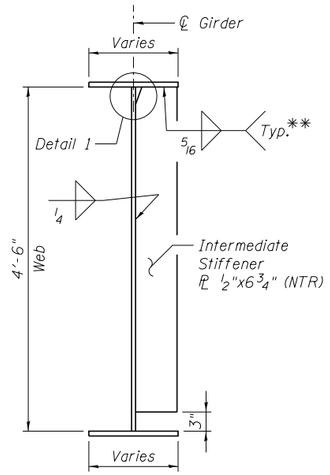
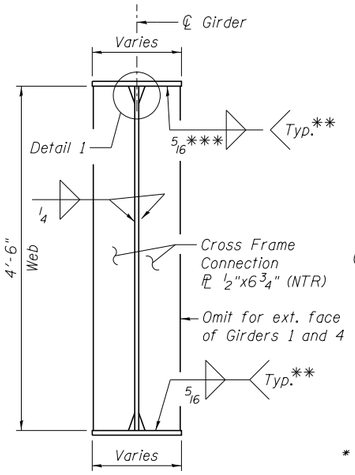


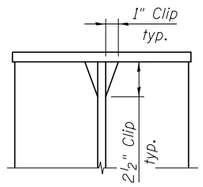
INTERMEDIATE STIFFENER DETAIL

(No. Req'd = 3)



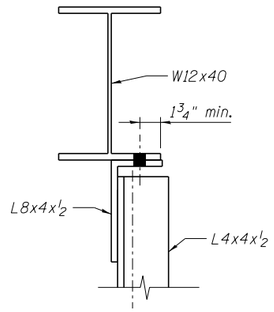
CONNECTION PLATE STIFFENER DETAIL

(No. Req'd = 78)



DETAIL 1

(Typical top & bottom flanges)

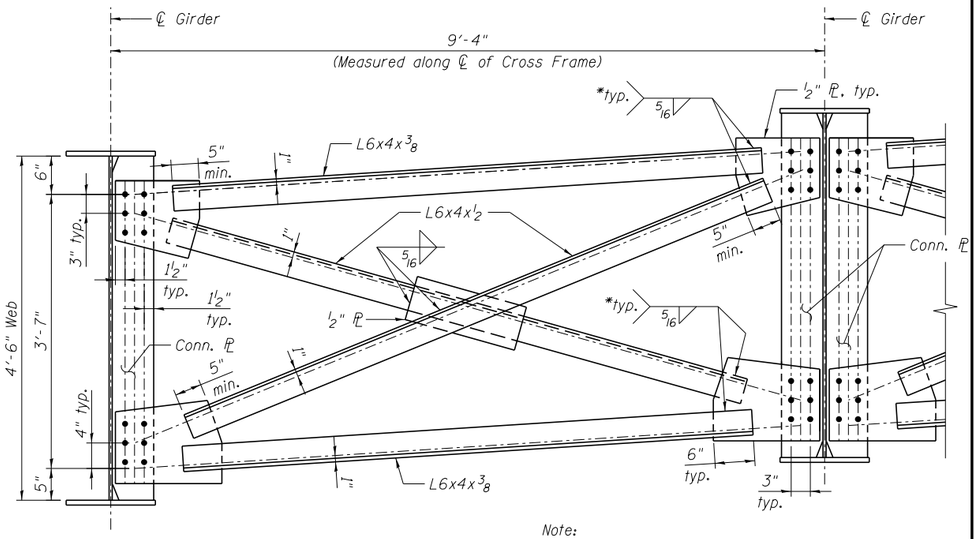


SECTION A-A

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

** Terminate weld 1/4" from edges of stiffener PL.

*** 1/4" weld for top flange to web from N. Abut to splice #1.

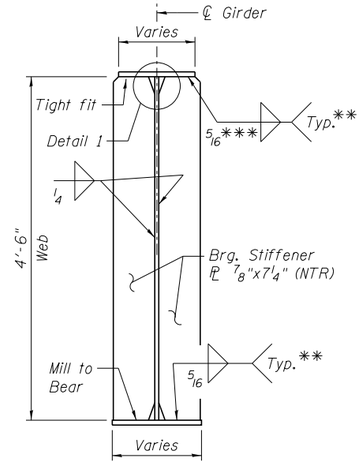


Note:
Connect short leg of angles to gusset plates, typ.

