

**NOTES:**

All structural steel for bearings shall be AASHTO M270, Grade 50.

Anchor bolts shall be F1554, Gr. 55.

Actual total bearing heights (Th) may differ from contract plans. Contractor to verify bearing heights and adjust extensions if required prior to ordering.

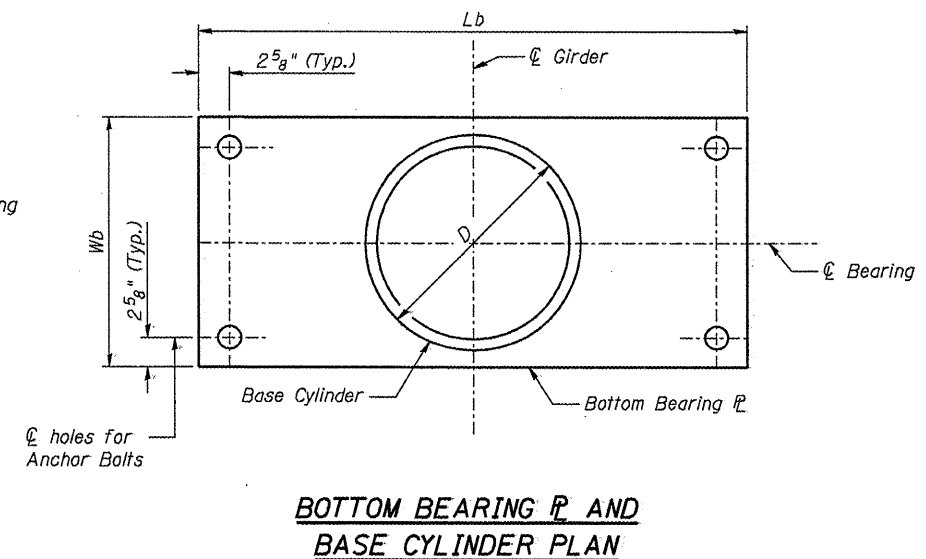
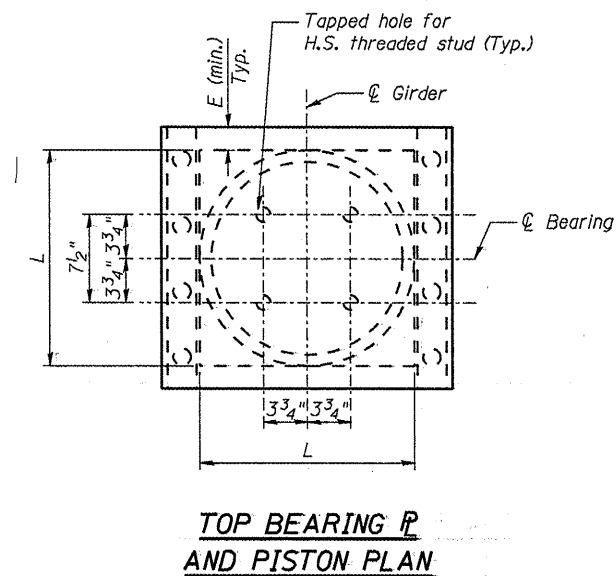
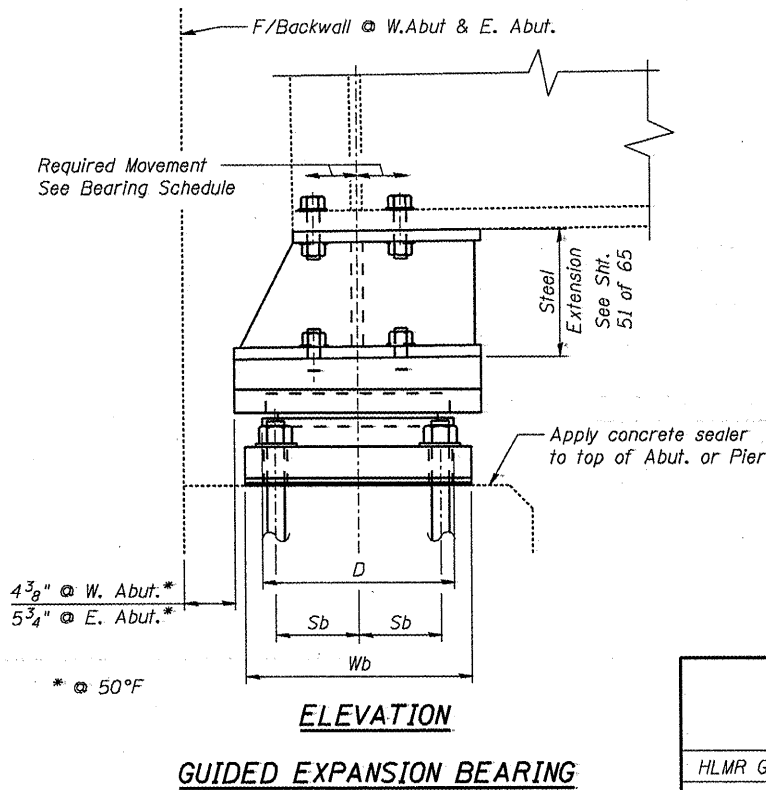
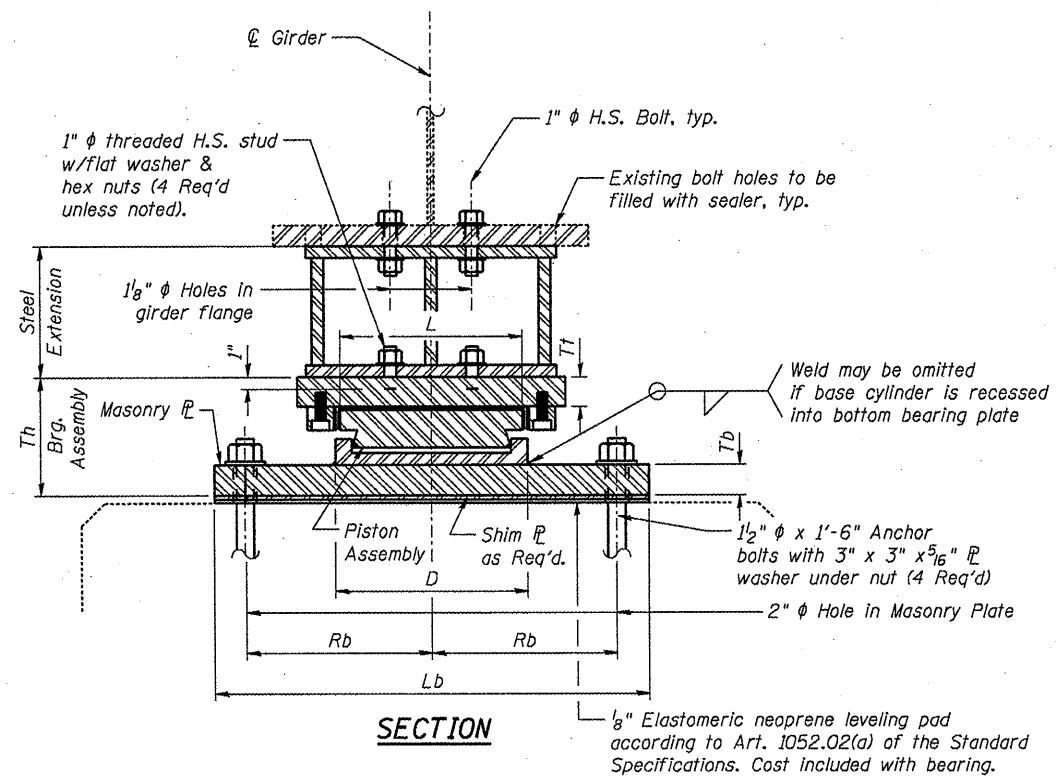
"Total Vertical Reaction" in table is the actual controlling vertical service load.

