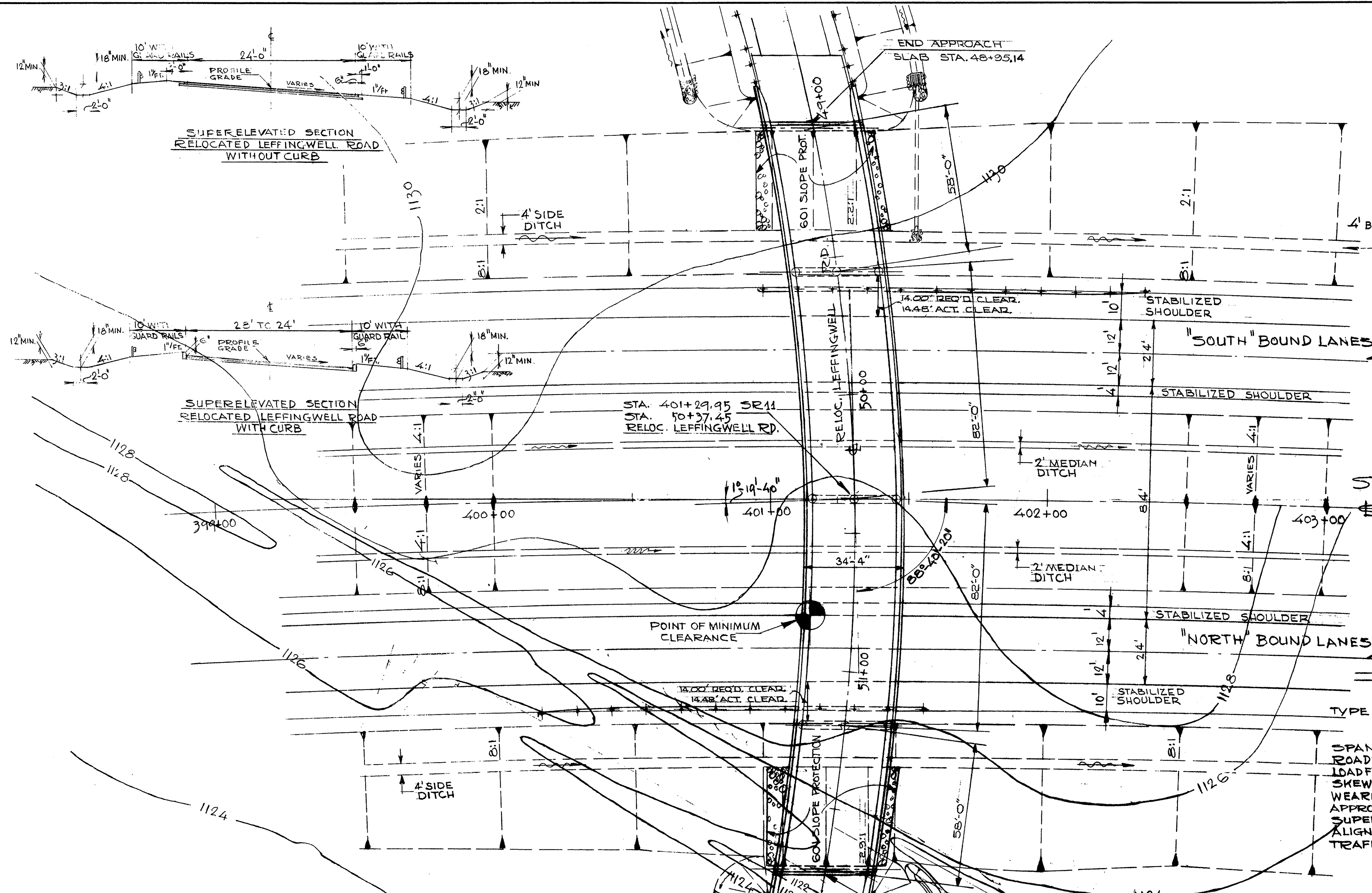
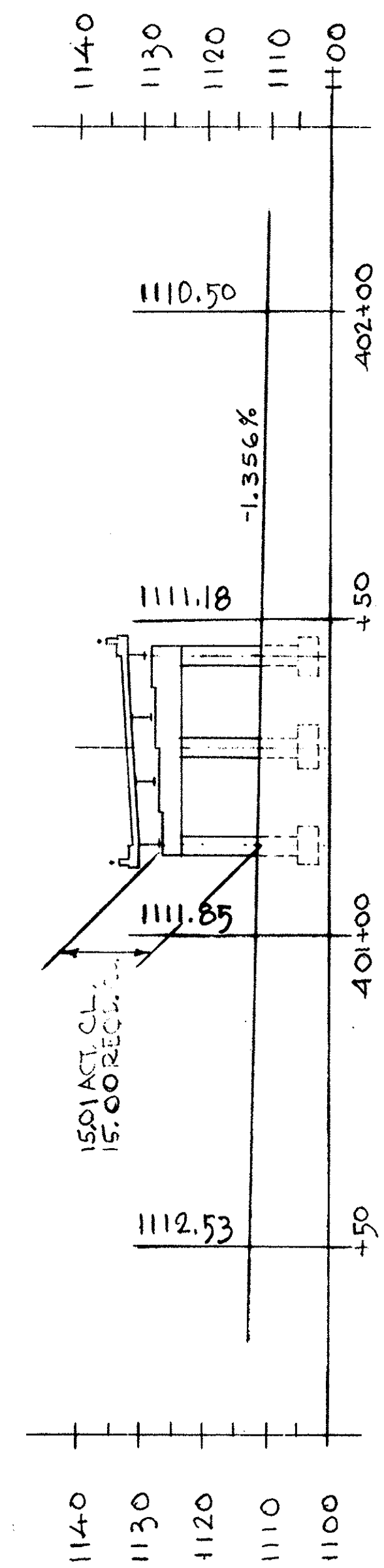


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— CURVE DATA — SR.11 —
 $\Delta = 41^\circ 45' 18''$ $L_c = 3,340.40'$
 $D_c = 1^\circ 15' 00''$ $T = 1,748.27'$
 $R = 4,583.66'$ $E = 322.09'$

STATE ROUTE No 11

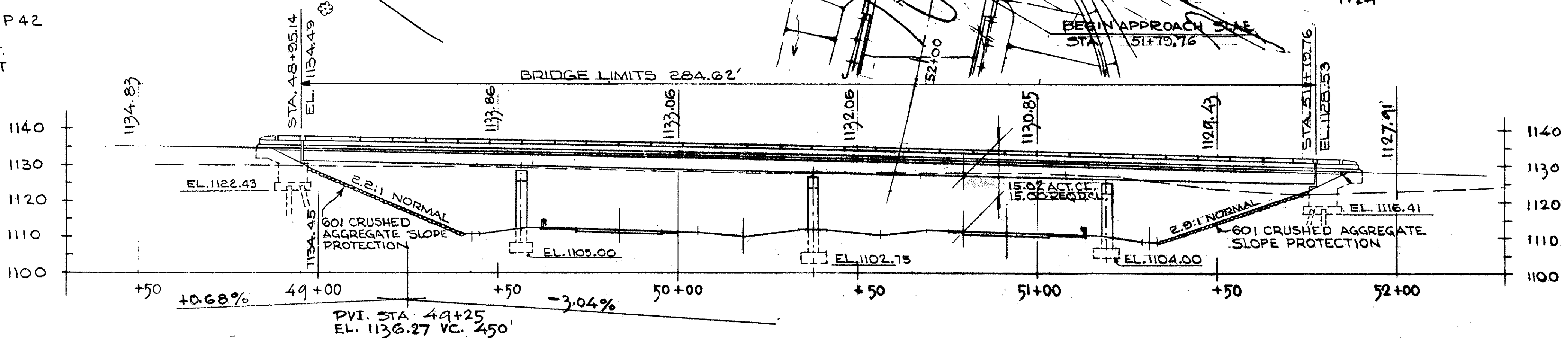
— CURVE DATA — RELOCATED LEFFINGWELL ROAD —
 $\Delta = 45^\circ 00' 00''$ $L_c = 562.50'$
 $D_c = 8^\circ 00' 00''$ $T = 296.66'$
 $R = 716.20'$ $E = 59.10'$

