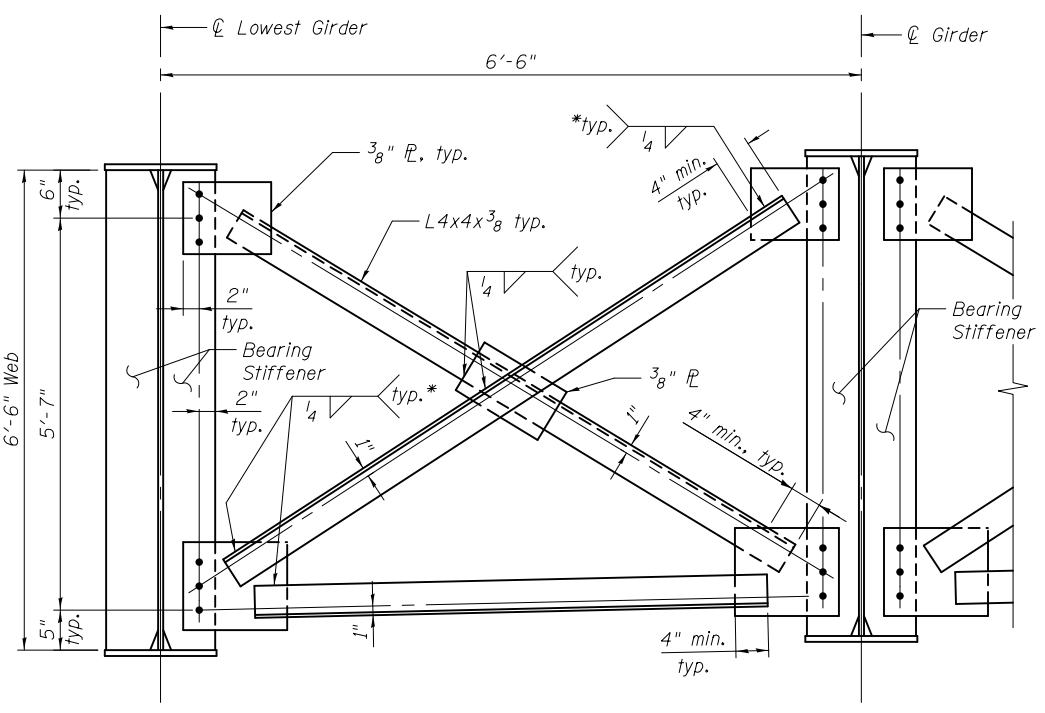
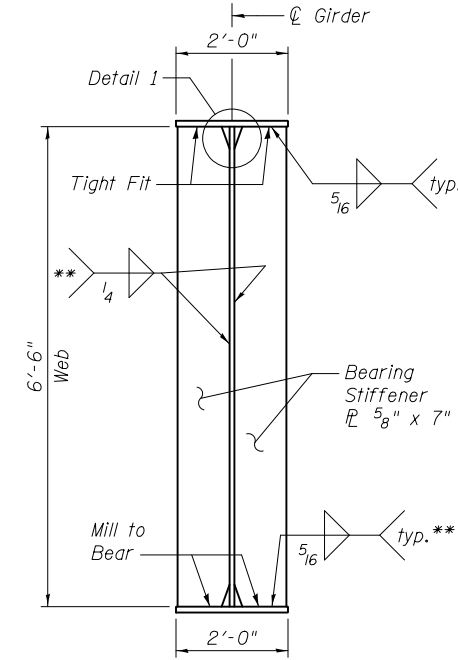


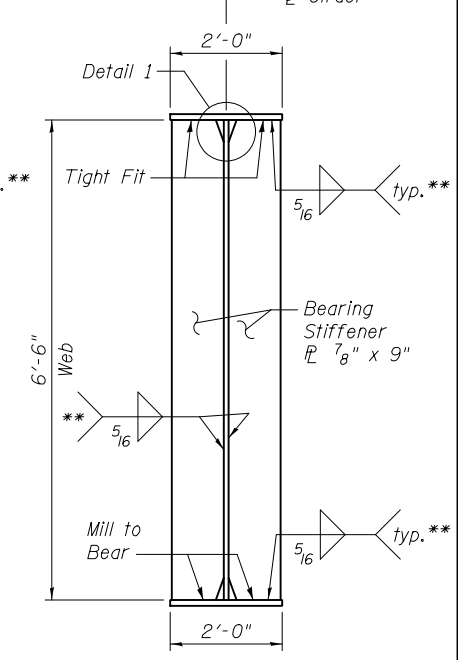
*****TYPE 4 CROSS FRAME**
(5 Required)



