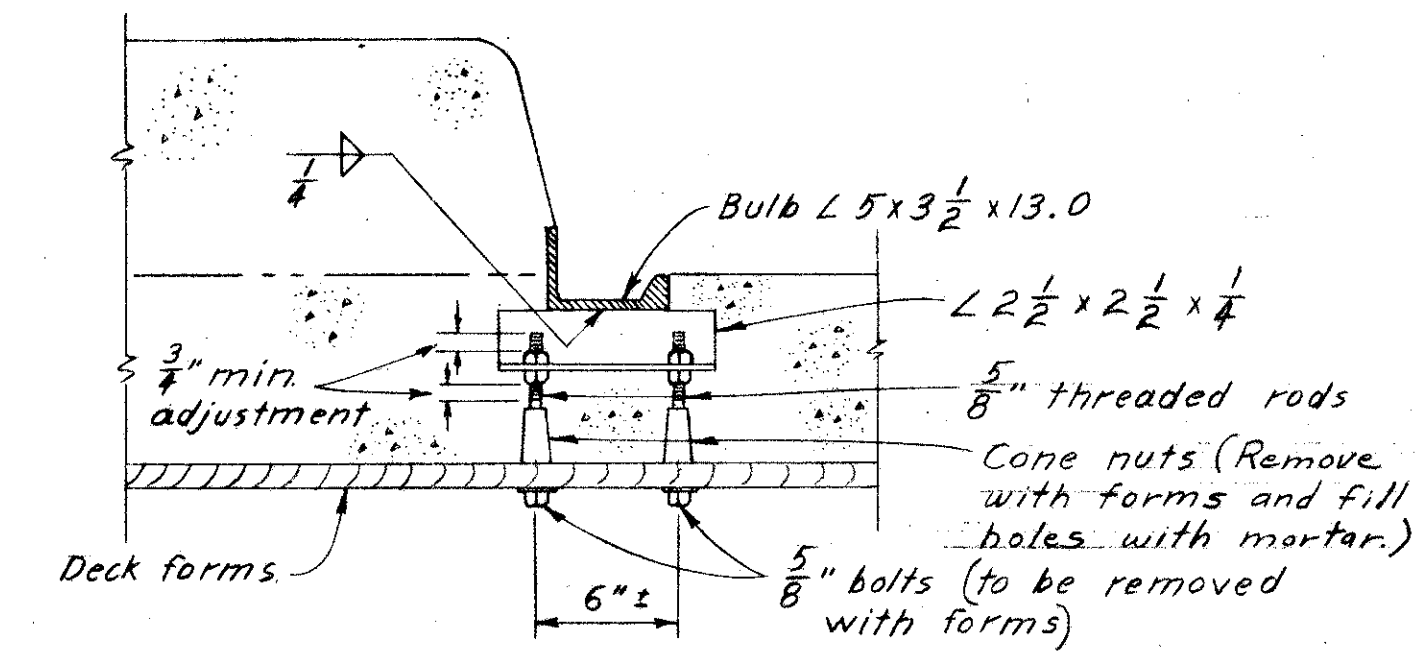
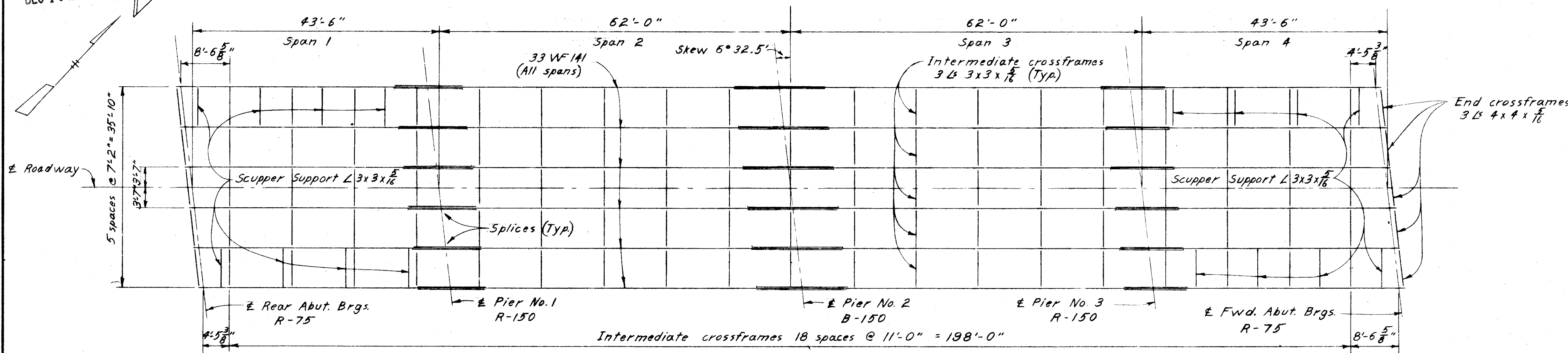