— PROPOSED STRUCTURE —

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUB-STRUCTURE.
 SPAN: 58'-0", 82'-0", 82'-0", 58'-0" % BRG'S
 ROADWAY: 28'-0" T/F. OF 2' L.O. SAFETY CURB.
 LOAD FREQUENCY: C.F. 130 (1957)
 SKEW: 1° 19' 40" L.F.
 WEARING SURFACE: 1" MONOLITHIC CONCRETE
 APPROACH SLAB: 25'-0" LONG A5-I-67 SPECIAL
 SUPERELEVATION: 0.0625 FT/FT.
 ALIGNMENT: 8° 00' 00" RIGHT
 TRAFFIC COUNT: 411 ADT. 1980

PILES
 ABUTMENT PILES TO BE 10BP42
 ESTIMATED LENGTH:
 ABUTMENT 1 - 12 FT.
 ABUTMENT 2 - 17 FT.

— SLOPE PAVING —
 601 CRUSHED AGGREGATE SLOPE PROTECTION



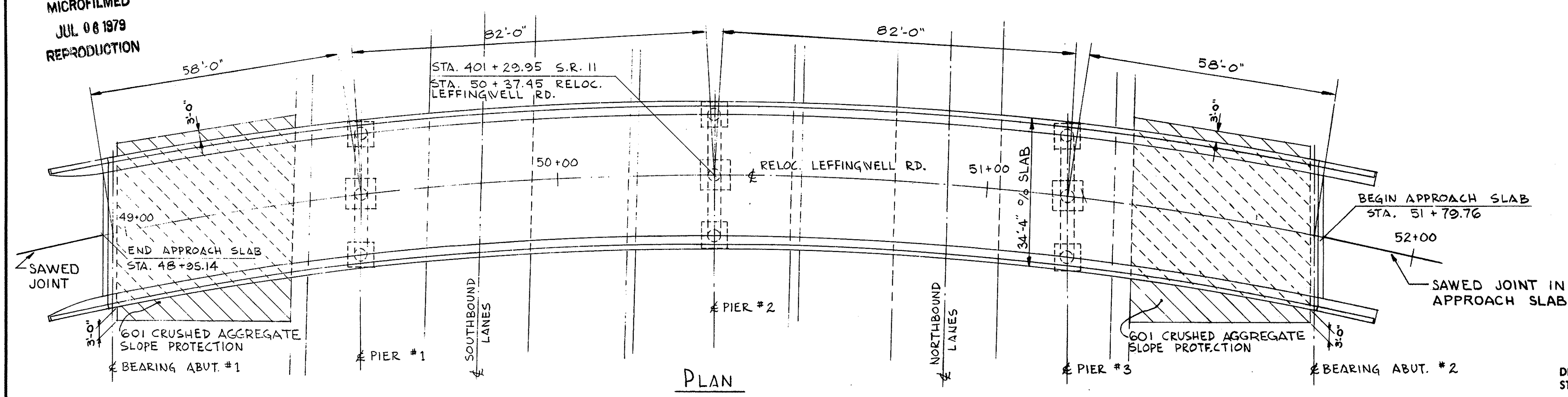
STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES					
AKRON, OHIO			GLAUS, PYLE & SCHOMER YOUNGSTOWN, OHIO		
SITE PLAN					
BRIDGE No		MAH-11-0760			
UNDER RELOCATED LEFFINGWELL ROAD MAHONING CO. S.R. No 11					
STA 401+29.95					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
D.S.	N.S.		D.S.	W.K.D.	7-21-64

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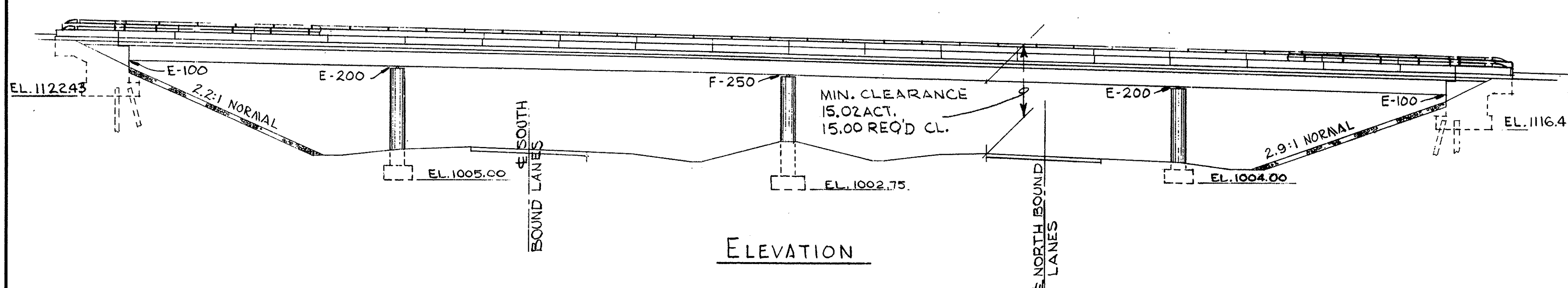
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PLAN



ELEVATION

GENERAL NOTES

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.

DESIGN DATA:

DESIGN LOADING - CF 130

CONCRETE CLASS C - BASIC UNIT STRESS 1,333 P.S.I.
CONCRETE CLASS E - BASIC UNIT STRESS 1,133 P.S.I.

STRUCTURAL STEEL - ASTM A36 - BASIC UNIT STRESS 20,000 P.S.I.
REINFORCING STEEL - ASTM A15, A16, A160, DEFORMED, INTERMEDIATE OR HARD GRADE. BASIC UNIT STRESS 20,000 P.S.I.
EXCEPT SPIRAL REINFORCEMENT MAY BE PLAIN, STRUCTURAL GRADE WITH BASIC UNIT STRESS OF 18,000 P.S.I.

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

AS-1-67	REVISED 1-11-68
BR-1-65	REVISED 11-24-65
*FSB-1-62	REVISED 1-15-63
SD-1-65	DATED 11-8-65

AND TO SUPPLEMENTAL SPECIFICATIONS:

808	DATED 1-13-67	832	DATED 5-25-67
825	DATED 12-19-67	931	DATED 5-25-67
828	DATED 1-1-67	811	DATED 1-1-67

PILES SHALL BE DRIVEN ("WITH A HAMMER OF NOT LESS THAN 11,000 FT. LBS. PER BLOW") 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. 507.05 IS NOT LESS THAN THE FOLLOWING VALUE FOR A PILE HAMMER OF THE INDICATED ENERGY RATING:

ABUTMENT PILES

48 TONS PER PILE USING AN 11,000 FT. LB. HAMMER
43 TONS PER PILE USING A 15,000 FT. LB. OR GREATER HAMMER

THE DESIGN LOAD IS 30 TONS PER PILE FOR THE ABUTMENT PILES.

PIER FOOTINGS ARE DESIGNED FOR A PRESSURE OF 5 TONS PER SQUARE FOOT.

