

#### ELEVATION AT ABUTMENT

TYPE II TFE ELASTOMERIC EXP. BRG.

#### ³₄′′¢ Threaded Stud 14" Dimples on 12" centers with flat washer & $l_{16}$ " deep, or equivalent. hex nut. (4-Read.) Beveled P 2" x 1'-1" x 1'-4" $\circ$ $\cap \cap$

<u>8</u> Layers of <sup>7</sup><sub>16</sub>'' Elastomer (55 Durometer)

l<sub>8</sub>" Steel Plates

" Stainless Steel

(A240, Type 304, 2B Finish)



SECTION A-A

# 18" PTFE with dimpled, unlubricated surface

# SECTION THRU TFE

€ 1<sup>1</sup><sub>4</sub> "\$ Hole —

#### BEAM REACTIONS

R₽	(K)	43.6
R4	(K)	40.6
Imp.	(K)	9.0
R (Total)	(K)	93.2

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel. Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 55 Tons.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

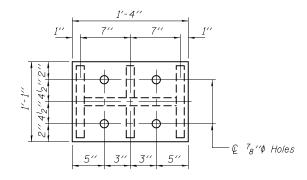
Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications. Side retainers shall be included in the cost of

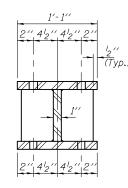
Elastomeric Bearing Assembly, Type II.

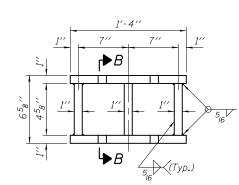
The '8'' PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact

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.



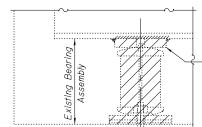
#### PLAN TOP AND BOTTOM PLATE





#### SECTION B-B

#### STEEL EXTENSION DETAIL

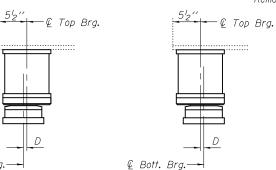


Existing P to be removed using the air-arc method and grind smooth all weld material remaining on the bottom flange.

Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy.

### EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



€ Bott. Brg.

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

# SETTING ANCHOR BOLTS AT EXP. BRG.

 $D = {}^{l}_{8}$ " per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

# BILL OF MATERIAL

Item	Unit	Total	
Elastomeric Bearing Assembly Type II	Each	5	
Jack and Remove Existing Bearings	Each	5	
Furnishing and Erecting Structural Steel	Pound	920	
Anchor Bolts 1''¢	Each	10	

# BOTTOM BEARING ASSEMBLY

-P2 1<sup>3</sup>8'' x 11'' x 2'-2<sup>1</sup>4''

TOP BEARING ASSEMBLY

(Looking North)

## SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

#### TYII/REPS 12-03-2008

Bonded-

DESIGNED	VHV	EXAMINED	Timoty A. Mallet	DATE	-	JANUARY 22, 2014
CHECKED	DAB		ACTING ENGINEER OF STRUCTURAL SERVICES			
DRAWN	baliva	PASSED	& Carl Proper			
CHECKED	VHV DAB		ACTING ENGINEER OF BRIDGES AND STRUCTURES			

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  W. ABUTMENT BEARING REPLACEMENT DETAILS SN 092-0050 SHEET NO. 14 OF 25 SHEETS

SECTION COUNTY 1512 36BDR VERMILION 34 19 CONTRACT NO. 70965