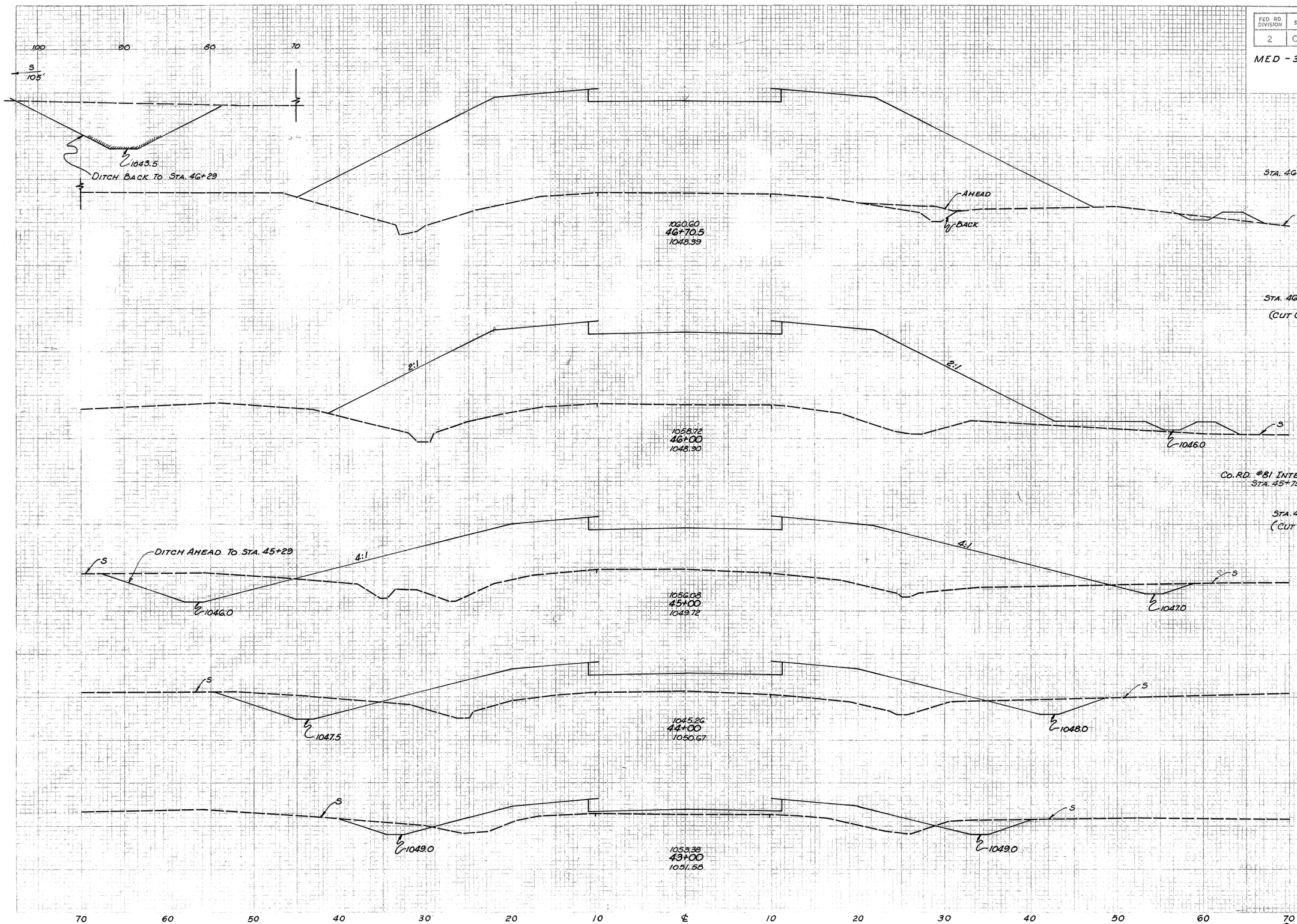
		END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
42+00		47	16		
				34	11
41+75.5		29	8		
				27	8
STA. 41+50	AHEAD	29	8		
	BACK	3	8		
				3	7
STA. 41+00		0	0		

STA. 38+00 TO STA. 42+00

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

8
29

MED - 301-3.24



		END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
STA. 46+70.5	AHEAD	72	846		
	BACK	72	854		
				114	
					1960
STA. 46+29 (CUT ONLY)	AHEAD	72			
	BACK	2			
				4	
46+00		0	647		
				8	
Co. RD. #81 INTERSECTION STA. 45+75 LT.				1166	3017
STA. 45+29 (CUT ONLY)	AHEAD	6			
	BACK	48			
					2026
				52	
45+00		48	447		
				170	1183
44+00		44	192		
				122	487
43+00		22	71		
				128	161
42+00		47	16		

STA. 43+00 TO STA. 46+70.5

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

9
29

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END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
48+18	84	1297	
		71	1050
47+95	83	1169	
		20	845
47+89	98	1036	
		175	1907
47+38	88	983	
		800	2287
46+70.5	72	846	

100 90 80 70

S 103.5'

℄ 1040.6

1063.55
48+18
1049.40

S

℄ 1043.8

100 90 80 70

S 103.5'

℄ 1040.6

1063.18
47+95
1048.79

S

℄ 1044.0

100 90 80 70

S 105'

℄ 1041.3

1063.08
47+89
1048.70

S

℄ 1044.1

S 104'

100 90 80 70

℄ 1043.2

1062.12
47+38
1048.18

S

℄ 1044.6

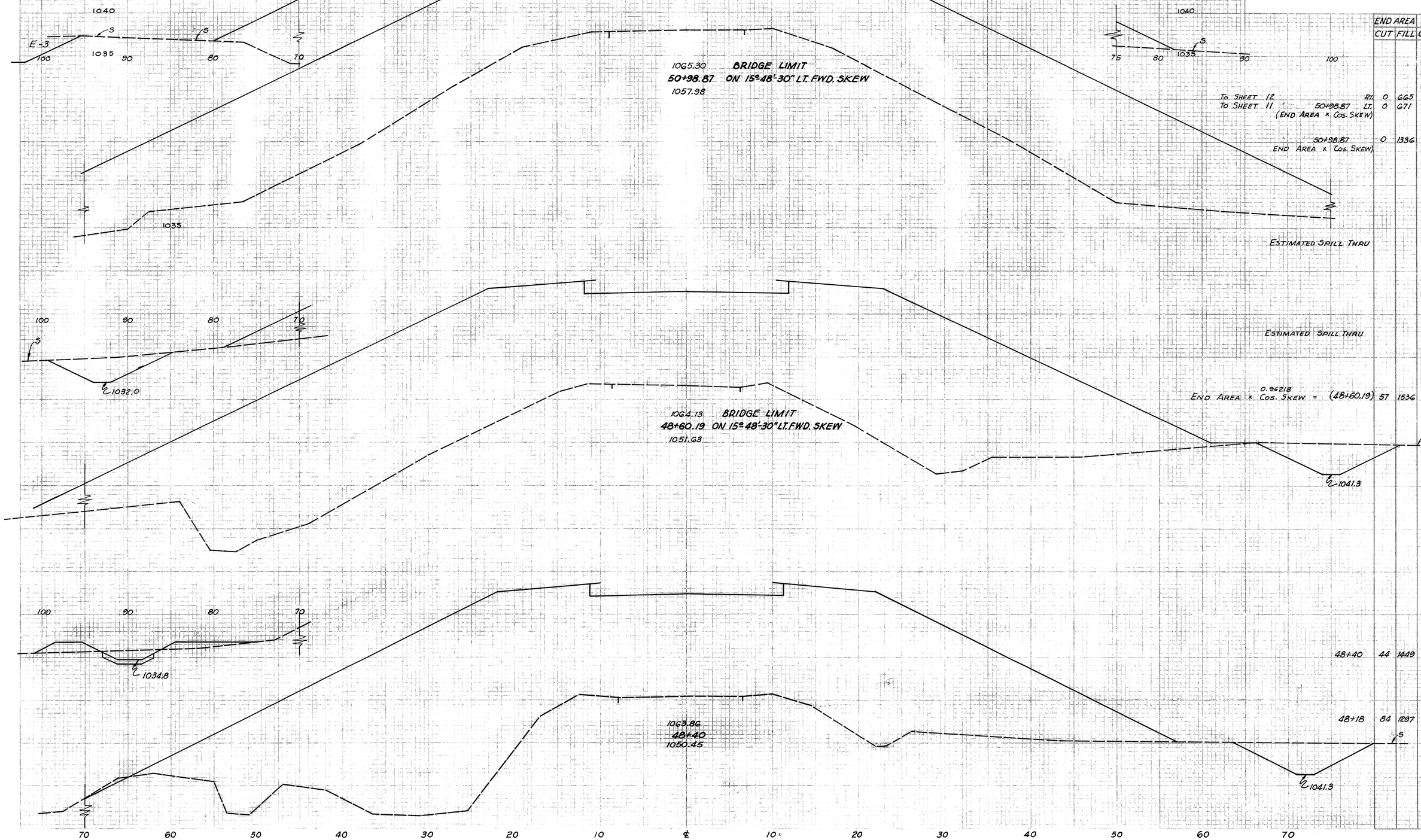
70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

STA. 47+38 TO STA. 48+18

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

10
29

MED. - 301-3.24



	END AREA CUT	END AREA FILL	CU YDS. CUT	CU YDS. FILL
To SHEET 12 Rt. 0 GG5 To SHEET 11 50+98.87 Lt. 0 G71 (END AREA x Cos. SKEW)				
50+98.87 END AREA x Cos. SKEW)		0	1336	
ESTIMATED SPILL THRU			68	993
ESTIMATED SPILL THRU			0	1514
END AREA x 0.96218 Cos. SKEW = (48+60.19)	57	1536		
			38	1116
48+40	44	1449		
			52	1119
48+18	84	1297		

STA. 48+40 TO STA. 50+98.87

FED. RD. DIV. NO.	STATE	PROJECT	
2	OHIO		

11
29

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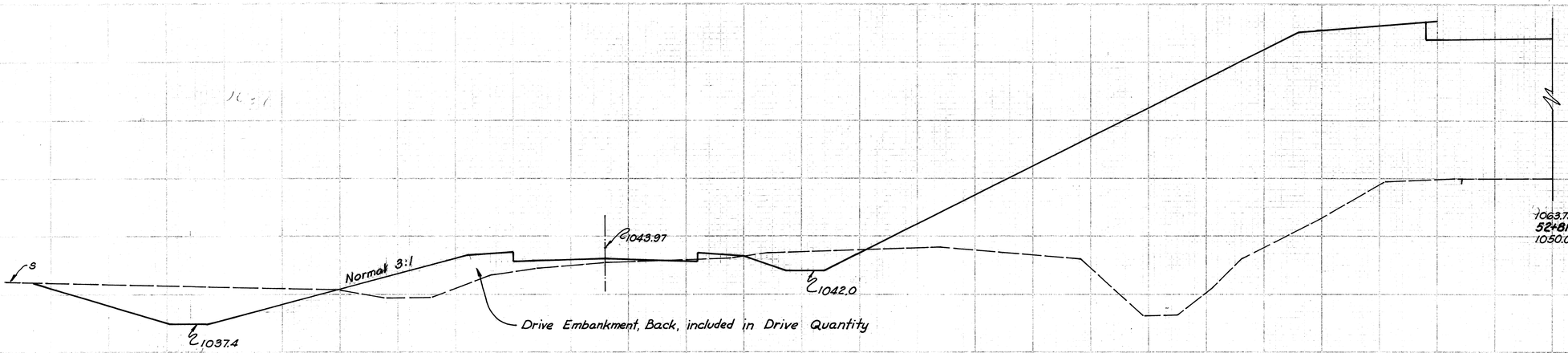
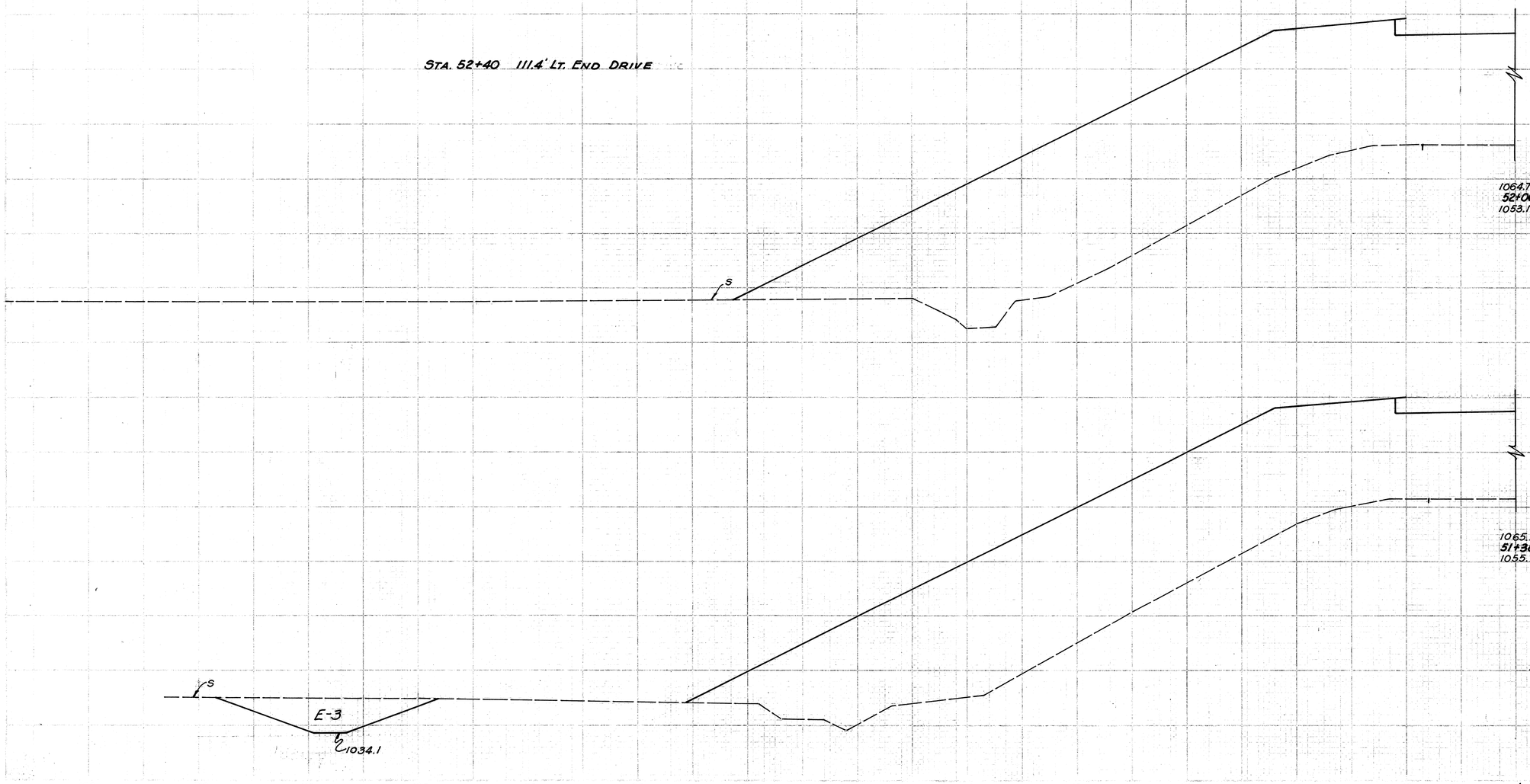


STA. 52+40 111.4' LT. END DRIVE



	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
52+81 AHEAD	62	726		
BACK	62	689		
DRIVE STA 52+40 TO 52+81 LT. →			0	28
			93	2138
				2138
52+00	0	736		
			0	1663
51+38	0	712		
			0	1002
FROM SHEET #10 (LT) 50+98.87	7	0	671	

130 120 110 100 90 80 70 60 50 40 30 20 10 ℄

STA. 51+38 TO STA. 52+81 (LT.)

