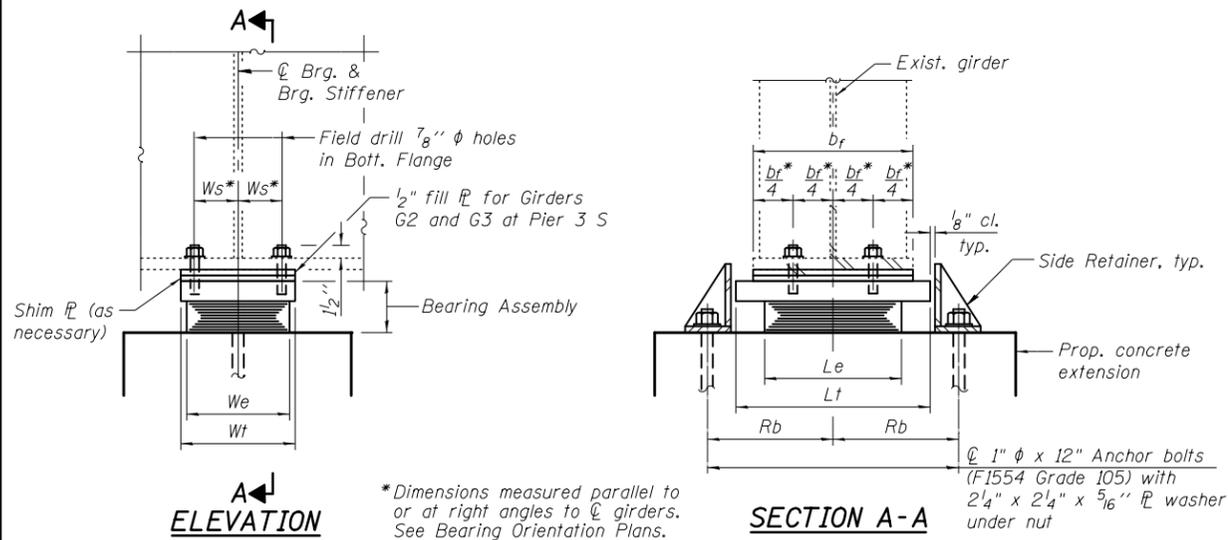


**TYPE I ELASTOMERIC BEARING DESIGN DATA**

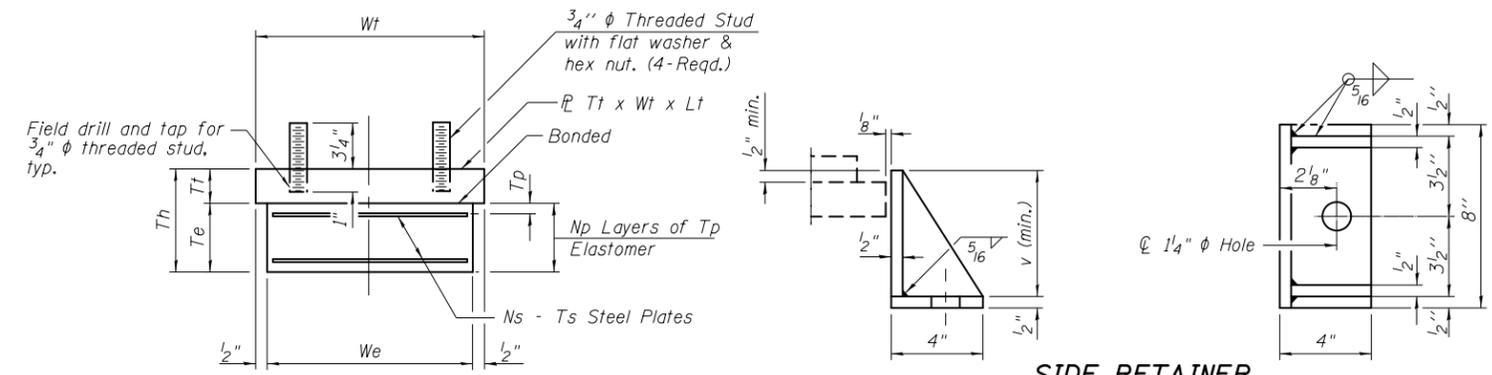
Location	Bearing Orientation					Th	Elastomers and Steel Plates							Top Plate			br	Rb	v		
	$\alpha$	X1**	X2**	Y1**	Y2**		Y3	We	Le	TP	Np	Ts	Ns	Te	Tt	Wt				Lt	Ws
Pier 1	0°	1'-1"	1'-1"	8"	8"	1 <sup>5</sup> / <sub>8</sub> "	8 <sup>1</sup> / <sub>16</sub> "	15"	24"	3 <sup>4</sup> / <sub>4</sub> "	6	3 <sup>3</sup> / <sub>16</sub> "	5	5 <sup>7</sup> / <sub>16</sub> "	2 <sup>5</sup> / <sub>8</sub> "	1'-4"	2'-2"	5 <sup>3</sup> / <sub>4</sub> "	1'-0"	1'-3 <sup>1</sup> / <sub>4</sub> "	8 <sup>1</sup> / <sub>16</sub> "
Pier 4	+5°00'46"	1'-0 <sup>1</sup> / <sub>4</sub> "	1'-1 <sup>5</sup> / <sub>8</sub> "	9 <sup>1</sup> / <sub>8</sub> "	6 <sup>13</sup> / <sub>16</sub> "	1 <sup>5</sup> / <sub>8</sub> "															
