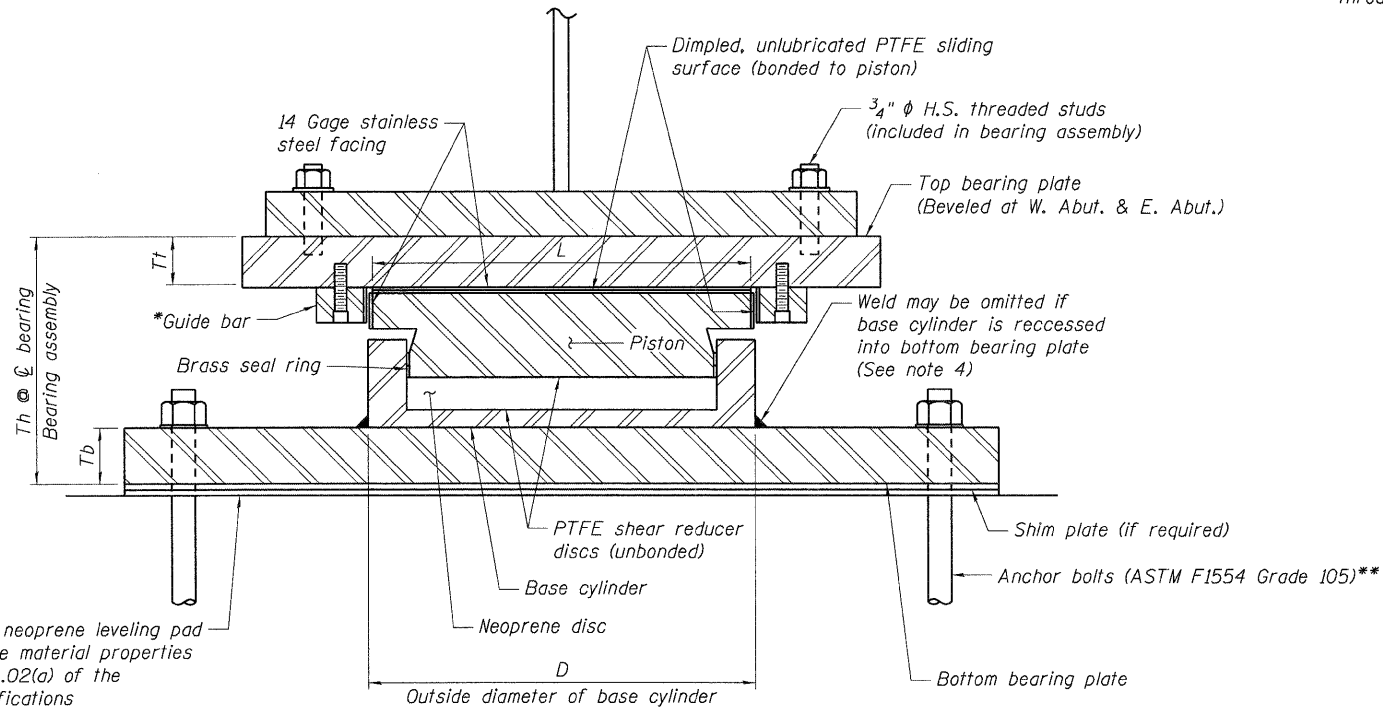


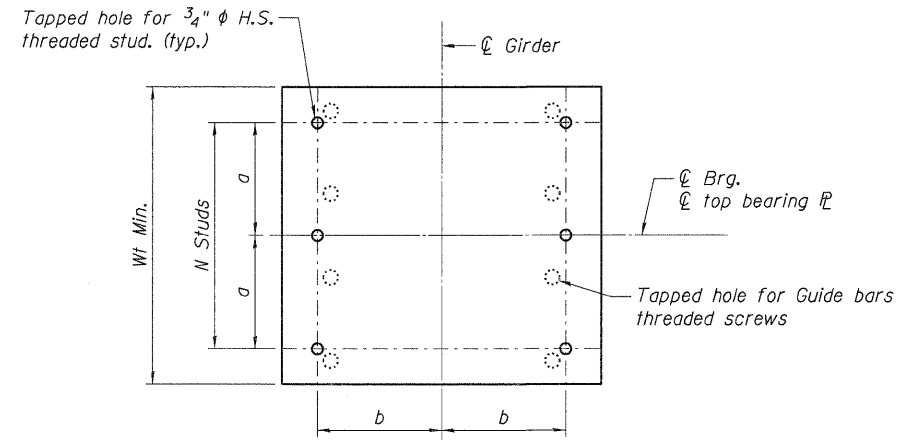
* As alternate to the bolted connection shown, the guide bars may be connected to the top bearing plate by groove welds or the guide bars and top bearing plate may be fabricated as a single piece.



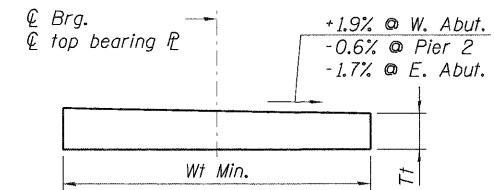
GUIDED EXPANSION POT BEARING
(W. Abutment, Pier 2, E. Abutment)

1/8" Elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications

** 1" ϕ x 12" Anchor bolts
2 1/4" x 2 1/4" x 5/16" ϕ Washer under nut
1/2" ϕ holes in bottom bearing ϕ , typ.



TOP BEARING ϕ PLAN



TOP BEARING ϕ ELEVATION

DIMENSIONS (IN)

