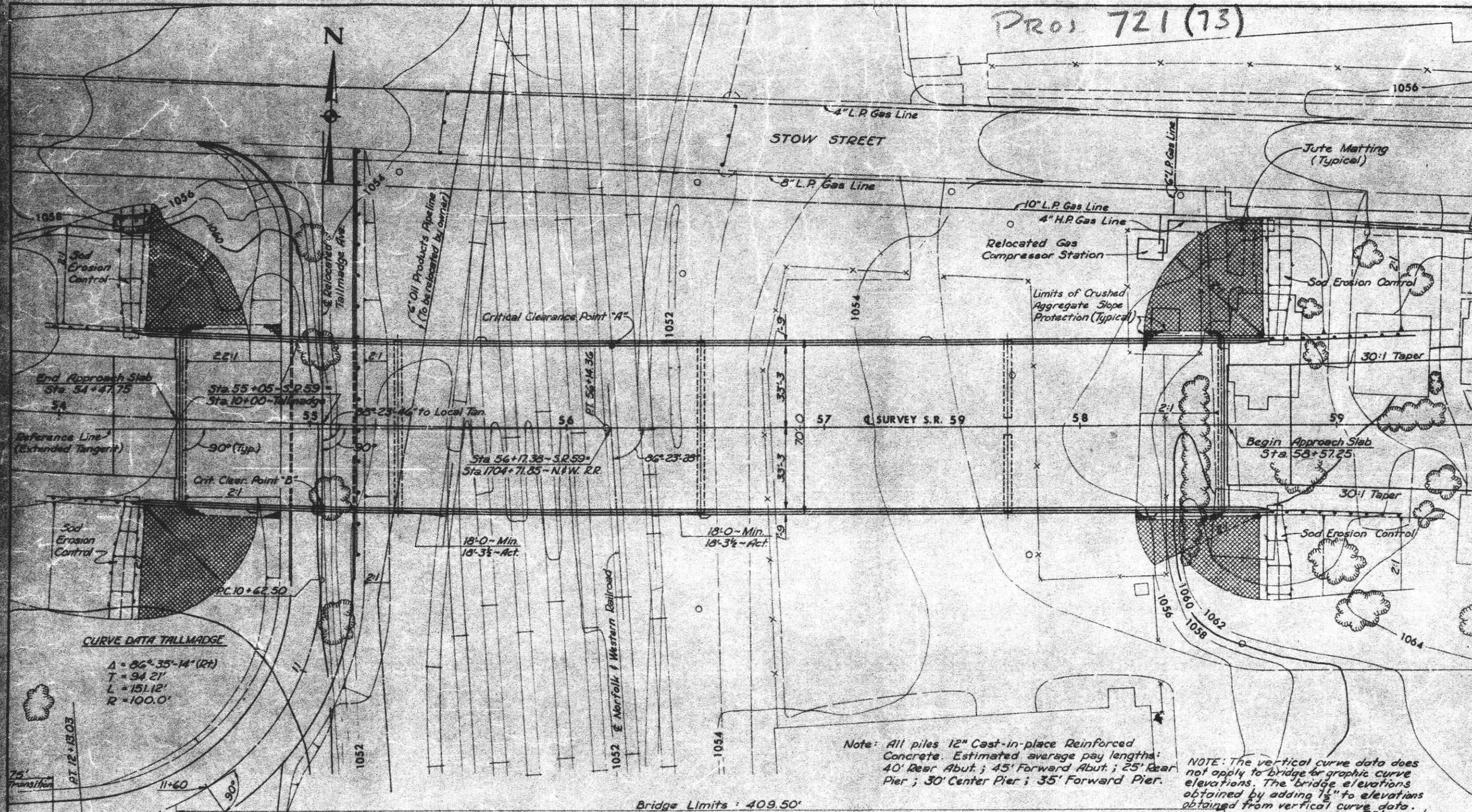


PROJ 721 (73)

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

PORTAGE COUN
 POR-59-0.8U
 POR-43-11.66
 POR-43DA-0.0



CURVE DATA TALLMADGE
 $\Delta = 86^{\circ}35'14''$ (RT)
 $T = 94.21'$
 $L = 151.12'$
 $R = 100.0'$