FED. RD. DIVISION	STATE	PROJECT		SHEET NO.	TOTAL SHEETS
2	OHIO			12	29

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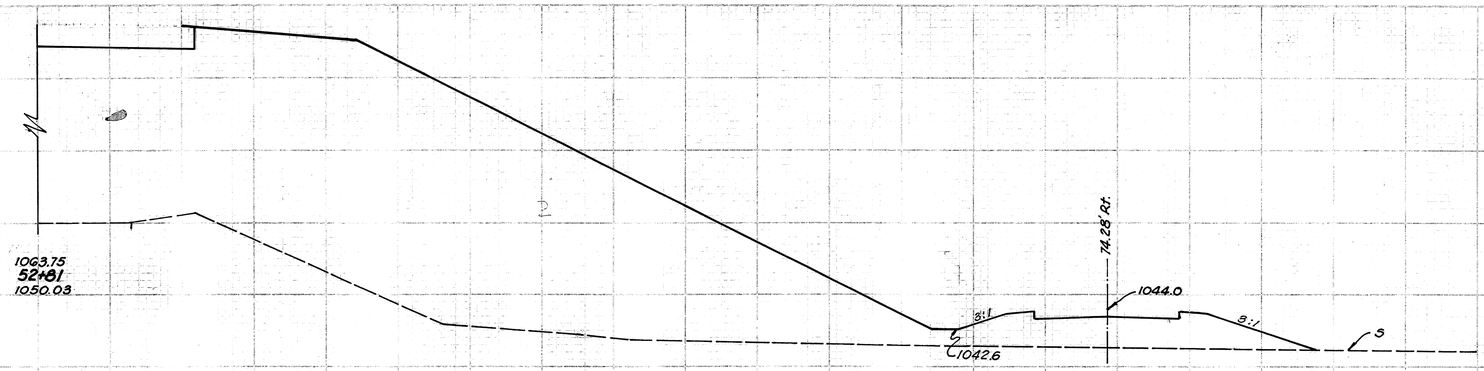
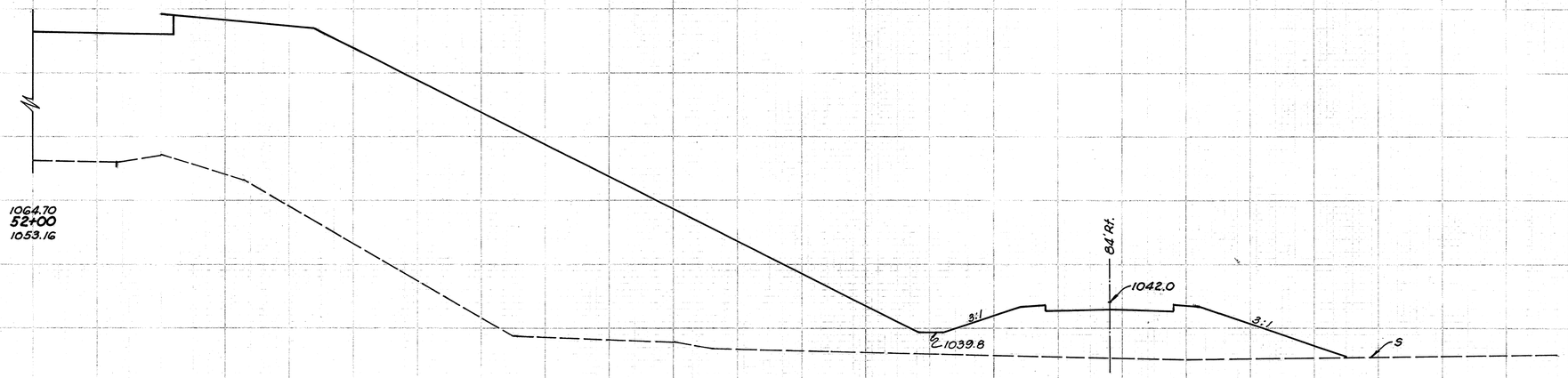
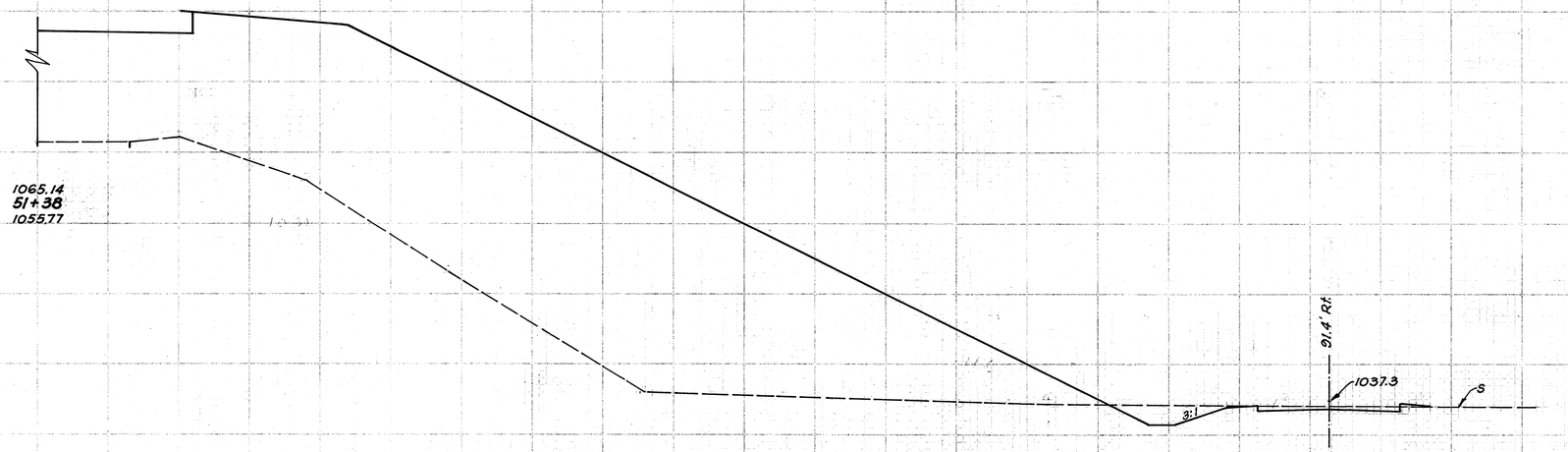






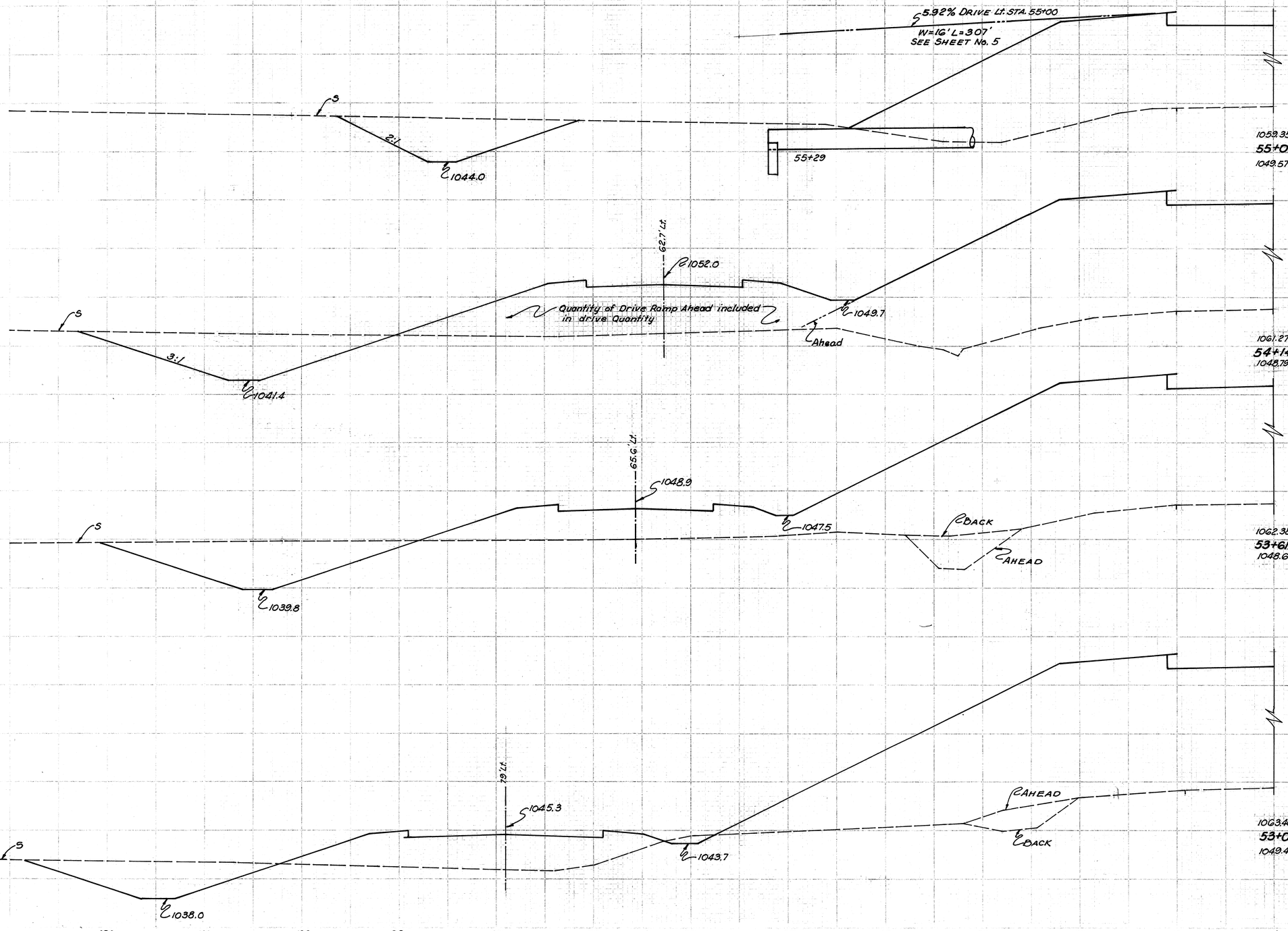
		END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
52+81		0	752		
				0	2426
52+00		0	865		
				12	1845
51+38		11	742		
				8	1020
FROM SHEET #10	(RT.) 50+98.87	0	665		

0 10 20 30 40 50 60 70 80 90 100 110 120

STA. 51+38 TO STA. 52+81 (RT)

FED. ROAD DIVISION	STATE	PROJECT		13
2	OHIO			29

MED-301-3.24



	END AREA		CU. YDS.	
	CUT	FILL	CUT	FILL
DRIVE @ STA. 55+00 (Lt.) (To STA. 54+14)			0	803
1059.35 55+00 1049.57				
55+00	62	338		
			236	1268
AHEAD 54+14	86	458		
BACK	86	641		
1061.27 54+14 1045.79				
			171	1250
AHEAD 53+61.3	90	640		
BACK	90	614		
1062.38 53+61.3 1048.65				
			161	1359
AHEAD 53+04	62	667		
BACK	62	686		
1063.40 53+04 1049.42				
			53	601
FROM SHEET #11 (Lt.)	52+81	62	726	

STA. 53+04 TO STA. 55+00 (Lt.)

FED. ROAD DIVISION	STATE	PROJECT	
2	OHIO		

14
29

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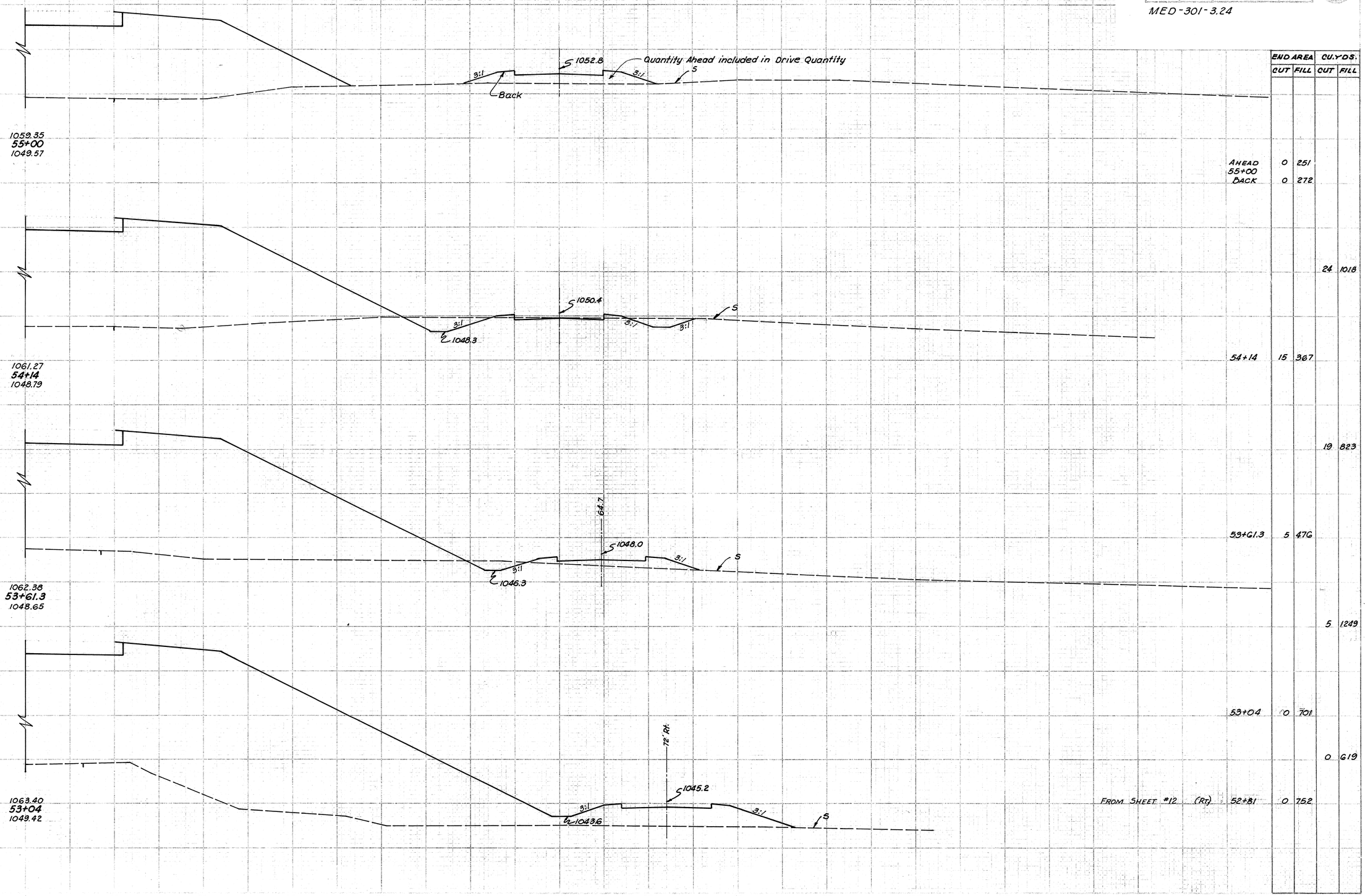

	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
AHEAD 55+00	0	251		
BACK	0	272		
			24	1018
54+14	15	367		
			19	823
53+61.3	5	476		
			5	1249
53+04	10	701		
			0	619
FROM SHEET #12 (RT)	52+81	0	752	

STA. 53+04 To STA. 55+00 (RT.)

