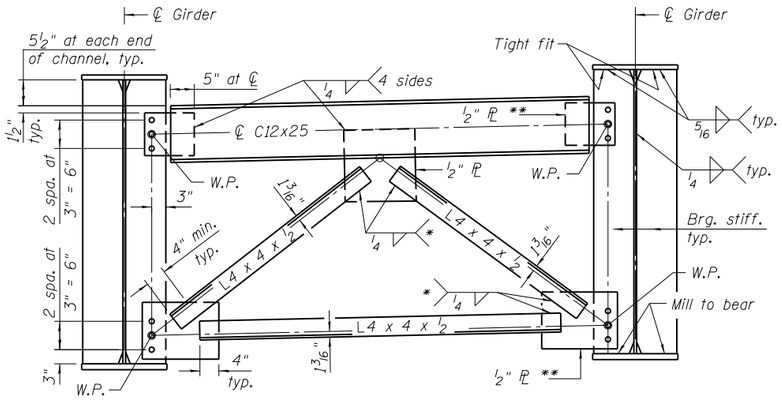
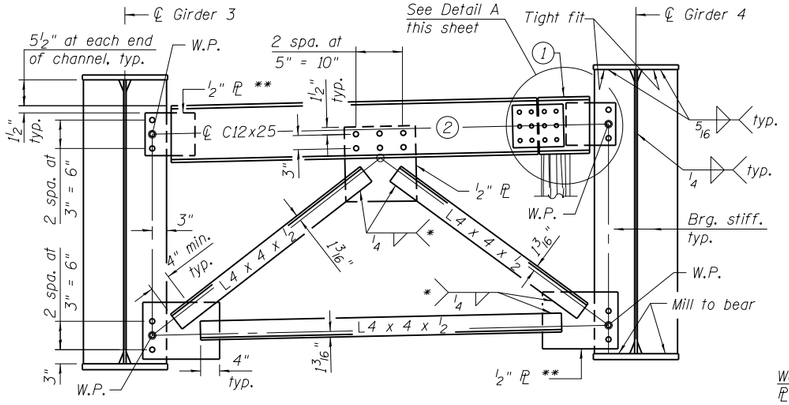


TYPICAL END CROSS FRAME - CF

(8 Required)

* Weld on near side of ½" PL.

** ½" PL's to be bent to match skew at abutments.



STAGE CONSTRUCTION END CROSS FRAME - CF1

(2 Required)

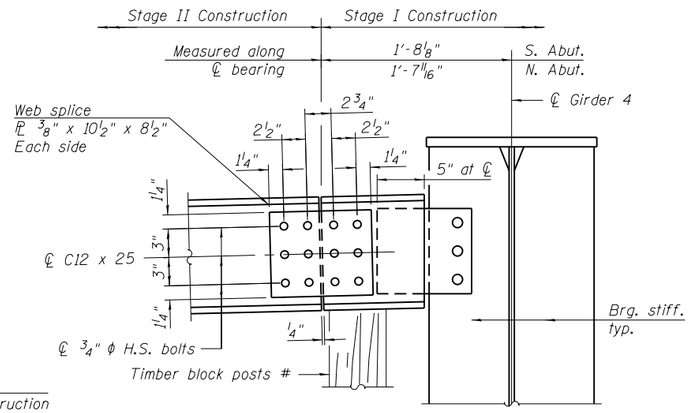
Notes:

Detail 1 1/16" ϕ holes for ⅞" ϕ bolts in Cross Frames CF and CF1, unless otherwise noted.

Place diaphargm with channel flanges and outstanding angle legs outward from abutment backwall.

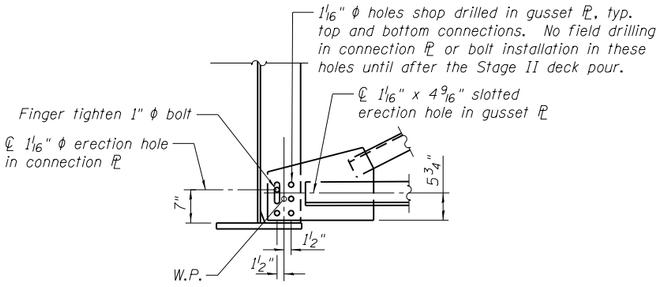
END CROSS FRAME - CF1 STAGE CONSTRUCTION SEQUENCE

1. Order diaphragm in two sections.
2. Attach section (1) of diaphragm to girder 4.
3. Place timber block posts between section (1) of diaphragm and abutment bearing section.
4. Attach section (2) of diaphragm to both girder 3 and section (1) of diaphragm during stage II construction with splice plates.
5. Remove timber block posts and install lower portion (½" PL's and L4 x 4 x ½ angles) of the cross frame.