CURVE DATA
 P.I. Sta 55
 $\Delta = 9^{\circ}06'$
 $D = 1^{\circ}28'$
 $T = 310.9'$
 $L = 620.3'$
 $R = 3906'$

Bench Mark - Elev 106.4
 spike in power pole #4
 West of the intersecti
 Ave. + Stow St. (South

1985 A.D.T. S.R. 59
 Average Daily Train Tra

PROPOSED STA

TYPE: Continuous str
 girders with reinfr
 deck and substruc

SPANS: 63.5' - 119.0' -
 (measured along C

ROADWAY: 68'-0" f/f

LIVE LOAD: HS 20 - 4

SKEW: 0° with Refe

SURFACE COURSE 1 1/2" A
 Conc

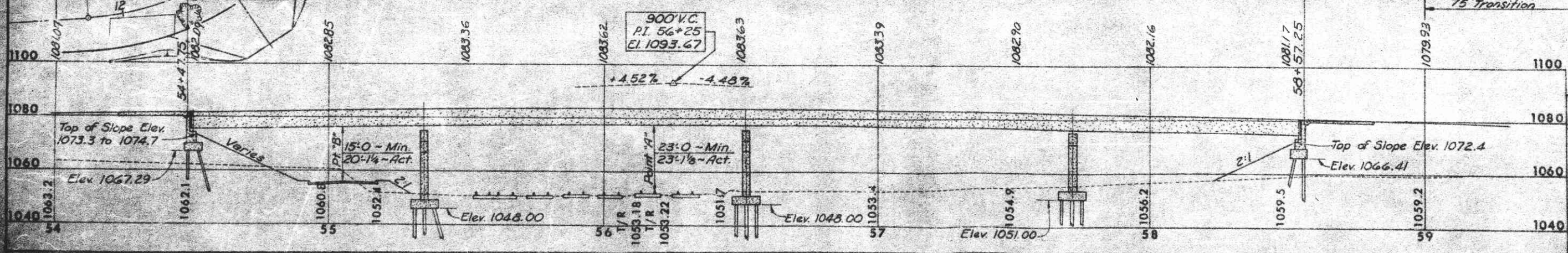
APPROACH SLABS: AS

ALIGNMENT: Tangent

SUPERELEVATION: Va

Note: All piles 12" Cast-in-place Reinforced
 Concrete. Estimated average pay lengths:
 40' Rear Abut; 45' Forward Abut; 25' Rear
 Pier; 30' Center Pier; 35' Forward Pier.

NOTE: The vertical curve data does
 not apply to bridge or graphic curve
 elevations. The bridge elevations
 obtained by adding 1 1/2" to elevations
 obtained from vertical curve data.



Earthwork limits
 schematic. Actual
 conform to plan cr

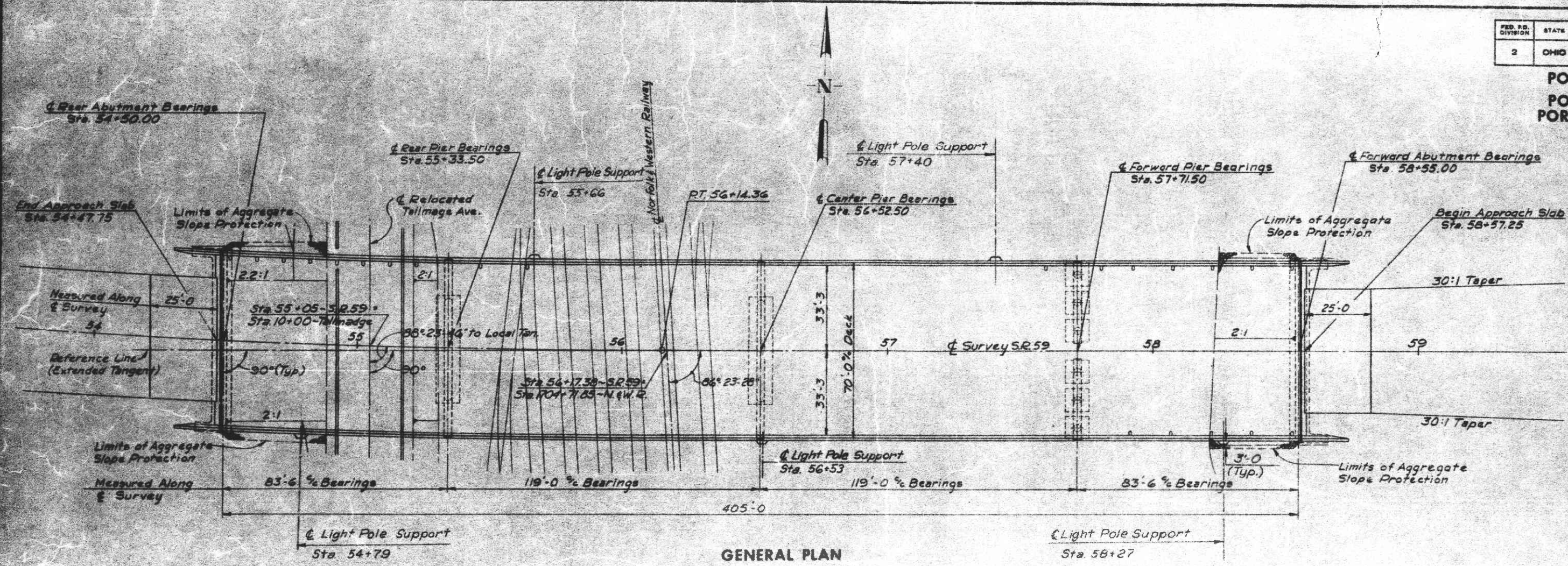
W. E. QUICKSALL AND ASS
 CONSULTING ENGINEERS NEW P