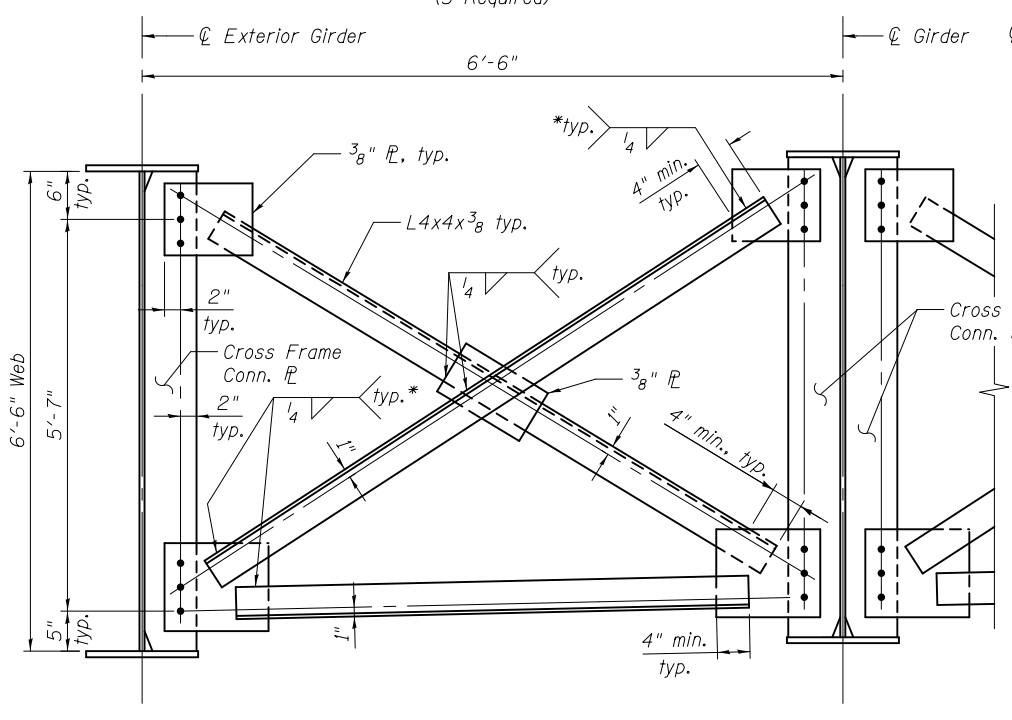
TYPE 6 CROSS FRAME
(5 Required)