THE CRUSHED AGGREGATE SLOPE PROTECTION SHALL EXTEND FROM THE FACE OF THE ABUTMENT DOWN TO THE TOE OF THE SLOPE AND EXTEND IN WIDTH TO 3 FEET BEYOND THE OUTER EDGE OF THE SUPERSTRUCTURE ON ONE SIDE, AND AT THE ACUTE CORNERS OF THE OTHER SIDE, THE OUTSIDE EDGE OF THE SLOPE PROTECTION SHALL INTERSECT THE PROJECTED FACE OF THE ABUTMENTS 3 FEET BEYOND THE OUTER EDGE OF THE SUPERSTRUCTURE AND SHALL EXTEND DOWN THE SLOPE, NORMAL TO THE FACE OF THE ABUTMENT, TO THE TOE OF THE SLOPE.

MACHINE FINISH: THE CONCRETE BRIDGE DECK SHALL BE FINISHED BY THE USE OF A FINISHING MACHINE.
SEE SHEET 276 FOR "PAINTING OF STRUCTURAL STEEL", "SECONDARY WELD", "WELDED ATTACHMENTS", AND "STANDARD DRAWING, FSB-1-62, BEARING NOTES."

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	SUPERSTRUCTURE	ABUTS.	PIERS	GEN.
503	390	CU. YDS.	UNCLASSIFIED EXCAVATION INCLUDING ROCK		212	178	
507	290	LN. FT.	STEEL PILES 10BP 42		290		
508	LUMP	SUM	FIRST TEST PILE				LUMP
511	304	CU. YDS.	CLASS "C" CONCRETE, SUPERSTRUCTURE	304			
511	87	CU. YDS.	CLASS "E" CONCRETE, ABUTMENTS ABOVE FOOTINGS		87		
511	85	CU. YDS.	CLASS "C" CONCRETE, PIERS ABOVE FOOTINGS			85	
511	103	CU. YDS.	CLASS "E" CONCRETE, ABUTMENT AND PIER FOOTINGS		63	40	
509	110,225	LBS.	REINFORCING STEEL	77,055	11,308	21,862	
513	261,818	LBS.	STRUCTURAL STEEL	261,818			

ITEM	TOTAL	UNIT	DESCRIPTION	SUPERSTRUCTURE	ABUTS.	PIERS	GEN.
832	261,818	LBS.	FIELD PAINTING OF STRUCTURAL STEEL	261,818			
517	615.20	LIN. FT.	BRIDGE RAILING TYPE I	502.87	52.33		
518	55	LIN. FT.	6" PERFORATED HELICAL CPM, INCLUDING SPECIALS		55		
518	66	LIN. FT.	6" NON PERFORATED HELICAL CPM		66		
518	23	CU. YDS.	POROUS BACKFILL		23		
518	10	EACH	SCUPPERS, INCLUDING SUPPORTS (TYPE I)	10			
601	450	SQ. YDS.	CRUSHED AGGREGATE SLOPE PROTECTION				450
808	304	UNITS	WATER REDUCING, SET RETARDING ADMIXTURE	304			
825	1,255	SQ. YDS.	CONCRETE SURFACE TREATMENT	1,209	46		
828	68	LIN. FT.	JOINT SEALER		68		

STATE OF OHIO
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BUREAU OF BRIDGES