INTERIOR CROSS FRAME

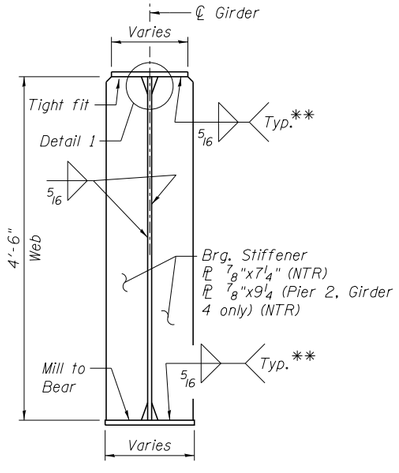
(CF1)

(No. Req'd = 39)



BEARING STIFFENER AT ABUTMENTS

(No. Req'd = 16)

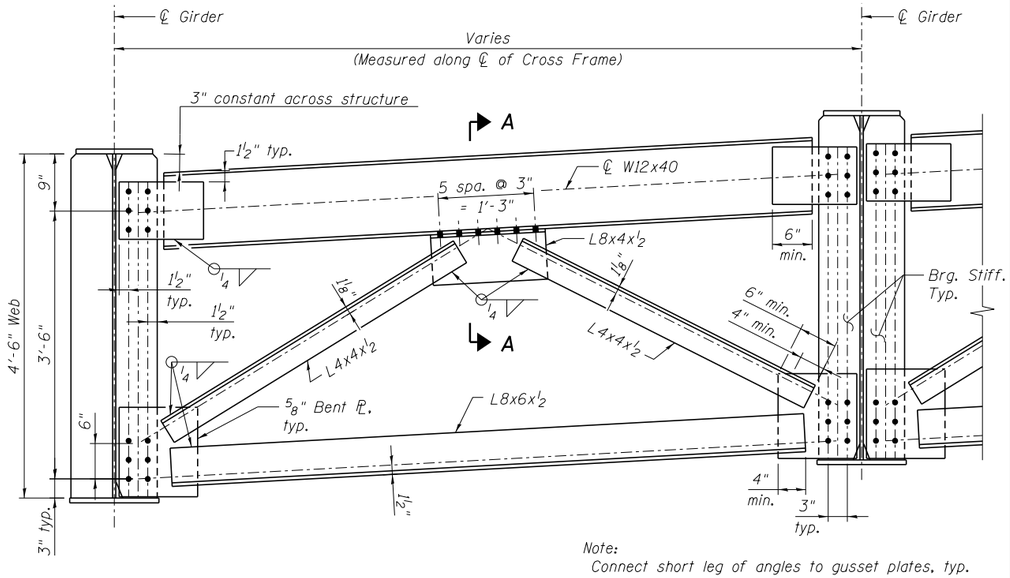


BEARING STIFFENER AT PIERS

(No. Req'd = 16)

NOTES:

1. The Contractor shall either:
   - A. Ream cross frame connection holes during shop assembly, or
   - B. Provide detailing and fabrication controls acceptable to the Engineer which ensures accuracy such that field reaming will not exceed the amount permitted in Article 505.08(l) of the Standard Specifications.
2. The calculated deflections of the primary girders/ beams under steel self-weight shall be used to detail the diaphragm, cross frame and lateral bracing connections, and to erect the structural steel such that the girders/beams will be plumb within a tolerance of ±1/8 in. per vertical ft. throughout when supporting their own weight. For steel self-weight deflections, see Sheet SB24.
3. All cross frame members shall be AASHTO M270 Grade 50 Steel. All structural steel shall be metallized.
4. All cross frames or diaphragms between beams or girders shall be installed with erection pins and bolts in accordance with the erection plan approved by the Engineer. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
5. Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts 7/8" ϕ, holes 15/16" ϕ.
6. All bearing stiffeners, connection plates and gusset plates shall comply with NTR.
7. All cross frame members shall comply with NTR.
8. Load carrying components designated "NTR" shall conform to the Impact Testing Requirements, Zone 2.



Note:
Connect short leg of angles to gusset plates, typ.

TYPE 2 CROSS FRAME AT PIERS AND ABUTMENTS

(CF2)

(No. Req'd = 12)

benesch
engineers · scientists · planners
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10093

FILE NAME = 0161512_60W77_023_Steel_Details_1.dgn	USER NAME = ksnider	DESIGNED - JHG	REVISED -
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	PLOT SCALE =	DRAWN - KMS	REVISED -
	PLOT DATE = 6/23/2014	CHECKED - KWS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS (1 OF 3)
STRUCTURE NO. 016-1512
SHEET NO. SB23 OF SB43 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	(0707-608&611)HB-B	COOK	177	139
		CONTRACT NO. 60W77		
		ILLINOIS FED. AID PROJECT		

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