SITE PLAN
 BRIDGE NO. POR-5
 S.R. 59 over NORFOLK & WE

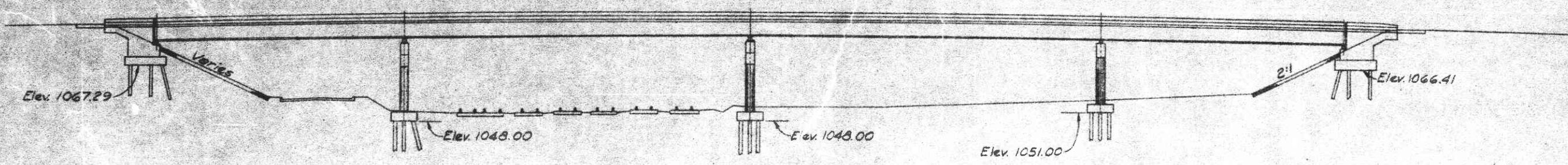
PORTAGE COUNTY		
PRESENT TOPOGRAPHY	DESIGNED	PRICE
SURVEYED	DRAWN	DESIGNED
Kucera	S.S.M.	W.C.A.

FED. P.S. DIVISION	STATE	PROJECT
2	OHIO	

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 POR-43-11.66
 POR-43DA-0.01



GENERAL PLAN



ELEVATION

Note:
 All piles shown are
 12" Cast-in-place

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GENERAL PLAN
 BRIDGE NO. POR
 S.R. 59 over NORFOLK & W.

PORTAGE COUNTY

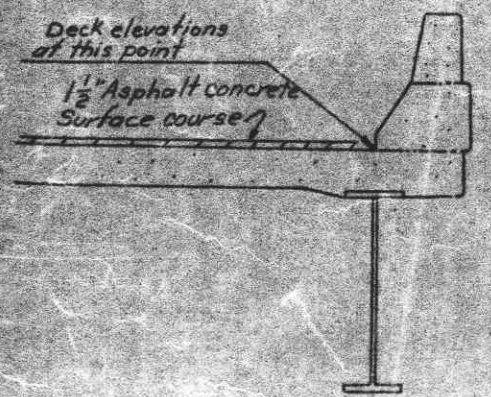
DESIGNED	DRAWN	CHECKED	APPROVED
			PMT

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 POR-43-11.66
 POR-43DA-0.00

