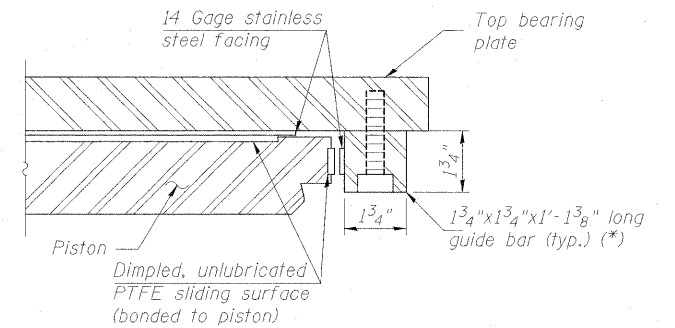


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BILL OF MATERIAL

ITEM	Capacity k	UNIT	QUANTITY
High Load Multi-Rotational Bearings, Guided Expansion	200	Each	14
Anchor Bolts, 1"	-	Each	56



DETAIL 1
SCALE: NTS

(*)
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.

Notes:

The structural steel plates for the bearing assembly shall conform to the requirement of AASHTO M270 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.

The Anchor bolt sizes and grades shown constitute a calculated seismic fuse. Substitution of higher diameter or grade anchor bolts will not be permitted.

Anchor bolts shall be ASTM F1554 all threads (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 55 (FY=55ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

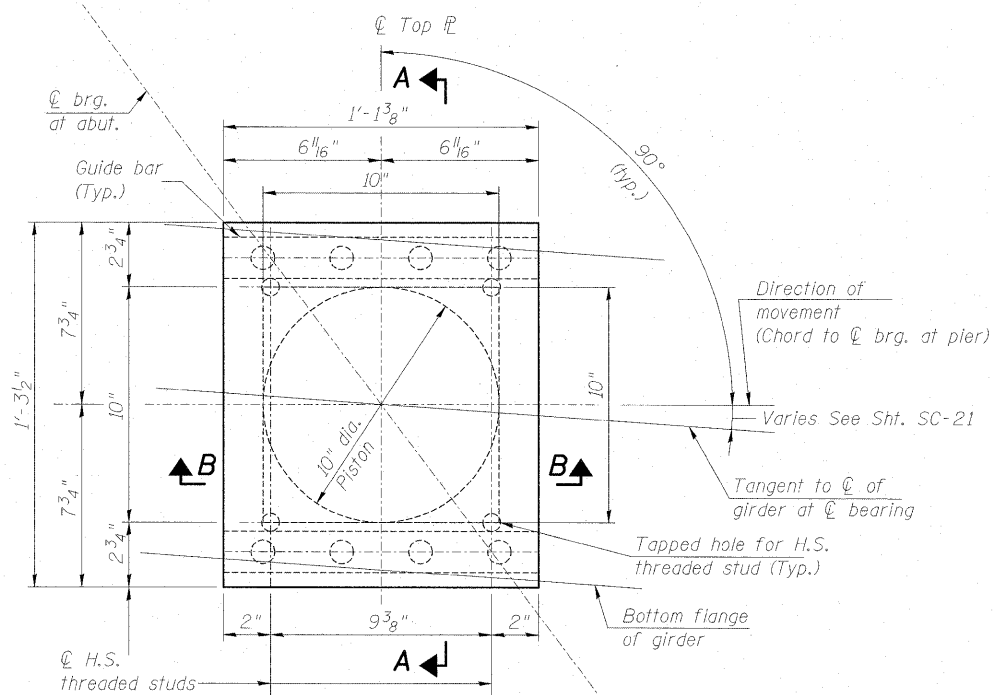
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

