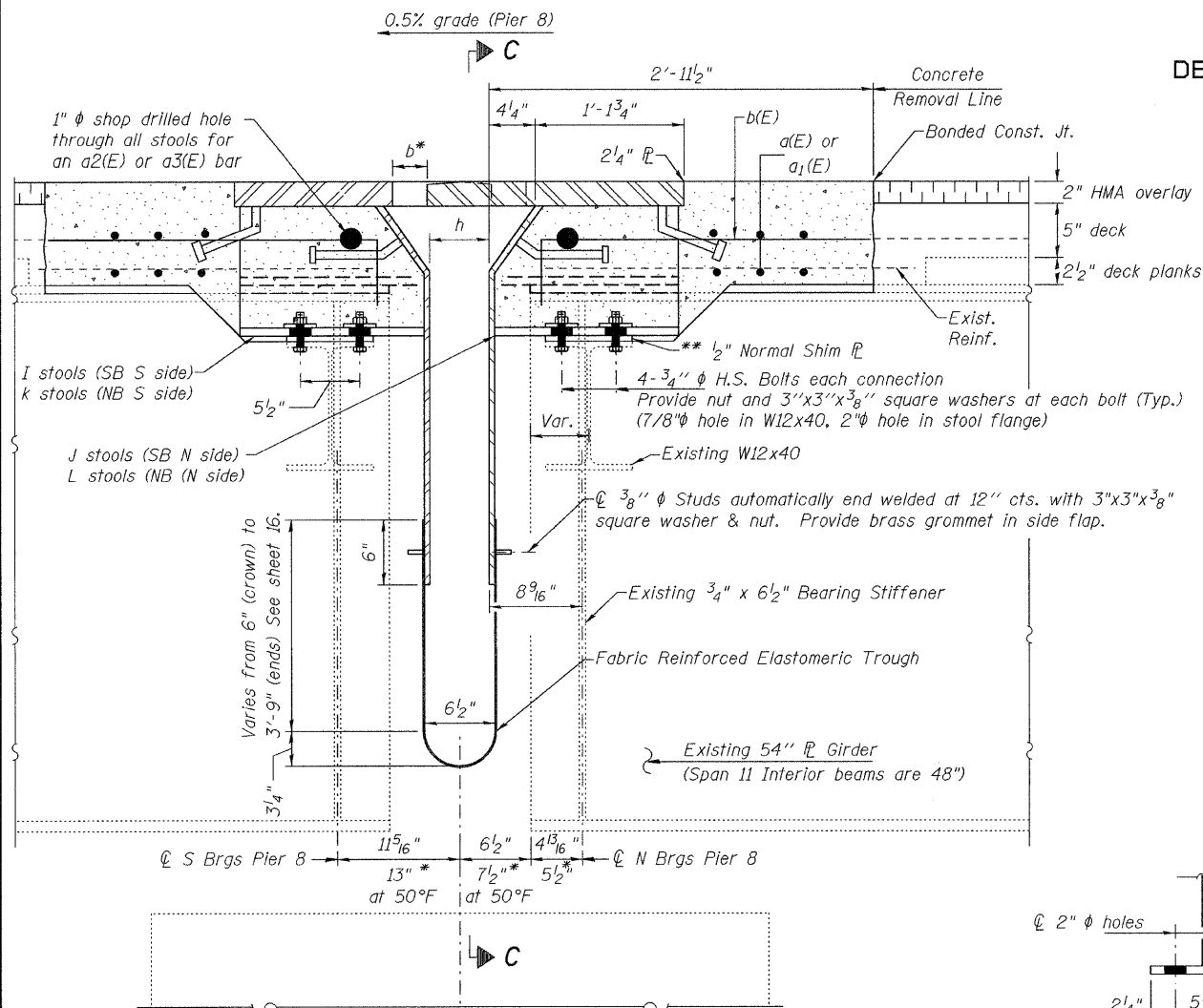
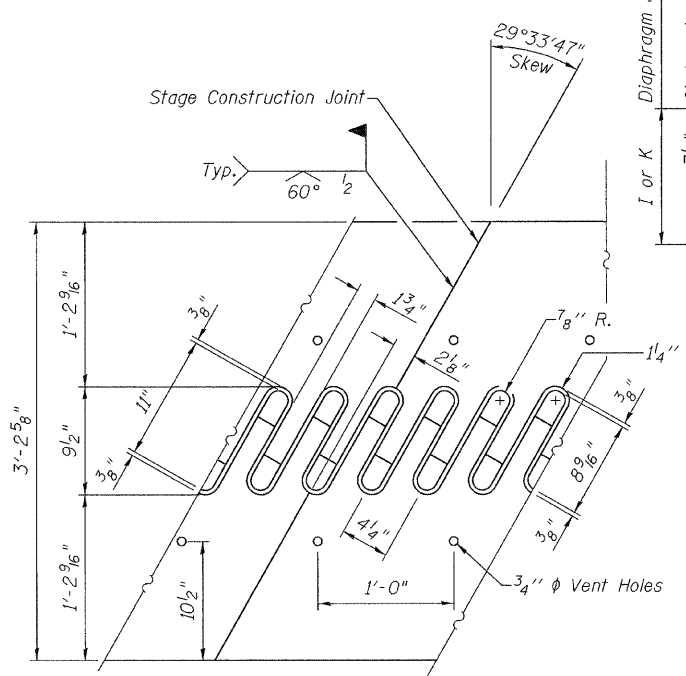