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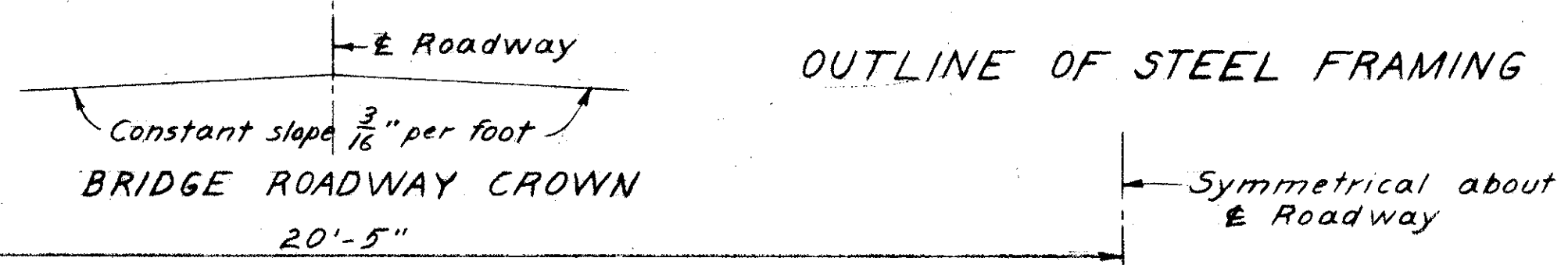


