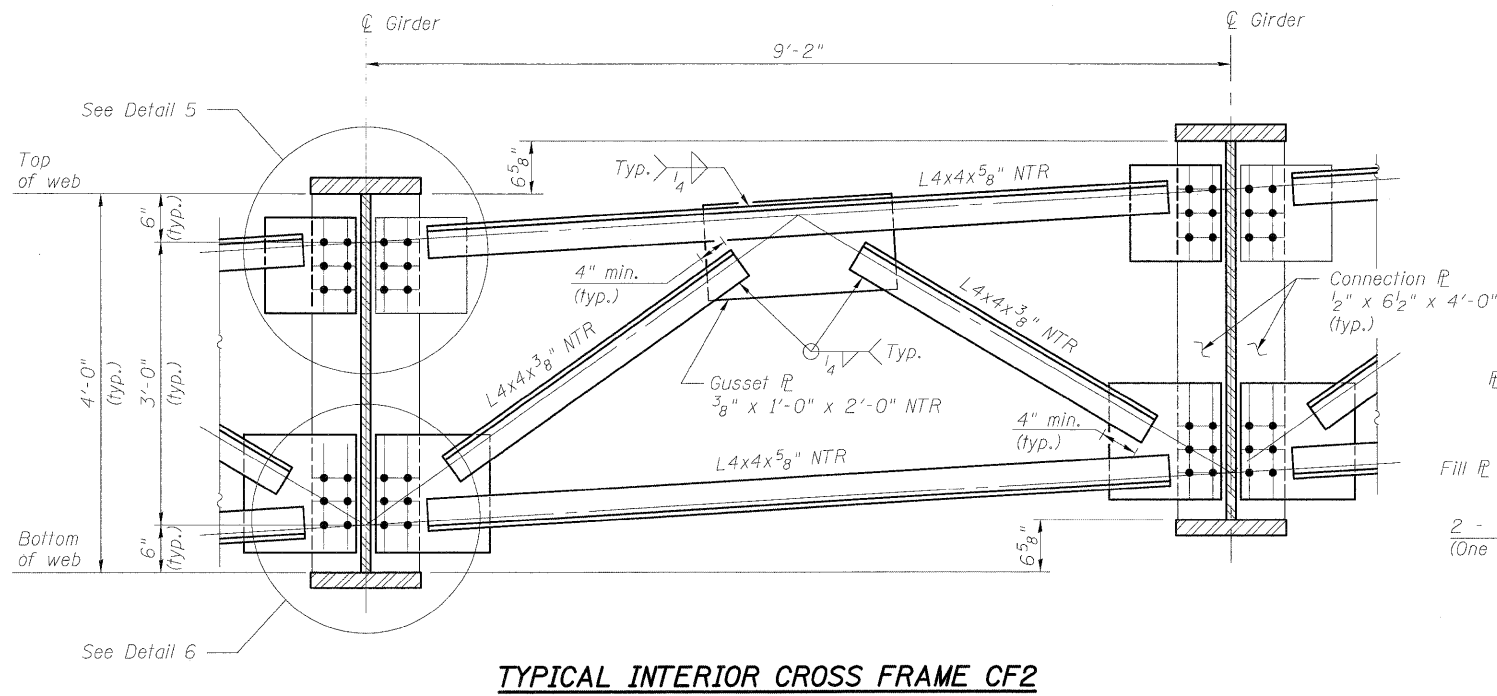


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



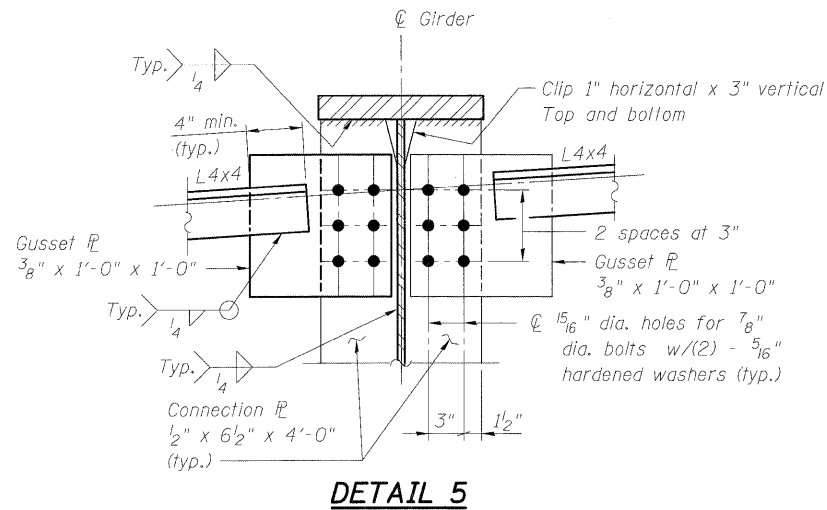
TYPICAL INTERIOR CROSS FRAME CF2

Notes:  
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 rods.