Pier 3 S	0°	8"	8"	5 <sup>1</sup> / <sub>2</sub> "	5 <sup>1</sup> / <sub>2</sub> "	1 <sup>5</sup> / <sub>8</sub> "	6"	10"	14"	7 <sup>1</sup> / <sub>16</sub> "	8	1 <sup>8</sup> / <sub>8</sub> "	7	4 <sup>3</sup> / <sub>8</sub> "	1 <sup>5</sup> / <sub>8</sub> "	11"	1'-4"	3 <sup>1</sup> / <sub>4</sub> "	1'-0"	10 <sup>1</sup> / <sub>4</sub> "	6"
Pier 6 S	-4°03'03"	8 <sup>3</sup> / <sub>8</sub> "	7 <sup>9</sup> / <sub>16</sub> "	4 <sup>15</sup> / <sub>16</sub> "	6 <sup>1</sup> / <sub>16</sub> "	1 <sup>5</sup> / <sub>8</sub> "															
Pier 9	-4°53'04"	1'-0 <sup>5</sup> / <sub>8</sub> "	11 <sup>5</sup> / <sub>16</sub> "	6 <sup>7</sup> / <sub>16</sub> "	8 <sup>2</sup> / <sub>2</sub> "	1 <sup>5</sup> / <sub>8</sub> "	5 <sup>13</sup> / <sub>16</sub> "	14"	22"	1 <sup>1</sup> / <sub>16</sub> "	4	3 <sup>5</sup> / <sub>16</sub> "	3	3 <sup>5</sup> / <sub>16</sub> "	2 <sup>1</sup> / <sub>2</sub> "	1'-3"	2'-0"	5 <sup>1</sup> / <sub>2</sub> "	1'-4"	1'-2 <sup>1</sup> / <sub>4</sub> "	5 <sup>13</sup> / <sub>16</sub> "