Cone nuts and 5/8" bolts are included with Item 5-7 structural steel for payment

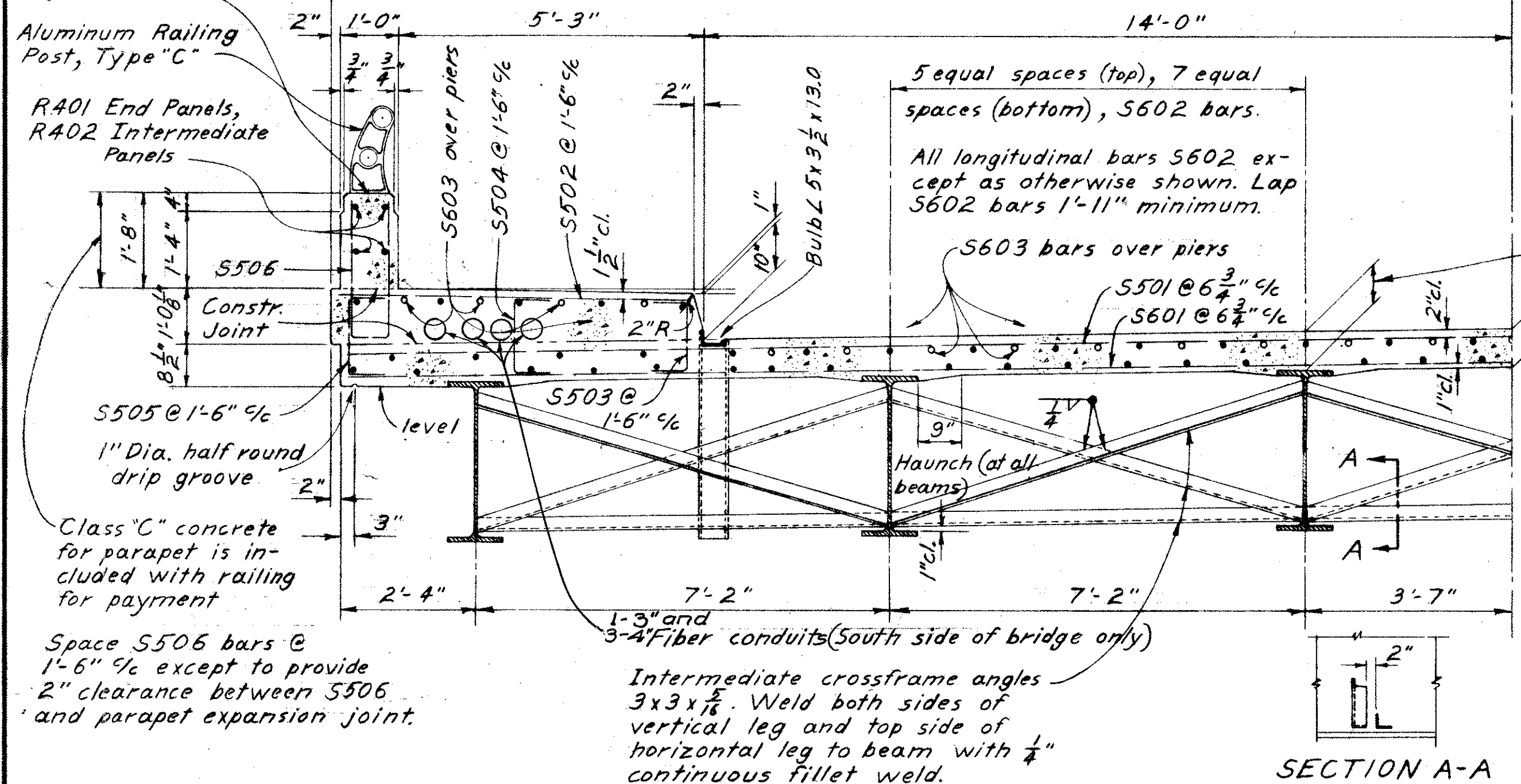
**GUTTER SUPPORT**

Gutters shall be accurately adjusted for alignment and grade, with allowance for dead load deflection, before concrete is placed. Gutters shall not be used to support finishing machines.

**OUTLINE OF STEEL FRAMING**



1/8" Preformed bearing pad (Sec. M-10.11) under each railing post; included with railing for payment.



NOTE: S601, S501 and S502 bars shall be placed parallel to the substructure units. Spacing of transverse bars is measured along longitudinal centerline of bridge.

**NOTES**

**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.

**CONCRETE** shall be Class "C".

REFERENCE shall be made to Standard Drawing CSB-2-56, sheets 2 and 3, for the following details:

- Roadway end dam
- End crossframes
- Curb plates
- 2" Dia. standard pipe drain at ends of bulb angle gutter.

**DECK SLAB HAUNCH:** The haunch in the deck slab adjacent to the top of the steel beams, which is shown as 9" wide, may vary from this dimension with a minimum of 6" and maximum of 12". Maximum slope of haunch shall be one vertical to four horizontal. Payment for deck slab concrete shall be based on the 9" width.