FED. RD. DIVISION	STATE	PROJECT	TYPE FUNDS
2	OHIO		

15
29

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62+00
1067.18

STA. 61+00 END WORK

61+00

1061.30
STA. 60+00 END PROJECT S-SG-199(5)
1061.16

1056.8

1059.05
59+00
1058.25

1056.0

1054.0

1057.77
58+00
1055.29

1053.0

7% DRIVE STA. 57+73 LT. L=32'

1057.38
57+00
1052.88

1050.0

1058.19
55+74
1050.43

55+89

1058.55
55+48
1049.96

55+29

		END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
61+00		0	0		
				0	4
AHEAD 60+00		0	2		
BACK		29	2		
				24	57
59+00		22	29		
				104	261
AHEAD 58+00		34	112		
BACK		18	106		
DRIVE STA. 57+73 LT. L=32'				1	12
				44	639
57+00	G	239			
				55	1709
AHEAD 55+74		18	493		
BACK		18	472		
				28	465
8% DRIVE STA. 55+56 RT. L=70'				1	121
AHEAD 55+48		39	507		
BACK		39	521		
				90	987
DRIVE STA. 55+00 TO 55+50 RT				0	62
(RT. & LT.) 55+00	G2	589			

70 60 50 40 30 20 10 ℄ 10 20 30 40 50 60 70

STA. 55+48 TO STA. 62+00

FED. RD. DIVISION	STATE	PROJECT		16 / 29
2	OHIO			

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QUANTITIES

ITEM	DESCRIPTION	UNIT	QUAN.
T-35	Asph. Conc. Surf. Course Type "C"	C.Y.	8.7
B-35	Asph. Conc. Base Course	C.Y.	14.6
T-30	Bit. Prime Coat (0.4 Gal. per S.Y.)	Gal.	84
*B-19	Aggregate Base Course	C.Y.	246.8
I-22	Subbase	C.Y.	260.6
E-1	Compacted Subgrade	S.Y.	1409

*Includes 10 C.Y. B-19 for Drive Sta. 4+25 LT.

WOODED AREA

Trees under 12"

One story Fr. Res.

℄ 8' Gr. Dr.

℄ S.R. 301

6" Tile

47

NOTE:
The old roadway shall be plowed, harrowed, and dragged to a smooth grade, the old ditches filled, and the entire area sloped to drain and left in a neat condition ready for seeding. Payment for this work shall be included in the unit price bid for Item E-1 Roadway Excavation. Seeding shall be measured and paid for in accordance with Item L-9

Curve Data
P.I. = Sta. 1+11.64
Δ = 38°00'00"
D = 38°11'48"
Lc = 99.48'
T = 51.64'
P.C. = 0+60
P.I. = 1+59.48

6+00

5+00

4+00

3+00

2+00

1+00

0+00

END WORK

P.T. Sta. 5+78.72

P.I. Sta. 4+31.03

℄ C.R. #81

P.C. Sta. 2+81.15

P.T. Sta. 1+59.48

PROP. 30" S-27

Curve Data
P.I. - 4+31.03
Δ = 16°22'30"
D = 5° 30'
Ls = 297.57'
T = 149.88'
P.C. = 2+81.15
P.T. = 5+78.72

℄ FIELD DRIVE STA. 4+25

6'-0" 10'-0" ℄ 10'-0" 6'-0"

6"

1" Per Ft. 3/16 Per Ft.

3:1 3:1

I-22 6" Subbase B-19 6" Aggregate

TYPICAL SECTION
Sta. 0+60 to Sta. 6+00

TYPICAL SECTION
Pavement Sta. 0+10 to Sta. 0+60
same as pavement for typical section "A" on sheet no. 2

P.I. Sta. 1+11.64

50'R Sta. 46+35

40'R

P.C. Sta. 0+60

Sta. 0+00 C.R. 81
Sta. 45+75 S.R. 301

10'

46

T-35 Surface

6" B-19
6" I-22

4" Tile

90° 00'

Sta. 45+25
40'R

45

1048.10 1048.11 1048.15 1048.28 1048.48 1048.77 1049.14 1049.60 1050.13 1050.75 1051.41 1052.73 1054.05 1054.68 1055.26 1056.78 1056.24 1056.65 1057.00 1057.29 1057.53 1057.87 1058.03

1056
1054
1052
1050
1048

P.I. Sta. 1+50
EL. 1056.69

-0.84%

200' V.C.

-2.64%

200' V.C.

4:1

0.00%

P.I. Sta. 4+75
EL. 1048.11

1048.10 1048.30 1048.60 1048.50 1049.60 1049.70 1049.70 1049.30 1048.50 1049.15 1049.09