\*\*Dimensions measured to corner of top plate.



\*Dimensions measured parallel to or at right angles to  $\phi$  girders. See Bearing Orientation Plans.

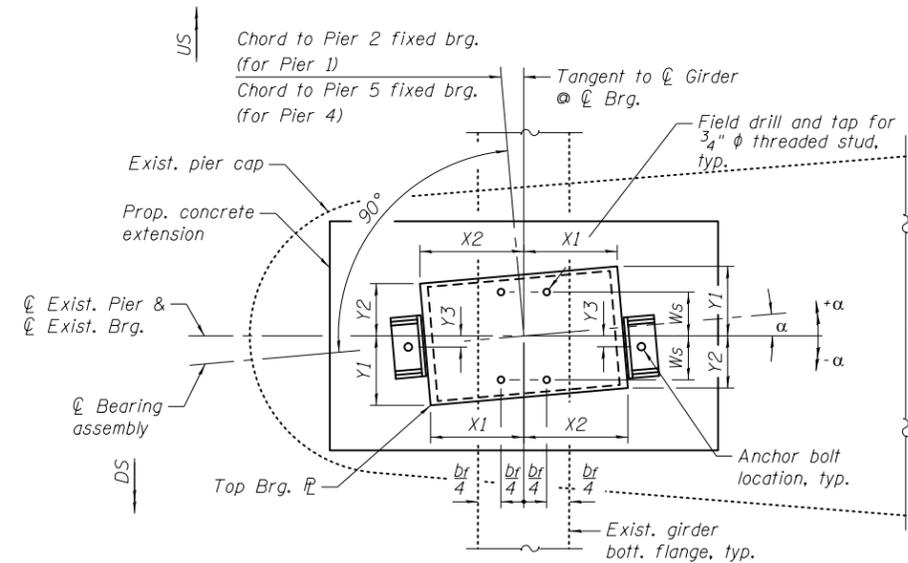
**TYPE I ELASTOMERIC EXP. BRG.**



**BEARING ASSEMBLY**

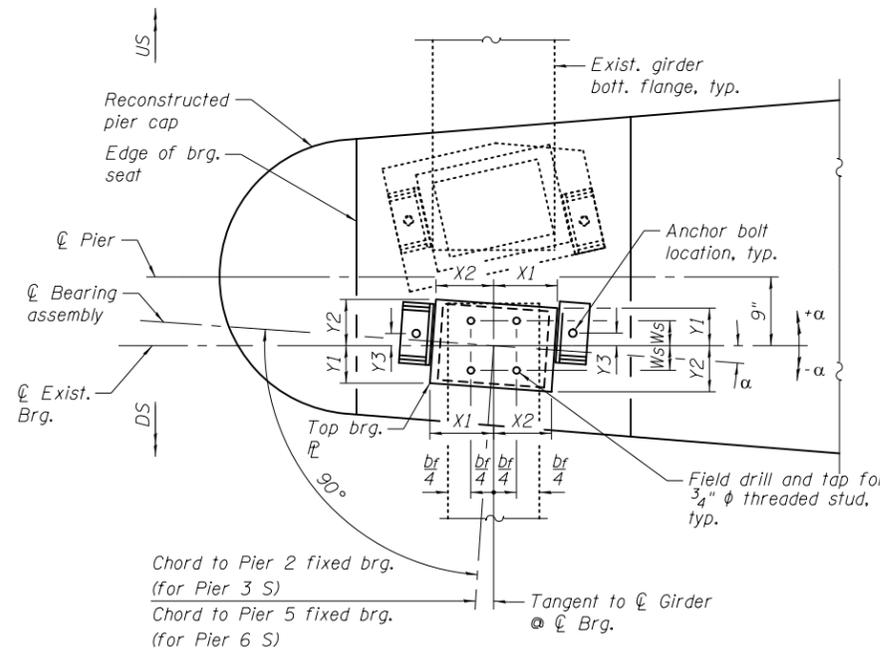
**SIDE RETAINER**

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



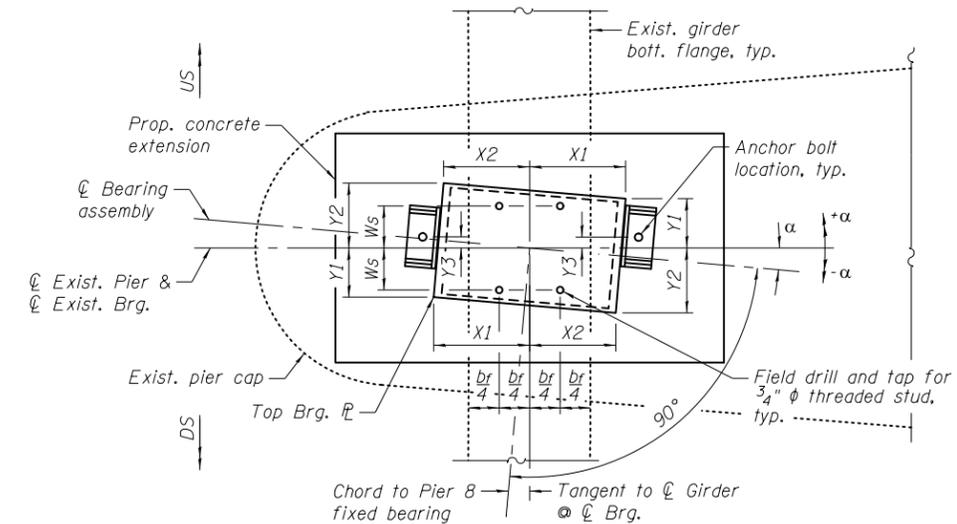
**BEARING ORIENTATION PLAN**

Pier 4 shown, Pier 1 similar



**BEARING ORIENTATION PLAN**

Pier 6 S shown, Pier 3 S similar



**BEARING ORIENTATION PLAN**

Pier 9

Notes:  
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.  
 Anchor bolts for side retainers may be cast in place or installed in drilled holes.  
 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 I.

Cost of field drilling & tapping shall be included in the cost of Elastomeric Bearing Assembly, Type I.  
 See Sheet S-62 for Bearing Removal Details and Jacking Procedure.  
 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 cross frame bolts shall not be removed without prior approval from the Engineer.

**BILL OF MATERIAL**

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	20
Anchor Bolts, 1"	Each	40

BOWMAN, BARRETT & ASSOCIATES INC.  
 CONSULTING ENGINEERS  
 Chicago, Illinois  
 312.228.0100  
 www.bbainc.com

USER NAME =	DESIGNED - TL	REVISED -
PLOT SCALE =	CHECKED - BAK	REVISED -
PLOT DATE = 11/08/2012	DRAWN - TL	REVISED -
	CHECKED - BAK	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TYPE I ELASTOMERIC BEARING DETAILS  
 STRUCTURE NO. 016-2437

SHEET NO. S-38 OF S-83 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2012-060-BR	COOK	285	201
CONTRACT NO. 60V61				
ILLINOIS FED. AID PROJECT				

2/26/17 PM

S:\1072\_05-CADD\Structure\1 SN 0162437\CADD Sheets\0162437-60V61-038-ElasT1\Brg.dwg/2012