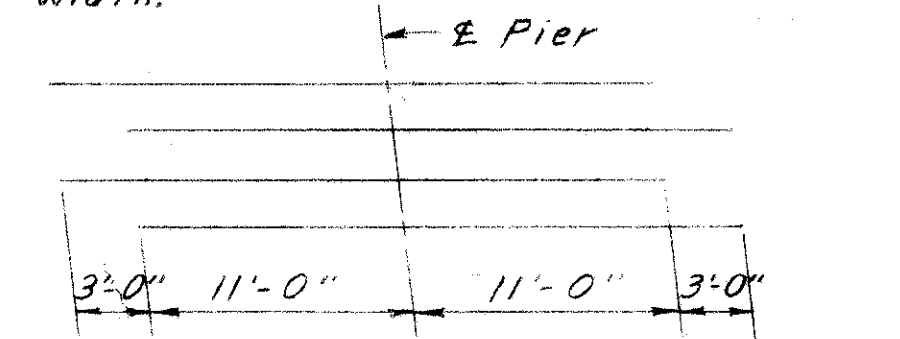
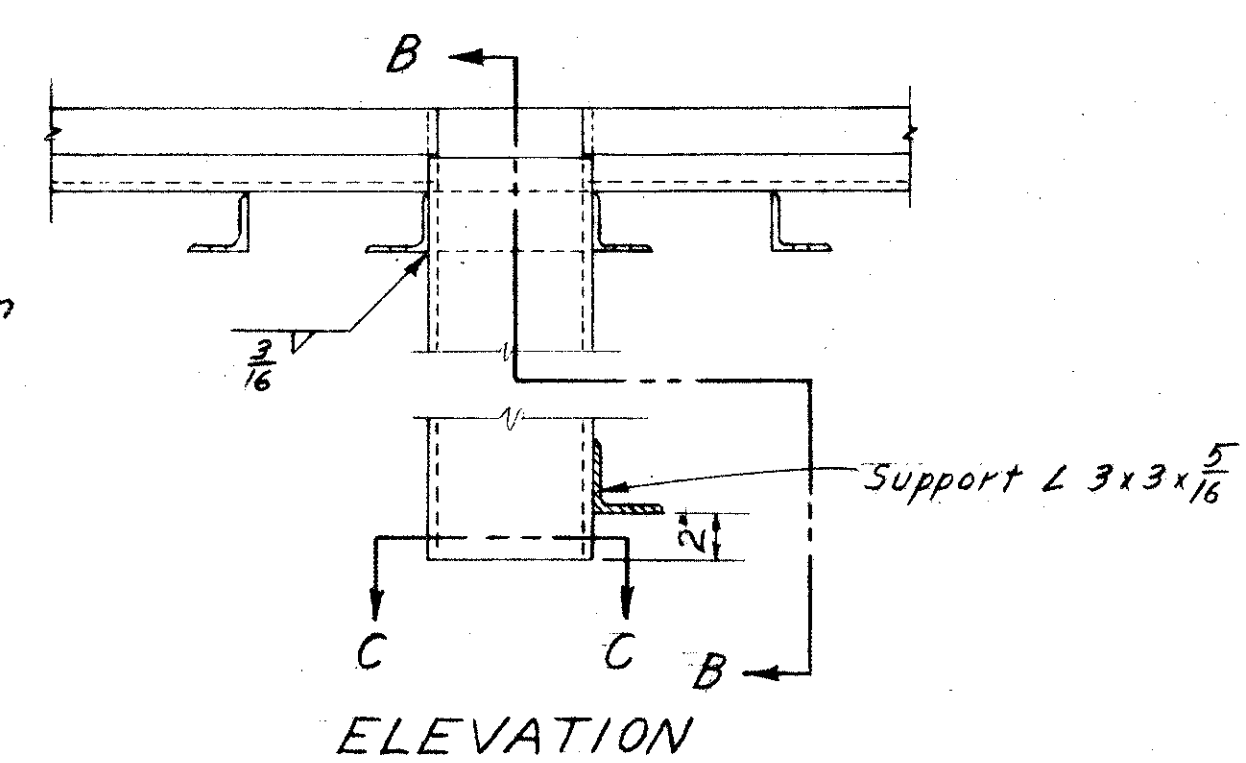
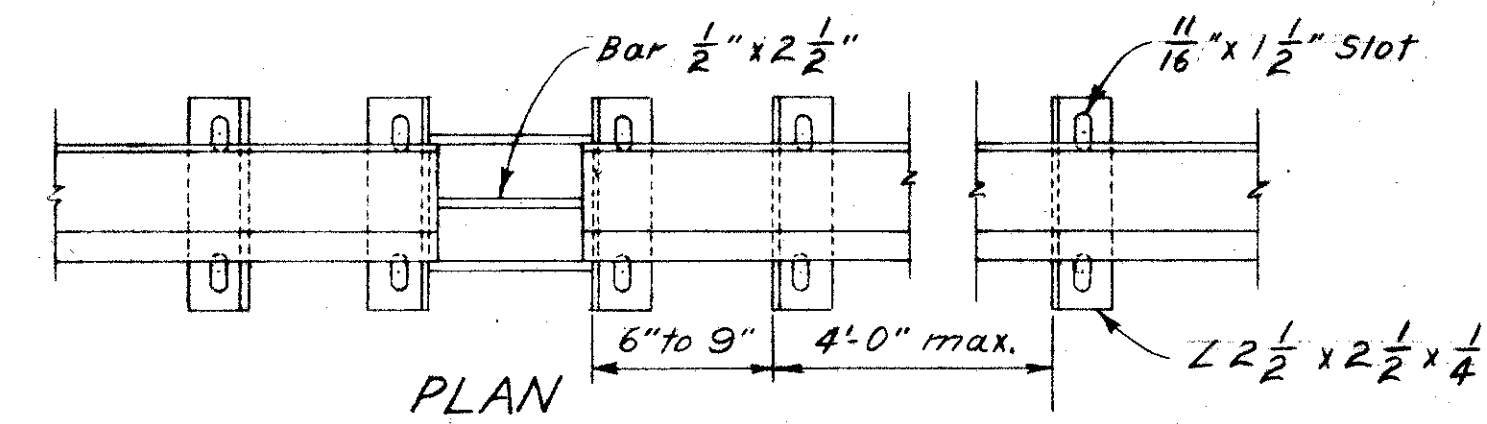