* Fed., State & City

STATION	SCREED ELEVATIONS		
	CURB LINE ELEV.		
	LI.	C.	RI.
54+48.50	1081.51	---	---
54+50.00	---	1081.28	---
54+51.38	---	---	1082.65
54+75	1081.78	1082.43	1083.08
55+00	1082.13	1082.78	1083.43
55+25	1082.38	1083.03	1083.68
55+50.01	1082.45	---	---
55+53.50	---	1083.11	---
55+55.75	---	---	1083.76
55+80	1082.83	1083.38	1083.91
55+75	1082.89	1083.47	1084.05
56+00	1083.06	1083.58	1084.00
56+25	1083.07	1083.59	1083.84
56+50	1083.00	1083.52	1083.60
56+52.50	1082.99	1083.51	1083.57
56+75	1082.94	1083.46	1083.42
57+00	1082.83	1083.35	1083.22
57+25	1082.61	1083.13	1082.93
57+50	1082.31	1082.83	1082.54
57+71.50	1081.98	1082.50	1082.14
57+75	1081.93	1082.45	1082.08
58+00	1081.56	1082.08	1081.63
58+25	1081.10	1081.62	1081.11
58+50	1080.55	1081.07	1080.55
58+55.00	1080.43	1080.95	1080.43

NOTE:
 Screed Elevations shown are at the intersection of the abutment and pier (if of bearings) and at even 25' stations. Elevations are at face of curb and 8' Survey.
 Screed Elevations are those required before deck concrete is placed to allow for dead load deflection caused by the weight of the concrete.



ESTIMATED QUANTITIES									
ITEM	TOTAL*	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER	GENERAL	AS BUILT	AS BUILT
503	Lump	Sum	Cofferdams, Cribbs and Sheeting				Lump		
503	685	Cu. Yd.	Unclassified Excavation	403	282				
505	Lump	Sum	Test Pile				Lump		
507	3345	Lin. Ft.	Piles: 12" Cast-in-place Reinforced Concrete	1870	3475				
509	335,275	Lbs.	Reinforcing Steel	22,101	54,292	258,759			
511	1015	Cu. Yd.	Class "C" Concrete, Superstructure			1015			
511	59	Cu. Yd.	Class "C" Concrete, Pier Caps and Columns		59				
511	297	Cu. Yd.	Class "C" Concrete, Abutments	297					
511	129	Cu. Yd.	Class "C" Concrete, Pier Footings		129				
511	268	Cu. Yd.	Class "C" Concrete, T-Type Piers above Footings		268				
512	22	Lin. Ft.	Premolded Sealing Strip	22					
513	816,500	Lbs.	Structural Steel			816,500			
514	816,500	Lbs.	Field Painting of Structural Steel			816,500			
51B	77	Cu. Yd.	Porous Backfill	77					
51B	22	Each	Scuppers, including Supports			22			
51B	125	Lin. Ft.	6" Perforated Helical C.M.P. including Specials (707.01)	125					
51B	90	Lin. Ft.	6" Non-perforated Helical C.M.P. (707.01)	90					
51B	261	Lin. Ft.	6" Standard Collector Pipe, including Specials, Alloy Steel (707.11) or Hot-dip Galvanized Steel			261			
601	654	Sq. Yd.	Crushed Aggregate Slope Protection	654					
808	1015	Unit	Chemical admixture for concrete Type A, B or D			1015			
825			See Sheet No. 171 for Lighting Summary						
404	84	Cu. Yd.	Asphalt concrete (70-85 or AC20)			84			
SPECIAL	42	Cu. Yd.	Sand-asphalt (See proposal note)			42			
SPECIAL	3025	Sq. Yd.	Membrane waterproofing, sheet type (see Proposal Note)			3025			

GENERAL NOTES

DESIGN SPECIFICATIONS: This structure conforms to "Standard Specifications for Highway Bridges" adopted by the American Association of Highway Engineers and Bridge Builders, 1965, including the Ohio Supplement to these Specifications.
 DESIGN DATA:
 Design Loading: - HS20-44
 Concrete Class C: - Unit Stress 1200 p.s.i. for superstructure
 Unit Stress 1333 p.s.i. for substructure
 Structural Steel: - ASTM A-36, unit stress 20,000 p.s.i.
 Reinforcing Steel: - ASTM A615, A616, or A617 Unit stress 60,000 p.s.i. †

REFERENCE shall be made to:
 Standard Drawings: Supplemental Specifications
 SD-1-69, dated 6-12-69 808, dated 1-1-71
 AS-1-67, revised 6-12-69
 RB-1-55, revised 2-2-59 836, dated 1-1-71
 BR-1-67, revised 10-15-71
 GR-3, dated 11-9-71
 PROCEDURE: The embankments shall be constructed to the line for a minimum distance of 200 feet back of the abutments, then be made for the abutments and piles driven.
 PILES shall be driven to a minimum bearing capacity of 30 tons for the abutments, and 40 tons per pile for the piers.