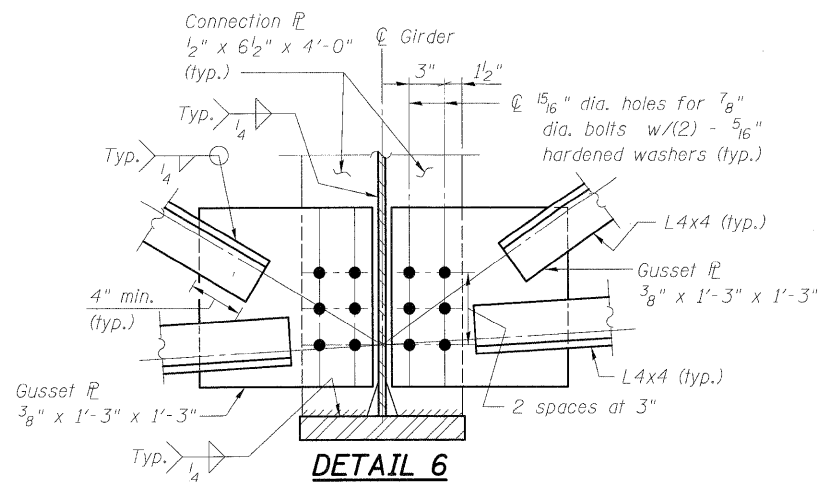
Notes:  
The Contractor Shall Either:

1) Ream Diaphragm and/or Cross Frame connection holes During shop assembly, or

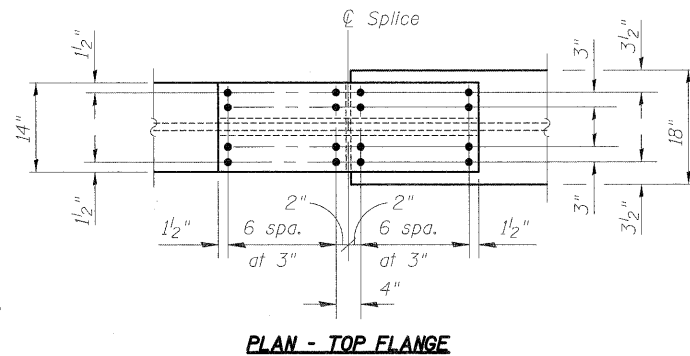
2) Provide detailing and fabrication controls acceptable to the Engineer which ensures accuracy such that field reaming will not exceed the amount permitted in Article 505.08(I) of the standard specifications.