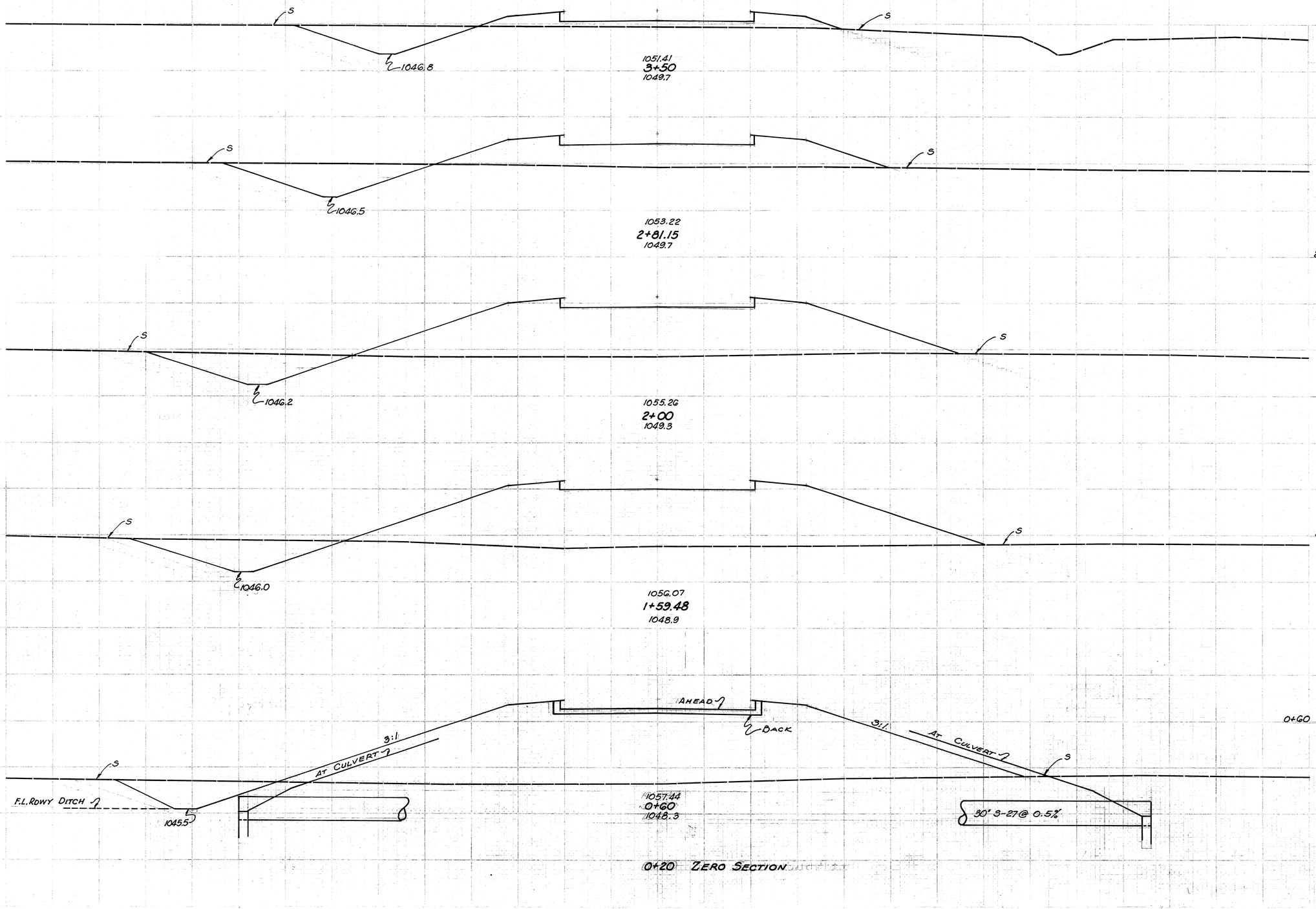
5+78.7 2+81.15 1+09.7

℄ Top of 30" Pipe
EL. 1046.5

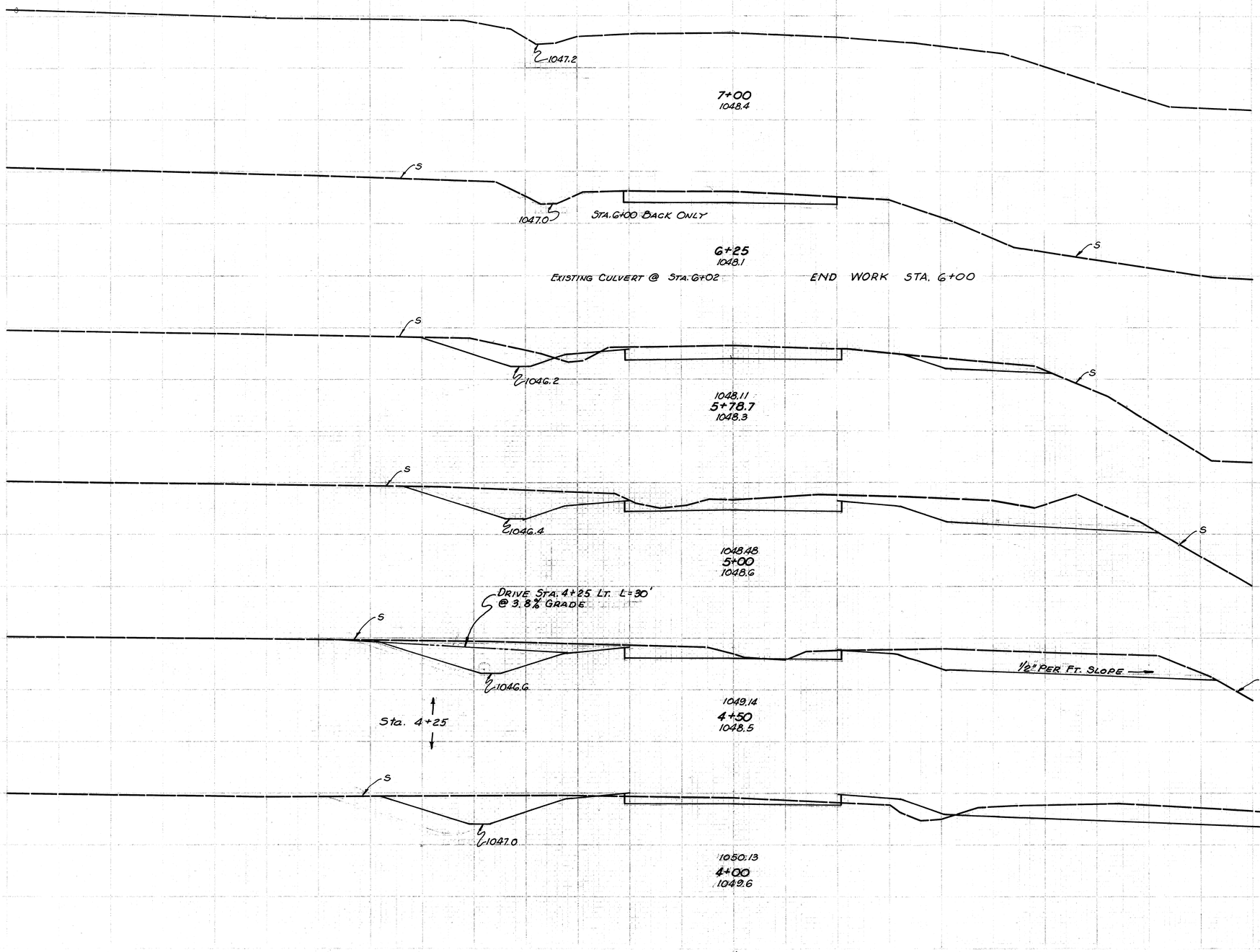
6+00 5+00 4+00 3+00 2+00 1+00 0+00

COUNTY ROAD #81

MED-301-3.24

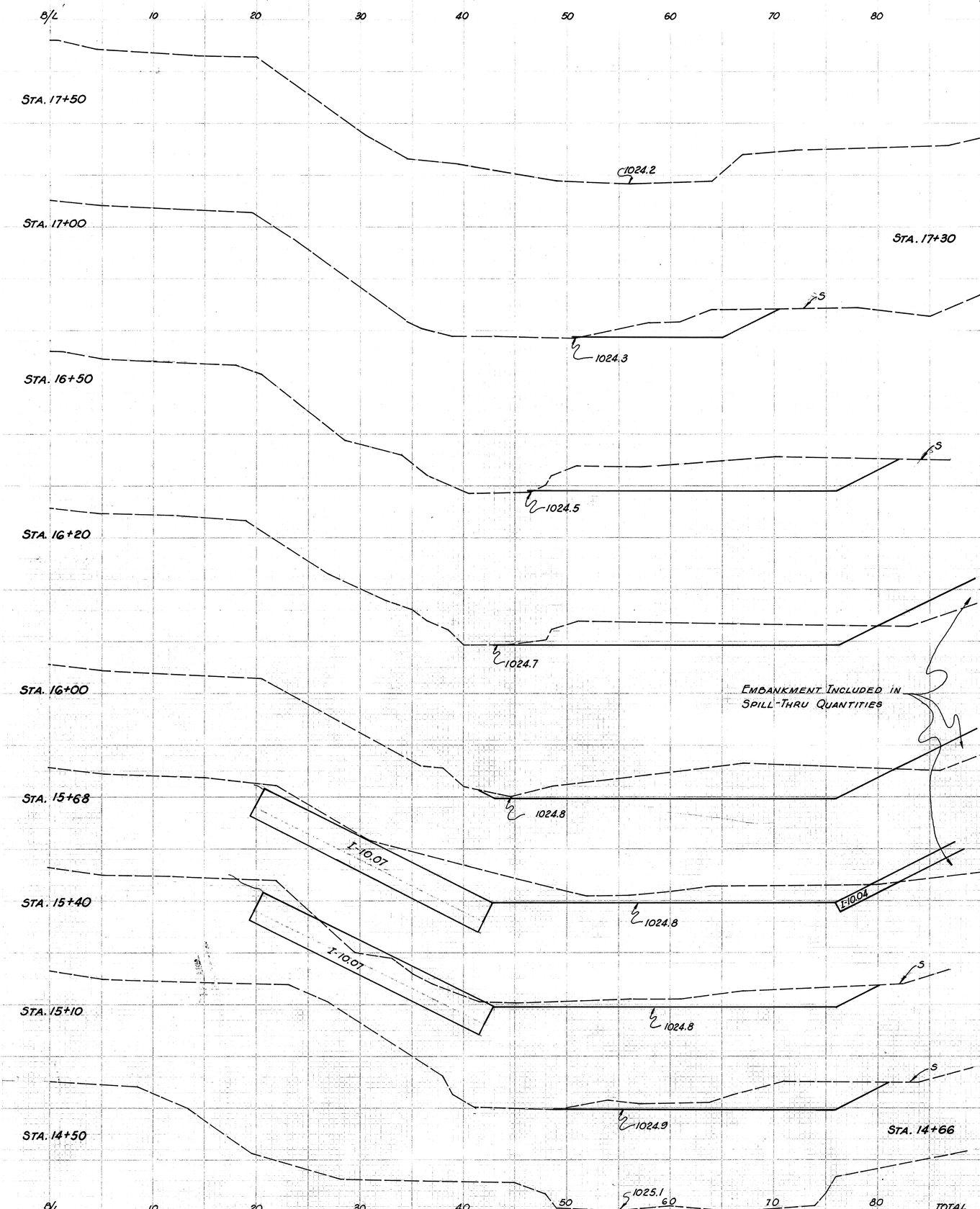


	END AREA		CU. YDS.	
	CUT	FILL	CUT	FILL
3+50	33	30		
			97	174
2+81.15	43	106		
			125	566
2+00	40	271		
			63	445
1+59.48	44	322		
			136	1446
0+60 AHEAD	30	463		
BACK	0	452		
			0	335
0+20	0	0		

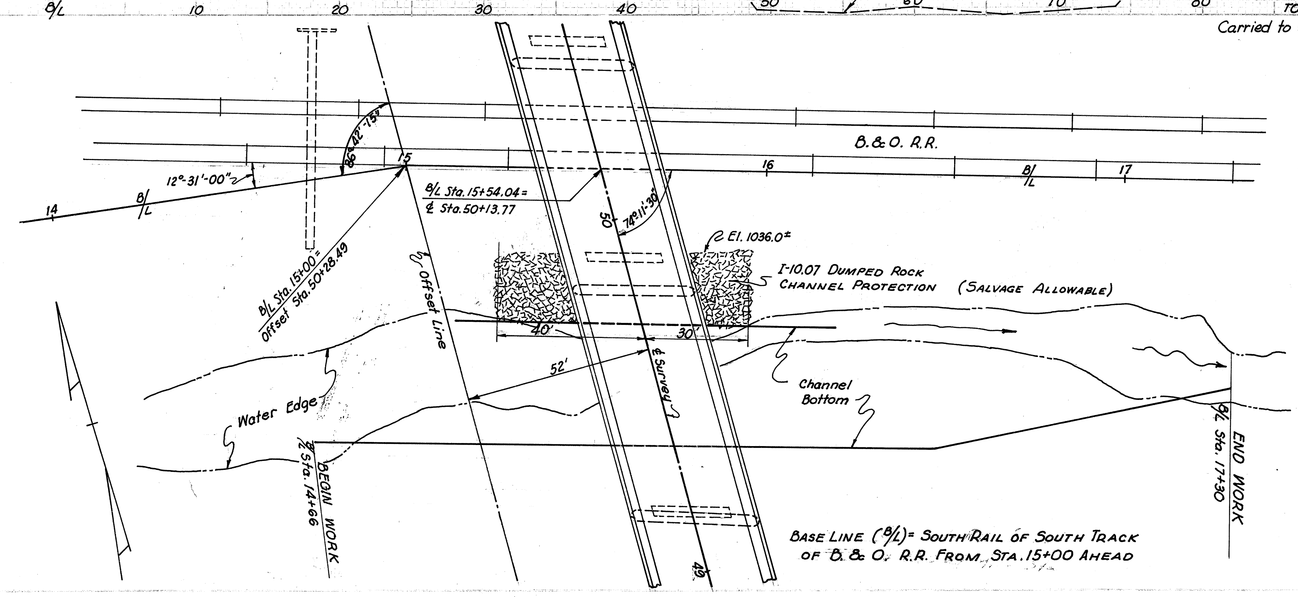


	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
Total Carried to Sheet No. 8.			1166	3017
STA. 6+00 AHEAD	0	0		
STA. 6+00 BACK	23	0		
			29	1
5+78.7	51	2		
			229	3
5+00	106	0		
			194	0
DRIVE 4+25 LT.			2	0
4+50	103	0		
			178	10
4+00	89	10		
			113	37
3+50	33	30		

COUNTY ROAD # 81 INTERSECTION



END AREA		CU. YDS.	
CUT	FILL	CUT	FILL
0	0		
		14	0
25	0		
		103	0
86	0		
		83	0
63	0		
		99	0
87	0		
		91	0
67	0		
		55	0
38	0		
		46	0
45	0		
		37	0
0	0		
		528	0



CHANNEL SECTIONS

MED-301-3.24

FED. AID PROJ. NO.	STATE	SHEET NO.	TOTAL SHEETS
2	OHIO	19	29

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

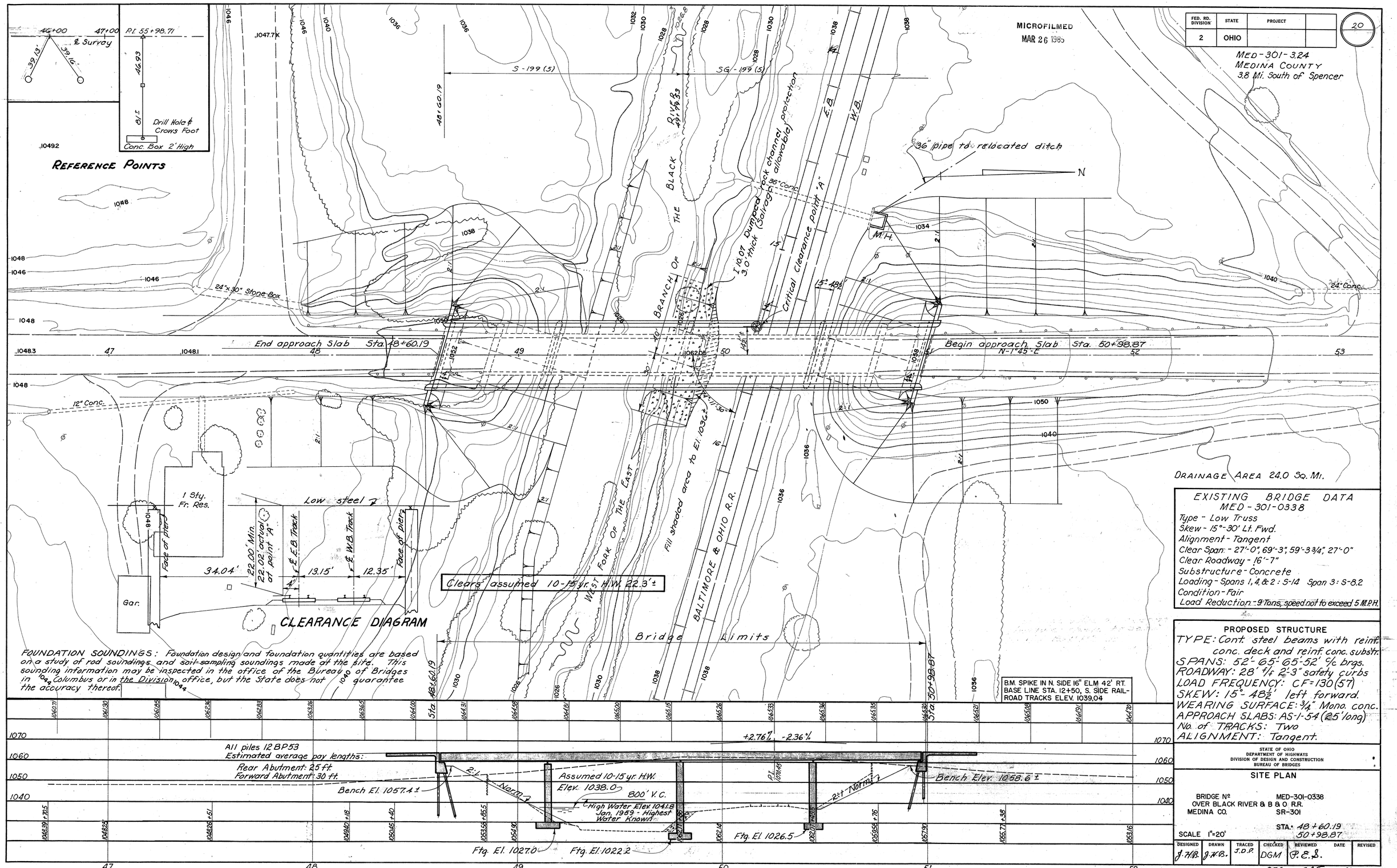
20

MICROFILMED
MAR 26 1985

MED-301-3.24
MEDINA COUNTY
3.8 Mi. South of Spencer

REFERENCE POINTS

CLEARANCE DIAGRAM



FOUNDATION SOUNDINGS: Foundation design and foundation quantities are based on a study of rod soundings and soil-sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in the District office, but the State does not guarantee the accuracy thereof.

EXISTING BRIDGE DATA
MED-301-0338

Type - Low Truss
Skew - 15°-30' Lt. Fwd.
Alignment - Tangent
Clear Span: - 27'-0", 69'-3", 59'-3¾", 27'-0"
Clear Roadway - 16'-7"
Substructure - Concrete
Loading - Spans 1, 4, & 2: S-14 Span 3: S-8.2
Condition - Fair
Load Reduction: - 9 Tons, speed not to exceed 5 M.P.H.

PROPOSED STRUCTURE

TYPE: Cont. steel beams with reinf. conc. deck and reinf. conc. substr.
SPANS: 52'-65'-65'-52' ℄ brgs.
ROADWAY: 28' + 2'-3" safety curbs
LOAD FREQUENCY: CF=130(57)
SKEW: 15°-48½' left forward.
WEARING SURFACE: ¾" Mono. conc.
APPROACH SLABS: AS-1-54 (25' long)
No. of TRACKS: Two
ALIGNMENT: Tangent.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

SITE PLAN

BRIDGE Nº MED-301-0338
OVER BLACK RIVER & B & O. R.R.
MEDINA CO. SR-301

SCALE 1"=20' STA. 48+60.19
50+98.87

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
J.H.B.	J.K.B.	J.D.P.	DGM	P.E.S.		

BFG 7-20-60

AERIAL SURVEY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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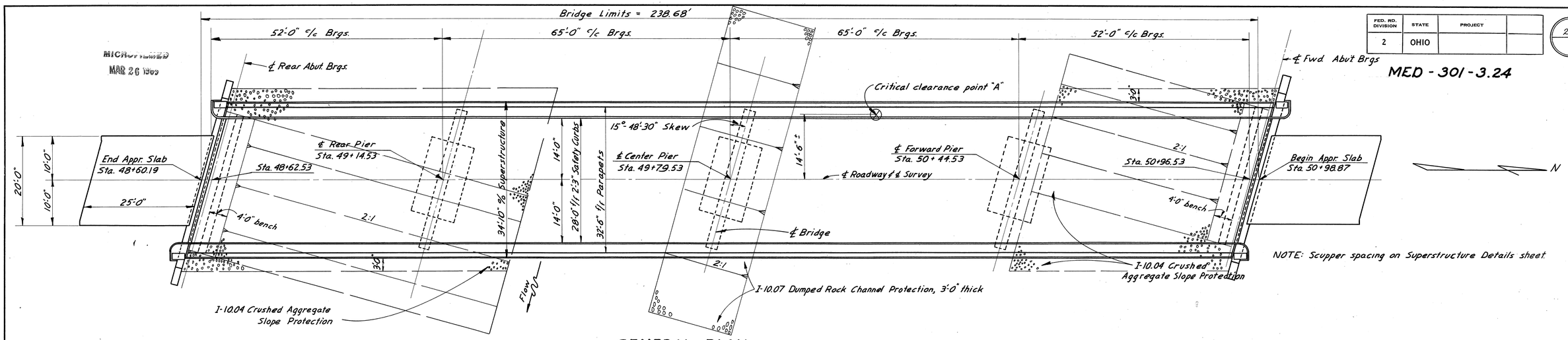
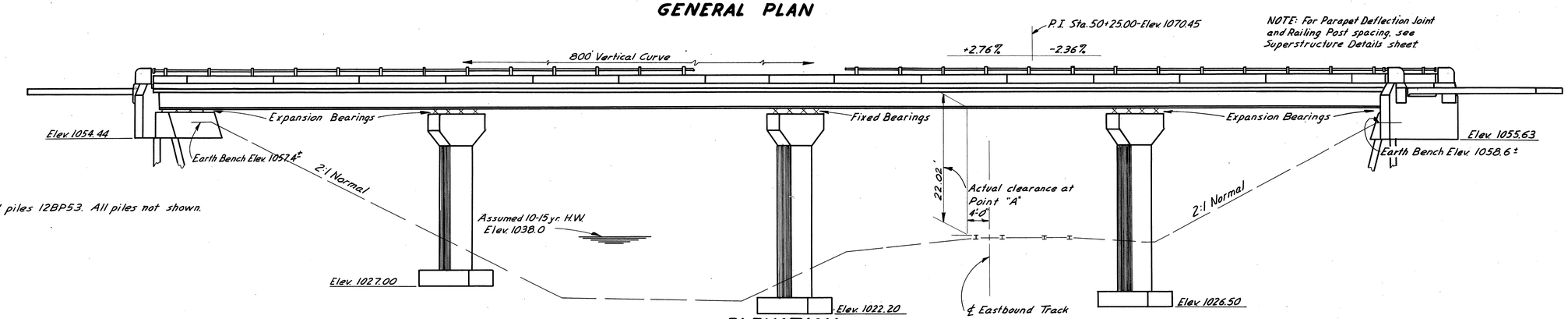
MED - 301 - 3.24

MICROFILMED
MAR 26 1969



NOTE: Scupper spacing on Superstructure Details sheet.

GENERAL PLAN



All piles 12BP53. All piles not shown.

NOTE: For Parapet Deflection Joint and Railing Post spacing, see Superstructure Details sheet.

