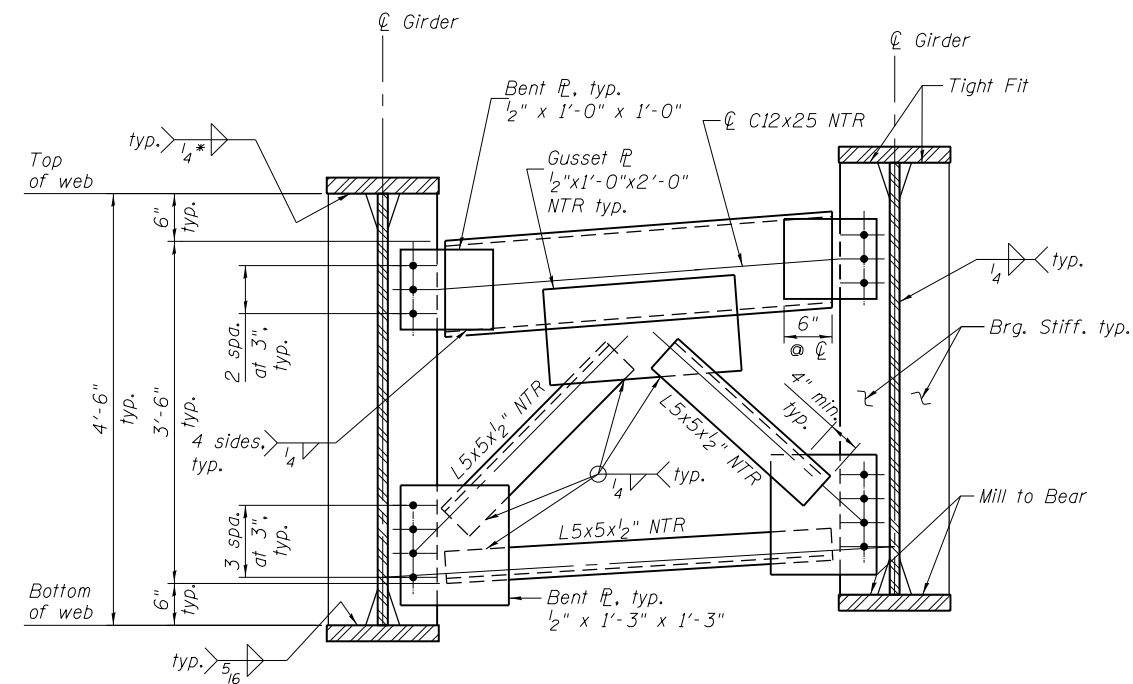


TYPICAL END CROSS FRAME CF1

** Three sides, to back face of channel only, typ.

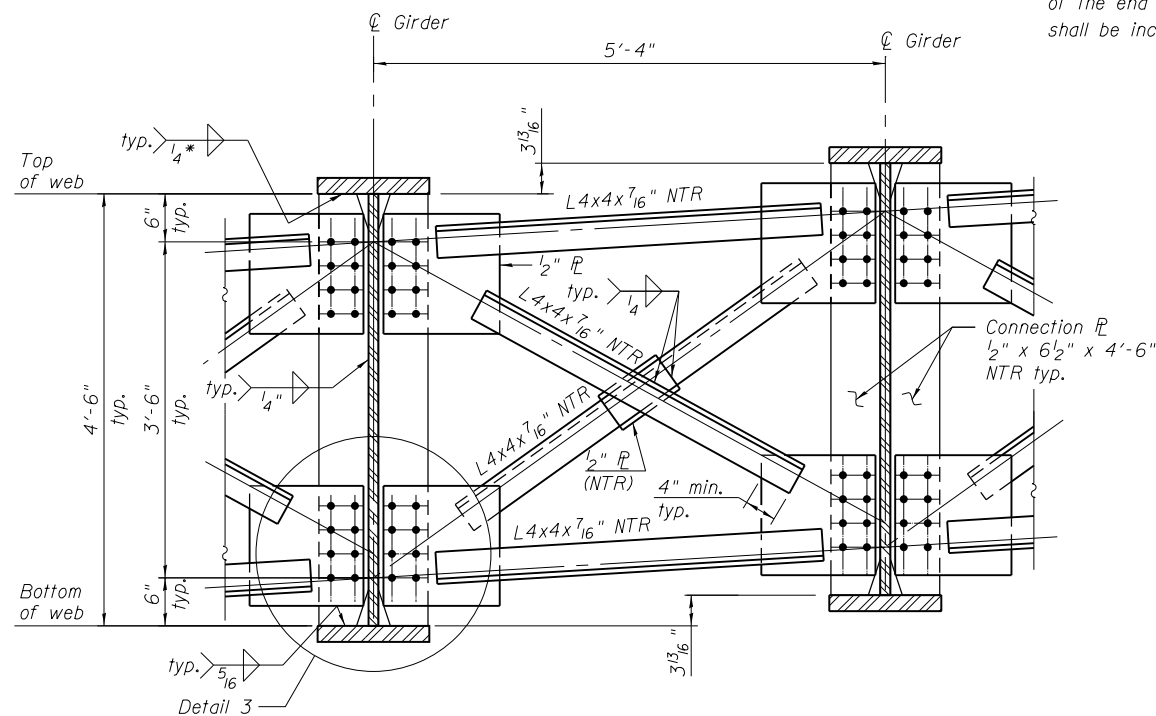


TYPICAL INTERIOR/END CROSS FRAME CF3

* 5/16" (between Splice 1 & 2)

Note:

End Cross frames at the Stage Line shall be installed after Stage I deck pour. See Stage III Deck Pour and Closure Sequencing on sheet S28 of S49. Timber block posts shall be used to support Stage I concrete formwork at the Abutments. Contractor shall apply grout to the top of the top channel of the end cross frames to ensure full contact between the Stage I concrete deck and the top of the channel of the end cross frames. Cost of timber block posts and grout shall be included in Furnishing and Erecting Structural Steel.

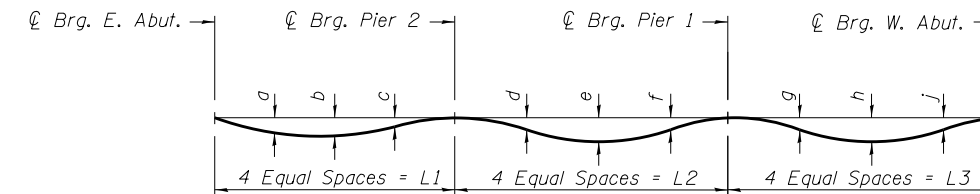


TYPICAL INTERIOR CROSS FRAME CF2

* 5/16" (between Splice 1 & 2)

Notes:

See framing plan on sheet S21 of S49 for location of girder cross frames.
 For Detail 3 and Sections A-A and B-B, see sheet S28 of S49. AASHTO M270 Grade 50 steel shall be used for all cross frames, connection plates, and bearing stiffeners, unless otherwise noted. Load carrying components designated "NTR" shall conform to the Impact Testing Requirements, Zone 2.
