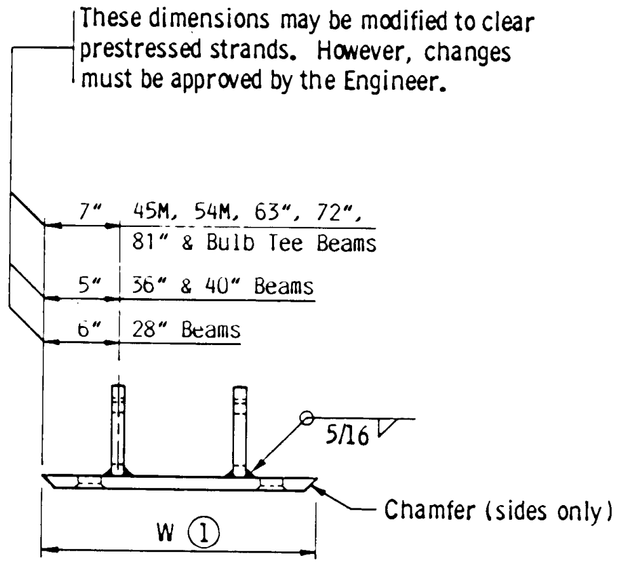
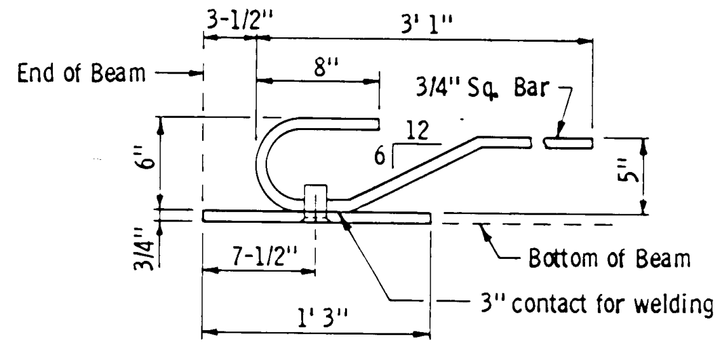
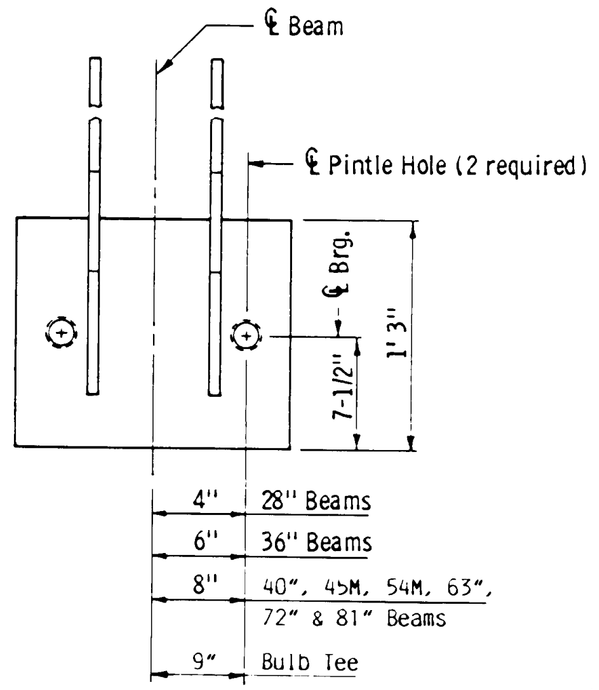


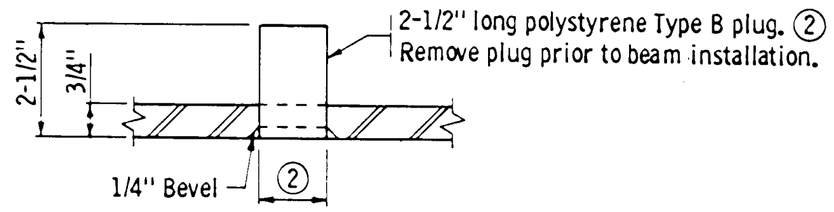
FRONT VIEW



SIDE VIEW



TOP VIEW



PINTLE HOLE DETAIL

NOTES:

Material to be structural steel per Spec. 3306

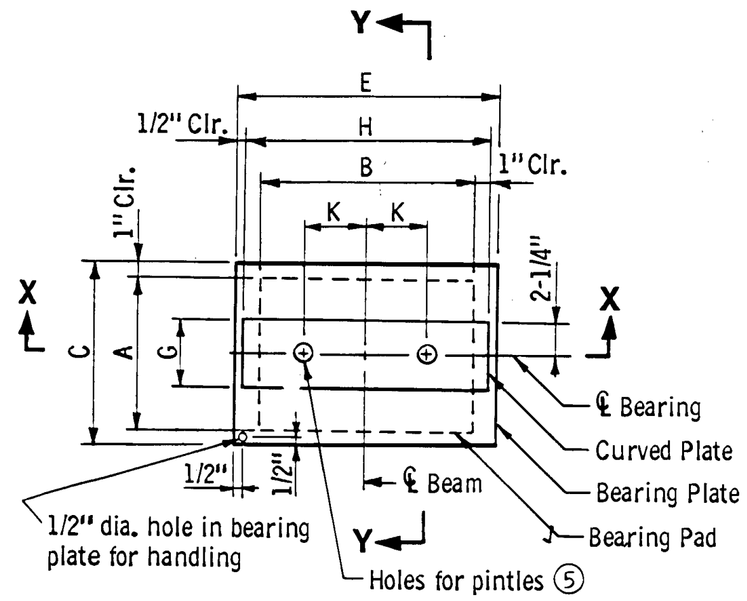
Sole plate for Bearing Assembly to be hot dipped galvanized per Spec. 3394 after fabrication.
Pintle holes shall be free of zinc build up from galvanizing.

Payment for sole plates to be included in price bid for Prestressed Concrete Beams.

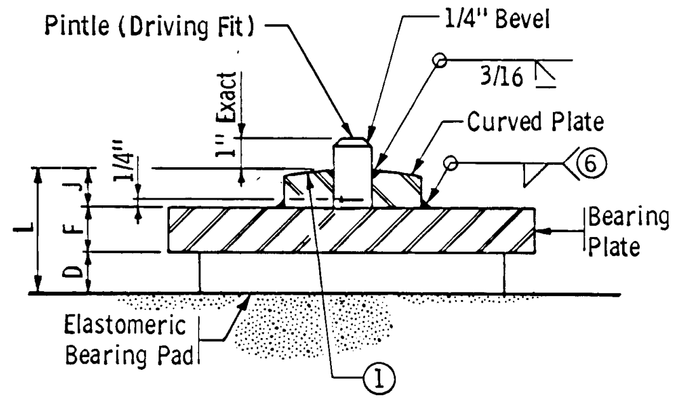
(1) Dimension "W" to be the width at the bottom flange of the beam minus 1/4".

(2) 1-1/2" dia. for 1-1/4" dia. pintles.
1-3/4" dia. for 1-1/2" dia. pintles.
Check bearing assemblies for pintle size used.

APPROVED: March 12, 1987 Developed by: ENGINEERING STANDARDS and BRIDGES & STRUCTURES Issued by: ENGINEERING STANDARDS	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION **SOLE PLATE** **PRESTRESSED CONCRETE BEAMS** **(FOR BEARINGS WITH PINTLES)**	REVISION	DETAIL NO. **B303**