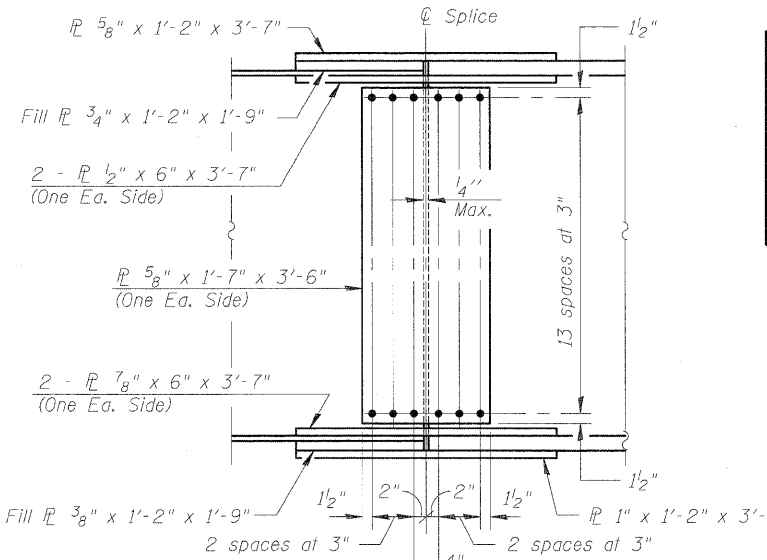
DETAIL 5



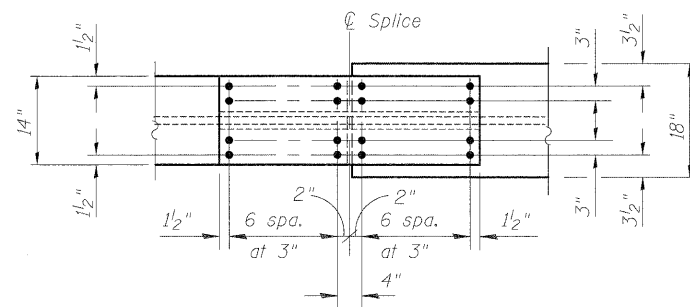
DETAIL 6



PLAN - TOP FLANGE



ELEVATION

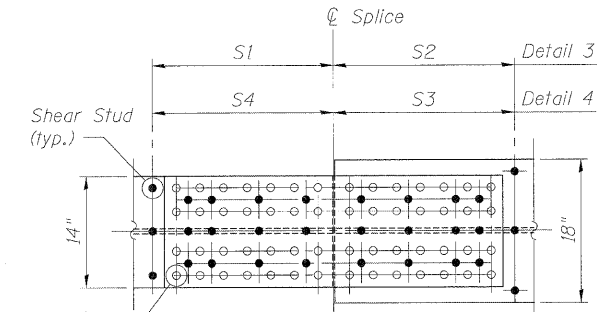


PLAN - BOTTOM FLANGE

FIELD SPLICE DETAIL

NOTE:

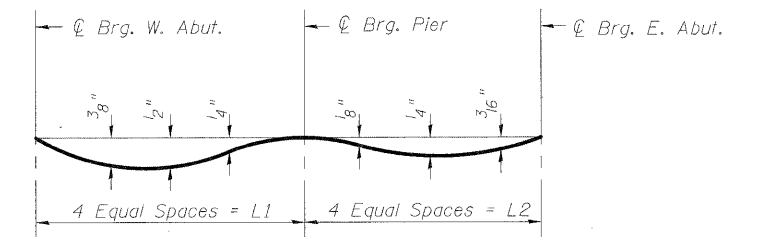
LOAD CARRYING COMPONENTS DESIGNATED "NTR" SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS, ZONE 2.



DETAIL 3  
DETAIL 4 OPPOSITE HAND  
N.T.S.

SHEAR CONNECTOR SPACING TABLE

GIRDER	ni	x1 (in.)	S1 (feet)	S2 (feet)	n2	x2 (in.)	S3 (feet)	S4 (feet)	n3	x3 (in.)
1	132	7	2.390	2.129	101	7	2.129	2.605	119	7
2	102	9	2.346	2.188	78	9	2.188	2.790	92	9
3	101	9	2.581	2.047	78	9	2.047	2.569	92	9
4	90	10	2.842	2.412	69	10	2.412	2.190	83	10
5	90	10	2.379	2.283	69	10	2.283	2.820	82	10
6	99	9	2.688	2.409	76	9	2.409	2.708	91	9
7	127	7	2.435	2.208	98	7	2.208	2.521	117	7



DEAD LOAD DEFLECTION DIAGRAM

(due to steel self weight only.)

(The deflection values provided above are for Girder-1 only the difference between the max value and minimum value for all Girders for each span is less than 1/16".)

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.

Notes:

1. NTR indicates Notch Toughness Requirement.
2. All Splice Plates shall comply with NTR.
3. All Structural Steel, except fill plates, shall be AASHTO M270 Grade 50.
4. For location of Detail 3 and 4 see Sheet SC-16.

STEEL DETAILS  
STRUCTURE NO. 099-0348

DESIGNED	MB
CHECKED	KJH
DRAWN	AMV
CHECKED	KJH



McDonough Associates Inc.  
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Chicago, Illinois 60601  
(312) 946-8600

SHEET NO. SC-18 SHEETS SC-37	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(99-1&2) R-6	WILL	756	544
FED. ROAD DIST. NO.			ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 60F12					