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

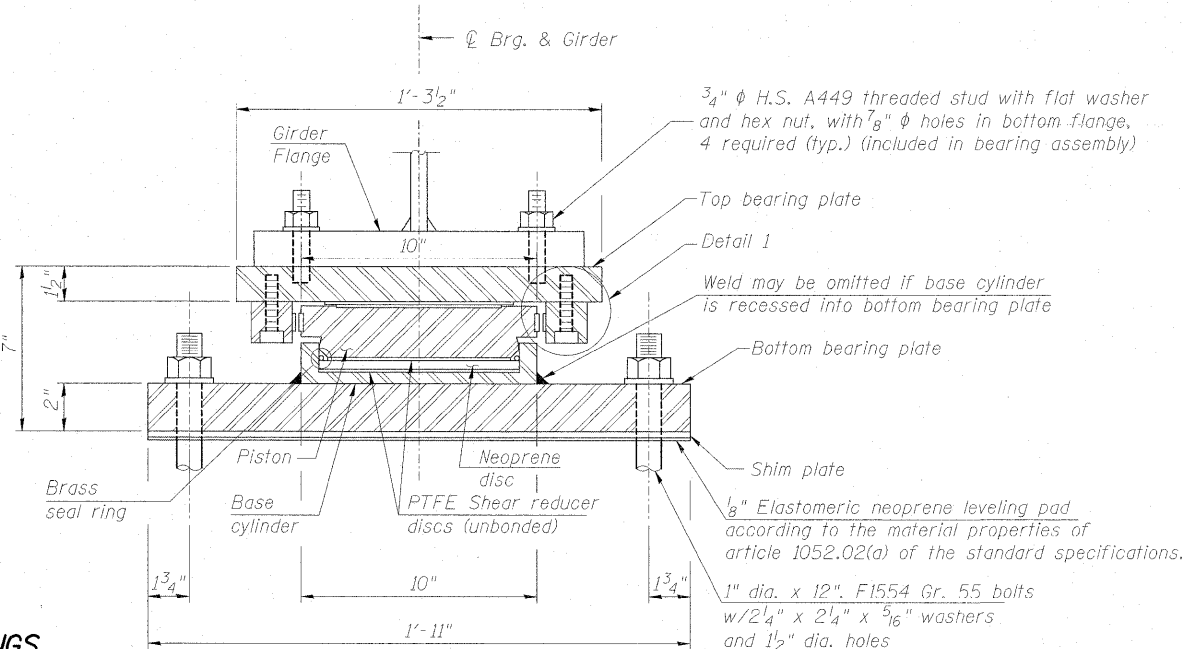
The 1/8" PTFE sheet shall be bonded directly to the piston with a two component, medium viscosity epoxy resin conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

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.

EXPANSION BEARING DETAILS
STRUCTURE NO. 099-0348



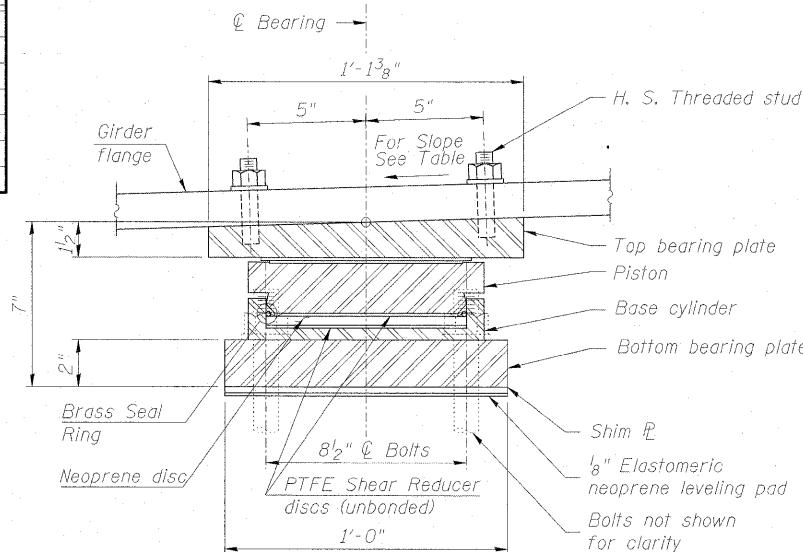
TOP BEARING PLATE AND PISTON PLAN
SCALE: NTS