AKRON, OHIO

GLAUS, PYLE & SCHOMER
YOUNGSTOWN, OHIO

GEN. PLAN & ELEV.
BRIDGE No MAH-11-0760
UNDER RELOCATED LEFFINGWELL ROAD
MAHONING CO. S.R. No 11
STA. 401+29.95

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
DJ	L.L.		DJ	W.K.O.	4-5-67	

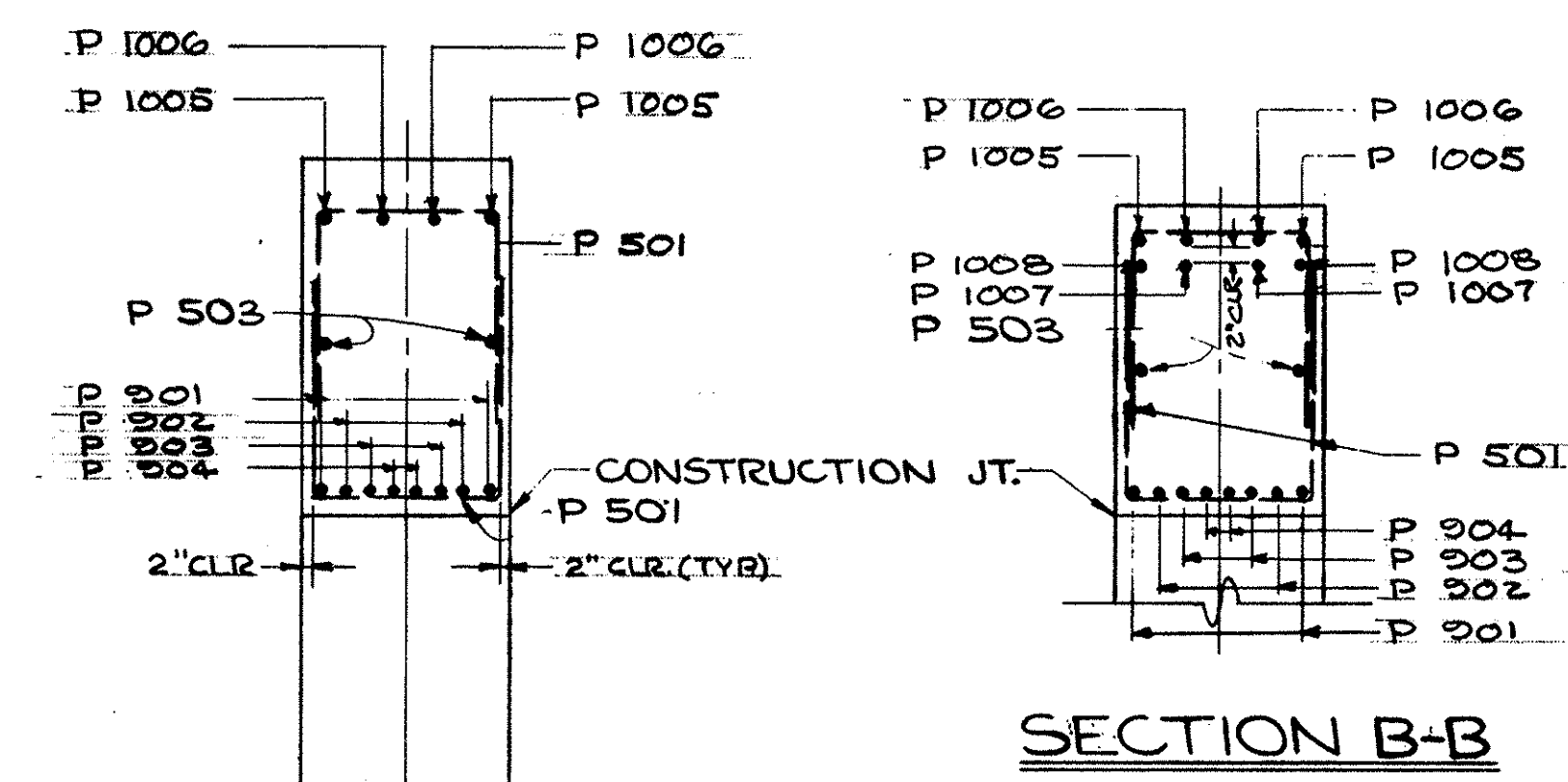
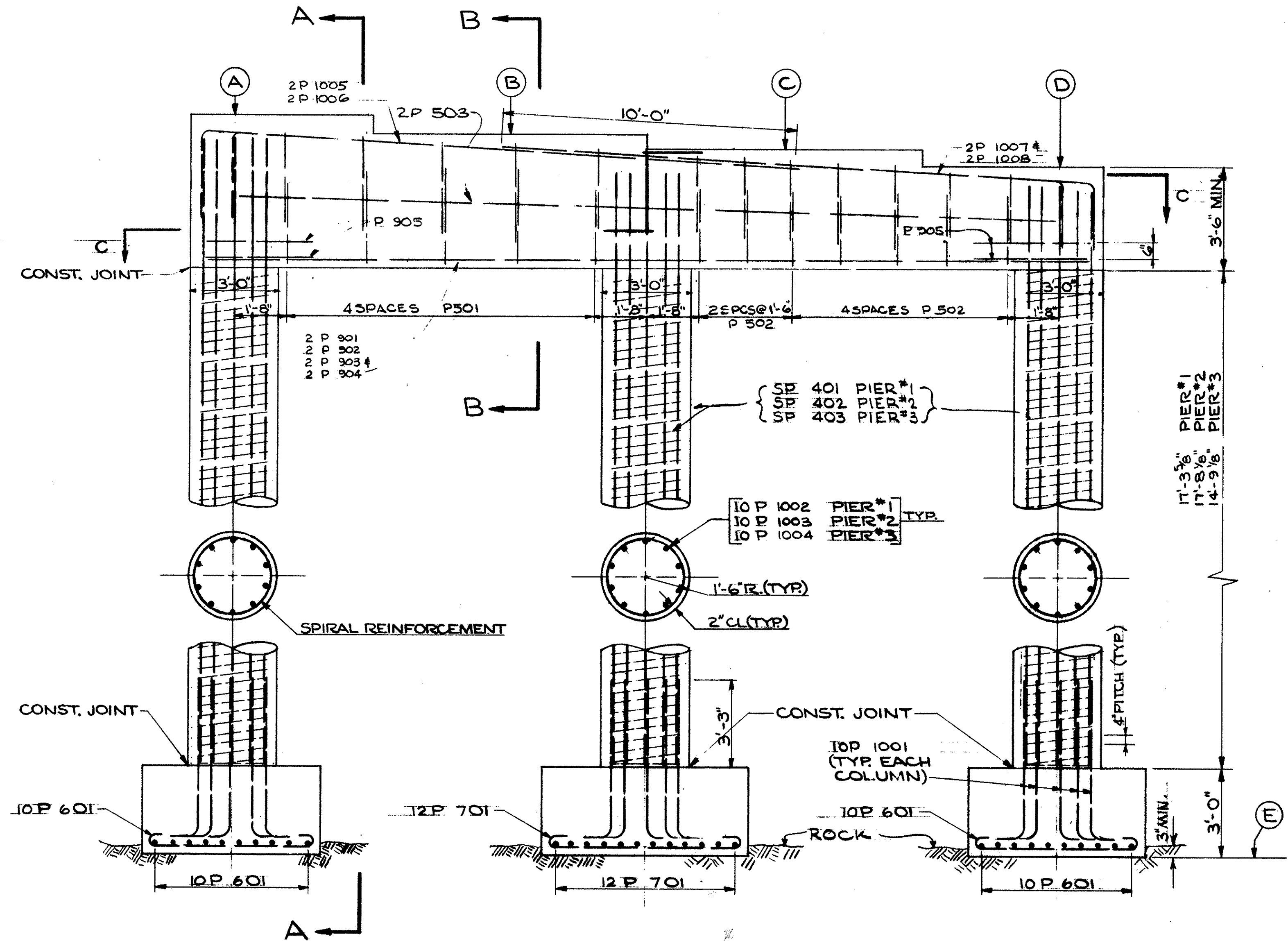
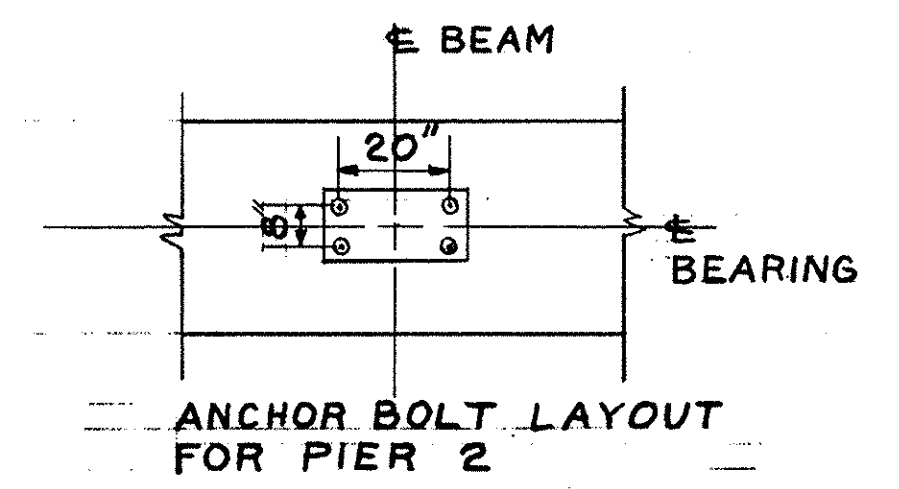
