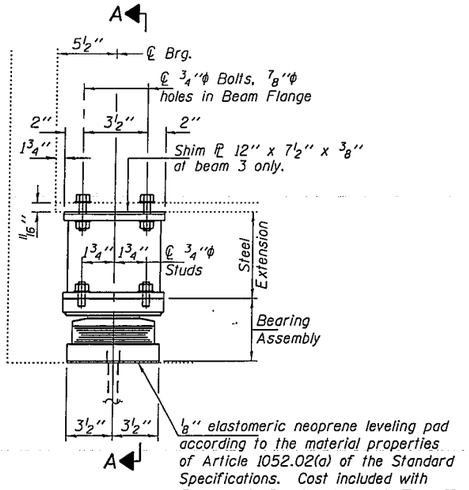
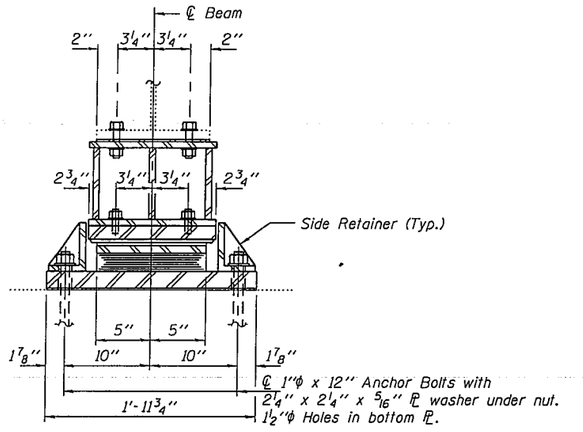
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION AT ABUTMENT



SECTION A-A

TYPE II TFE ELASTOMERIC EXP. BRG.

Notes:

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

If the analysis submitted to the Contractor for the jacking/temporary support system to be used shows temporary stiffeners are required to prevent web crippling or buckling, the stiffeners shall be steel and bolted to the web. If stiffeners are not required, hardwood timbers shall be installed tightly between the top and bottom flange to prevent flange rotation.

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 = 25 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.

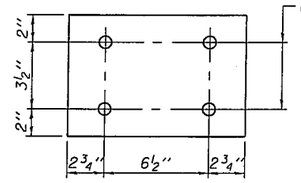
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.

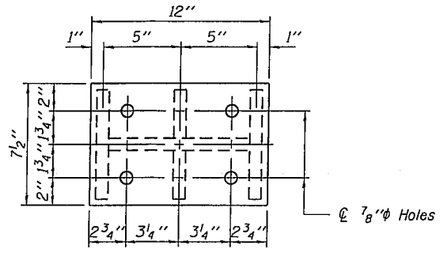
The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

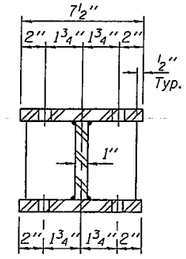
Fasteners shall be high strength bolts.



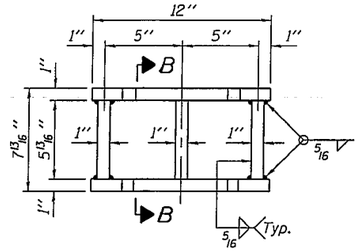
SHIM PLATE
ℙ 12" x 7½" x ⅜"
(2 Required)



PLAN TOP AND BOTTOM PLATE



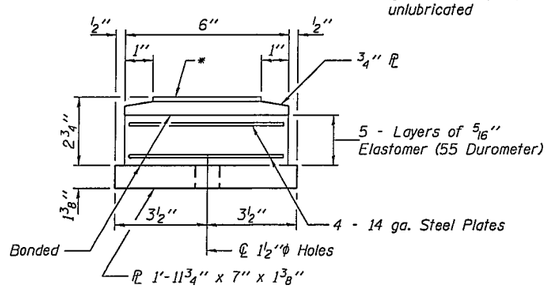
SECTION B-B



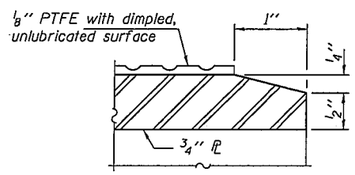
STEEL EXTENSION DETAIL

TOP BEARING ASSEMBLY

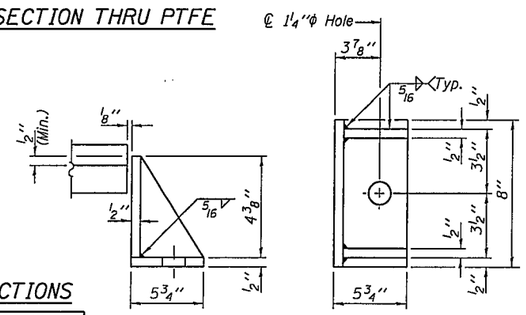
PLAN-PTFE SURFACE



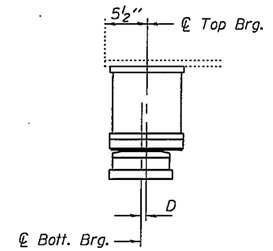
BOTTOM BEARING ASSEMBLY



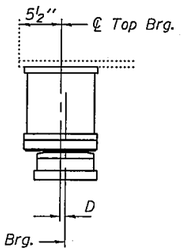
SECTION THRU PTFE



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

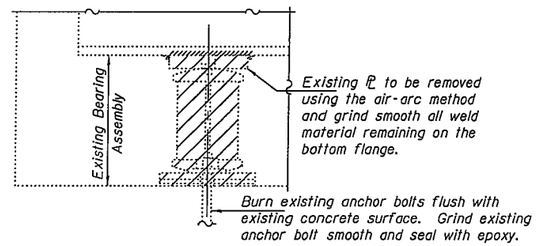


BELOW 50° F.
(Move bott. brg. away from fixed brg.)



ABOVE 50° F.
(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.
D = ⅛" per each 100° of expansion for every 15° temp. change from the normal temp. of 50°F.



EXISTING BEARING REMOVAL DETAIL
Cost included with Jack and Remove Existing Bearings.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	10
Jack and Remove Existing Bearings	Each	10
Furnishing and Erecting Structural Steel	Pound	1090
Anchor Bolts 1"ϕ	Each	20

BEAM REACTIONS

R℄	(K)	11.6
R℄	(K)	31.0
Imp.	(K)	9.3
R (Total)	(K)	51.9

DESIGNED	GGE
CHECKED	ATH
DRAWN	baliva
CHECKED	GGE ATH

APRIL 13, 2010
EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — ENGINEER OF BRIDGES AND STRUCTURES

TYII/REPS 12-03-2008

REPAIR DETAILS
CH 19 OVER I-72
SN 010-0146

SHEET NO. 13	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3 SHEETS	72	(10-71HB)BDR,BJR	CHAMPAIGN	14	9
			CONTRACT NO. 70865		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		