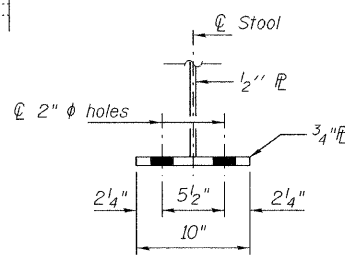
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



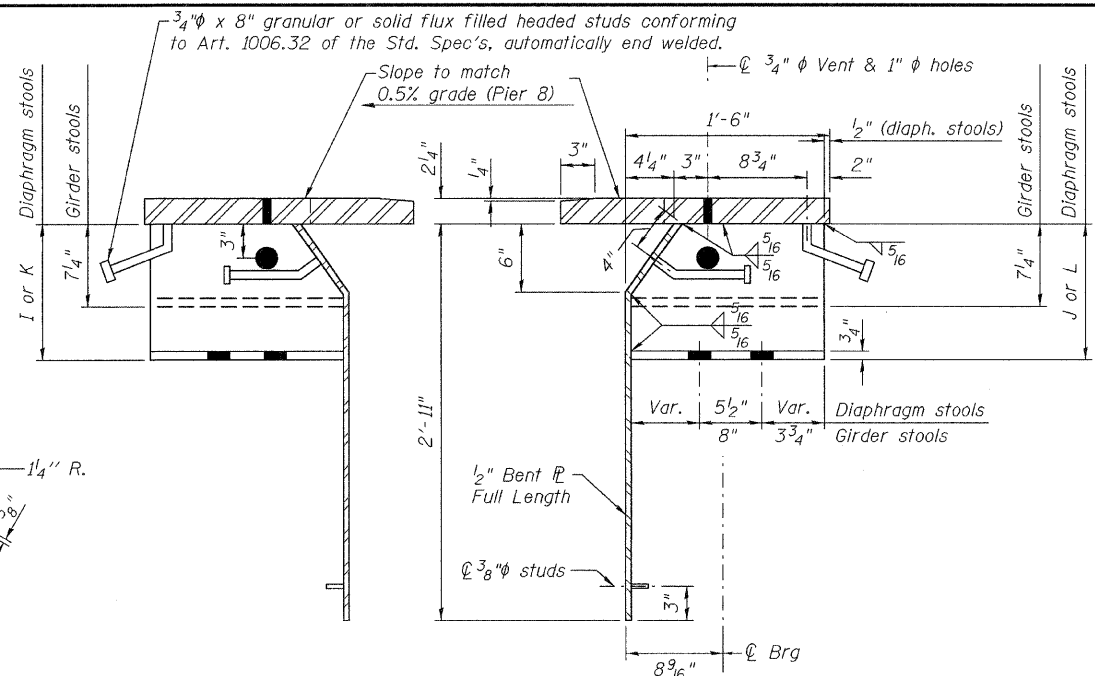
**SECTION B-B**  
(Looking West)