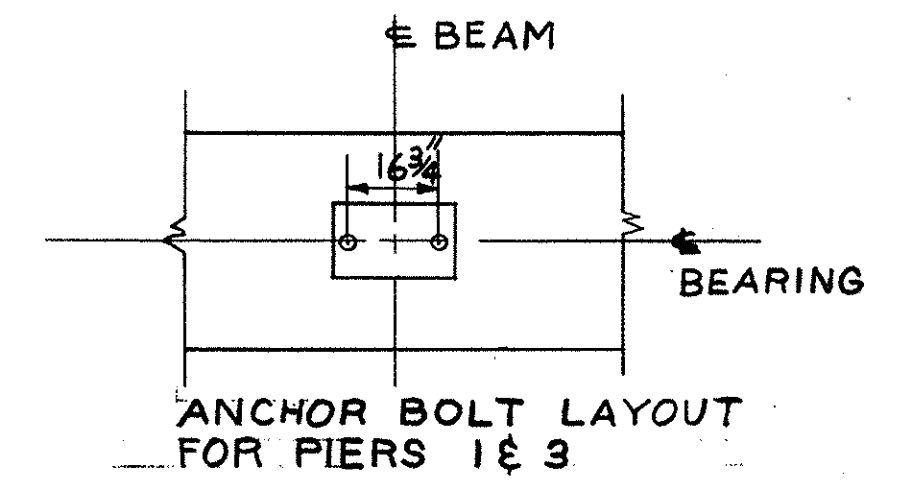
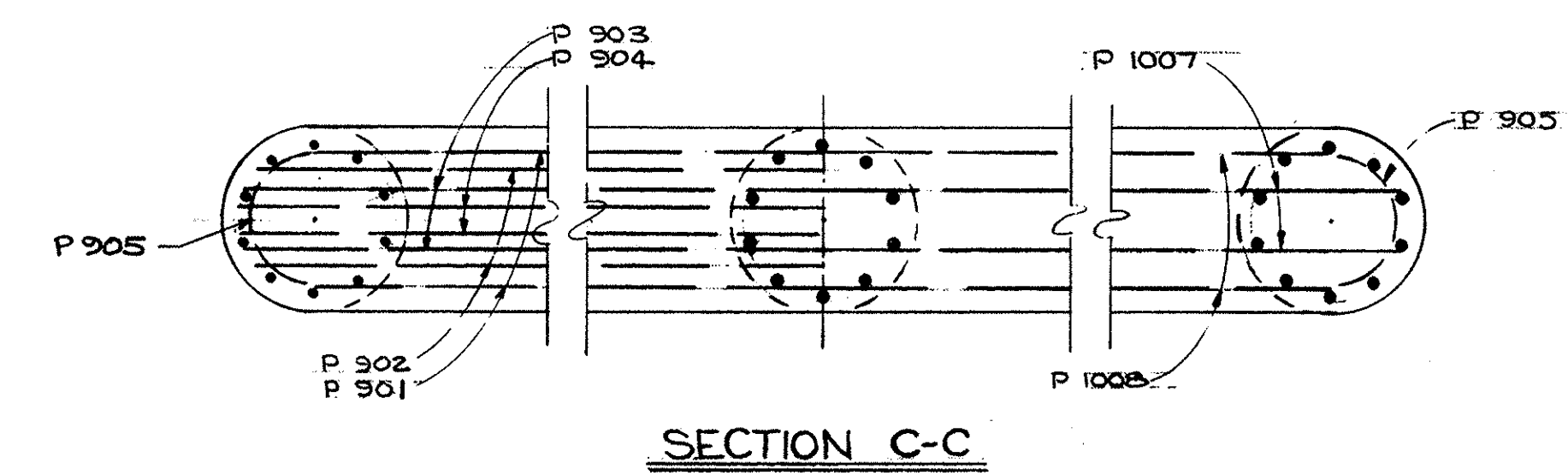
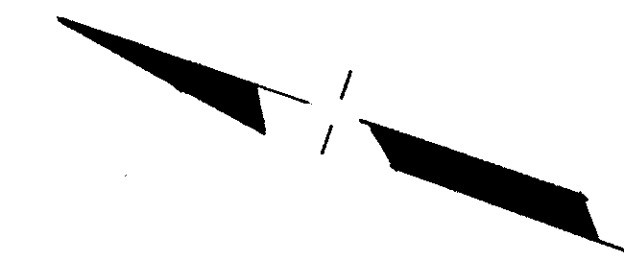
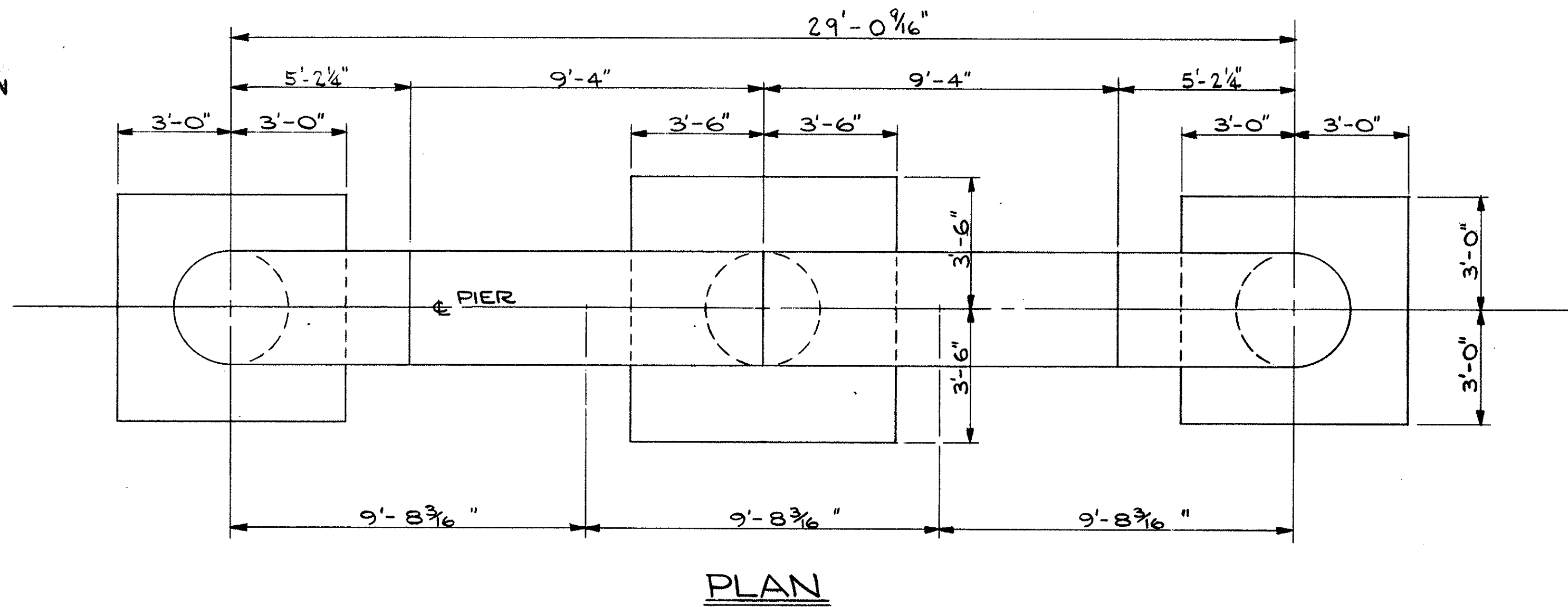
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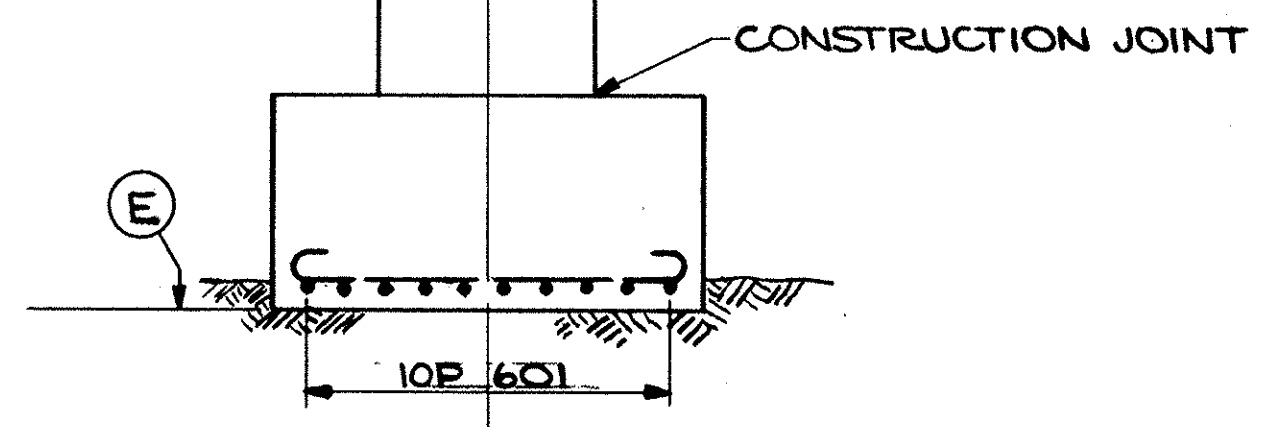
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PIER ELEVATION TABLE

