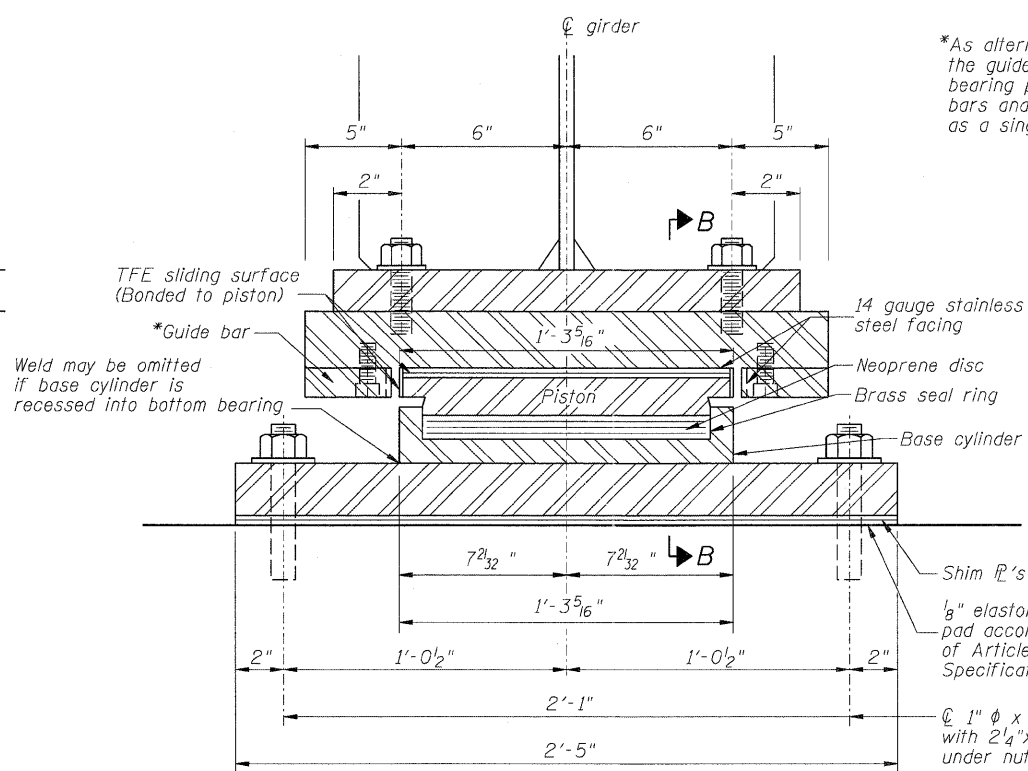
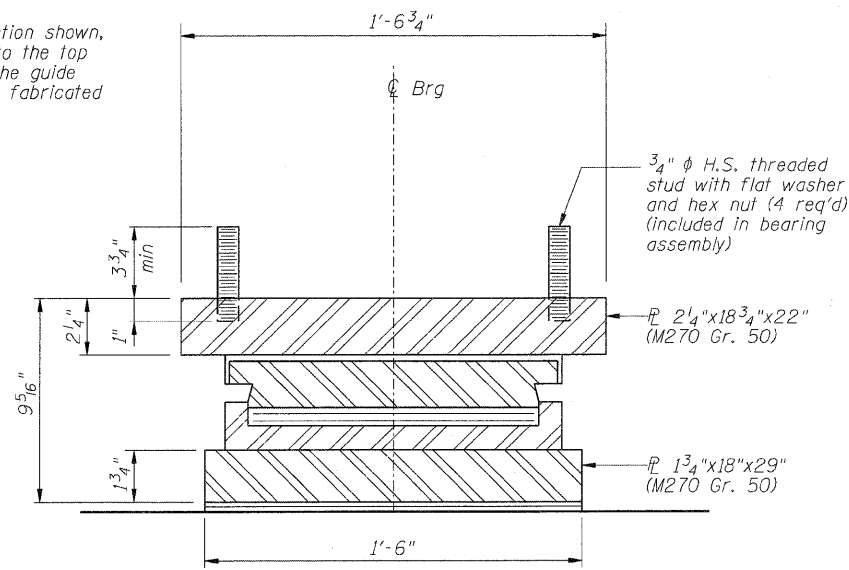


