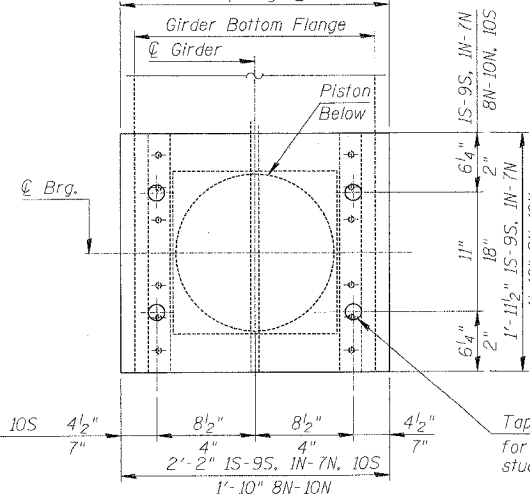
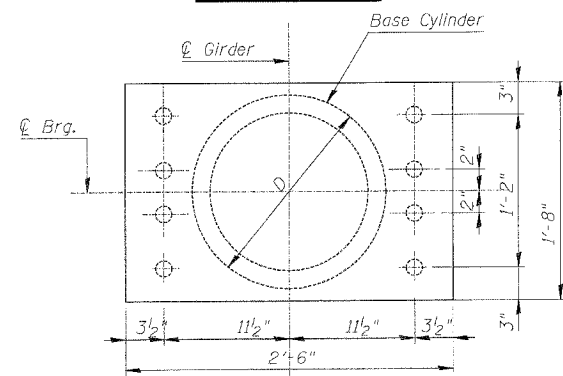