LOCATION	A	B	C	D	E
PIER #1	1130.54	1129.96	1128.80	1105.00	
PIER #2	1128.73	1128.14	1127.53	1126.93	1102.75
PIER #3	1127.16	1126.52	1125.90	1125.26	1104.00

PIER FOOTINGS SHALL EXTEND A MINIMUM OF 3' INTO UNDISTURBED ROCK



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GLAUS, PYLE & SCHOMER
YOUNGSTOWN, OHIO

PIER DETAILS
BRIDGE N° MAH-11-0760
UNDER RELOCATED LEFFINGWELL ROAD
MAHONING CO. S.R. N°11
STA. 401+29.95

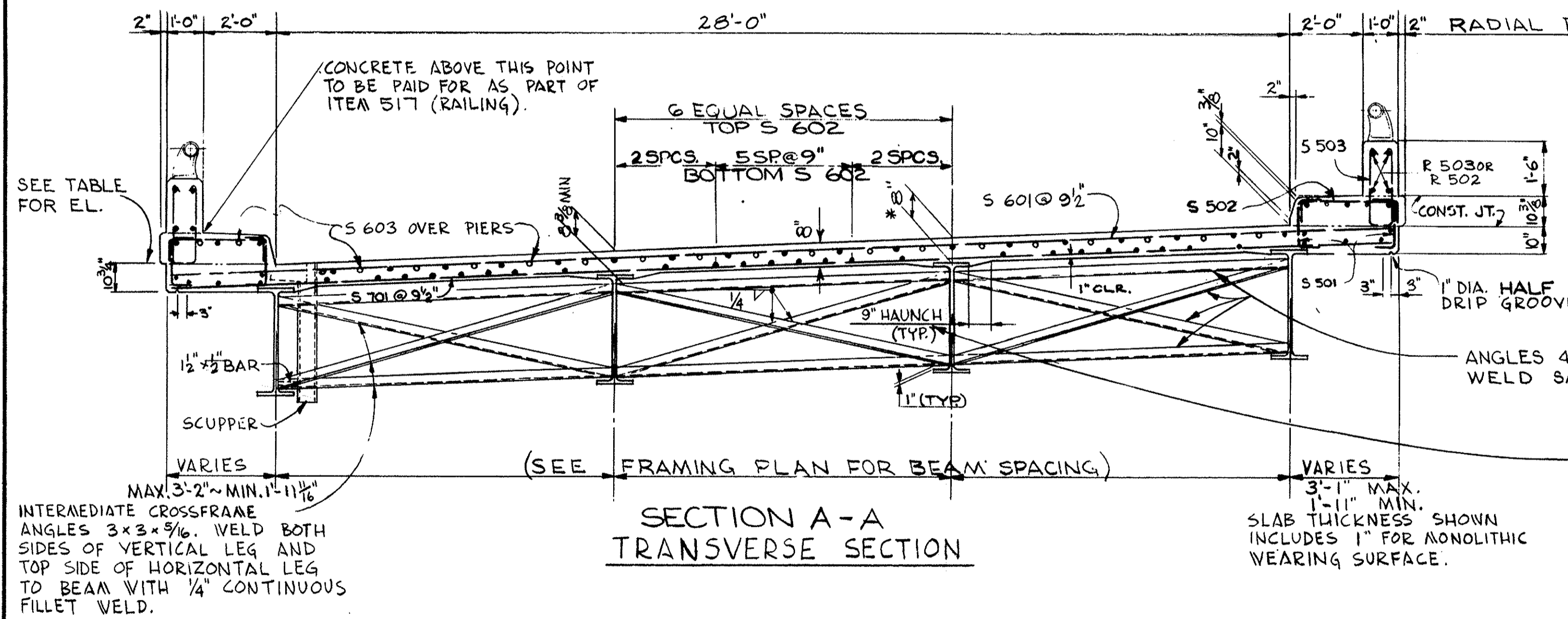
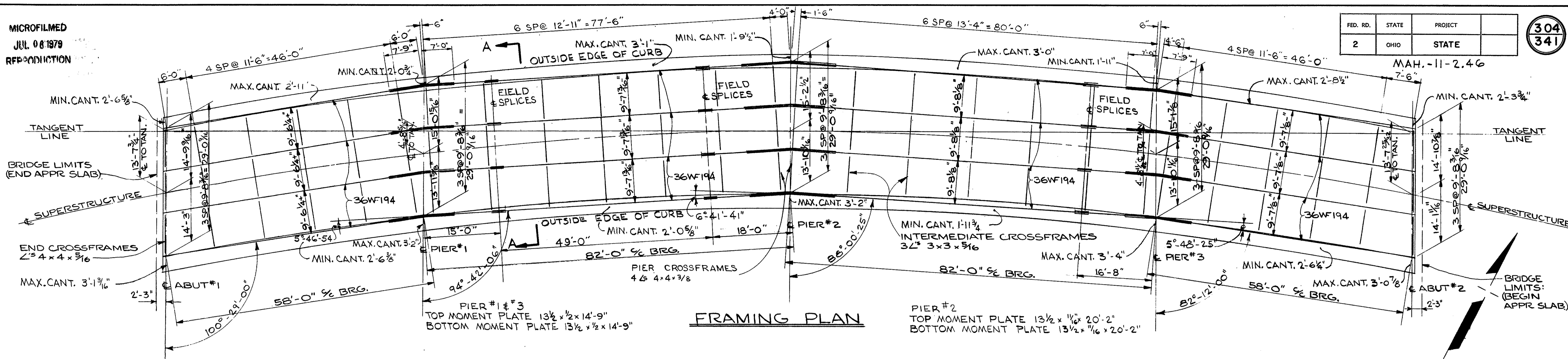
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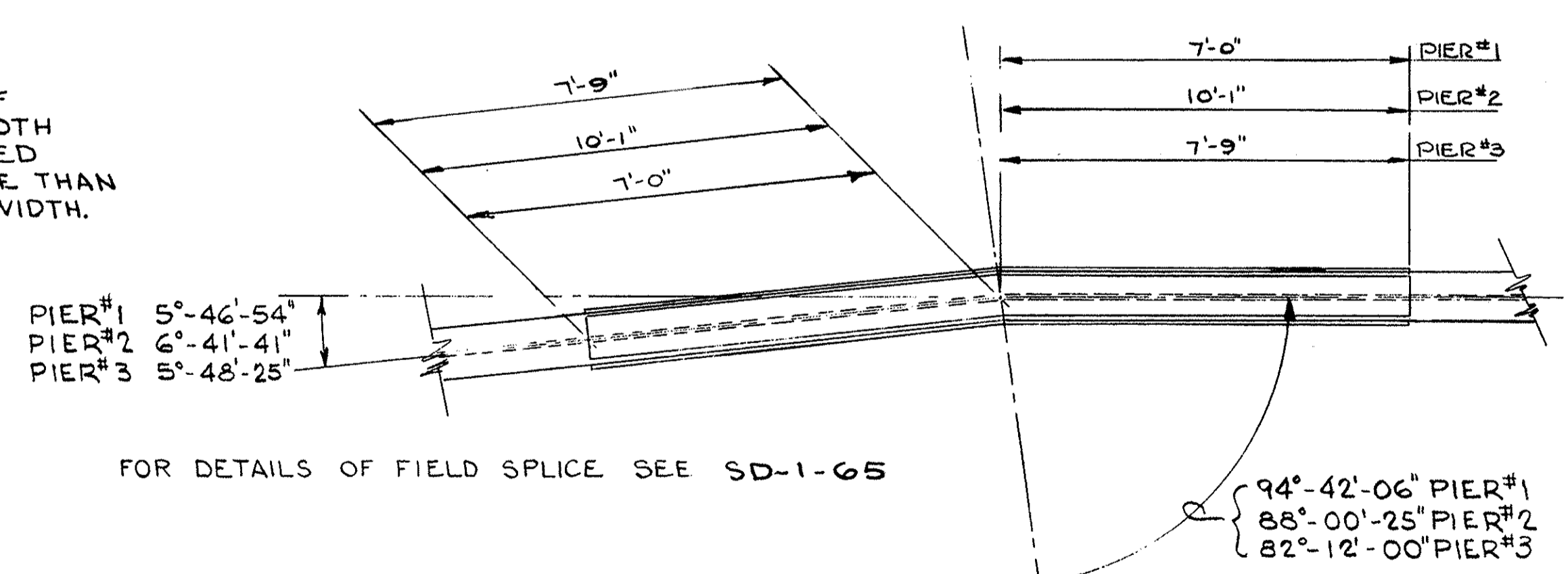
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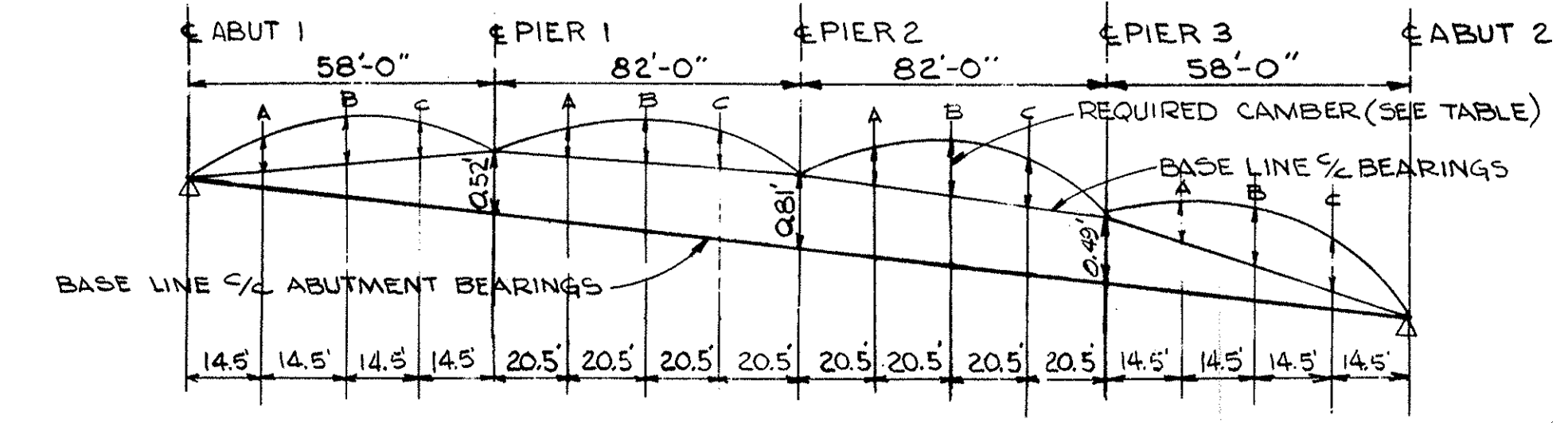
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A TYPICAL HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING QUANTITY OF CONCRETE. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" PROVIDED THAT THE SLOPE SHALL BE NOT MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.



