

GIRDER END DIMENSION TABLE

Structure	Location	X	Y	Z
S.N. 082-0323	Pier 3-E	1'-6"	9 1/4"	8 3/4"
	Pier 3-W	1'-6"	9 1/4"	8 3/4"
	E. Abut.	1'-9"	1'-1 1/8"	7 7/8"
S.N. 082-0325	Pier 7-E	1'-6"	9 3/4"	8 1/4"
	Pier 7-W	1'-6"	9 1/4"	8 3/4"
	W. Abut.	1'-9"	11 1/2"	9 1/2"

Dimensions given for normal temp. of 50°F. Adjust X & Y for actual temp. using "Setting Anchor Bolts at Exp. Brg."

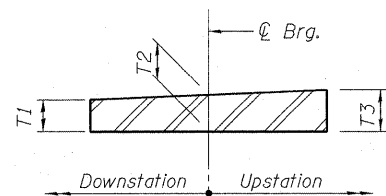
SHIM TABLE

Structure	Location	Girder	Thickness
S.N. 082-0323	Pier 3-W	1B	1/8"
		2B	3/8"
		3B	1/2"
		4B	5/8"
		5B	1 1/16"
		6B	1 3/16"

All Shim P's are 1'-1" x 2'-5 3/4" (Typ.).

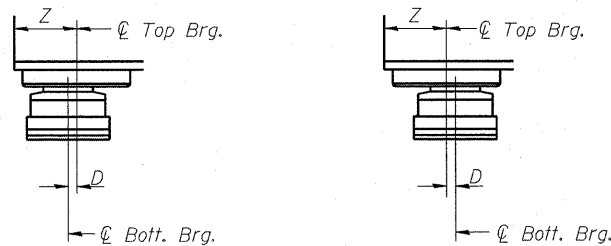
BEVELED TOP P TABLE

Structure	Location	T1	T2	T3	Wt	Lt
S.N. 082-0323	Pier 3-E	1 5/8"	1 5/8"	1 5/8"	1'-3 1/2"	1'-8"
	Pier 3-W	1 5/8"	1 5/8"	1 5/8"	1'-3 1/2"	1'-8"
	E. Abut.	1 1/2"	1 1/8"	2 1/4"	1'-1 3/4"	1'-6"
S.N. 082-0325	Pier 7-E	1 1/2"	1 1/2"	1 1/2"	1'-2 1/2"	1'-6"
	Pier 7-W	1 5/8"	1 5/8"	1 5/8"	1'-3 1/2"	1'-8"
	W. Abut.	2"	1 13/16"	1 5/8"	1'-5"	1'-8"



BEVELED TOP P DETAIL

See Beveled Top P Table for thicknesses.



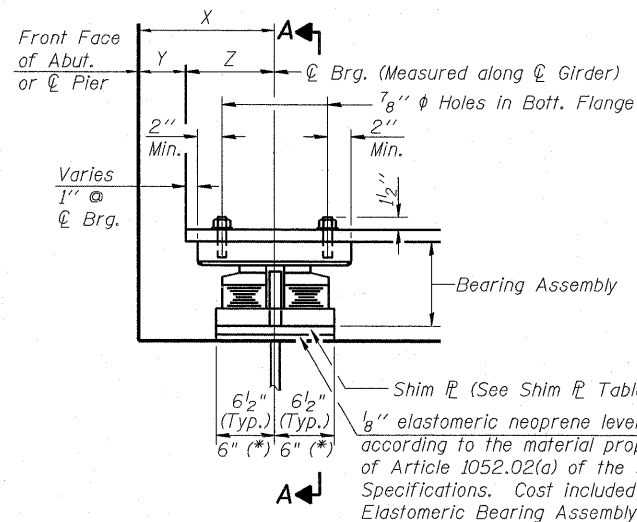
BELOW 50° F.

ABOVE 50° F.

(Move bottom brg. away from P.Z.T.M.) (Move bottom brg. toward P.Z.T.M.)

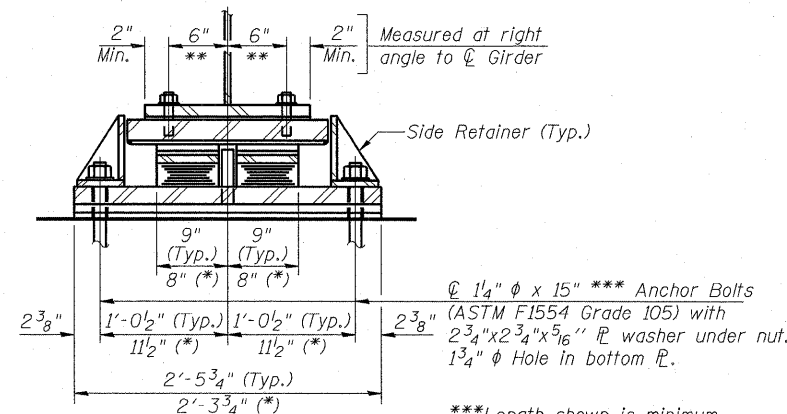
SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F. Point of Zero Thermal Movement (P.Z.T.M.) located at fixed brg. for S.N. 082-0323 and Units 1&2 of S.N. 082-0325. P.Z.T.M. located at midspan of Span 9 for Unit 3 of S.N. 082-0325.



