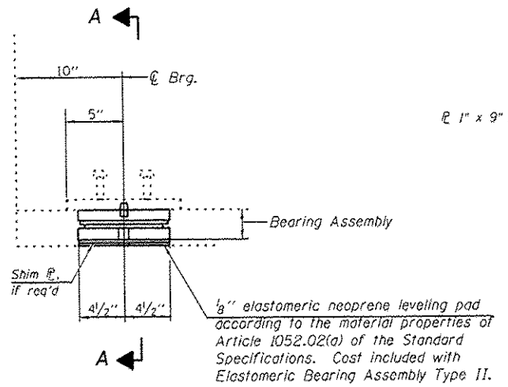
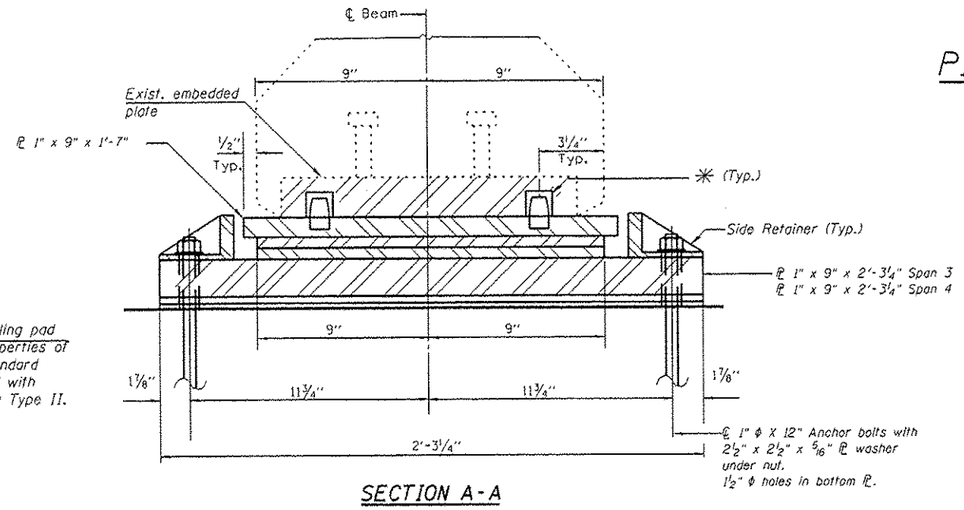


ELEVATION AT BEARING.

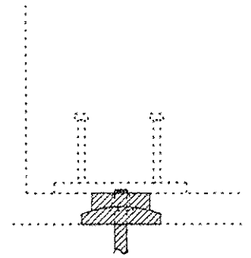


SECTION A-A

✳ Prior to pier cap reconstruction, but after concrete removal, Drill 1⅛" ϕ holes ¾" deep into embedded top ℙ to properly install new bearings.

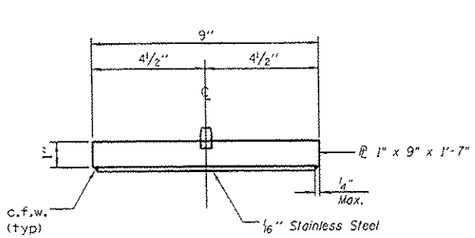
PIER 3 BEAM REACTION TABLE

		SPAN 3	SPAN 4
R℄	(K)	23.9	18.4
R℄	(K)	29.1	27.3
Imp.	(K)	8.0	8.0
R (Total)	(K)	61.0	53.7

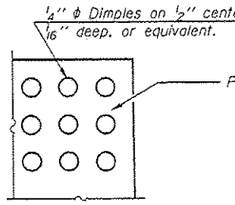


EXISTING BEARING REMOVAL DETAIL

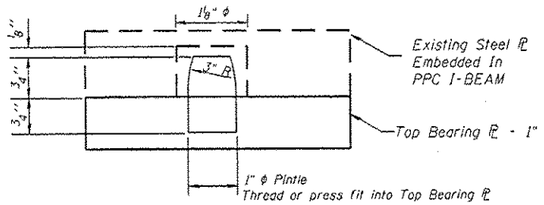
Note: Hatched area indicates removal of existing bearings. Cost included with Jack and Remove Existing Bearing Assembly.



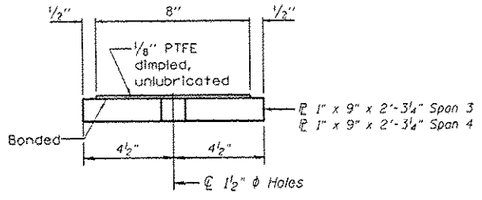
TOP BEARING ASSEMBLY



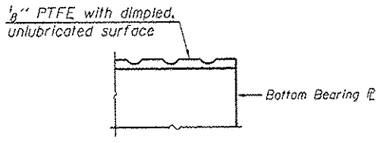
PLAN-TFE SURFACE



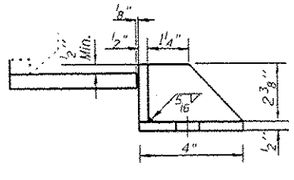
PINTLE

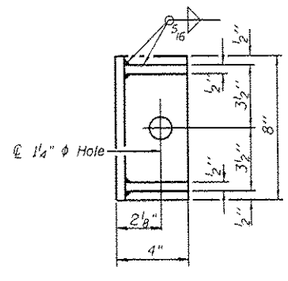


BOTTOM BEARING ASSEMBLY



SECTION THRU TFE





SIDE RETAINER

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

Notes:

Prior to ordering any materials, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

Min. Jack capacity = 45 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.

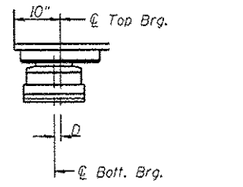
Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

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

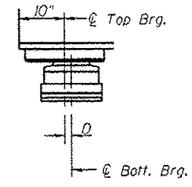
Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II (Special).

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.



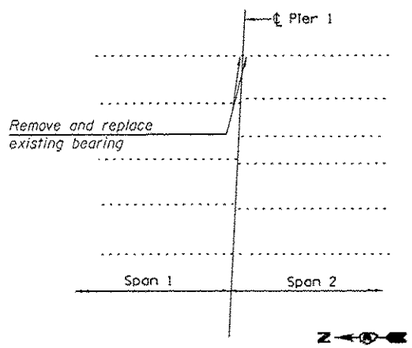
BELOW 50° F.
(Move bottom brg. away from fixed brg.)



ABOVE 50° F.
(Move bottom 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.



REPAIR LOCATION PLAN

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II (Special)	Each	2
Jack Remove Existing Bearing	Each	2
Anchor Bolts 1" ϕ	Each	4

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		DRAWN - YOGESH PATEL	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED - RON WOODSHANK	REVISED -
	PLOT DATE = 4/3/2013	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 REPAIR DETAILS
SN: 050-0132

SCALE: | SHEET NO. 7 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	D3 PIER CAP REPAIR 2014-I	LASALLE	25	14
		CONTRACT NO. 66C71		
	ILLINOIS			