Dimension	W. Abut.	Pier 2	E. Abut.
D	11 7/8"	20 5/8"	11 7/8"
L	12"	20 3/4"	12"
Wt	22"	28"	22"
Tb	2 1/4"	2 1/2"	2 1/4"
Tt	1 1/2"	2 3/4"	1 1/2"
Th	8 5/8"	12 1/2"	8 5/8"
N	3	4	3
a	9"	8"	9"
b	9"	12"	9"
c	n/a	9 1/2"	n/a
d	14 1/2"	17 1/2"	14 1/2"

DESIGN DATA

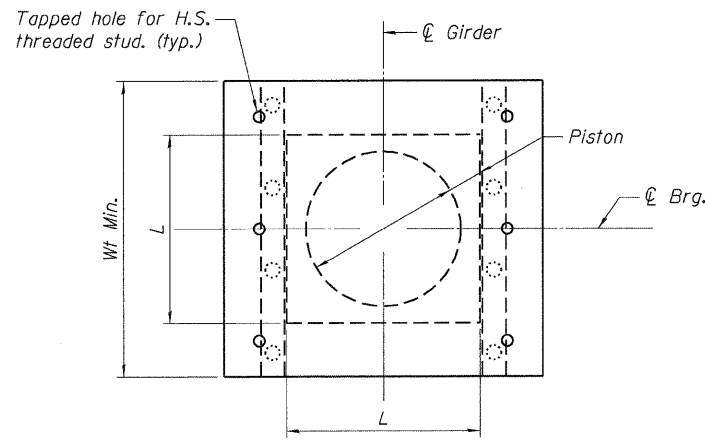
Data	W. Abut.	E. Abut.	Pier 2
Service Vertical Design Load (kips)	229	229	746
Factored Horizontal Design Load (kips)	22	22	96
Factored Design Rotation (rad)	0.013	0.008	0.013
Total Required Movement (in)	2.7	6.5	3.8

BILL OF MATERIAL

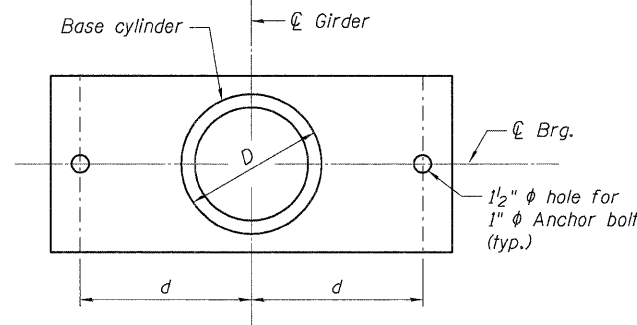
Item	Unit	Total
Anchor Bolts, 1" ϕ	Each	96
High Load Multi-Rotational Bearings, Guided Expansion, 250K	Each	24
High Load Multi-Rotational Bearings, Guided Expansion, 750K	Each	12

NOTES:

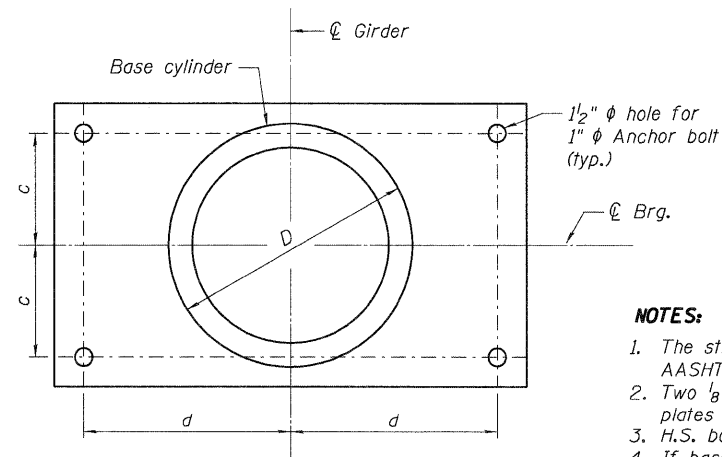
- The structural steel plates of the bearing assembly shall conform to the requirements of AASHTO M 270 Grade 50.
- Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
- H.S. bolts in bearing assembly shall be galvanized according to AASHTO M298 Class 50.
- If base cylinder is recessed into the bottom bearing plate, the thickness of the bottom plate shall be Tb plus the depth of the recess.
- Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade and diameter specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
- Anchor bolts 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 cost of the elastomeric neoprene leveling pads, shim plates, and threaded studs shall be included in High Load Multi-Rotational Bearings.



TOP BEARING ϕ AND PISTON PLAN



BOTTOM BEARING ϕ AND BASE CYLINDER PLAN
(W. Abut. & E. Abut.)



BOTTOM BEARING ϕ AND BASE CYLINDER PLAN
(Pier 2)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
US 20 OVER MCLEAN BOULEVARD

BEARING DETAILS
1 OF 2

FILE NAME = #FILEL*	USER NAME = #USER*	DESIGNED - MDB	REVISED -
		DRAWN - MDB	REVISED -
		CHECKED - PK	REVISED -
		DATE - 12/16/11	REVISED -

SCALE:	SHEET NO. 5-41	OF 5-62	STATION 98+32.18
F.A.P. RTE. 345	SECTION BR-R	COUNTY KANE	TOTAL SHEETS 794 SHEET NO. 513
SN 045-0077			CONTRACT NO. 60H45
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			

TENG ENGINEERS/ARCHITECTS/PLANNERS CHICAGO, ILLINOIS

045077-60H45-001-BEARING_SHT.DGN, \\F5-2014\AVVAULT\TRANS.07\2022\31379-001\STRUCT\CAD\60H45-045077-SHEET\045077-60H45-001-BEARING_SHT.DGN 12-12-2011, 10:02:13