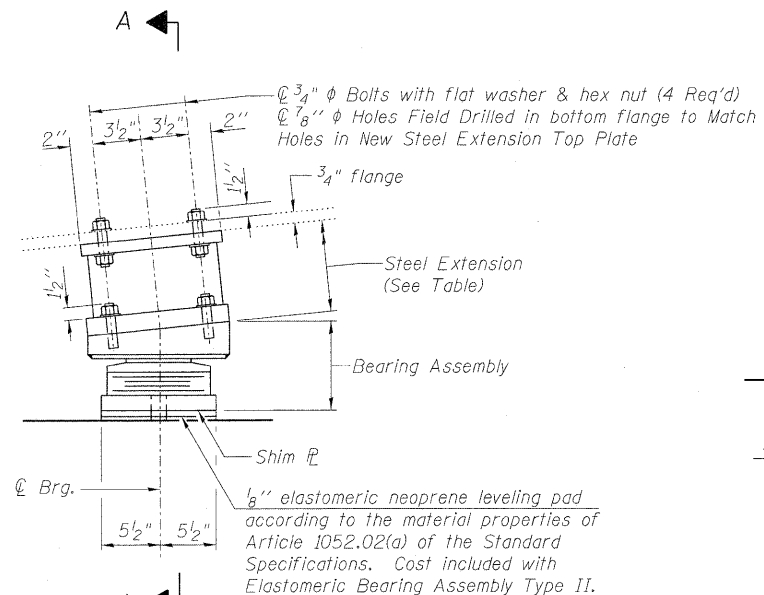
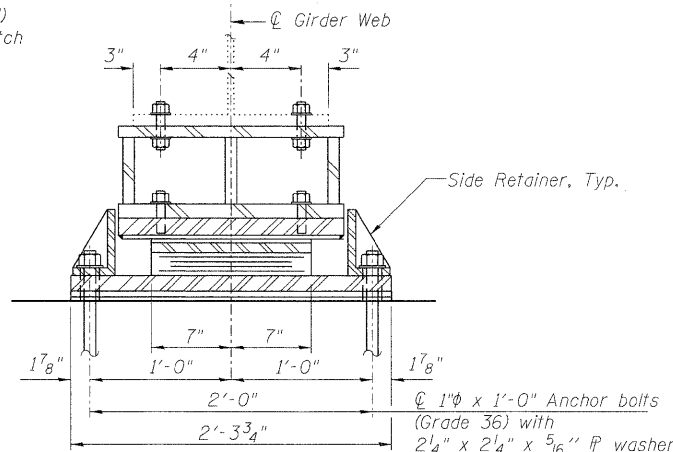


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**TYPE II ELASTOMERIC EXP. BRG.**

(S. Abut. & Pier 4)



**SECTION A-A**

Notes:

Hatch area indicates Bearing removal. See Special Provision for Jack and Remove Existing Bearings. Cribbing shall be designed to resist horizontal and vertical loads at bearing locations.

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 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 bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The 1/8" 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.

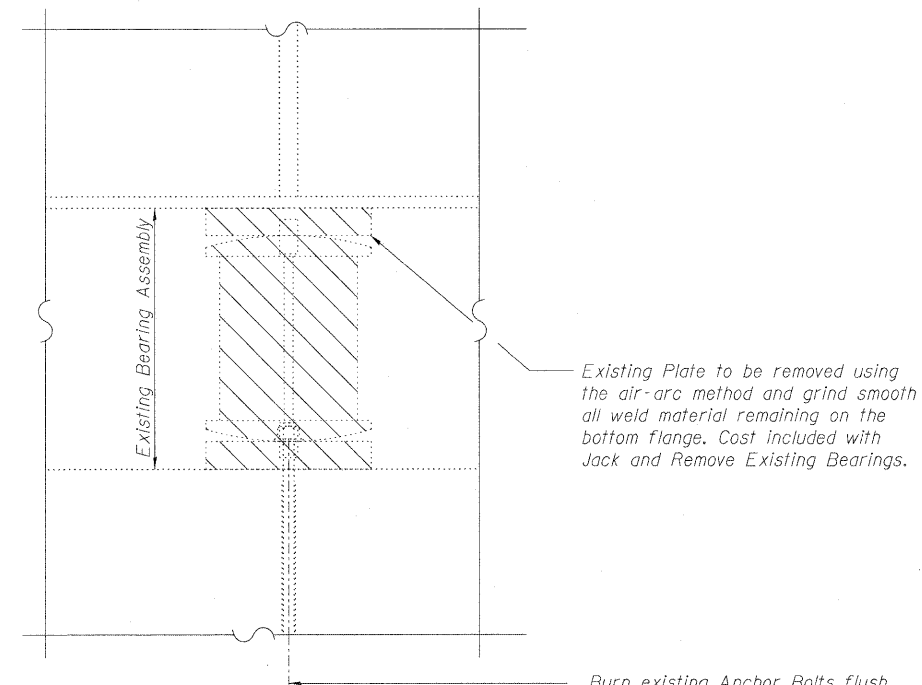
Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Steel Extensions and fasteners shall be included in the cost of Furnishing and Erecting Structural Steel.