**FLAME CUTTING DIAGRAM**  
(Cut from 2 1/4" x 3'-2 5/8" M270 Gr. 50)

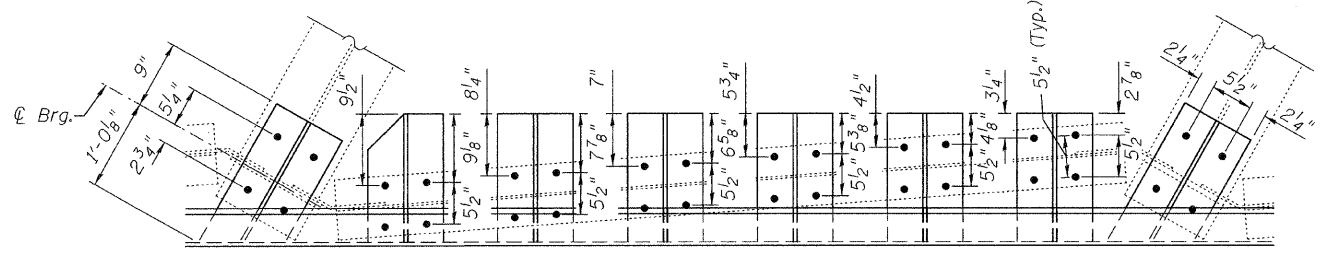


**STOOL SECTION**



**I & K STOOLS**  
(Looking West)

**J & L STOOLS**  
(Looking West)



**PARTIAL PLAN OF STOOLS**

Notes: See sheet 13 of 20 for stool locations.  
See sheet 16 of 20 for Section C-C.  
Stool heights are measured along  $\phi$  of bearings.

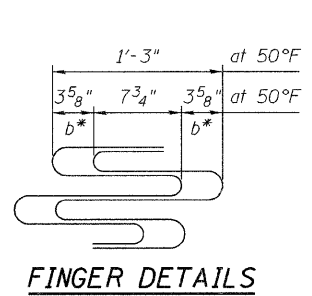
All plates shall be AASHTO M270, Gr. 50.  
Existing shear studs that interfere with the finger plate stool shall be removed using the air-arc method and grind smooth all weld material remaining on the top flange. Cost included with Finger Plate Expansion Joint, 5".  
Finger Plate Expansion Joints shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.

**DIMENSIONS I & J (SB PIER 8)**

Stool No.	Height	Stool No.	Height	Stool No.	Height	Stool No.	Height
I2	11 3/8"	I23	15 13/16"	J2	11 1/4"	J23	15 7/8"
I3	11 7/16"	I24	16"	J3	11 1/2"	J24	16 1/16"
I4	11 1/16"	I25	16 3/16"	J4	11 3/4"	J25	16 3/16"
I5	11 5/16"	I26	16 5/16"	J5	12"	J26	16 3/8"
I6	12 3/16"	I27	16 3/8"	J6	12 3/16"	J27	16 7/16"
I7	12 7/16"	I28	16 1/8"	J7	12 7/16"	J28	16 1/8"
I9	12 15/16"	I30	15 1/2"	J9	12 15/16"	J30	15 9/16"
I10	13 1/8"	I31	15 3/16"	J10	13 3/16"	J31	15 1/4"
I11	13 3/8"	I32	14 7/8"	J11	13 7/16"	J32	14 15/16"
I12	13 5/8"	I33	14 9/16"	J12	13 1/16"	J33	14 5/8"
I13	13 7/8"	I34	14 1/4"	J13	13 5/16"	J34	14 5/16"
I14	14 1/8"	I35	13 15/16"	J14	14 3/16"	J35	14"
I16	14 5/8"	I37	13 5/16"	J16	14 5/8"	J37	13 3/8"
I17	14 7/8"	I38	12 15/16"	J17	14 7/8"	J38	12 15/16"
I18	15"	I39	12 1/2"	J18	15 1/16"	J39	12 9/16"
I19	15 3/16"	I40	12 1/8"	J19	15 1/4"	J40	12 3/16"
I20	15 3/8"	I41	11 3/4"	J20	15 3/8"	J41	11 13/16"
I21	15 1/2"	I42	11 3/8"	J21	15 9/16"	J42	11 7/16"