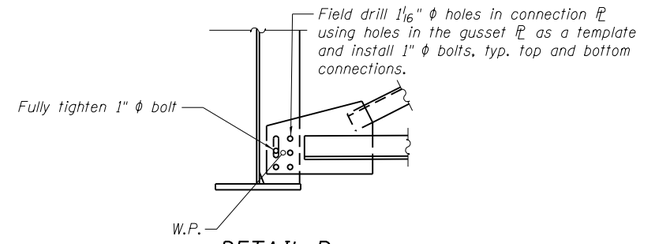
Cost of Timber Block Post is included with Furnishing and Erecting Structural Steel.

DETAIL A



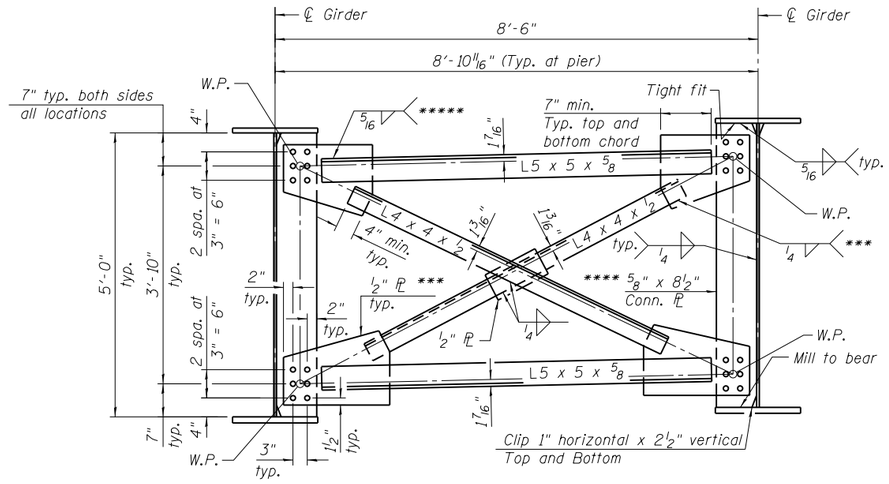
DETAIL B

(Shown at completion of Stage II steel erection)



DETAIL B

(Shown at completion of Stage II deck pour)



TYPICAL INTERIOR AND PIER CROSS FRAME - CF2

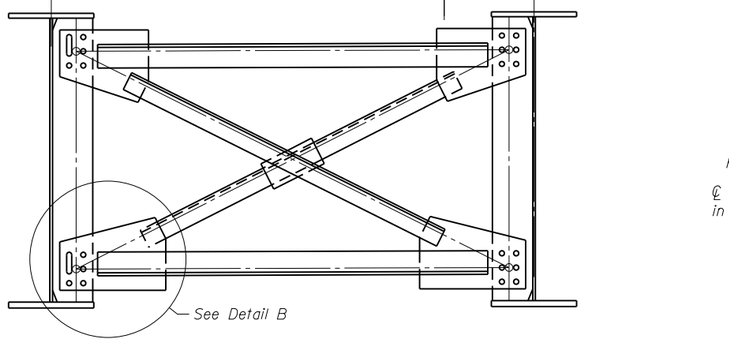
(44 Required)

(Interior Cross Frame - CF2 shown. Pier Cross Frame - CF2 similar, except as noted.)

*** ½" PL's to be bent to match skew at pier.

**** ¾" x 8½" Brg. stiff. PL each side of girder web at pier in lieu of connection PL shown.

***** Fillet weld angles along 3 sides on one face of gusset PL.



STAGE CONSTRUCTION INTERIOR AND PIER CROSS FRAME - CF3

(11 Required)

(Interior Cross Frame - CF3 shown. Pier Cross Frame - CF3 similar, except as noted.)
(See Interior and Pier Cross Frame - CF2 for details and dimensions not shown)

(¾" x 8½" Brg. stiffener PL's at pier not shown for clarity.)

Notes:

Detail 1¼" ϕ holes for 1" ϕ bolts in Cross Frames CF2 and CF3, unless otherwise noted.

GENERAL NOTES

Two hardened washers required for each set of oversized holes.

All plates and rolled shapes composing the cross frames, including the connection plates welded to the girders shall be AASHTO M270, Grade 50 and conform to the Impact Testing Requirement, Zone 2.

design firm no. 184001036

whks engineers • planners • land surveyors

USER NAME = dheberling	DESIGNED - SBC	REVISED	
FILE NAME = 0430028-64E08.dgn	CHECKED - BRD	REVISED	
PLOT SCALE = 82.00000 '' / in.	DRAWN - DLH	REVISED	
PLOT DATE = 9/26/2013	CHECKED - SBC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING DETAILS
STRUCTURE NO. 043-0080
SHEET NO. 29 OF 60 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	103BR-4	JoDAVIESS	159	79
		CONTRACT NO. 64E08		
	ILLINOIS	FED. AID PROJECT		