

## SETTING ANCHOR BOLTS AT EXP. BRG.

(Move bott. brg. away from fixed brg.) (Move bott. brg. toward fixed brg.)

D='8'' per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

## € 11/4" \$\phi\$ Hole

← @ Brg. N. Abut.

**₩** 

6"

ELEVATION AT ABUT.

(Looking East)

1'-94'

BEARING ASSEMBLY

Ronded

7<sub>8</sub>" ¢ Holes in

bottom flange

Bearing

Assembly

 $(2 - \frac{3}{4})$   $\phi$  H.S. Bolts w/lock washers (Typ. ea. side)

Tapped holes in top P:  $^{7}_{8}$ "  $\phi$  holes in bearing P

(Coat bolts with anti-seize compound)

Fill & for crown

TYPE I ELASTOMERIC EXP. BRG.

(at North Abutment)

P 234" x 1'-1" x 1'-112"

-P2 1½" x 1′-1" x 1′-11½"

5 - Layers of 9<sub>16</sub>'

- 3<sub>16</sub>" Steel Plates

Elastomer

and shim P

2" 41/2"

*M*/p

 $B \blacktriangleleft$ 

6"

will be allowed in lieu of welded plates.

SID	E R	ETA.	INE	R
Equivalent	rolled	angle	with	stiffener

• Tran Systems
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11:04:34 0161708-

USER NAME = BAWitort	DESIGNED	JRM	REVISED
	CHECKED	WJC	REVISED
PLOT SCALE = 0:2.0000 ':" / in.	DRAWN	MTS	REVISED
PLOT DATE = 10/28/2013	CHECKED	WJC	REVISED

3<sup>3</sup>8"

SIDE RETAINER

will be allowed in lieu of welded plates.

Equivalent rolled angle with stiffeners

## STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

-	ABUTN	/IENT	. BE	ARI	NG	DETAILS	
	STR	IICTI	IRF	NΩ	016	6-1708	
	0111	001	JIIL	140	. 010	J-1700	
	CHEET	NO	3.0	ΟE	55	CHEETC	

IUN	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
090	2013-011R	COOK	356	168
		CONTRACT	NO. 6	50W29
	ILL INOIS FED. A	ID PROJECT		

Notes:

/m ///-

2'-4"

SECTION B-B

1<sup>3</sup>8" tyρ.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Concrete diaphragm

- Side Retainer, typ.

€1" Ø x 12" Anchor bolts

 $2^{l_4}$ " x  $2^{l_4}$ " x  $^{5}_{16}$ "  $P_{2}$  washer

(F1554 Grade 36) with

under nut.

Tapped holes in top P;  $^{7}8$ "  $\phi$  holes in bearing P

(Coat bolts with anti-seize compound)

Anchor bolts for side retainers for Type I bearings may be cast in place or installed in holes drilled before or after members are in place.

Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I or Elastomeric Bearing Assembly, Type II.

The  $^{\prime}_8$ " PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 18" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Two 18" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts and washers shall be galvanized according to ASTM M111 or M232 as applicable.

## BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	9
Elastomeric Bearing Assembly, Type II	Each	9
Anchor Bolts, 1" Ø	Each	18