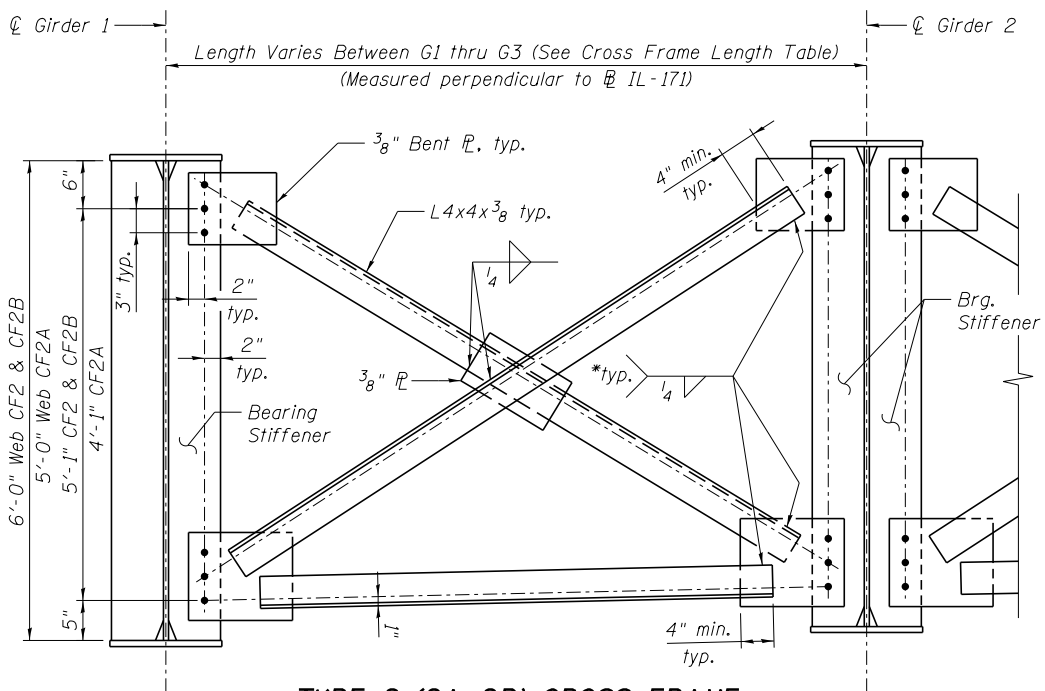
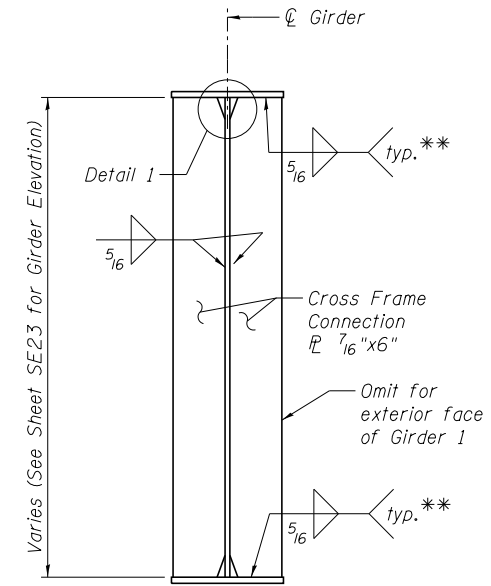


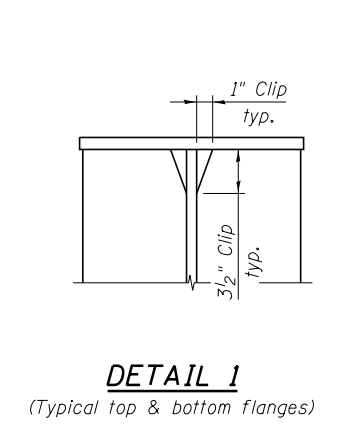
**TYPE 1 (IA-1M) & TYPE 5 (5A) CROSS FRAME**  
 (CF1) (CF5)  
 (No. Req'd = 34) (No. Req'd = 4)