ELEVATION AT PIER 3-E & PIER 3-W (S.N. 082-0323) AND E. ABUT., PIER 7-E, PIER 7-W, & W. ABUT. (S.N. 082-0325)

*E. Abut. & Pier 7-E (S.N. 082-0325)



SECTION A-A

*E. Abut. & Pier 7-E (S.N. 082-0325)

**See "Threaded Stud Layout" on Sheet S-87 for actual location of threaded studs.

Notes:

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 III 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 III.

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.

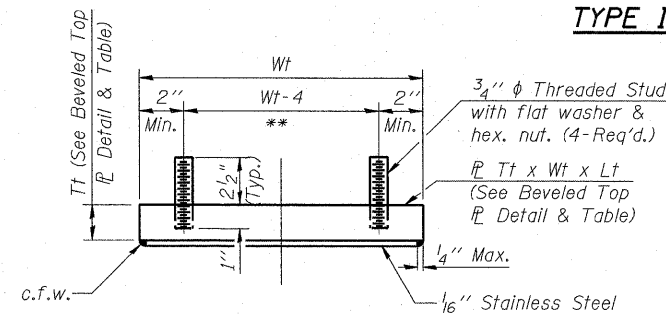
Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

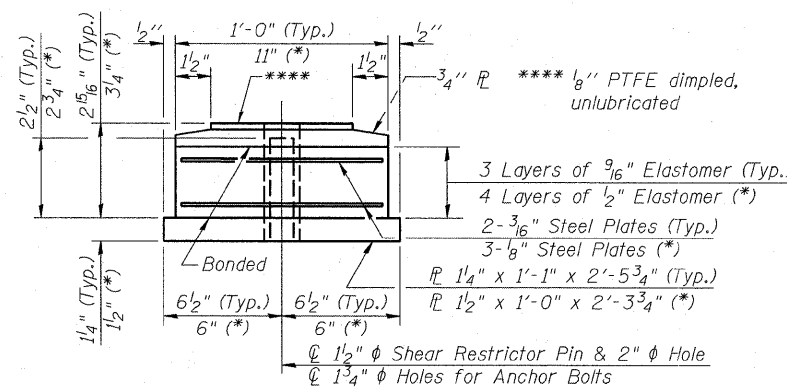
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

See Sheets S-83 thru S-86 for bearing layout & orientation.

TYPE III ELASTOMERIC EXP. BRG.

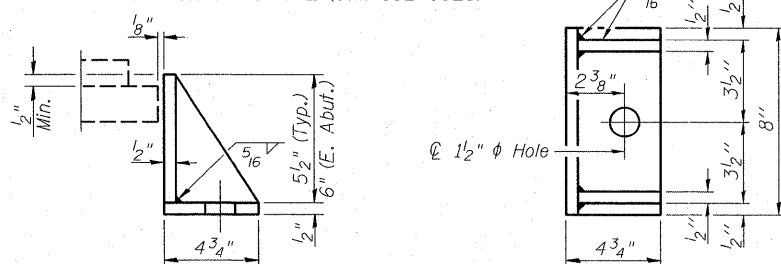


TOP BEARING ASSEMBLY



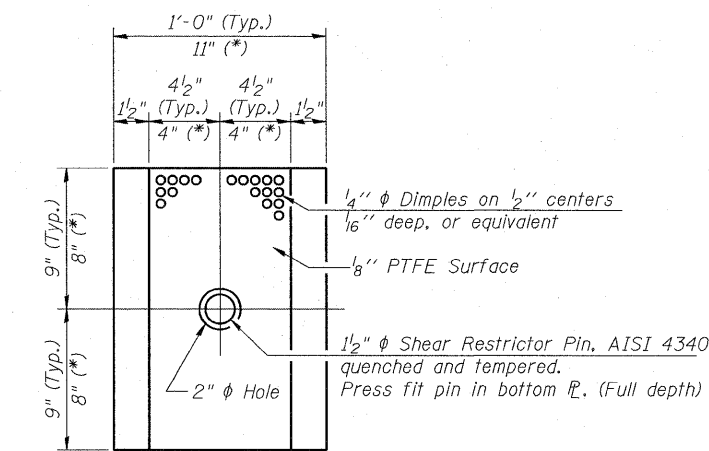
BOTTOM BEARING ASSEMBLY

*E. Abut. & Pier 7-E (S.N. 082-0325)



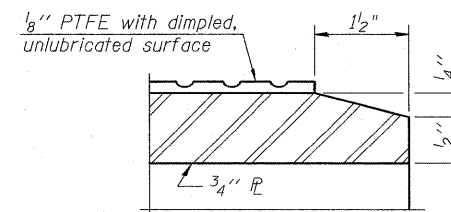
SIDE RETAINER

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



PLAN-PTFE ELASTOMERIC BRG.

*E. Abut. & Pier 7-E (S.N. 082-0325)



SECTION THRU PTFE

QUANTITY TABLE

Structure	Location	Qty.
S.N. 082-0323	Pier 3-E	6
	Pier 3-W	6
	E. Abut.	6
S.N. 082-0325	Pier 7-E	6
	Pier 7-W	5
	W. Abut.	8

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type III	Each	37
Anchor Bolts 1 1/4"	Each	74



USER NAME = bhettA
 DESIGNED - CLS
 DRAWN - GF
 CHECKED - ATB
 DATE - 03/18/2011

REVISIONS
 REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

ELASTOMERIC BEARING DETAILS II
 I-70W OVER I-55, CSX & KCS RAILROADS

SCALE: NONE SHEET NO. S-88 OF S-138 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	82-1-B-1	ST. CLAIR	319	203
S.N. 082-0323 & S.N. 082-0325			CONTRACT NO. 76C75	
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	