SPAN NO	DEFLECTION AND CAMBER											
	1/4 PT A	1/4 PT B	3/4 PT C	1/4 PT A	1/4 PT B	3/4 PT C	1/4 PT A	1/4 PT B	3/4 PT C	1/4 PT A	1/4 PT B	3/4 PT C
DEFLECTION DUE TO WT. OF STEEL	.04	.05	.01	.09	.15	.07	.07	.15	.09	.01	.05	.04
DEFLECTION DUE TO REMAINING D.L.	.17	.18	.06	.37	.61	.28	.28	.61	.37	.06	.18	.17
ADJUSTMENT REQD. FOR VERTICAL CURVE	.30	.42	.30	.65	.86	.65	.61	.81	.61	.22	-	-
ADJUSTMENT REQD. FOR BMS. ON CHORD	-.20	-.64	-.48	-.65	-.87	-.65	-.50	-.67	-.50	-.45	-.58	-.21
REQUIRED SHOP CAMBER	+31"	+01"	-11"	+46"	+75"	+33"	+46"	+30"	+57"	-16"	-35"	0.00"



*THIS 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.

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BUREAU OF BRIDGES

AKRON, OHIO

GLAUS, PYLE & SCHOMER
YOUNGSTOWN, OHIO

FRAMING PLAN
BRIDGE N^o MAH-11-0760
UNDER RELOCATED LEFFINGWELL ROAD
MAHONING CO. S.R. N^o 11
STA. 401+29.95

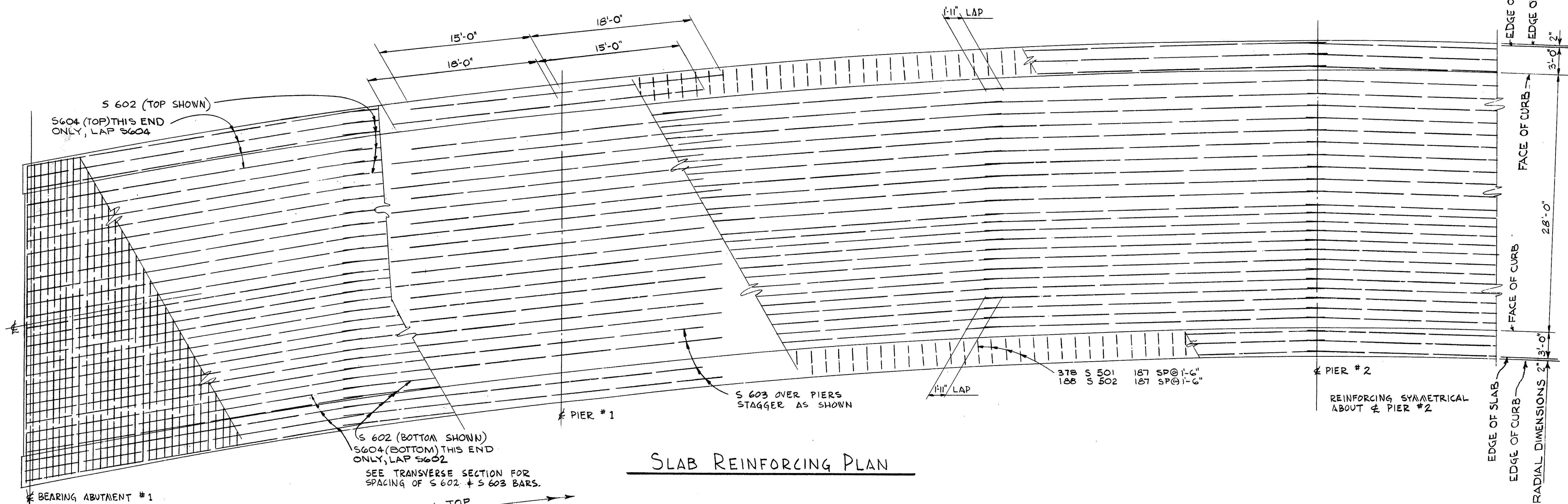
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D.S.	L.L.		D.S.	W.K.D.	4-7-67	

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SLAB REINFORCING PLAN

ABUT. 1	PIER 1	PIER 2	PIER 3	ABUT. 2
1133.63	1134.64	1133.21	1131.25	1129.54
1133.47	1134.37	1132.80	1130.84	1129.42
1133.33	1134.05	1132.36	1130.42	1129.99
1133.14	1133.64	1131.94	1130.01	1129.54
1132.94	1133.21	1131.47	1129.41	1129.54
1132.67	1132.80	1131.03	1128.98	1129.54
1132.35	1132.36	1130.57	1128.53	1129.54
1131.94	1131.94	1130.01	1128.08	1129.54
1131.47	1131.47	1129.41	1127.62	1129.54
1131.03	1131.03	1128.98		
1130.57	1130.57	1128.53		
1130.01	1130.01	1128.08		

ELEVATIONS AT FACE OF CURB

ELEVATIONS AT FACE OF CURB

ROADWAY

DECK ELEVATIONS
AT QUARTER POINTS OF SPANS

THE ELEVATIONS SHOWN AT THE FACE OF CURBS ARE THOSE WHICH ARE REQUIRED BEFORE THE CONCRETE DECK IS PLACED, PROPER ALLOWANCE HAS BEEN MADE FOR THE DEAD LOAD DEFLECTIONS CAUSED BY THE WEIGHT OF THE CONCRETE.