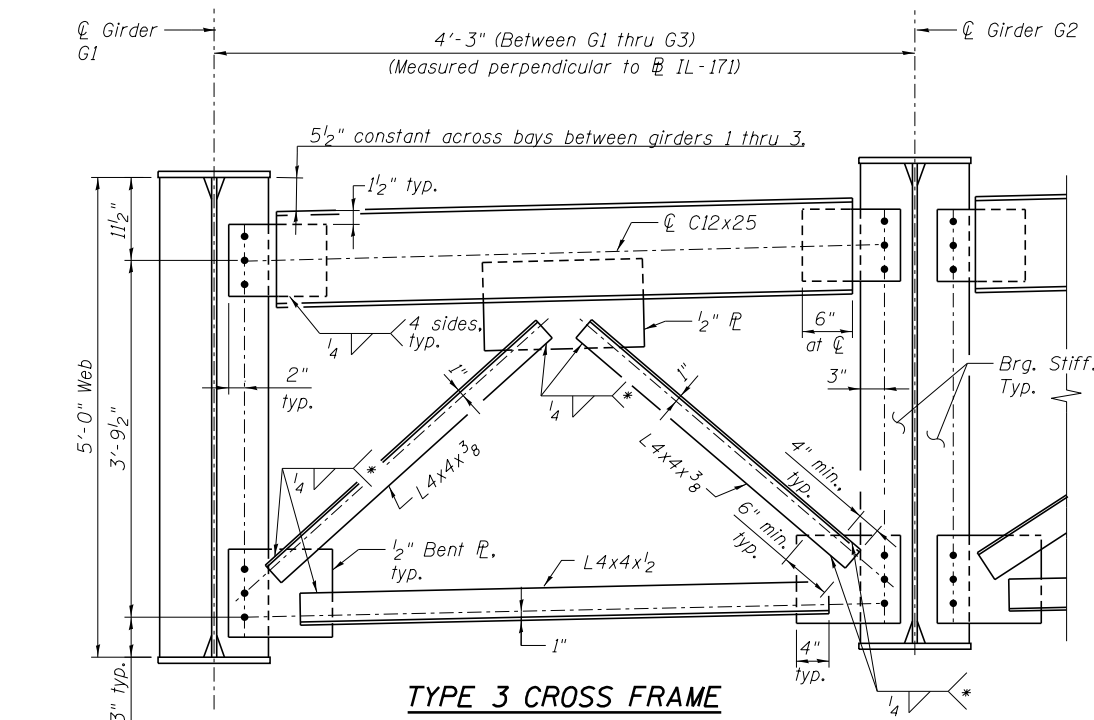
**TYPE 2 (2A-2B) CROSS FRAME AT PIERS 1 THRU 3**  
 (CF2)  
 (No. Req'd = 6)



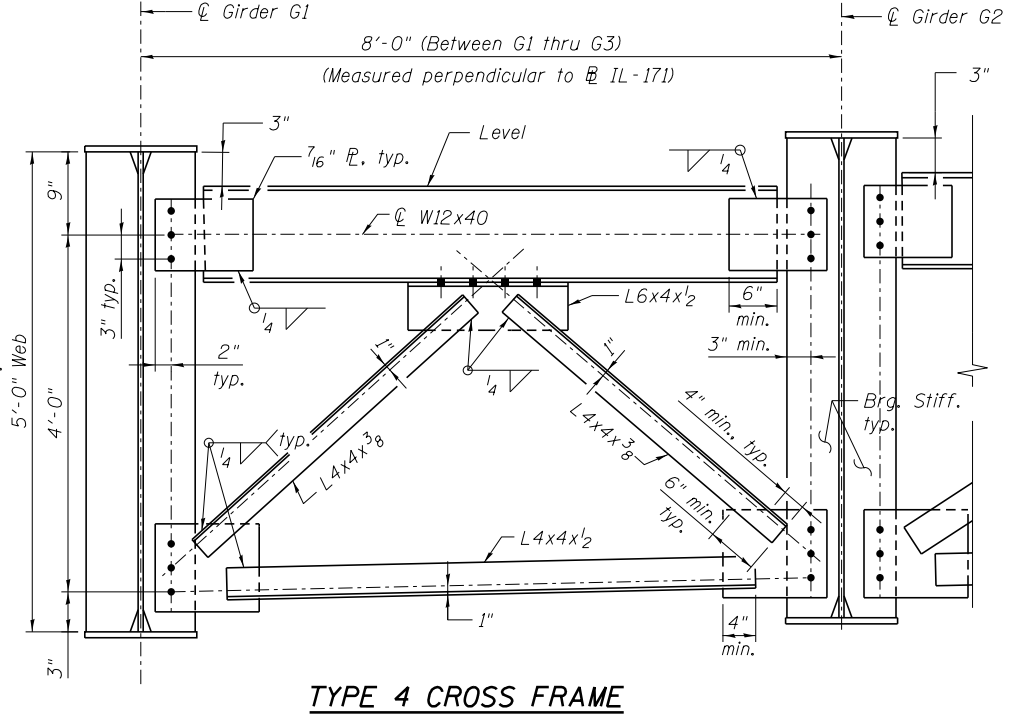
**CONNECTION PLATE DETAIL**  
 (No. of Connection Plates Req'd = 108)



