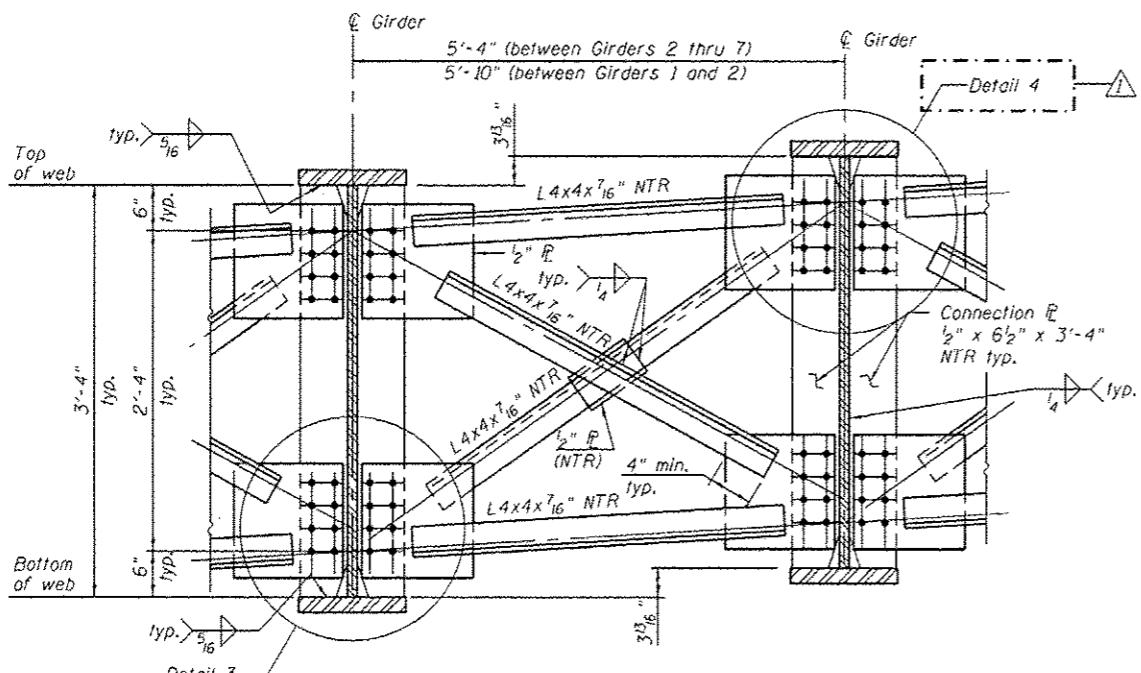
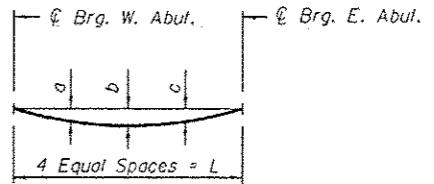


TYPICAL END CROSS FRAME CF1



TYPICAL INTERIOR CROSS FRAME CF2



### GIRDER SELF-WEIGHT DEFLECTION DIAGRAM

See Screed Dimension Layout Table on sheet SR6 of SR41 for span lengths.

### GIRDER SELF-WEIGHT DEFLECTIONS

Location	Girder						
	1	2	3	4	5	6	7
a	1/4"	3/8"	1/2"	1/4"	1/4"	3/8"	1/2"
b	1/4"	3/4"	1/2"	1/4"	1/4"	3/4"	1/2"
c	1/4"	5/8"	3/8"	1/2"	1/4"	1/4"	3/8"

Note:

End Cross frames at the Stage Line shall be installed after Stage I deck pour. See Stage III Deck Pour and Closure Sequencing on sheet SR23 of SR41. Timber block posts shall be used to support Stage I concrete formwork at the Abutments. Contractor shall apply grout to the top of the top channel of the end cross frames to ensure full contact between the Stage I concrete deck and the top of the channel of the end cross frames. Cost of timber block posts and grout shall be included in Furnishing and Erecting Structural Steel.

Notes:

See framing plan on sheet SR18 of SR41 for location of girder cross frames.

For Detail 3 and Detail 4, see sheet SR23 of SR41. AASHTO M270 Grade 50 steel shall be used for all cross frames, connection plates, and bearing stiffeners, unless otherwise noted.

Load carrying components designated "NTR" shall conform to the Impact Testing Requirements, Zone 2.

All cross frames between girders shall be installed with erection pins and bolts in accordance with erection plan submitted to and approved by the Engineer. Individual cross frames at supports may be temporarily disconnected to install bearing anchor rods.

The calculated deflections of the primary girders under steel self-weight shall be used to detail the cross frame connections, and to erect the structural steel such that girders will be plumb within a tolerance of  $\pm \frac{1}{6}$ " per vertical foot throughout the length of the girder system when supporting their own weight.

No connection plate on exterior side of exterior girders.

(Sheet 1 of 2)

**COLLINS  
ENGINEERS**  
122 W. Becker Dr.  
Suite 800  
Elgin, IL 60131-2656  
Tel: 847-229-7045/500  
Fax: 847-229-7045/500  
[www.collinseng.com](http://www.collinseng.com)  
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000793

USER NAME =	DESIGNED - AMS	REVISED □ 5-30-2013 AMS
CHECKED - LOB	REVISED	
PLOT SCALE =	DRAWN - DR	REVISED
PLOT DATE =	CHECKED - JMH	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STEEL DETAILS  
STRUCTURE NO. 016-1323  
SHEET NO. SR22 OF SR41 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	0303-474HB-R	COOK	358	263
				CONTRACT NO. 60F63
				ILLINOIS FED. AID PROJECT