ELEVATION

ESTIMATED QUANTITIES

Item	Total	Unit	Description	Supers.	Abuts.	Piers	General		
E-2	Lump	Sum	Cofferdams, cribs & sheeting				Lump		
E-2	194	Cu. Yds.	Unclassified excavation		72	122			
E-2	38	Cu. Yds.	Rock excavation			38			
E-3	528	Cu. Yds.	Channel excavation				528		
S-1	249	Cu. Yds.	Class "C" concrete, superstructure	249					
S-1	159	Cu. Yds.	Class "C" concrete, piers above footings			159			
S-1	53	Cu. Yds.	Class "E" concrete, pier footings			53			
S-1	100	Cu. Yds.	Class "E" concrete, abutments		100				
S-4	93,289	Lbs.	Reinforcing steel	68,529	6,016	18,744			
S-7	174,000	Lbs.	Structural steel	174,000					
S-8	174,000	Lbs.	Field painting of structural steel, as per plan	174,000					
S-14	485.08	Lin. Ft.	Railing (aluminum rails and supports, concrete parapet and end posts)	485.08					
S-16	Lump	Sum	First test pile						
S-18	440	Lin. Ft.	Steel piles, 12BP53		440				
S-24	Lump	Sum	Removal of existing structure				Lump		
S-29	24	Cu. Yds.	Porous backfill		24				
S-29	27	Each	Scuppers	27					
I-10	588	Sq. Yds.	Crushed aggregate slope protection				588		
I-10	190	Cu. Yds.	Dumped rock channel protection				190		
			50% S-199(5)						
			50% SG-199(5)						

GENERAL NOTES

REFERENCE shall be made to Standard Drawings CSB-2-56, Sheets No. 2 and 3, revised 2-2-59; AR-1-57, revised 2-2-59; RB-1-55, revised 2-2-59; and to Supplemental Specification S-101 dated 12-2-59.

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57 together with current revisions thereof.

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic the existing structure shall be removed.

PILES shall be driven to firm contact with rock. If the length of penetration is approximately equal to the depth to rock according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in Sec. S-18.05 is not less than the following value for a pile hammer of the indicated energy rating.

42 tons per pile using a 7,000 ft. lb. hammer
34 tons per pile using an 11,000 ft. lb. hammer
30 tons per pile using a 15,000 ft. lb. or greater hammer

If the energy rating of the hammer is between the ratings as shown above, the required formula capacity shall be determined by interpolation. The design load is 28 tons per pile.

PIER FOOTINGS shall extend a minimum of 3" into solid rock or to the elevation shown, whichever is lower.

FOUNDATION BEARING PRESSURE: Pier footings are designed for a maximum bearing pressure of 6 tons per sq. ft.

PAINTING: After erection and after the shop coat has been cleaned and, where necessary, repainted in accordance with Sec. S-8.04, an additional coat of the same paint as used in the shop shall be applied over the outside face of the outside steel beams and all sides of the bottom flange of all spans other than the track span. The above specified additional coat shall be applied to all the structural steel in the track span before the application of the aluminum paint, except to those surfaces which are to be in contact with concrete.

CONSTRUCTION CLEARANCE of 19'-0" vertically above the top of the railroad rails and 8'-0" horizontally from the center of tracks shall be maintained at all times.

SHEETING AND BRACING: Before construction is started, eight sets of prints showing details of the sheeting and bracing to be used for excavation adjacent to the railroad tracks shall be submitted to the Director for approval by the Department of Highways and by the Railroad Company.

ALIGNING RAILROAD TRACKS: After the Contractor has completed all excavation and backfill adjacent to the railroad tracks in compliance with Sec. E-2.04 and E-2.08 of the Construction and Material Specifications, subject to the supervision of the Railroad Company, nothing in Sec. E-2.04, E-2.08 or G-8.07 of the Specifications shall be construed to hold the Contractor liable for aligning and resurfacing the railroad tracks.

MACHINE FINISH: At the Contractor's option, the top of the deck slab may be machine finished. Machine finishing, if used, shall be in accordance with the Proposal Note "Machine Finishing of Bridge Deck Slabs."

STEEL: See proposal regarding A-373 Steel.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

GENERAL PLAN & ELEVATION NOTES & ESTIMATED QUANTITIES

BRIDGE NO. MED-301-0338
over BLACK RIVER & B&O R.R.
MEDINA COUNTY STA. 48+60.19
50+98.87

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
WS	WS	REE	E.B.L	B.F.Sims A.J.F	7-20-60	

MICROFILMED
MAR 26 1985

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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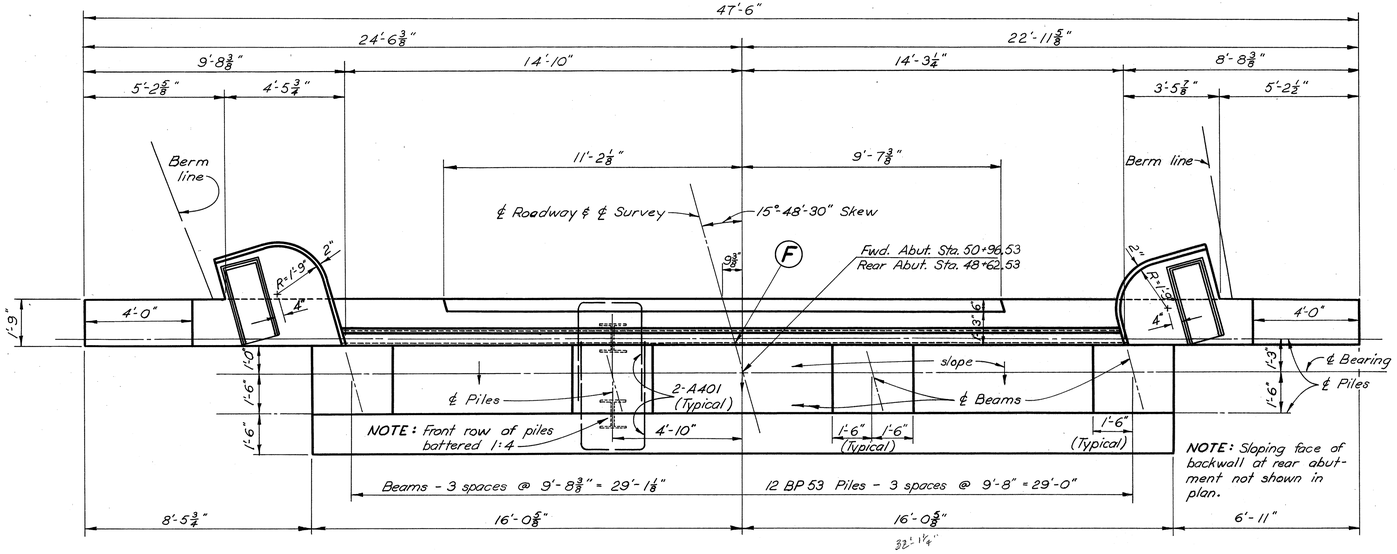
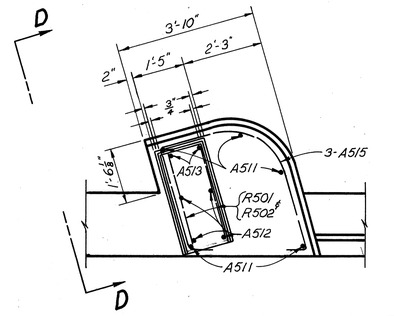
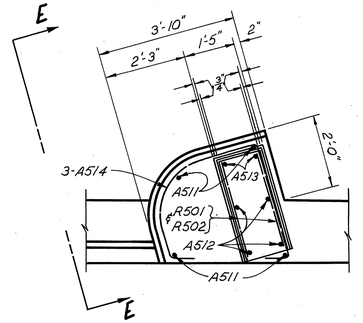
MED - 301 - 3.24

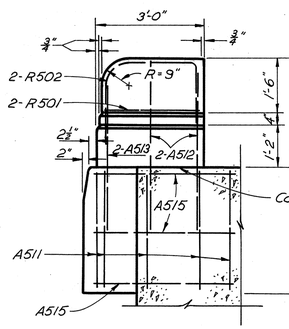


PLAN

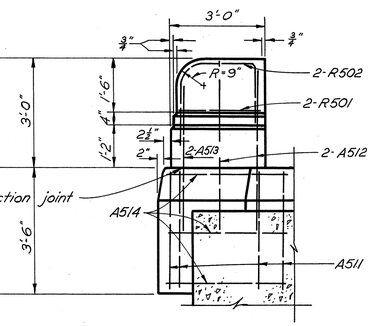




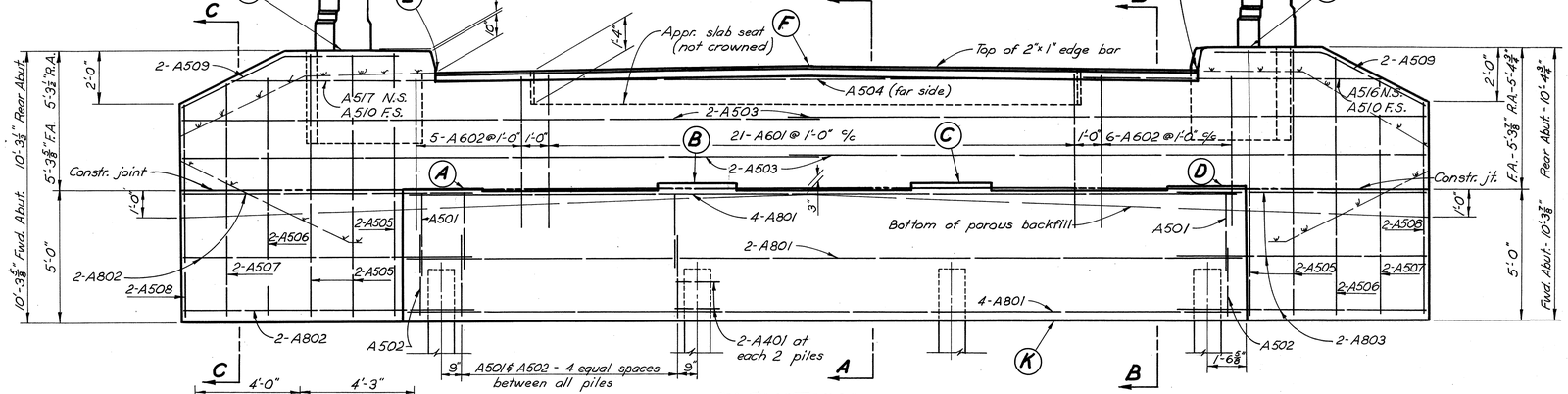
CURB AND END POST DETAILS



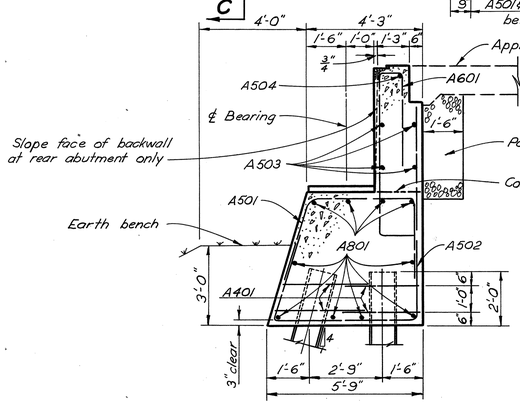
VIEW D-D



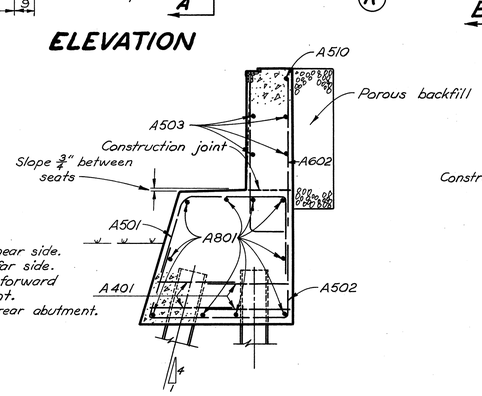
VIEW E-E



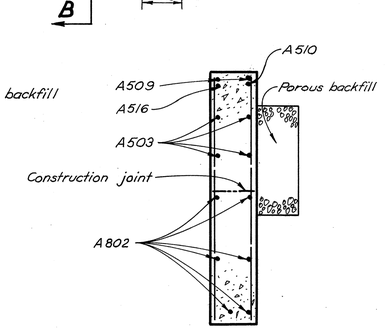
ELEVATION



SECTION A-A



SECTION B-B



SECTION C-C

NOTE: N.S. denotes near side.
F.S. denotes far side.
F.A. denotes forward abutment.
R.A. denotes rear abutment.

ELEVATION		
Point	Fwd. Abut.	Rear Abut.
A	1060.63	1059.44
B	1060.79	1059.62
C	1060.79	1059.65
D	1060.65	1059.54
E	1065.08	1063.88
F	1065.31	1064.15
G	1065.10	1063.98
H	1065.93	1064.73
J	1065.95	1064.84
K	1055.63	1054.44

POROUS BACKFILL, 1'-6" thick, shall extend upward to the approach slab and to the surface of the earth shoulders, and outward to the surface of the embankment slopes. Excavation therefor, in excess of that required for construction of the abutments, shall be considered as paid for in the bid price per cu. yd. paid for porous backfill.

CONCRETE above construction joint in railing end posts shall be included with Item S-14 for payment.

PROCEDURE: The embankment shall be placed and compacted to the level of the earth bench after which excavation shall be made for the abutment and piles driven.