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts.

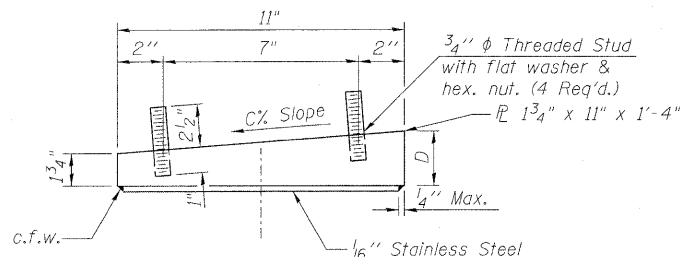
The Contractor is to verify the existing dimensions prior to fabricating the steel extensions. It is intended to keep the existing beams at their current elevation.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.



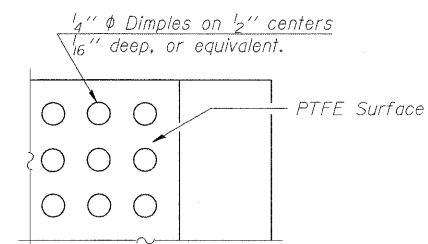
**EXISTING BEARING REMOVAL DETAIL**

Burn existing Anchor Bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy. Cost included with Jack and Remove Existing Bearings.