Inverted HLMR bearing configurations are not permitted.

See Sht. 51 of 65 for typical Existing Bearing Removal Detail.

**BILL OF MATERIAL - BEARINGS**

Item	Unit	Total
High Load Multi-Rotation Bearings, Guided Expansion, 450K	Each	4
High Load Multi-Rotation Bearings, Guided Expansion, 550K	Each	20
Jack and Remove Existing Bearings	Each	24
Anchor Bolts, 1 1/2"	Each	96
Furnishing and Erecting Structural Steel	Pound	9,590



**BEARING SCHEDULE**

Type	Vertical Design Load (K)	Total Vertical Reaction (K)	Quantity (Each)	Location	Member	Total Required Movement	Th (in)	Top Plate Assembly				Bottom Plate Assembly				Steel Extension				
								L (in)	Tf (in)	E (in)	Top $\phi$ Slope (%)	D (in)	Lb (in)	Wb (in)	Tb (in)	Sb (in)	Rb (in)	We (in)	Le (in)	Te (in)
HLMR Guided Expansion	550	414	16	West Abutment, Pier 4, Pier 8	Girders	2 1/2"	9 1/2"	16 1/2"	2 1/2"	2 1/2"	**	16 1/2"	37 1/4"	19 1/2"	2 5/8"	7 1/8"	16"	21 1/4"	21 1/2"	10 3/4"
HLMR Guided Expansion	550	382	4	Pier 11	Girders	2 1/4"	9"	16 1/2"	2 1/2"	2 1/4"	1.14	16 1/2"	30 1/4"	19 1/2"	2"	7 1/8"	12 1/2"	20 5/8"	21 1/2"	11"
HLMR Guided Expansion	450	330	4	East Abutment	Girders	2 3/4"	8 3/4"	15"	2 1/4"	2 3/4"	1.14	15"	30 1/4"	18"	2"	6 3/8"	12 1/2"	20 1/2"	20"	11 1/4"

\*\* 3.41% W. Abut & Pier 4  
1.14% Pier 8