EXCAVATION QUANTITY includes the removal of fill material between the top of the earth bench and the bottom of the abutment crossbeam.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

ABUTMENT DETAILS

BRIDGE NO. MED-301-0338
OVER BLACK RIVER & B&O R.R.
MEDINA COUNTY
STA. 48 + 60.19
50 + 98.87

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
WS	WS	JCN	E.B.L.	BFG GFT	7-20-60	

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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MED -301-3.24

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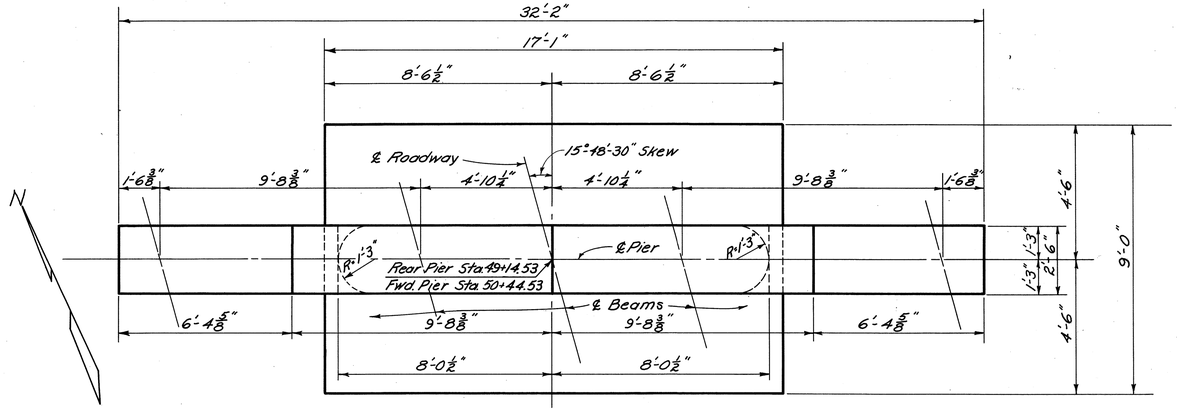
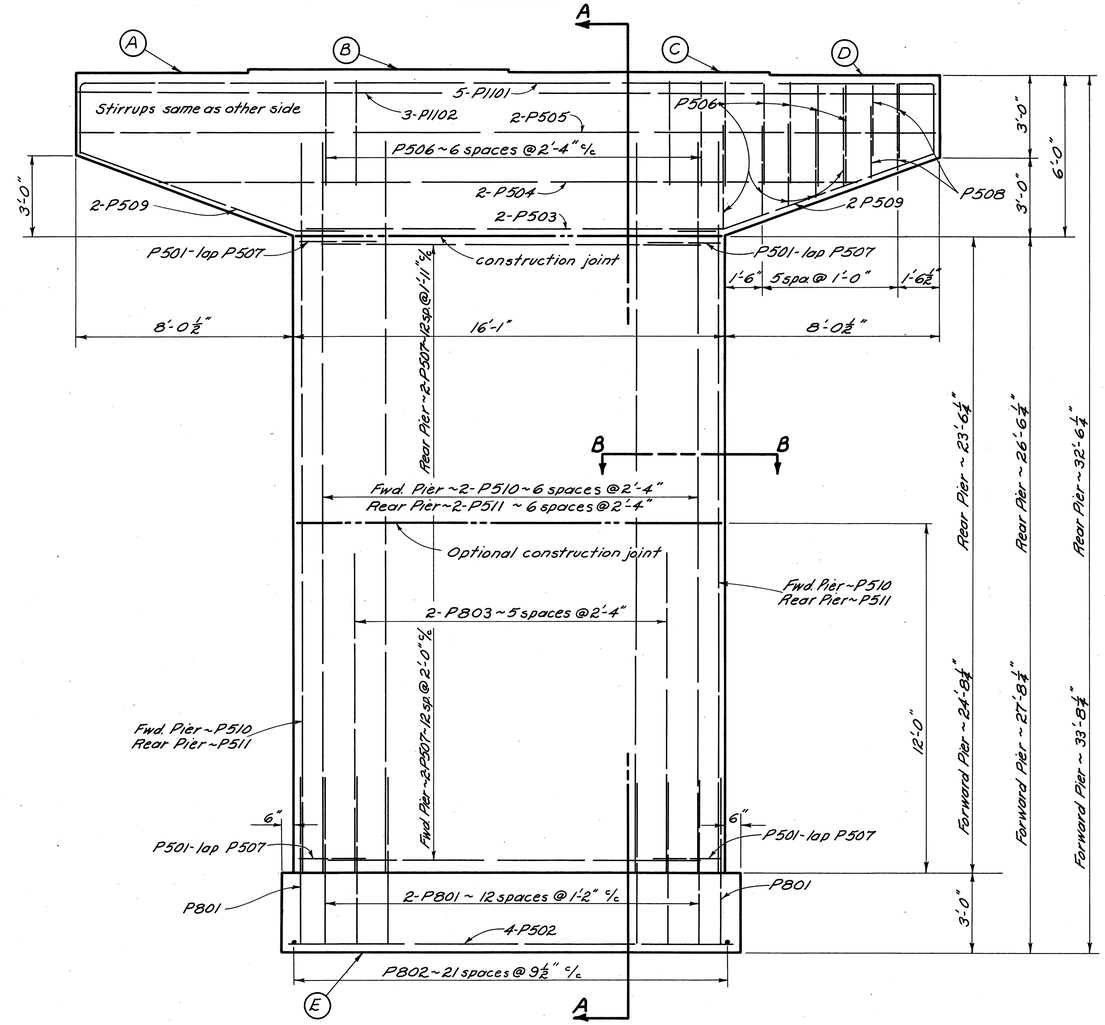
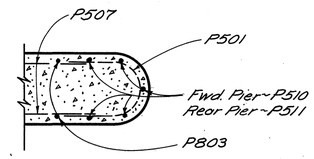
MAR 26 1965



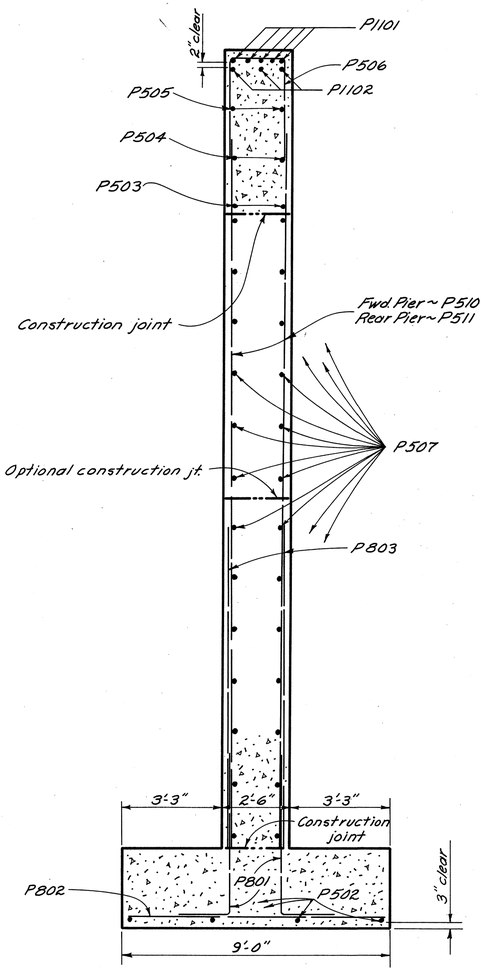
PLAN



ELEVATION



SECTION B-B



SECTION A-A

ELEVATIONS		
Point	Fwd. Pier	Rear Pier
A	1060.19	1059.59
B	1060.34	1059.71
C	1060.34	1059.69
D	1060.19	1059.52
E	1026.50	1027.00

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

DETAILS OF REAR & FORWARD PIERS

Bridge No. MED-301-0338 over Black River & B&O R.R.
Medina County Sta. 48+60.19
50+98.87

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
		J.D.P.	E.B.L.	B.F.G. jm G.J.F.	7-20-60	

FED. RD. DIVISION	STATE	PROJECT		
2	OHIO			

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MED - 301 - 3.24

ELEVATIONS	
Point	Center Pier
A	1060.03
B	1060.16
C	1060.15
D	1059.99
E	1022.20

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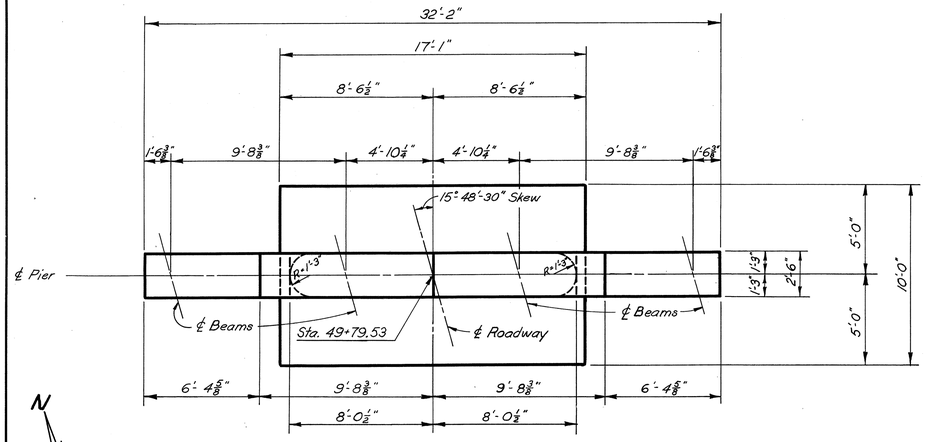
MAR 26 1985



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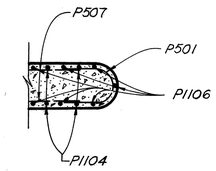
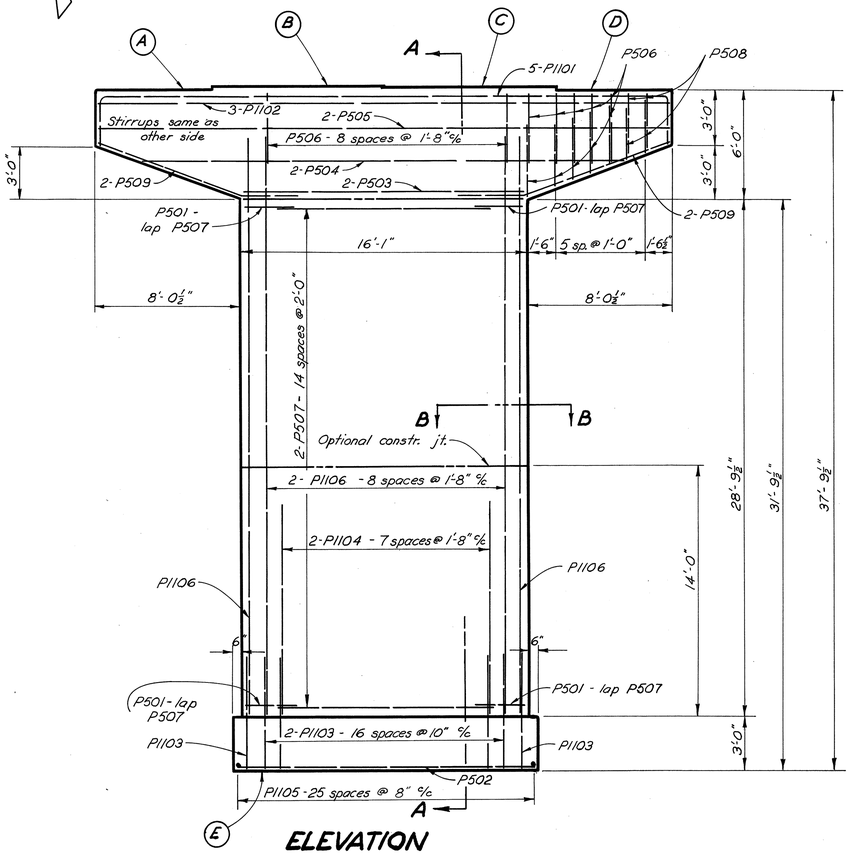
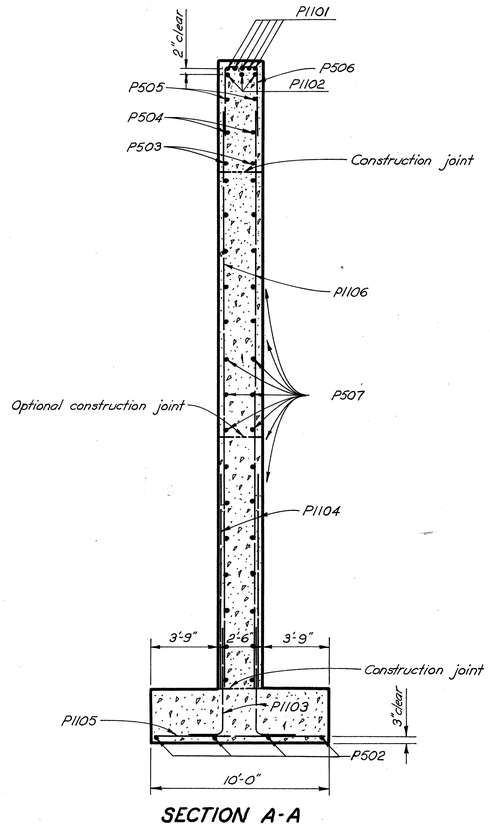


SECTION B-B

NOTE• Special care shall be taken in placing reinforcing steel to avoid bolster bolts.



ELEVATION



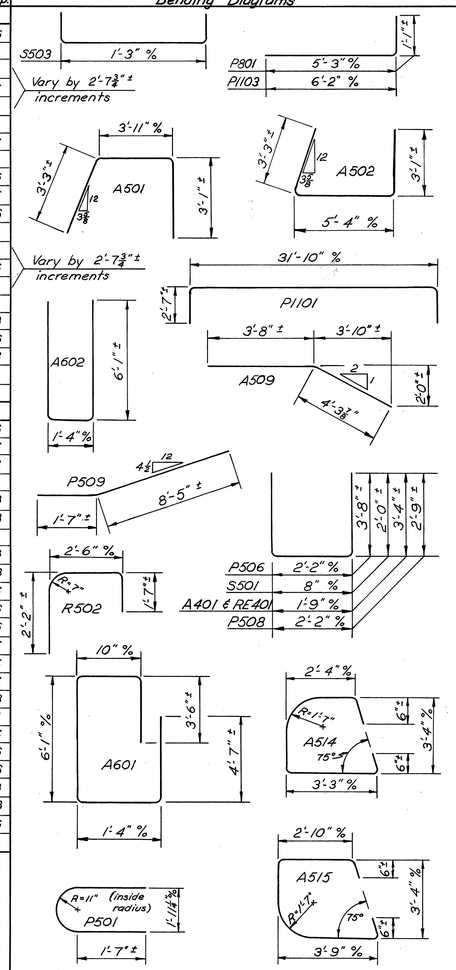
SECTION A-A

REINFORCING STEEL LIST

Mark	No.	Length	Weight	Shp.
Superstructure				
S701	301	34'-2"	21,021	S
S702	2	5'-10¼"		
through	series	to	859	S
S712	of 11	32'-4"		
S713	4	5'-3"	43	S
S601	301	34'-2"	15,447	S
S602	448	35'-3"	23,720	S
S603	75	26'-0"	2,929	S
S604	2	5'-10½"		
through	series	to	631	S
S614	of 11	32'-4"		
S501	324	4'-5"	1,493	B
S502	312	2'-10"	922	S
S503	624	2'-3"	1,464	B
Abutments				
A801	20	3'-9"	1,695	S
A802	12	10'-10"	347	S
A803	12	9'-3"	296	S
A601	42	15'-10"	999	B
A602	22	13'-3"	438	B
A501	34	10'-0"	355	B
A502	34	11'-5"	405	B
A503	16	24'-5"	407	S
A504	2	24'-0"	50	S
A505	20	9'-11"	207	S
A506	8	9'-7"	80	S
A507	8	8'-9"	73	S
A508	8	7'-11"	66	S
A509	8	7'-11"	66	B
A510	4	11'-0"	46	S
A511	18	3'-2"	59	S
A512	16	4'-5"	74	S
A513	8	3'-10"	32	S
A514	6	8'-11"	56	B
A515	6	9'-11"	62	B
A516	2	6'-3"	13	S

REPLACEMENT BARS: If reinforcing bars are fabricated from stock which previously has been tested and approved by the Ohio Highway Testing Laboratory, test samples as provided in Sec. S-4.02 need not be furnished and replacement bars will not be required.