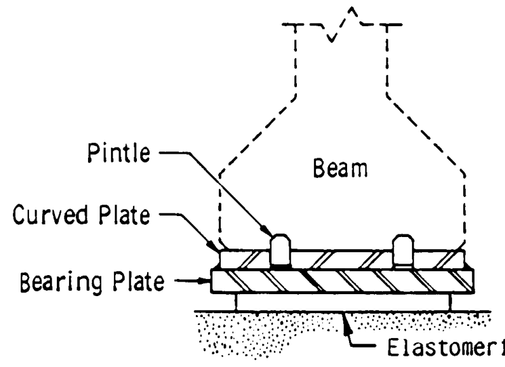
PLAN



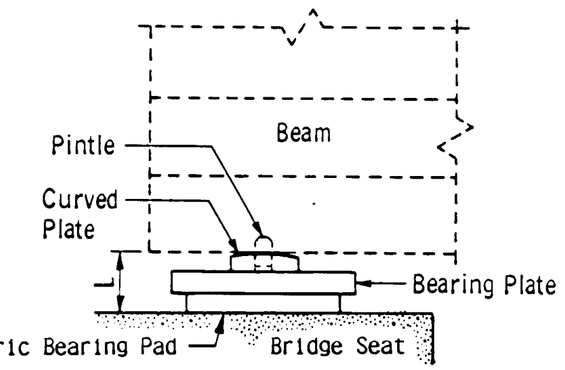
SECTION Y-Y
(ENLARGED BEARING ASSEMBLY)

PINTLE SPACING TABLE

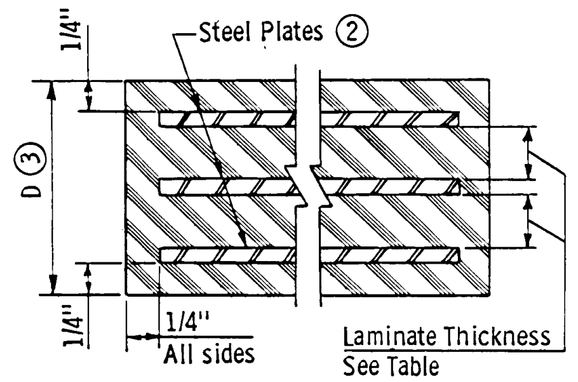
BEAM SIZE	K
28"	4"
36"	6"
40", 45M 54M, 63" 72" & 81	8"
Bulb Tee	9"



SECTION X-X



END ELEVATION



SECTION THRU BEARING PAD

TABLE (4)

Beam Size	Bearing Pad Size A	B	D	Steel Plates No.	Thick.	Laminates No.	Thick.	Shape Factor	Bearing Plate Size C	E	F	Curved Plate Size G	H	J	Pintle Dia.	Pintle Spacing K	Assy. Height L	Assembly Type
63"	12"	24"	1 7/8"	3	3/8"	2	1/2"	8.0	14	27	1 1/4"	4 1/2"	26	1 1/4"	1 1/2"	8"	4 3/8"	1

NOTES:

For elastomeric materials & pad construction, see Spec. 3741 and special provisions, except as noted.

All steel plates shall comply with Spec. 3306, except as noted.

All plates shall be flat after fabrication and galvanizing. Welding distortion of bearing plates shall be straightened to within 1/16" of flatness by mechanical means without damage to the zinc coating.

Pintles shall comply with Spec. 3314, Type II

Galvanize structural steel bearing assembly after fabrication per Spec. 3394, except as noted.

Payment for bearing assembly shall include all material on this detail.

(1) The radius of the curved plate shall be 1' 0" min. & 1' 6" max. Finish to 250 Micro. The finished thickness of the plate may be 1/16" less than shown.

(2) Do not galvanize these plates.

(3) The total thickness shown includes the steel plates.

(4) See Bridge Design Manual for design requirements.

(5) 1-1/4" dia. pintle for total loads to 200 Kips.
1-1/2" dia. pintle for total loads over 200 Kips.

(6) For sole plate or bearing plate thicknesses up to 1-1/2", use 5/16" fillet welds; for thicknesses over 1-1/2" to 2-1/4", use 3/8" fillet welds; for thicknesses over 2-1/4", use 1/2" fillet welds with minimum preheat of 300°.

APPROVED: AUG 4, 1987 Developed by: ENGINEERING STANDARDS & BRIDGES AND STRUCTURES OFFICES Issued by: OFFICE OF ENGINEERING STANDARDS	STATE OF MINNESOTA DEPARTMENT OF TRANSPORTATION **CURVED PLATE BEARING ASSEMBLY** **PRESTRESSED CONCRETE BEAMS** **(EXPANSION)**	REVISION	DETAIL NO. **B311**

DRAWN	CHECKED	APPROVED
DETAILS C.R 88-09-116	SHEET 31B OF 36B SHEETS	

BRIDGE NO. 02546