SIDE VIEW

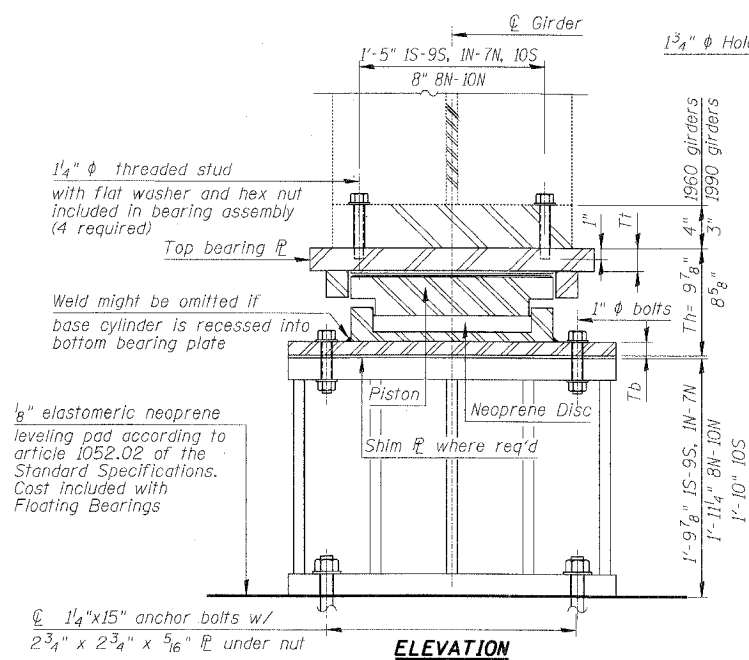
Top Brg. ⊕



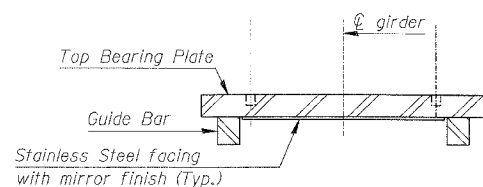
TOP BEARING AND PISTON PLAN



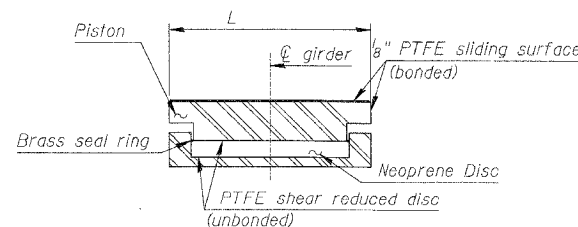
BOTTOM BEARING AND BASE CYLINDER PLAN



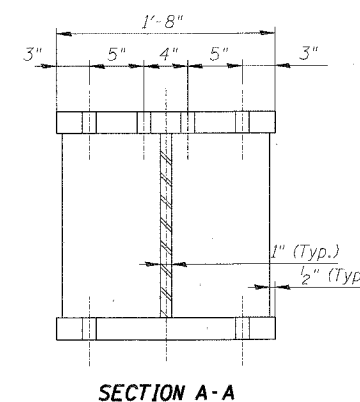
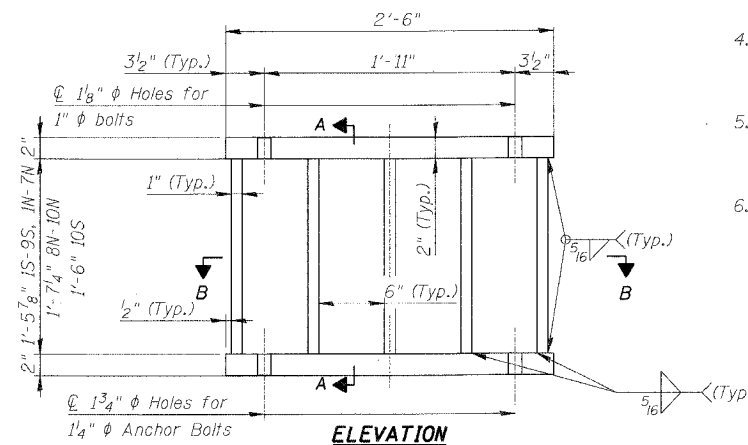
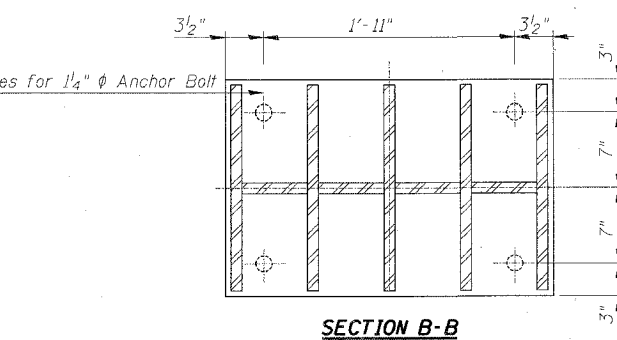
ELEVATION



TOP BEARING PLATE ASSEMBLY



PISTON ASSEMBLY



FABRICATED STEEL EXTENSION DETAIL
S.N. 016-1116
TOTAL OF 20 REQ'D.

Notes:

- The 1/8" TFE sheet shall be bonded directly to the piston with a two component medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MM-A-134, Type 1. The bond agent shall be applied to the full area of the contact surfaces.
- Total Bearing Heights (Th) are based on values taken from a specific manufacturer's design tables. Actual bearing heights may differ from contract plans. Contractor to verify bearing heights and adjust steel extension height if required.
- The Vertical Design Load in table is the actual controlling vertical service load.
- HLMR Bearings dimensions and details are based on a specific manufacturer's design tables. Contractor shall make necessary modifications based on the actual bearings provided.
- As alternates to the bolted connection shown, the guide bars may be connected to the top bearing plate by groove welds or the guide bar and top bearing may be fabricated as a single piece.
- Bearing manufacturer shall coordinate with steel extension manufacturer in order to provide required height from top of pier to bottom of beam flange.

BILL OF MATERIAL

Item	Unit	Quantity
HLMR Bearing, Guided Exp., 550 Kips	Each	17
HLMR Bearing, Guided Exp., 400 Kips	Each	3
Furnishing and Erecting Structural Steel	Lbs.	24,530

HLMR BEARING SCHEDULE (S.N. 016-1116)

Beam No.	Vertical Design Load, k	Lateral Design Load, k	Total Req'd Movement (in.)	Total Req'd Rotation (rad)	Tt	Tb	Th	L	D
IS-10S, 1N-7N	550	110	2 7/8	0.0002	2 3/4	2	9 7/8	18 1/2	17 3/4
8N-10N	400	80	2 7/8	0.0002	2	2	8 5/8	15	15

Dimensions are in inches. Beam numbers reference as-built drawings, see Framing Plans for cross reference.

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

HLMR BEARING DETAIL
20 REQ'D (SEE SCHEDULE THIS SHEET)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
DAN RYAN ELEVATED BRIDGE
BEARING REPLACEMENT & STEEL REPAIR
HLMR BEARING DETAILS
SCALE: NTS
DATE: 3/7/2008
DRAWN BY: MTR
CHECKED BY: BLU