Bending Diagrams



Mark	No.	Length	Weight	Shp.
Abutments (cont'd)				
A517	2	7'-4"	15	S
A401	32	8'-2"	175	B
Piers				
P1101	15	36'-5"	2,902	B
P1102	9	31'-10"	1,522	S
P1103	36	7'-4"	1,403	B
P1104	16	12'-0"	1,020	S
P1105	26	9'-8"	1,335	S
P1106	20	32'-6"	3,453	S
P801	56	6'-2"	922	B
P802	44	8'-8"	1,018	S
P803	24	12'-0"	769	S
P501	82	6'-2"	527	B
P502	12	16'-9"	210	S
P503	6	16'-0"	100	S
P504	6	25'-9"	161	S
P505	6	31'-10"	199	S
P506	83	9'-3"	801	B
P507	82	13'-7"	1,162	S
P508	24	7'-5"	186	B
P509	12	10'-0"	125	B
P510	16	28'-5"	474	S
P511	16	27'-3"	455	S
Railing				
*R501	8	2'-6"		S
*R502	8	6'-0"		B
*R503	112	15'-9"		S
*R504	16	4'-7"		S
Replacement Bars				
RE1101	1	7'-6"		S
RE801	1	6'-6"		S
RE701	2	6'-2"		S
RE601	3	5'-11"		S
RE501	1	5'-7"		S
RE401	1	8'-2"		B

* To be included with railing for payment.

BAR SIZE is indicated by the bar mark. The first digit where three digits are used and the first two digits where four digits are used indicate the bar size number. For example P801 is a No. 8 size bar and P1101 is a No. 11 size.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

CENTER PIER DETAILS & REINFORCING STEEL LIST

BRIDGE NO. MED-301-0338
OVER BLACK RIVER & B&O R.R.
MEDINA COUNTY
STA. 48 + 60.19
50 + 98.87

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
MB	MB	JCN	E.B.L.	B.F.G. and Q.P.T.	7-20-60	

MICROFILMED
MAR 26 1985

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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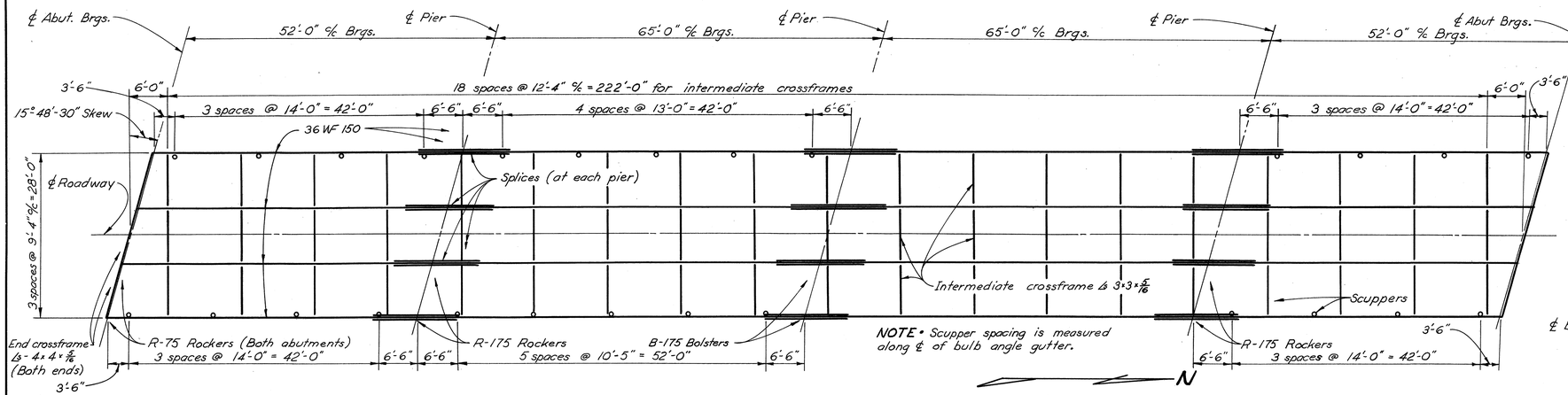
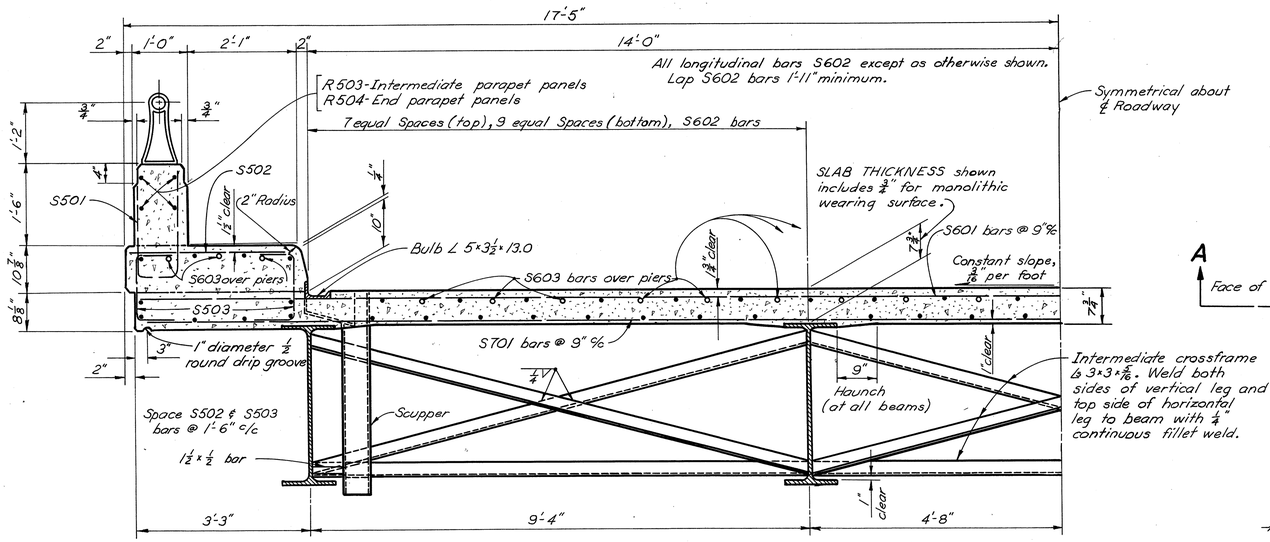
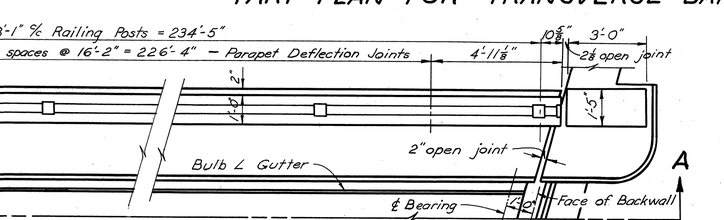
MED-301-3.24



OUTLINE OF STEEL FRAMING AND SCUPPER SPACING

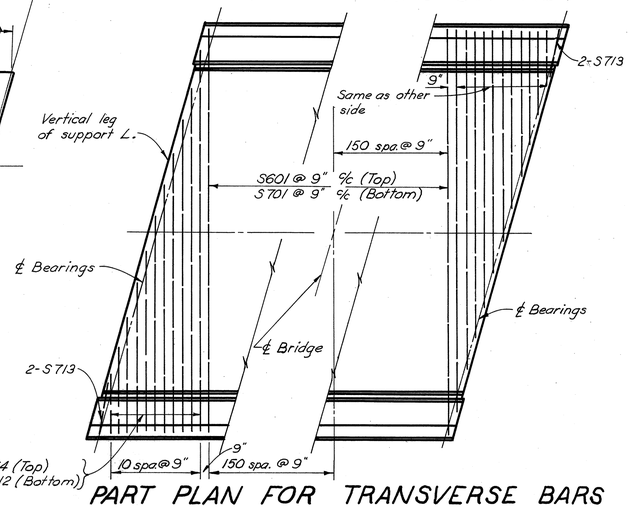


HALF TRANSVERSE SECTION



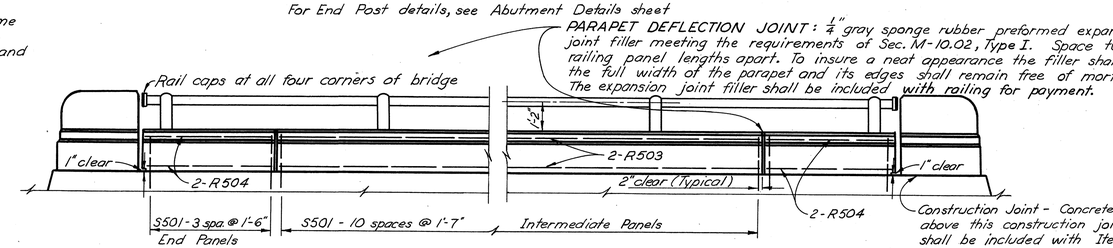
PART PLAN OF BRIDGE

For End Post details, see Abutment Details sheet



PART PLAN FOR TRANSVERSE BARS

PARAPET DEFLECTION JOINT: 1/4" gray sponge rubber preformed expansion joint filler meeting the requirements of Sec. M-10.02, Type I. Space two railing panel lengths apart. To insure a neat appearance the filler shall be the full width of the parapet and its edges shall remain free of mortar. The expansion joint filler shall be included with railing for payment.



SECTION A-A

DEFLECTION AND CAMBER				
	OUTSIDE BEAMS		INSIDE BEAMS	
LOCATION	END SPAN	MIDDLE SPAN	END SPAN	MIDDLE SPAN
Deflection due to weight of steel	1/16"	1/16"	1/16"	1/16"
Deflection due to remaining dead load	1/4"	3/8"	1/4"	5/16"
Convexity required for vertical curve	1/4"	3/8"	1/4"	3/8"
Sum of deflection and convexity	9/16"	13/16"	9/16"	3/4"
Required camber	0	1"	0"	1"

NOTE: For details not shown, see Std. Dwg. CSB-2-56, Sheets 2 and 3.

REFERENCE shall be made to Std. Dwg. AR-1-57 for Aluminum Railing and Posts (Type A) details and for Rail Cap details.

CONCRETE shall be Class "C."

WELDING shall be Class "A," except as shown. Any welds shown as field welds may, at the option of the contractor, be made in the shop. Class "B" welds are shown thus: B⟶

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress upgrade. The slab may be placed in sections, between transverse construction joints which are parallel to transverse reinforcing steel and are located near the center of any span.

DECK SLAB DEPTH: The distance shown from top of deck slab to top of steel beam is the nominal dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

MOMENT PLATES:
Top Plate - 10 1/2 x 7/16 x 12'-6"
Bottom Plate - 13 1/2 x 1/2 x 12'-6"

BEAM SPLICE WELDING PROCEDURE:
1. Raise end of beams at Center Pier 1/8".
2. Butt-weld the beam flanges and web at splice using the following sequence: Make two passes on each flange, then two on the web; repeat, using one pass at each location, until welds are completed.
3. Weld top and bottom flange moment plates at Rear Pier.
4. Lower end of beams at Center Pier.
5. Make splice at Center Pier and Forward Pier in the same manner raising the end of the beams 1/8" at the Forward Pier and 5/8" at the Forward Abutment.

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DIVISION OF DESIGN AND CONSTRUCTION
BUREAU OF BRIDGES

SUPERSTRUCTURE DETAILS

BRIDGE NO. MED-301-0338
OVER BLACK RIVER & B&O R.R.

MEDINA COUNTY STA. 48+60.19
50+98.87

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
		JCN	E.B.L.	A.J.F.	7-20-60	

HOMER TOWNSHIP, MEDINA COUNTY, OHIO, VAL. SEC. 1-OH-116.1(28)

MICROFILMED
MAR 26 1985

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

25A

MED -301-3.24

N

To Spencer 5.2

Pro. Top of Slope

Pro. Toe of Slope

6125+10 ℄ 36" Conc. Pipe

6125

6124+35 ℄ O.H. Bridge No. 122A.

2:1

Proposed O.H. Highway Bridge No. 122A
4 Spans Cont. Steel Beams with reinf. conc. deck and reinf. conc. substructure
To be Constructed by Others

6121+35 Tell Tale

Relocate and Restore Pole Line

Pro. Manhole by Others

Pro 36" Pipe by Others

B.&O.-W.U. Pole Line

2 Crossarms 17 Wires

Relocate Relay Case

J.B.

Temporary Cable on Ties

℄ W.B. Main Track, B.&O. R.R.

To Willard

℄ E.B. Main Track, B.&O.R.R.

To Warwick

74°11' 30"

Val. Sta. 6124+35.51 ℄ W.B.M., B.&O. R.R. =
Sta. 50+30.13 ℄ Pres. and Pro. S.R. 301

West Fork of the East Branch of the Black River

℄ Present and Proposed S.R. 301

Existing Bridge No. 122A
4 Span O.H. Pony Truss
To be removed by others.

52.0

65.0

34.04

2:1

To Homerville

Pro. Top of Slope

Pro. Toe of Slope

48

FORCE ACCOUNT WORK
BY THE
BALTIMORE and OHIO RAILROAD COMPANY

1. Preliminary Engineering
2. Construction Engineering
3. Communication Lines Relocation & Restoration
4. Signal Changes
5. Rehabilitate Track

Highway Bridge No. MED-301-0338

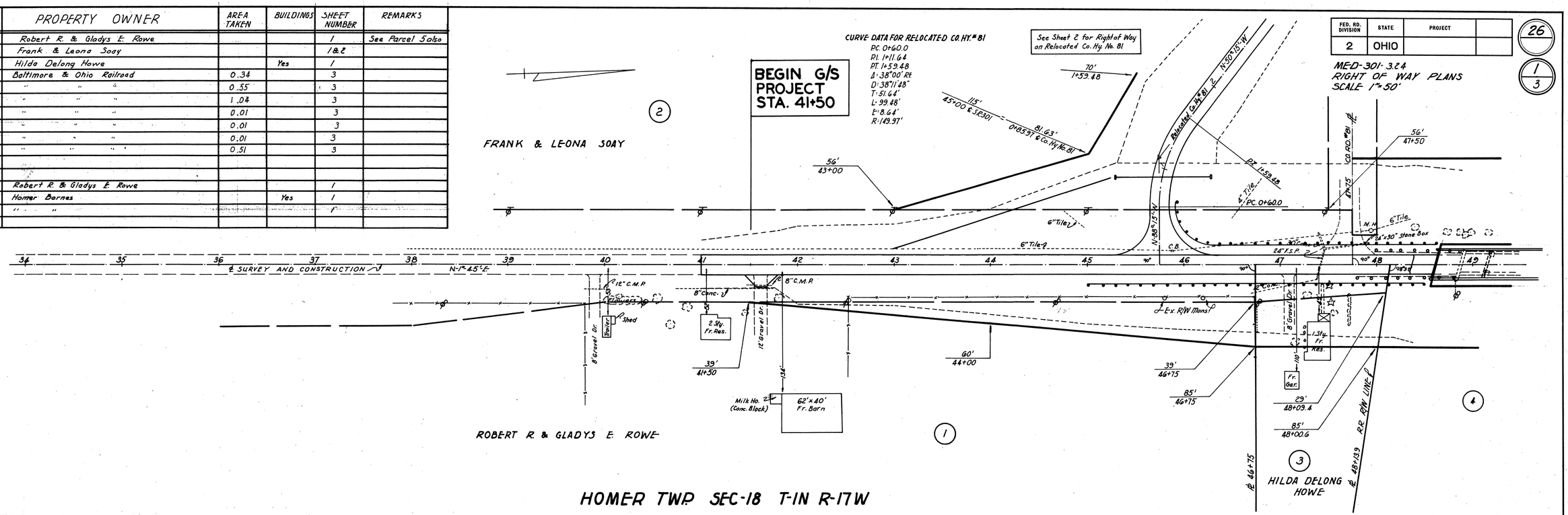
THE BALTIMORE AND OHIO SYSTEM
THE BALTIMORE AND OHIO RAILROAD COMPANY
AKRON DIVISION - MAIN LINE - HOMER, OHIO