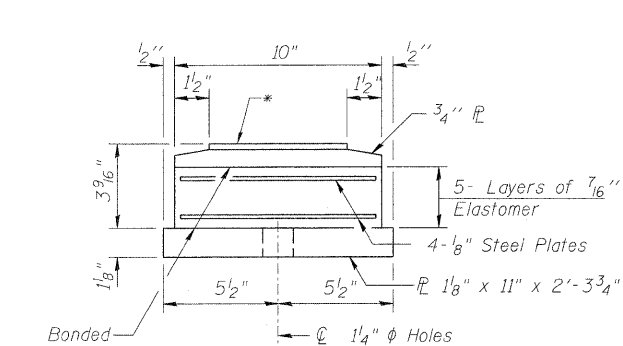


**TOP BEARING ASSEMBLY**

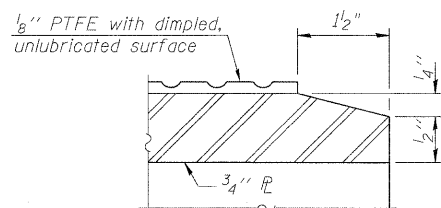
\*1/8" PTFE dimpled, unlubricated



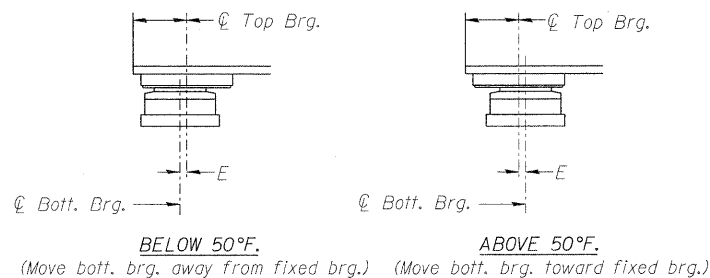
**PLAN-PTFE SURFACE**



**BOTTOM BEARING ASSEMBLY**



**SECTION THRU PTFE**



**SETTING ANCHOR BOLTS AT EXP. BRG.**

E = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

**STEEL EXTENSION DIMENSIONS**

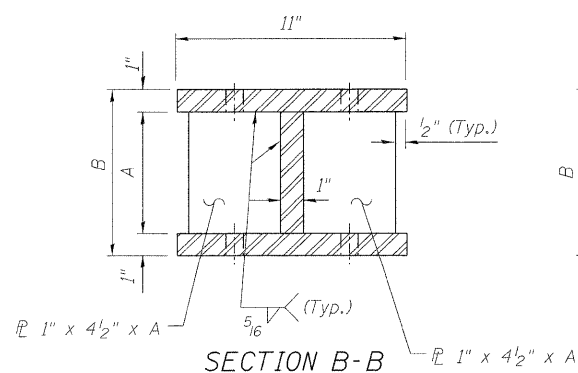
Location	A	B	C	D
S. Abut.	5 1/16"	7 1/16"	3.2	2 1/8"
Pier 4 S	5 13/16"	7 13/16"	3.6	2 3/16"
Pier 4 N	5 9/16"	7 9/16"	3.2	2 1/8"

**GIRDER REACTION TABLE**

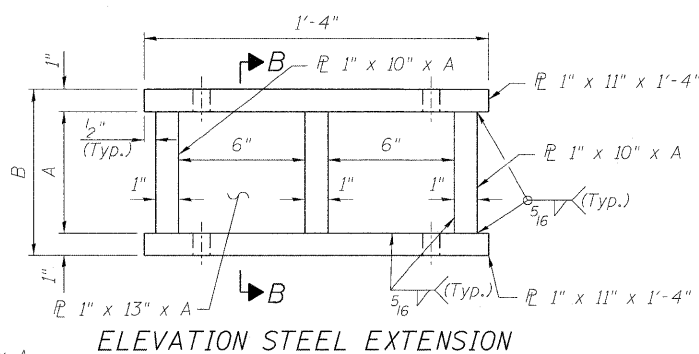
	S. Abut.	Pier 4 S	Pier 4 N
Dead Load (K)	37.8	37.8	48.4
Live Load (K)	55.1	55.1	56.6
Impact (K)	14.1	14.1	13.7
Total (K)	107.0	107.0	118.7
Min. Jack Capacity (Tons)	55	55	65

**BILL OF MATERIAL**

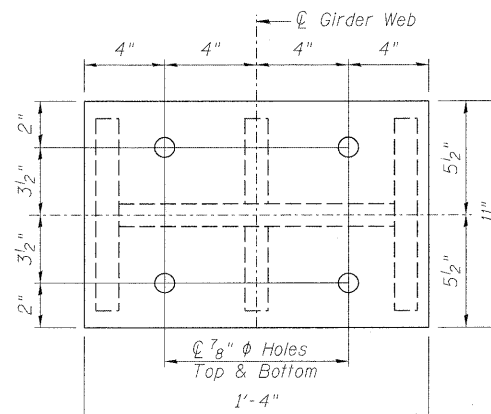
Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	15
Anchor Bolts, 1"	Each	30
Jack and Remove Existing Bearings	Each	15
Furnishing and Erecting Structural Steel	Pound	2613



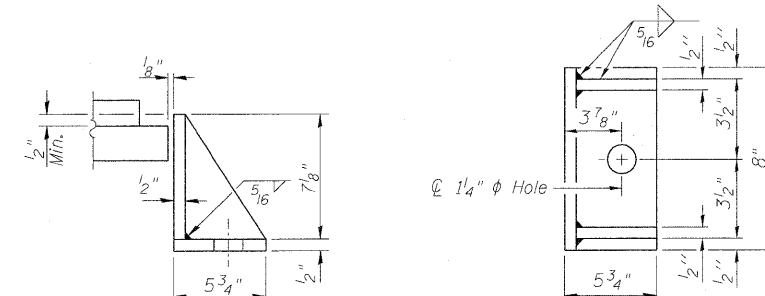
**SECTION B-B**



**ELEVATION STEEL EXTENSION**



**PLAN STEEL EXTENSION**



**SIDE RETAINER**

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

**BEARING DETAILS (1 of 3)  
STRUCTURE NO. 016-2407**

<p>LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois</p>	SHEET NO. 20	F.A.P. RTE. 330	SECTION 462 X-B-1	COUNTY COOK	TOTAL SHEETS 54	SHEET NO. 40
	27 SHEETS	CONTRACT NO. 60J37		ILLINOIS FED. AID PROJECT		