**DIMENSIONS K & L (NB PIER 8)**

Stool No.	Height	Stool No.	Height	Stool No.	Height	Stool No.	Height
K2	11 5/16"	K23	15 7/8"	L2	11 5/16"	L23	15 7/8"
K3	11 9/16"	K24	16 1/16"	L3	11 9/16"	L24	16 1/16"
K4	11 13/16"	K25	16 3/16"	L4	11 13/16"	L25	16 3/16"
K5	12"	K26	16 5/16"	L5	12 1/16"	L26	16 3/8"
K6	12 1/4"	K27	16 7/16"	L6	12 1/4"	L27	16 7/16"
K7	12 1/2"	K28	16 1/8"	L7	12 1/2"	L28	16 1/8"
K9	13"	K30	15 9/16"	L9	13"	L30	15 1/2"
K10	13 1/4"	K31	15 1/4"	L10	13 1/4"	L31	15 3/16"
K11	13 1/2"	K32	14 15/16"	L11	13 1/2"	L32	14 15/16"
K12	13 1/16"	K33	14 5/8"	L12	13 3/4"	L33	14 5/8"
K13	13 5/16"	K34	14 5/16"	L13	13 5/16"	L34	14 5/16"
K14	14 3/16"	K35	14"	L14	14 3/16"	L35	14"
K16	14 1/16"	K37	13 5/16"	L16	14 1/16"	L37	13 5/16"
K17	14 15/16"	K38	12 15/16"	L17	14 15/16"	L38	12 15/16"
K18	15 1/16"	K39	12 9/16"	L18	15 1/16"	L39	12 9/16"
K19	15 1/4"	K40	12 3/16"	L19	15 1/4"	L40	12 3/16"
K20	15 7/16"	K41	11 13/16"	L20	15 7/16"	L41	11 3/4"
K21	15 9/16"	K42	11 3/8"	L21	15 9/16"	L42	11 3/8"



**FINGER DETAILS**

SB & NB Pier 8  
(439' Expansion Length)

Temp.	b	h
-30°F	6 3/8"	7 7/8"
50°F	3 5/8"	5 1/2"
130°F	7"	3 1/8"

\* Measured along  $\phi$  girder.  
\*\* Provide 1/2" normal shim, plus one 1/4" shim, plus one 1/8" shim, and one 1/16" shim for height adjustment. Tapered shims shall be added under the stools as required by the Engineer to make a smooth finger joint. Theoretical girder stool heights vary from 5 1/4" to 5 5/8". Fabricate all girder stools 5 1/4" tall and shim as needed. Cost shall be included with Finger Plate Expansion Joint, 5".

**PIER 8 FINGER PLATE DETAILS**  
SN 082-0247 & 0248

DESIGNED	J. Uehle
CHECKED	A. Hallway
DRAWN	J. Uehle
CHECKED	A. Hallway

NOVEMBER 5, 2009  
EXAMINED *Carl Boyer*  
ENGINEER OF STRUCTURAL SERVICES  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 12 20 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	255	82-1HVB-I-1	ST. CLAIR	45	37
CONTRACT NO. 76926					
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT IM-255( )					