UTILITY LINES: All expense involved in relocating the utility lines shall be borne by the owners. The Contractor and Owners cooperate by arranging their work in such a manner that either would be held to a minimum.

CONSTRUCTION CLEARANCE of 20' vertically above the top of the structure and 8' horizontally from the center of tracks shall be maintained.

RAILROAD AERIAL LINES will be relocated by the Railroad. The Contractor shall use all precautions necessary to see that the lines are not damaged during the construction stage and shall cooperate with the Railroad in the relocation of these lines. The cost of the relocation shall be borne by the railroad force account work.

END DAM PAINTING: Portions of end dams which will be in contact with concrete shall not be painted. All other portions shall be painted in accordance with 514.

REINFORCING STEEL CLEARANCE shall be 2" from face of concrete on all bars except in footings. Footing reinforcing steel shall be 1" from all concrete faces.

WELDS on non-stress carrying members are shown thus:

† If bars in accordance with ASTM A616 are provided they shall be tested as per AASHTO Designation M42-70. Spiral reinforcement shall be plain bars ASTM A82, A306, A499 or A615.
 For lighting details, see Standard Drawings HL-3, HL4, HL5.

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GENERAL NOTES
 ESTIMATED QUANTITIES
 & SLAB ELEVATIONS
 BRIDGE NO. POR-59-0.80
 S.R. 59 over NORFOLK & WESTERN

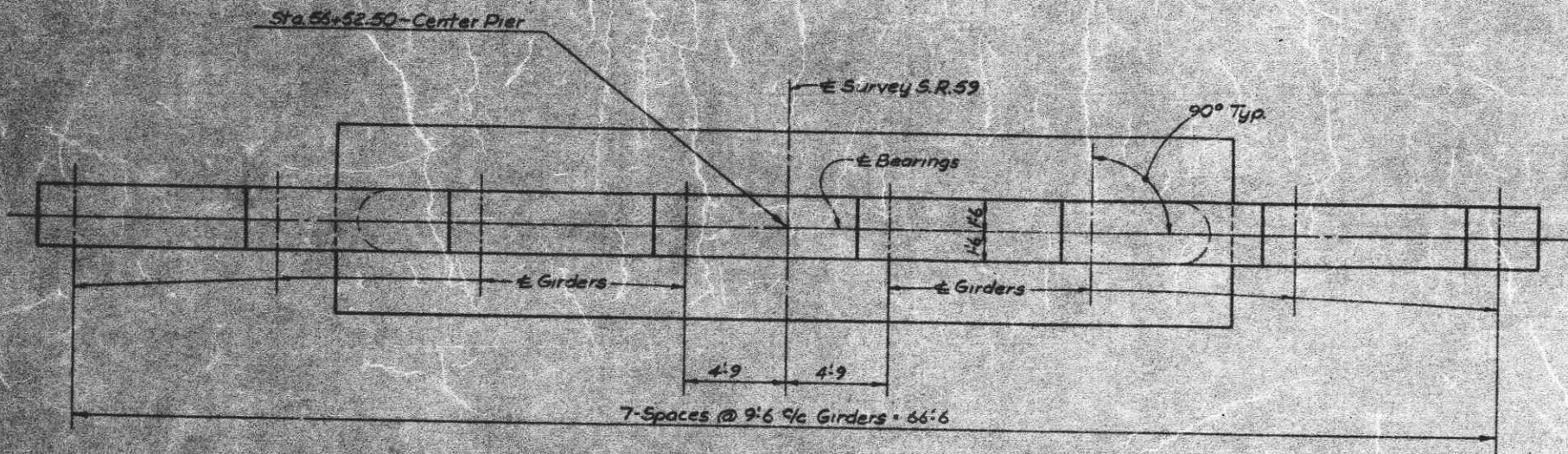
PORTAGE COUNTY

DESIGNED	DRAWN	TRACED	CHECKED
	By		RB
			9/69

Rev. B-24-73

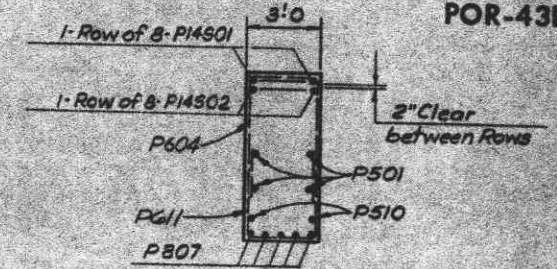
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