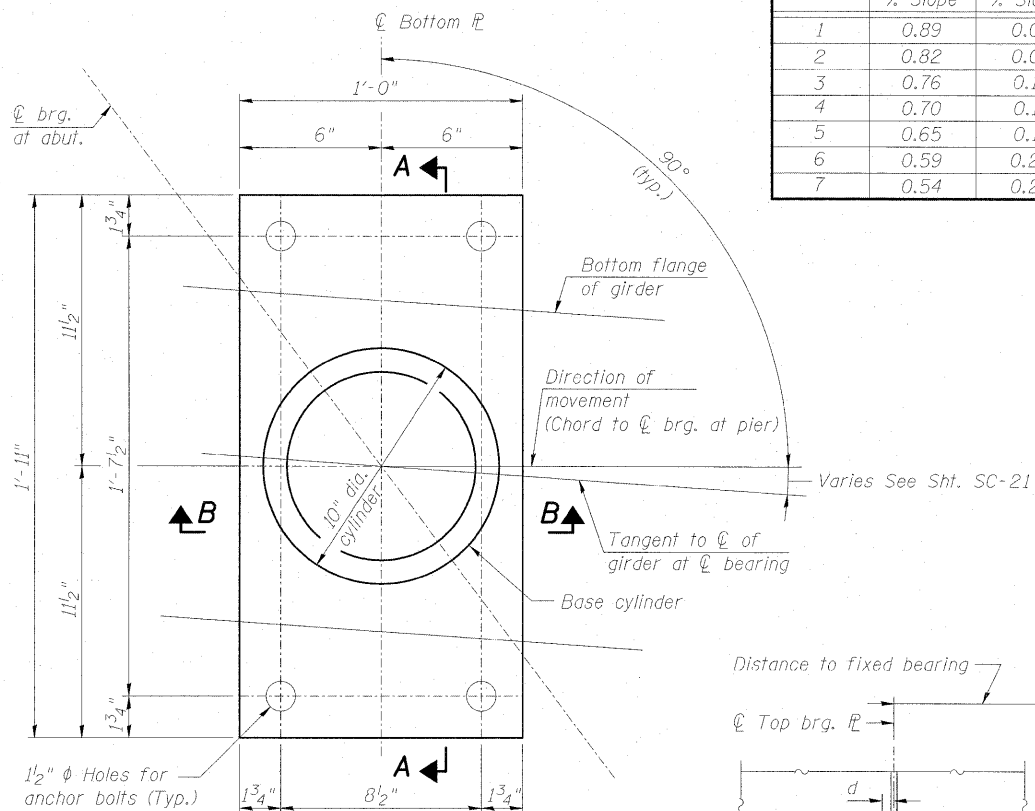
SECTION A-A
SCALE: NTS

SLOPE AT BEARINGS

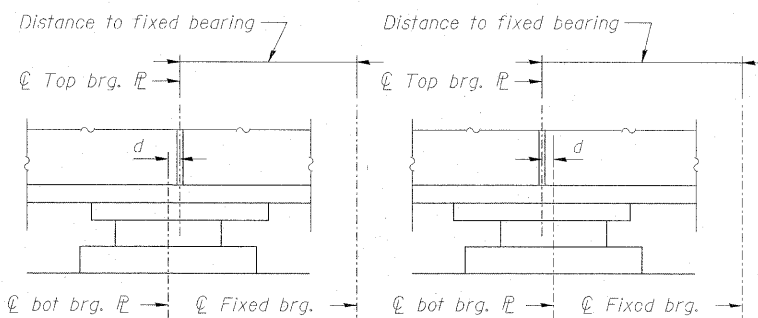
GIRDER	West Brg. % Slope	East Brg. % Slope
1	0.89	0.06
2	0.82	0.09
3	0.76	0.13
4	0.70	0.16
5	0.65	0.19
6	0.59	0.22
7	0.54	0.25



SECTION B-B
SCALE: NTS



BOTTOM BEARING PLATE AND BASE CYLINDER PLAN
SCALE: NTS



SETTING ANCHOR BOLTS AT EXPANSION BEARINGS

NOTE: d=1/8" per each 100' of expansion for every 15° temperature change from the normal temperature of 50°F.

HIGH LOAD MULTI-ROTATIONAL BEARING GUIDED EXPANSION INFORMATION:

- 1) Total vertical service design axial DL = 74.4 k
- 2) Total vertical service design LL without impact = 79.1 k
- 3) Total required Movement = 1.4 in (Expansion = 0.7" & Contraction = 0.7")

NOTE:

THE HIGH LOAD MULTI-ROTATIONAL BEARING GUIDED EXPANSION TYPE SHOWN ARE AT WEST ABUTMENT, EAST ABUTMENT SIMILAR.

DESIGNED	MJL
CHECKED	MGB
DRAWN	AMV
CHECKED	MGB



McDonough Associates Inc.
Engineers / Architects
130 East Randolph Street
Chicago, Illinois 60601
(312) 946-8600

SHEET NO. SC-22 SHEETS SC-37	F.A.I. RTE. 55	SECTION (99-1&2) R-6	COUNTY WILL	TOTAL SHEETS 756	SHEET NO. 548
	CONTRACT NO. 60F12				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			