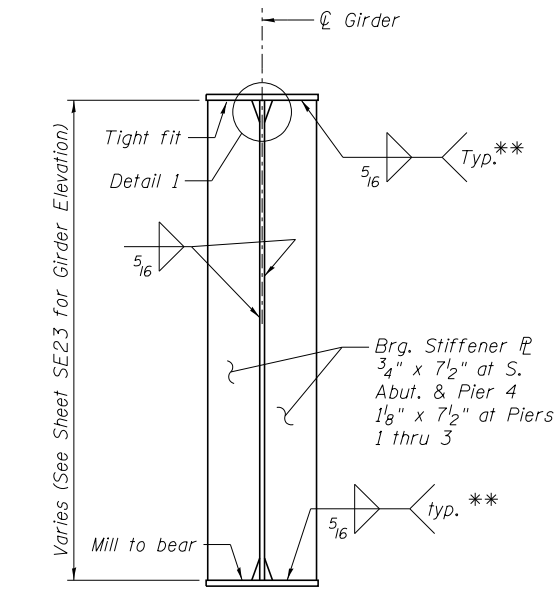
**DETAIL 1**  
 (Typical top & bottom flanges)



**TYPE 3 CROSS FRAME AT SOUTH ABUTMENT**  
 (CF3)  
 (No. Req'd = 2)



**TYPE 4 CROSS FRAME AT PIER 4**  
 (CF4)  
 (No. Req'd = 2)



**BEARING STIFFENER**  
 (No. of 3/4" x 7 1/2" Plates Required = 8)  
 (No. of 1/8" x 7 1/2" Plates Required = 12)

**CROSS FRAME LENGTH**  
 (Measured perpendicular to IL-171)

Cross Frame	Length
CF1	8'-0"
CF1A	4'-5 3/4"
CF1B	4'-8 1/2"
CF1C	4'-11 3/8"
CF1D	5'-2 1/8"
CF1E	5'-7 7/8"
CF1F	5'-10 3/4"
CF1G	6'-1 5/8"
CF1H	6'-4 5/8"
CF1J	6'-7 1/2"
CF1K	7'-1 1/2"
CF1L	7'-4 3/8"
CF1M	7'-7 1/4"
CF2	8'-0"
CF2A	5'-4 7/8"
CF2B	6'-10 1/2"
CF5	8'-0"
CF5A	7'-10 1/8"

**NOTES:**

- All cross frames between girders shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames at supports may be temporarily disconnected to install bearing anchor rods.
- Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 3/4"  $\phi$ , holes 5/16"  $\phi$ . Two hardened washers required for each set of oversized holes.
- See sheet SE26 for Cross Frame Connection Detail to Existing Steel.
- All Cross Frame elements, Connection Plates and Bearing Stiffeners may be AASHTO M270 Grade 36.

\* Fillet weld angles along 3 sides on one face of gusset plate.  
 \*\* Terminate weld 1/4" from edges of stiffener  $\bar{r}$ .

FILE NAME = 0160483.60J16.025.Steel.Details.1.dgn	USER NAME = jsurber	DESIGNED - DTS	REVISIONS -
		CHECKED - KMP	REVISIONS -
		DRAWN - DTS	REVISIONS -
		CHECKED - KMP	REVISIONS -
			REVISIONS -

F.A.P. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2013-038B-R	COOK	821	509
CONTRACT NO. 60J16			ILLINOIS FED. AID PROJECT	

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