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 POR-43-11.66
 POR-43DA-0.00

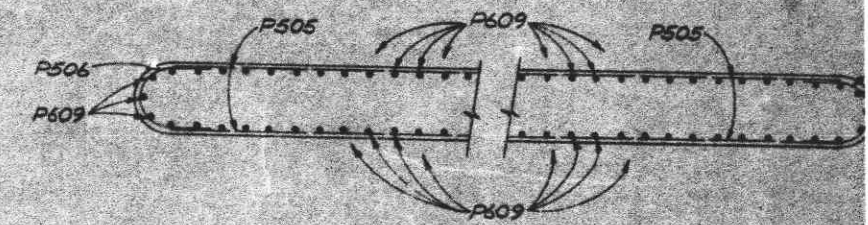


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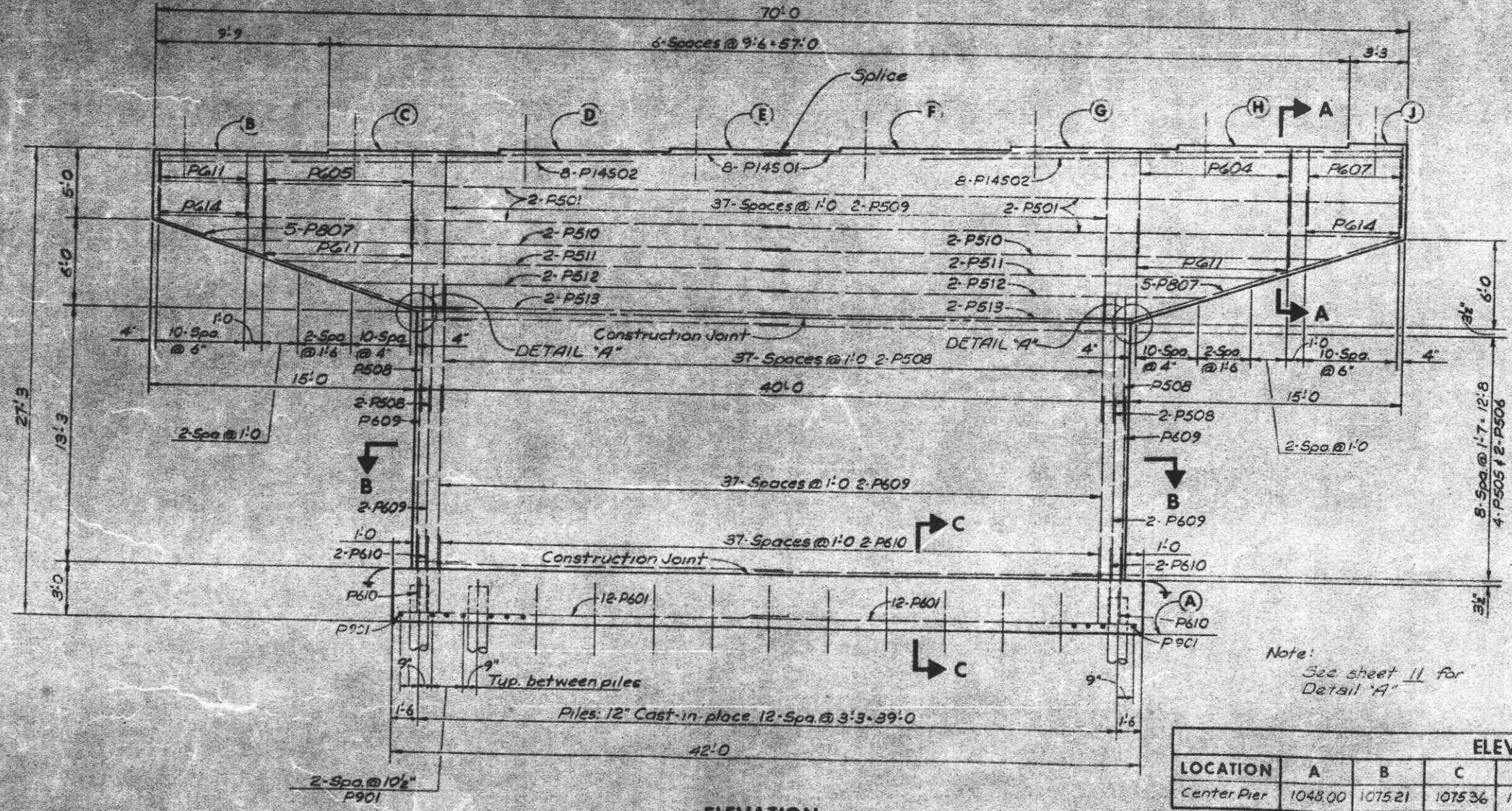
Note:
 Special care shall be taken in placing the reinforcing steel in the pier cap so as to not interfere with the bearing anchor bolts.