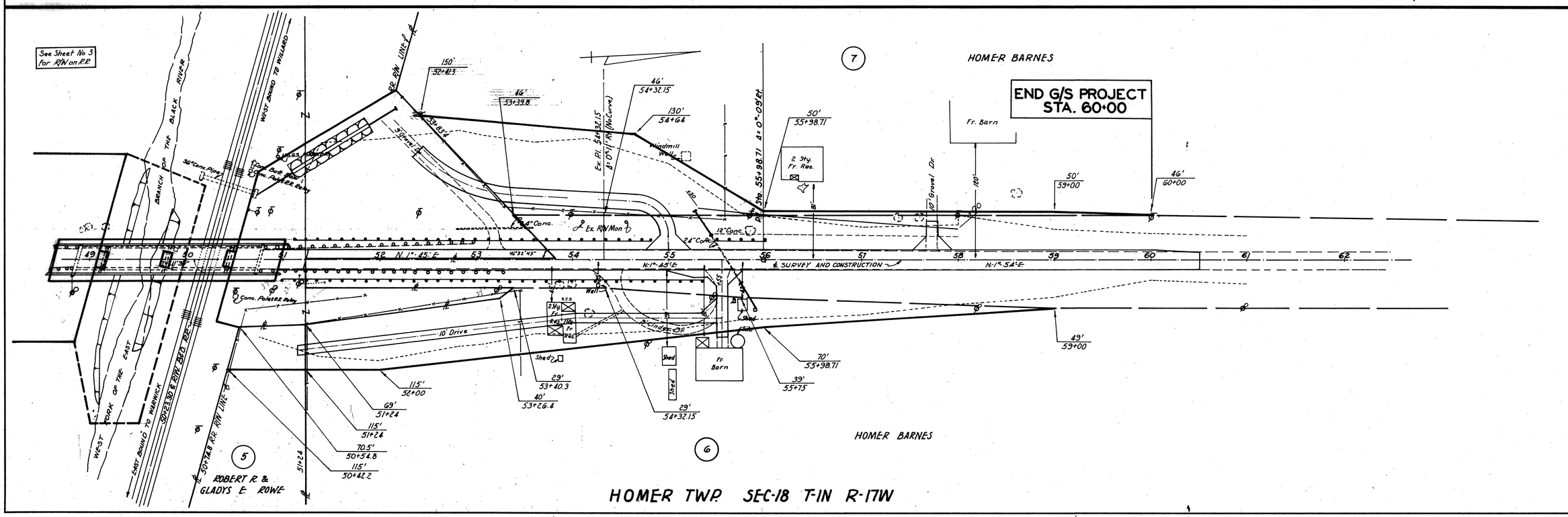
RAILROAD FORCE ACCOUNT PLAN
RECONSTRUCTION OF O.H. BR. 122A

Scale: 1" = 20'
May 16, 1960
Office of Regional Engineer
Pittsburgh, Pa
17214

File: G2A-37

PARCEL NUMBER	PROPERTY OWNER	AREA TAKEN	BUILDINGS	SHEET NUMBER	REMARKS
1	Robert R. & Gladys E. Rowe			1	See Parcel 5 also
2	Frank & Leona Soay			1 & 2	
3	Hilda Delong Howe		Yes	1	
4	Baltimore & Ohio Railroad	0.34		3	
4A	" " "	0.55		3	
4B	" " "	1.04		3	
4C	" " "	0.01		3	
4D	" " "	0.01		3	
4E	" " "	0.01		3	
4X	" " "	0.51		3	
5	Robert R. & Gladys E. Rowe			1	
6	Homer Barnes		Yes	1	
7	" "			1	



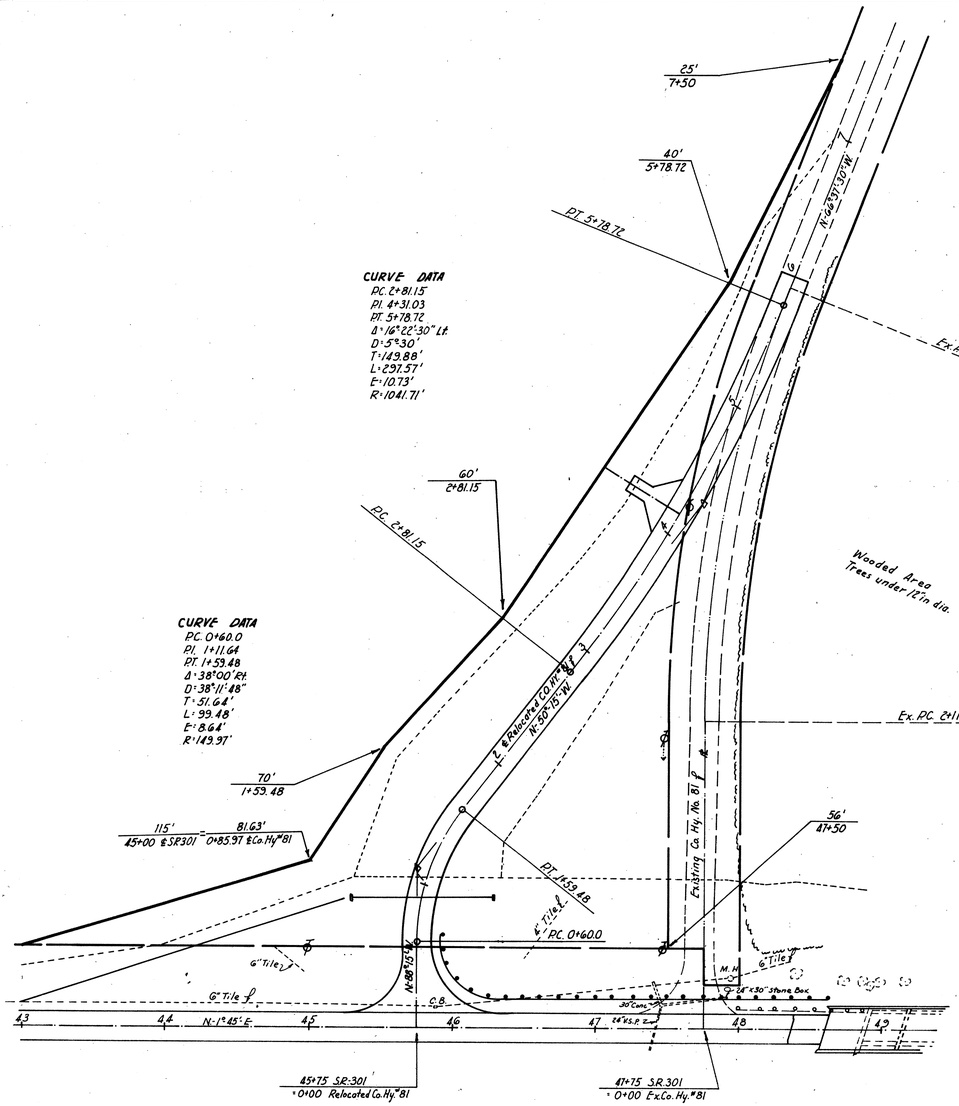


FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

27

2/3

MED-301-3.24
Right of Way Plans
Scale 1"= 50'



PLAT OF PROPERTY TO BE CONVEYED TO THE STATE OF OHIO
OWNED BY
THE BALTIMORE & OHIO RAILROAD COMPANY
MED-301-3.24
HOMER TWP. SEC-18 T-IN R-17W MEDINA COUNTY, OHIO

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

28

3/3

MED-301-3.24
Right of Way Plan

CURVE DATA
PC. 2+81.15
PI. 4+31.03
PT. 5+78.72
Δ: 16°22'30" Rt.
D: 5°-30'
T: 149.88'
L: 297.57'
E: 10.73'
R: 1041.71'

CURVE DATA FOR EX. CO. HY. NO. 81
PC. 2+11.79
PI. 3+68.17
PT. 5+20.84
Δ: 21°38' Rt.
D: 7°00.0'
T: 156.38'
L: 309.05'
E: 14.71'
R: 818.48'

PT 5+78.72
Ex PT 5+20.84
PC 2+81.15
℄ Relocated County Hy. No. 81
N 50°15' W
Ex PC 2+11.79
Existing Co. Hy. No. 81 ℄
R.R. R/W LINE ℄
N 6°45' 30" W
50+23.3 ℄ Survey S.R. 301
G124+32.2 ℄ Baltimore & Ohio R.R.
Wooded Area
Trees under 18"in dia.
BLACK RIVER
BRANCH OF THE
EAST BOUND TO WILLARD
WEST BOUND TO MARWICK
50+23.30 ℄ R.R. BRG. FWD.
℄ R.R. R/W LINE
50'-15' R.R. R/W LINE
LOT-6
LOT-7
LOT-8
LOT-5
4 Aerial
4 A
4 B
4 C
4 D
4 E
4 X
Cont. Gulf Oil Pipe Line Easmt.
Conc. Pole & R. Poly
M.H.
6"Tile
24"R.C.P.
30"Cont. Pipe
Stone Box
Inlet
Fence
Gate
Sign
Tree
Bush
Conc.
Existing Co. Hy. No. 81 ℄
36"Cont. Pipe
+75+
47
48
49
50
51
52
53
54
N 1°-45' E
46°32'48"
℄ 48+14 R.R. R/W LINE ℄
℄ 50+15 R.R. R/W LINE ℄
N 17°-26'-30" W
S 17°-33'-30" W
S 1°-45' W
S 72°-26'-30" E
N 72°-26'-30" W
N 17°-33'-30" E
N 1°45' E
S 1°45' W
S 17°-33'-30"

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

29

1/1

MED-301-3.24

CENTERLINE LOCATION PLAN

MED-301-(3.24)

HOMER TWP. SEC-18 T-IN R-17W

MEDINA COUNTY, OHIO

0 100 200 500

SCALE IN FEET

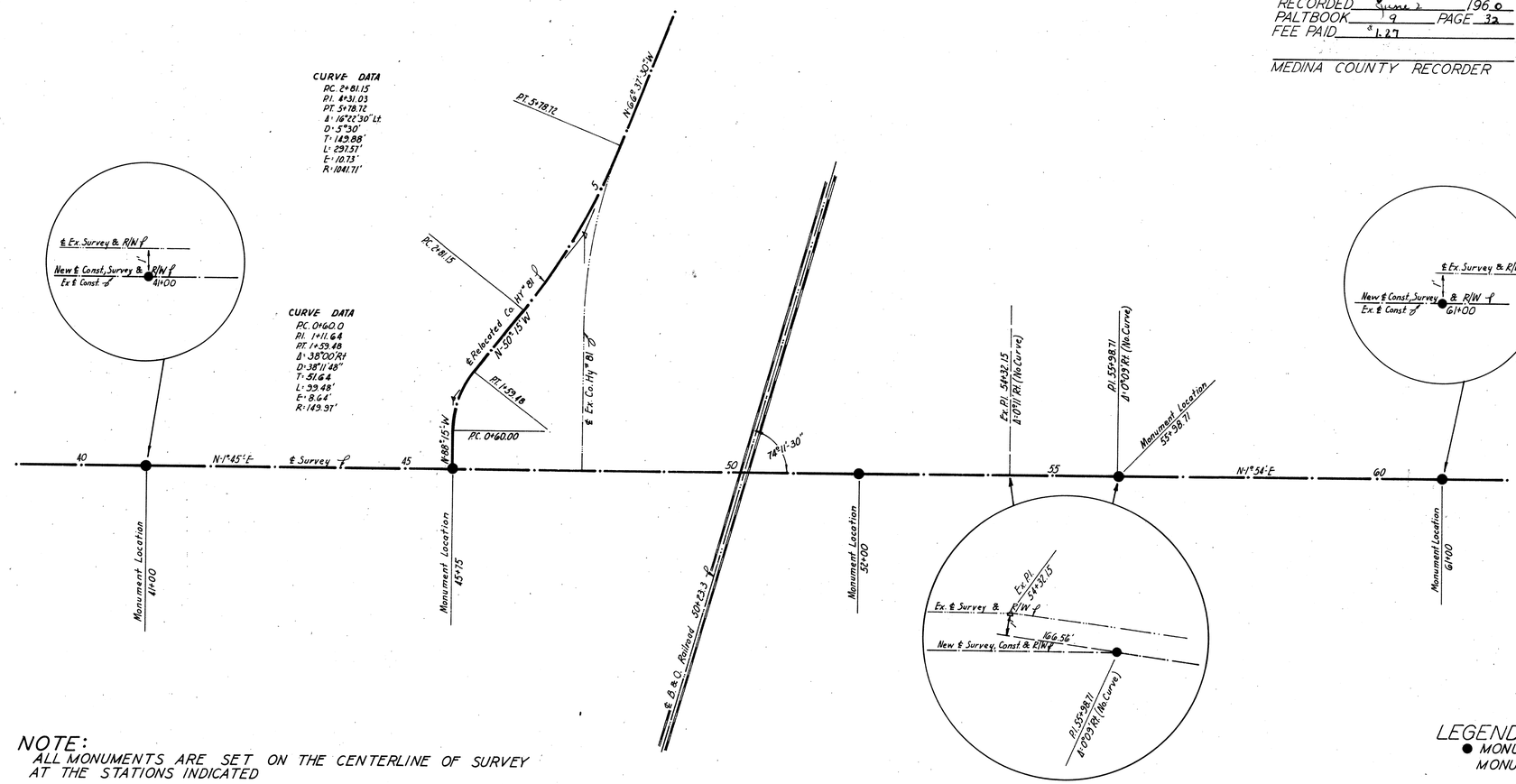
I HEREBY CERTIFY THAT THE ACCOMPANYING PLAT IS A TRUE DELINEATION OF A SURVEY MADE BY THE DEPARTMENT OF HIGHWAYS STATE OF OHIO

5-16-60 E. L. Tobey

DIVISION DEPUTY DIRECTOR - DIVISION NO. 3
REGISTERED SURVEYOR NO. 2690

RECEIVED June 1 1960 at 11:53 a.m.
RECORDED June 2 1960
PALTBOOK 9 PAGE 32
FEE PAID $1.27

MEDINA COUNTY RECORDER



NOTE:
ALL MONUMENTS ARE SET ON THE CENTERLINE OF SURVEY AT THE STATIONS INDICATED

LEGEND
● MONUMENTS
MONUMENT ASSEMBLIES 5 EACH