STATE OF OHIO
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SLAB DETAILS
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UNDER RELOCATED LEFFINGWELL ROAD
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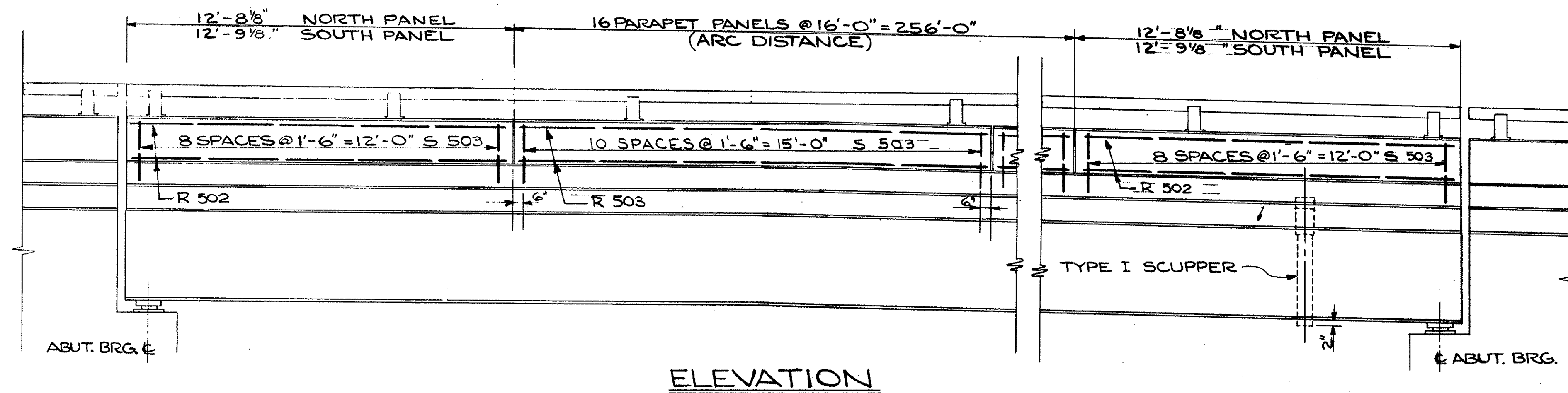
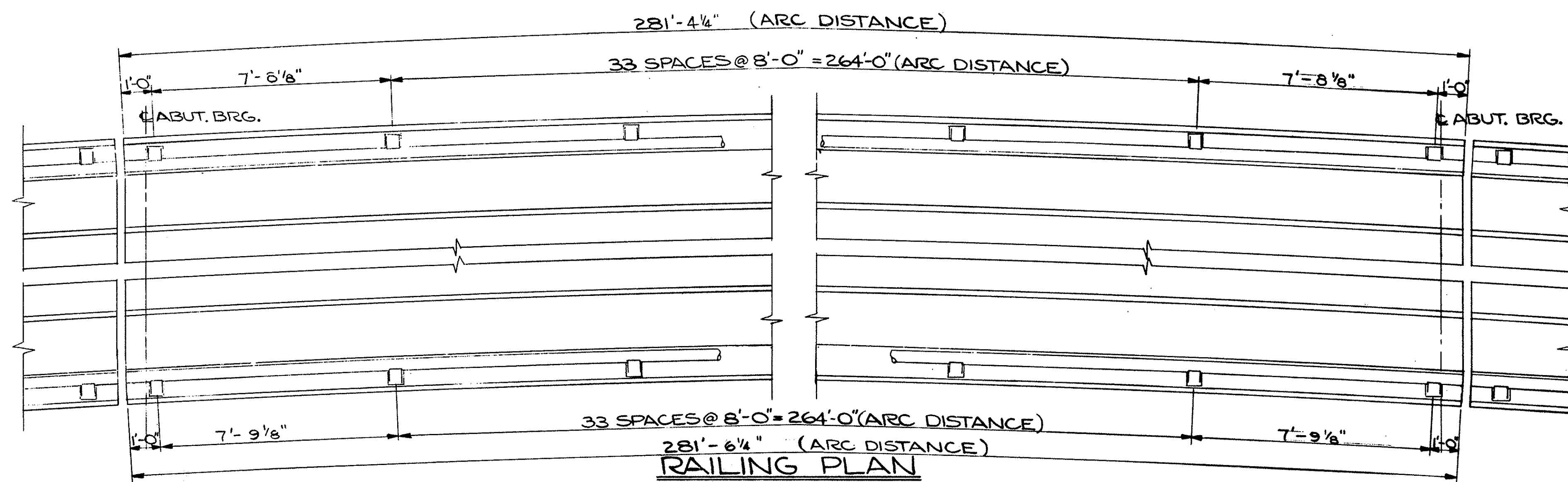
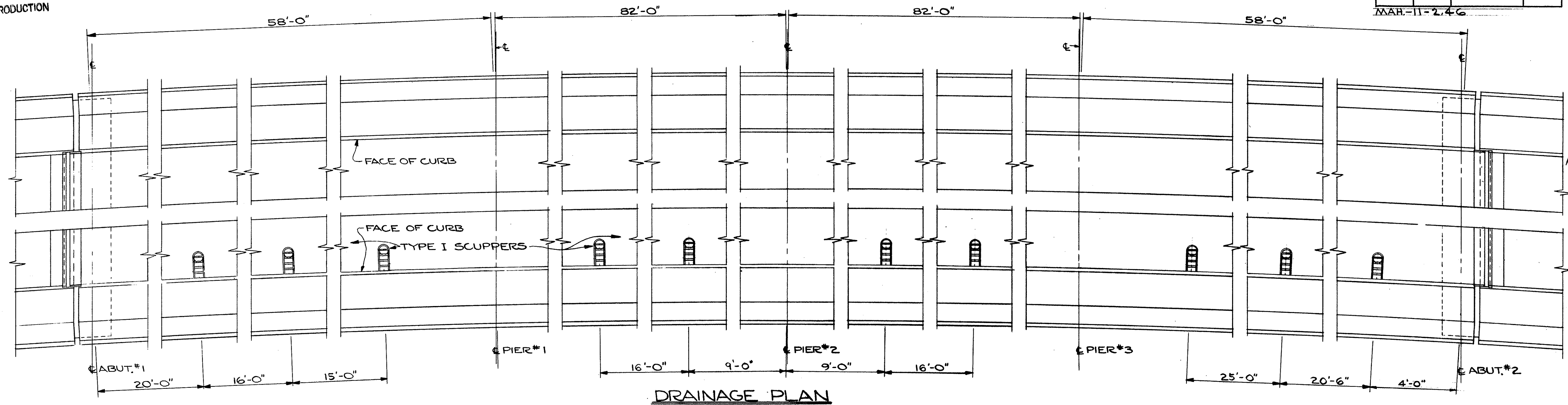
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DS	L.L.		DS	WKO	4-7-67	

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STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES						
AKRON, OHIO			GLAUS, PYLE & SCHOMER YOUNGSTOWN, OHIO			
DRAINAGE & RAIL'G. DETAILS						
BRIDGE N ^o			MAH-11-0760			
UNDER RELOCATED LEFFINGWELL ROAD						
MAHONING CO. S.R. N ^o 11						
STA. 401+29.95						
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DS	TRGN		DS	WJD	7-24-64	