SECTION A-A

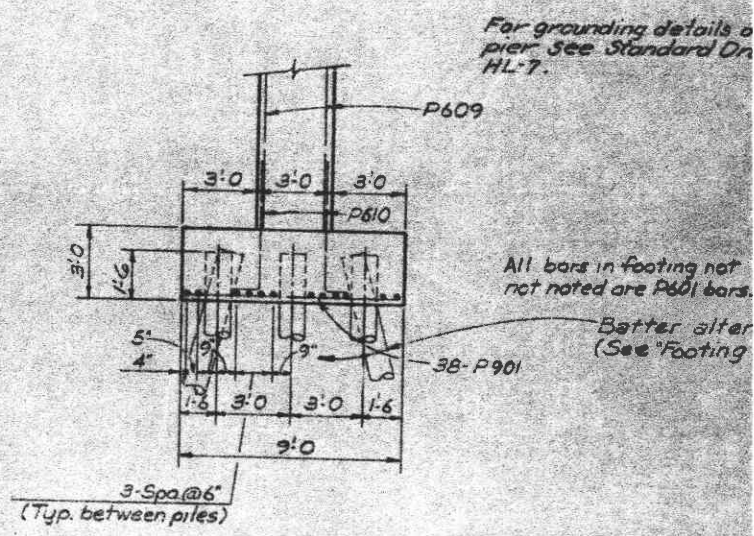


SECTION B-B



ELEVATION

Note:
 See sheet II for Detail 'A'



SECTION C-C

For grounding details of pier, see Standard Dr. HL-7.

All bars in footing not noted are P601 bars. Batter after (See Footing)

ELEVATIONS									
LOCATION	A	B	C	D	E	F	G	H	J
Center Pier	1048.00	1075.21	1075.36	1075.51	1075.66	1075.74	1075.76	1075.77	1075.79

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CENTER PIER DET
BRIDGE NO. POR-51
 S.R. 59 over NORFOLK & WES
 PORTAGE COUNTY