 All cross frames between girders shall be installed with erection pins and bolts in accordance with erection plan submitted to and approved by the Engineer. Individual cross frames at supports may be temporarily disconnected to install bearing anchor rods.
 The calculated deflections of the primary girders under steel self-weight shall be used to detail the cross frame connections, and to erect the structural steel such that girders will be plumb within a tolerance of ± 1/8" per vertical foot throughout the length of the girder system when supporting their own weight.
 No connection plate on exterior side of exterior girders.



GIRDER SELF-WEIGHT DEFLECTION DIAGRAM

See Screenshot Dimension Layout Table on sheet S8 of S49 for span lengths.

GIRDER SELF WEIGHT DEFLECTIONS

Location	Girder						
	1	2	3	4	5	6	7
a	1/2"	7/8"	1 3/8"	3/8"	3/8"	7/8"	1/8"
b	5/8"	1 1/4"	1 5/8"	1/2"	3/4"	1 1/8"	1 3/8"
c	3/8"	3/4"	1 1/2"	3/8"	5/8"	5/8"	3/4"
d	-1/8"	-1/8"	-1/4"	-1/8"	-1/8"	-1/8"	-1/8"
e	-1/8"	-1/8"	-1/4"	1/8"	-1/8"	-1/8"	-1/4"
f	0"	-1/8"	-1/4"	0"	-1/8"	-1/8"	-1/8"
g	1/8"	1/4"	3/8"	1/8"	1/8"	3/8"	1/2"
h	1/4"	1/2"	5/8"	1/4"	3/8"	5/8"	3/4"
j	1/8"	3/8"	1/2"	1/4"	3/8"	1/2"	5/8"

(Sheet 1 of 3)