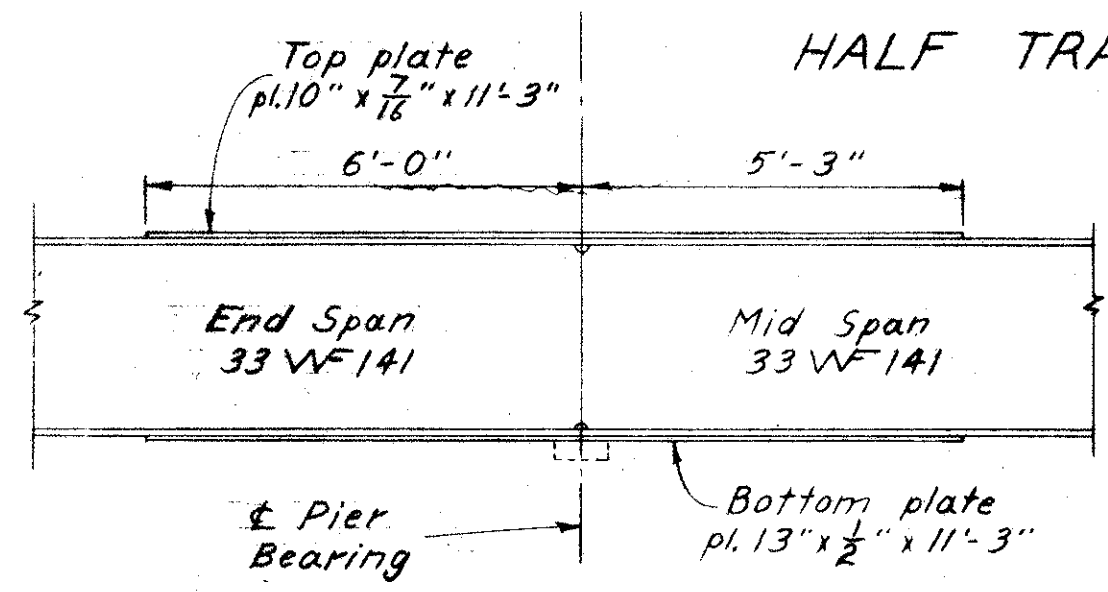
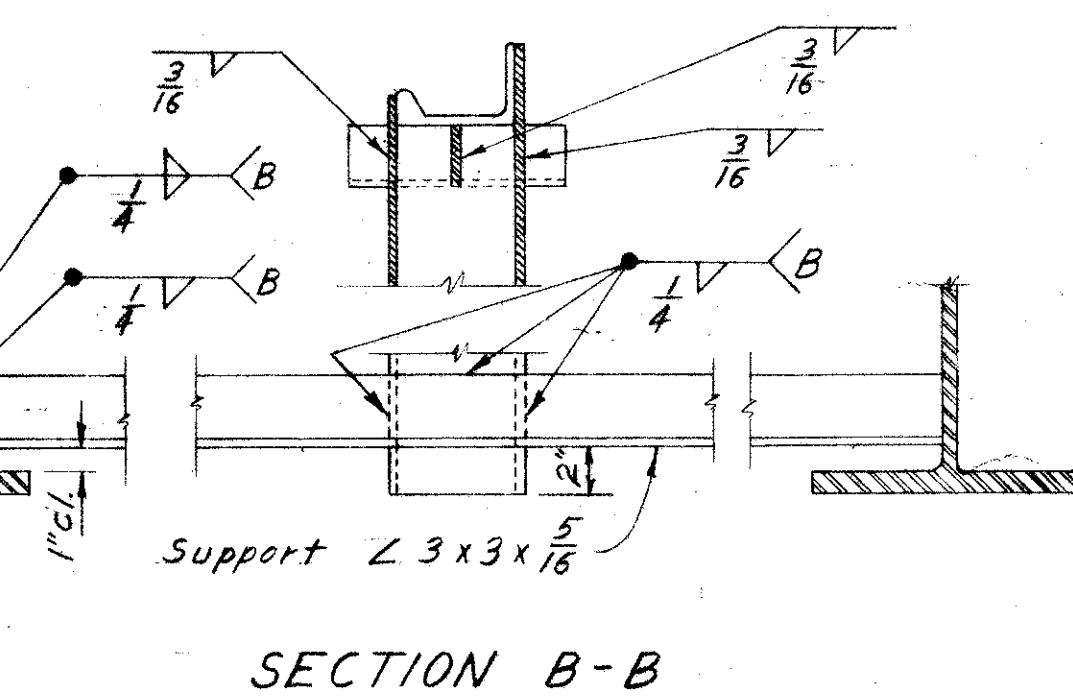
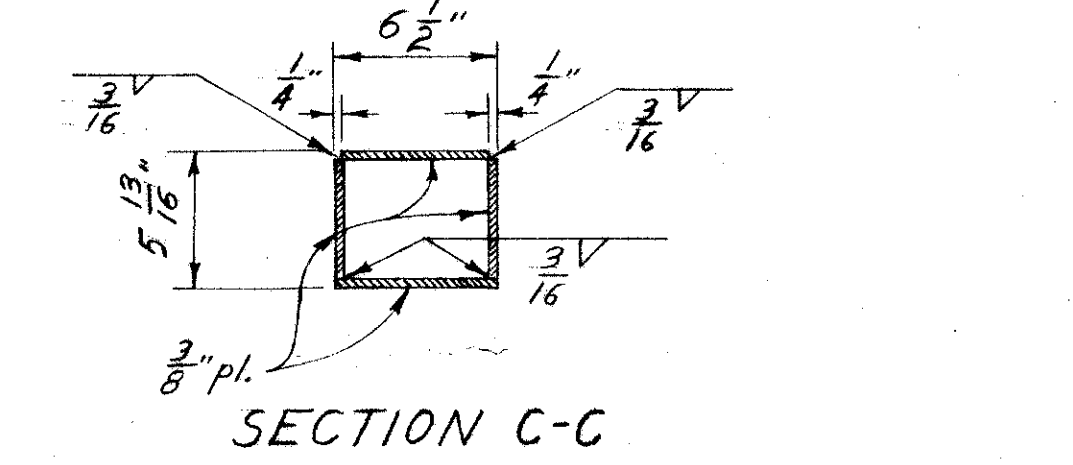