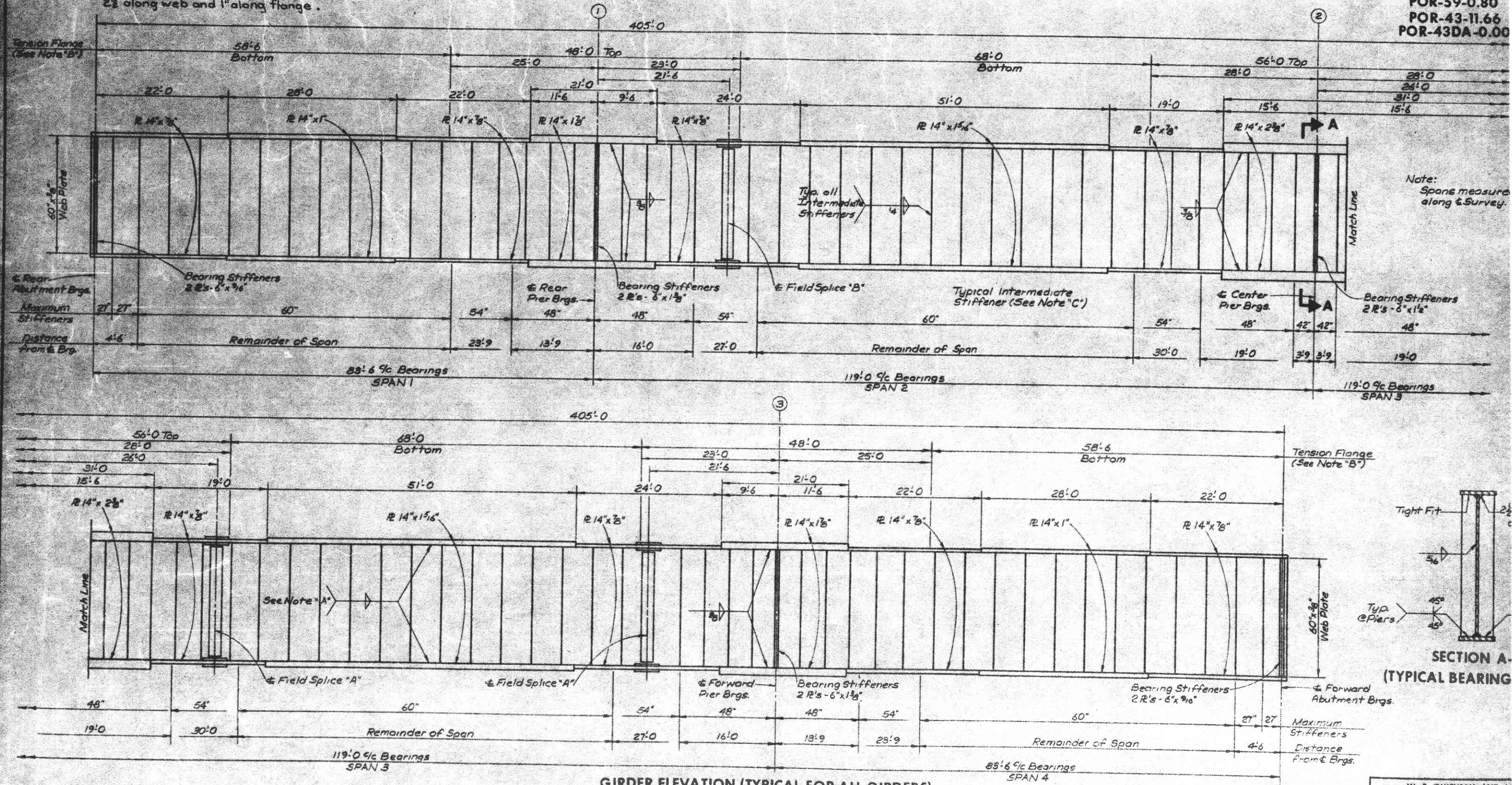
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 TRACED: RMZ
 CHECKED: RMZ
 DATE: 8-24-70

All web to flange welds to be $\frac{5}{16}$ fillet weld on both sides of web unless otherwise noted.
 Note "B": Intermediate stiffeners shall have a tight fit at both compression and tension flanges. To clear weld clip corners $2\frac{1}{2}$ " along web and 1" along flange.

All Intermediate Stiffeners to be $6 \times \frac{3}{8}$ " Plates with maximum spacing as noted. Adjust spacing within the maximum to coincide with the crossframe spacing as shown on the "Structural Steel Framing Plan" sheet 14.

FED. RD. DIVISION	STATE	PROJECT
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 POR-43-11.66
 POR-43DA-0.00



Note: Spans measured along & Survey.

SECTION A - (TYPICAL BEARING)

GIRDER ELEVATION (TYPICAL FOR ALL GIRDERS)

Notes: All Web Splices to be made at a minimum of 5'-0" from Flange Splices. Butt welds on girder flange plates shall be ground flush, the finish grinding being parallel to the direction of stress. All full penetration welds to be back-gouged and welded after welding far side.

Note: See sheet 19 for Field Splice Details.

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GIRDER DATA			
BRIDGE NO. POR-5 over NORFOLK & W. PORTAGE COUNTY			
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	PMZ		TG

Rev. 8-24-73