ELEVATION AT PIER 1



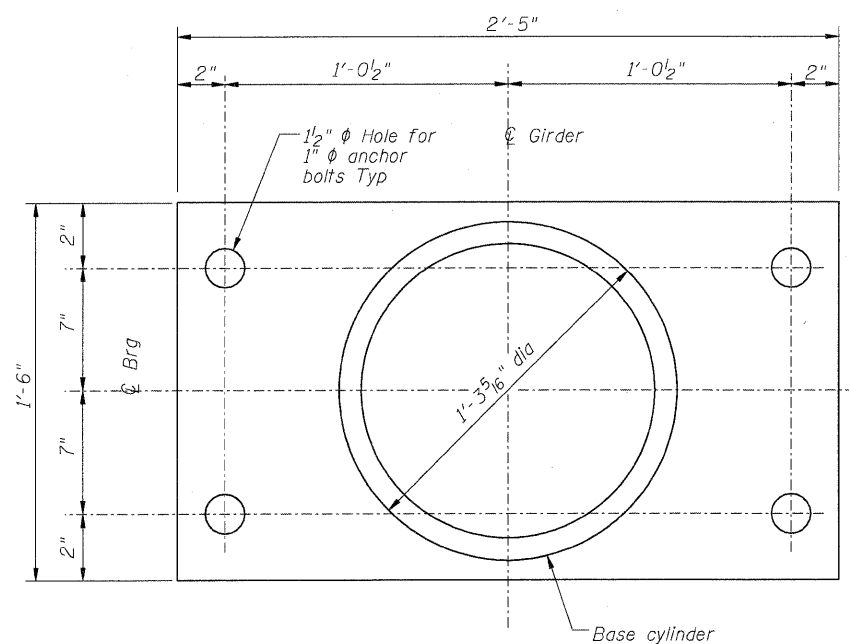
SECTION A-A



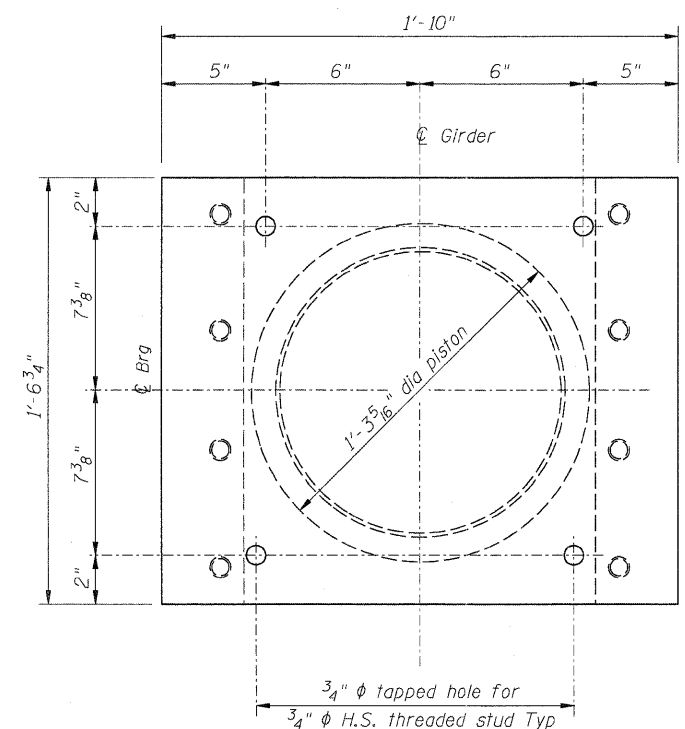
SECTION B-B

*As alternates to the bolted connection shown, the guide bars may be connected to the top bearing plate by groove welds or the guide bars and top bearing plate may be fabricated as a single piece.

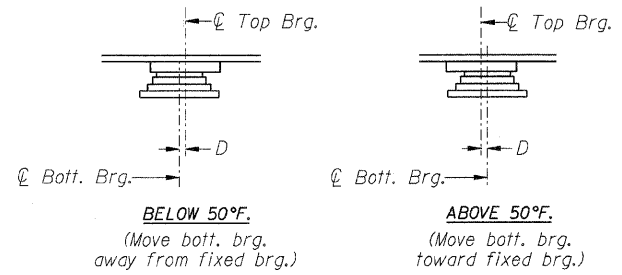
GUIDED EXPANSION POT BEARING



BOTTOM BEARING PLATE AND BASE CYLINDER PLAN



TOP BEARING PLATE AND PISTON PLAN



SETTING ANCHOR BOLTS AT EXP. BRG.
 $D = \frac{1}{8}$ " per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

Bearing Data	
Vertical design load	411 k
Total required movement	5"

BILL OF MATERIAL

Item	Unit	Total
High Load Multi-Rotation Bearings, Guided Expansion 450k	Each	10
Anchor Bolts 1"	Each	40

NOTES

- The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270, Grade 50.
- Cost of top and bottom bearing assembly plates, 1/8" Elastomeric Neoprene, shim plates and threaded studs with washer shall be included with "High Load Multi-Rotation, Guided Expansion 450k".
- Anchor bolts shall be ASTM F1554 all-thread (or an Engineer approved alternative material) of the grade and diameter specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36 ksi).
- Anchor bolts may be cast in place or installed in holes drilled after members are in place. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
- Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown in bearing details.
- The bearing assembly shall be capable of transmitting 20% of the vertical design load as a horizontal force in the direction normal to the guide bars.

FILE NAME = D264880-sht-brgpier1.dgn

USER NAME = dwoznarski
 DESIGNED - ACB
 CHECKED - JMB
 PLOT SCALE = 1:20000' / IN.
 DRAWN - RLK
 PLOT DATE = 7/18/2011
 CHECKED - ACB

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BEARING DETAILS - PIER 1
 STRUCTURE NO. 098-0115

SHEET NO. 63 OF 103 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	166

CONTRACT NO. 64B80
 ILLINOIS FED. AID PROJECT