DIAGRAM SHOWING STAGGER OF S603 BARS OVER PIERS



**SCUPPER DETAILS**



**HALF TRANSVERSE SECTION**

**BEAM SPLICE WELDING PROCEDURE**

- Raise ends of beams at Pier No. 1, 1 3/8"
- Butt-weld the beam flanges and web at Pier No. 2, 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.
- Weld top and bottom moment plates at Pier No. 2.
- Lower ends of beams at Pier No. 1
- Make splices at Piers No. 1 and No. 3 in the same manner, except that the beam ends shall not be raised.

**BEAM SPLICE AT PIER No. 1 and No. 3**

For additional details see Standard Drawing CSB-2-56

For beam splice at Pier No. 2, see Standard Drawing CSB-2-56. Moment plates at Pier No. 2 are: top pl. 10" x 7/8" x 16'-0", bottom pl. 13" x 1/2" x 16'-0". These plates centered over pier bearing.

	DEFLECTION AND CAMBER							
	Outside beams				Inside beams			
	Span 1	Span 2	Span 3	Span 4	Span 1	Span 2	Span 3	Span 4
Deflection due to weight of steel	1/16"	1/8"	1/8"	1/16"	1/16"	1/8"	1/8"	1/16"
Deflection due to remaining dead load	1/8"	3/8"	3/8"	1/8"	1/8"	1/4"	1/4"	1/8"
Convexity required for vertical curve	0	3/8"	3/8"	1/8"	0	3/8"	3/8"	1/8"
Sum of deflection and convexity	3/16"	7/8"	7/8"	5/16"	3/16"	3/4"	3/4"	5/16"
Required camber	0	1"	1"	0	0	1"	1"	0

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

**SUPERSTRUCTURE DETAILS**

BRIDGE No. LAK-44-0505  
under JACKSON ST.

LAKE COUNTY S.R. 44 RELOC.  
Sta. 283+50.73

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
FFE	FFE		J.V.G.	BFG	7-24-61	