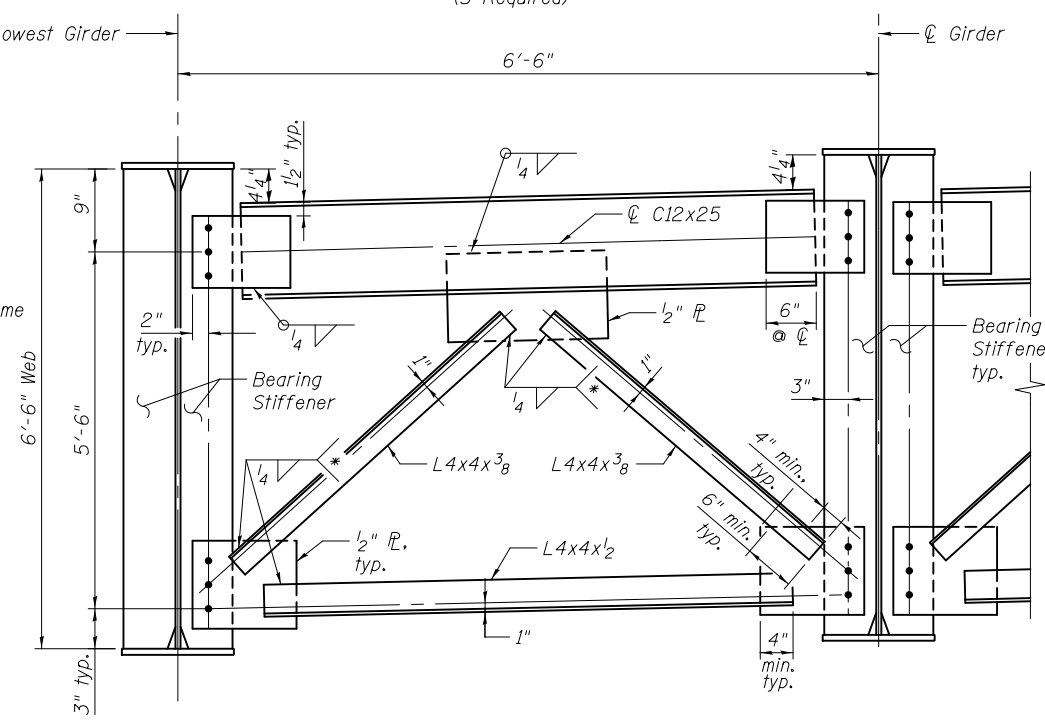
**BEARING STIFFENER AT
PIER 4 (S. BRG.) AND S. ABUT.**
Use with Type 4 and Type 7 Cross Frames



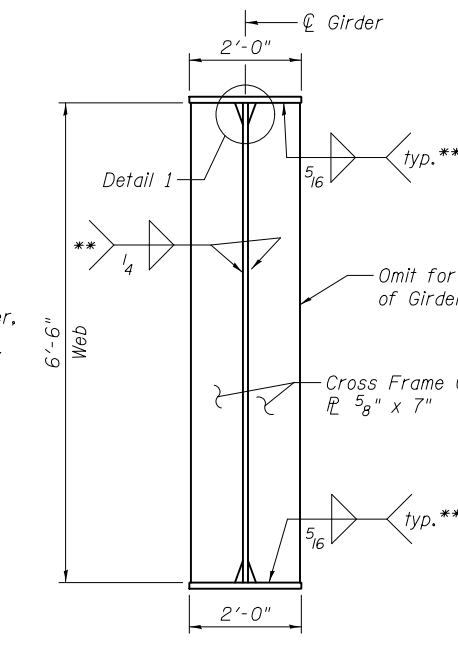
**BEARING STIFFENER AT
PIER 5**
Use with Type 6 Cross Frame



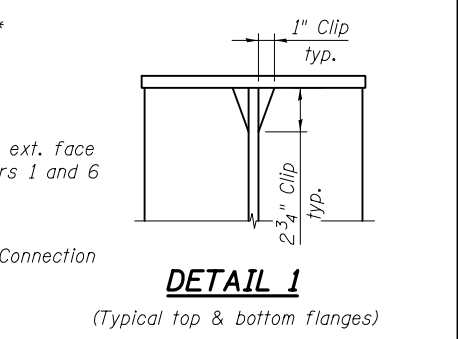
TYPE 5 CROSS FRAME
(80 Required)



*****TYPE 7 CROSS FRAME**
(5 Required)
Place cross frame with channel flanges and
outstanding angle legs outward from abutment
backwall.



**CROSS FRAME
CONNECTION PLATE DETAIL**
Use with Type 5 Cross Frame



DETAIL 1
(Typical top & bottom flanges)

- * Fillet weld angles along 3 sides on one face of gusset plate.
- ** Terminate weld 1/4" from edges of stiffener and connection PL.
- *** Steel components shall be hot dip galvanized after fabrication according to AASHTO M111 and ASTM A385.

Notes:
All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
Bolts for cross frame connections shall be 3/4" φ, holes 15/16" φ. Two hardened washers required for each set of oversized holes.



USER NAME =	DESIGNED - RLM	REVISED
	CHECKED - JTH	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 2/1/2013	CHECKED - RLM	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STEEL DETAILS - UNIT 2
STRUCTURE NO. 014-0033**
SHEET NO. 31 OF 61 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	1-1BR-2	CLINTON	159	100
CONTRACT NO. 76479				
ILLINOIS FED. AID PROJECT				