

**B354**

**Curved Plate Bearing Assembly (Steel Beams) (Fixed)**

Approved, and signed, December 21, 2022.

**Reapproved 12-21-2022**

Under NOTES:

- Changed the term “Per Spec. XXXX” to “In Accordance with Spec. XXXX” in all instances throughout the notes.
- Changed the 3<sup>rd</sup> note from "Provide Anchor Rods Per Spec. 3385, Type A. Galvanize Per Spec. 3392." to "Provide Round Bars In Accordance With Spec. 3306 For Use As Anchor Rods. Galvanize In Accordance With Spec. 3394.

At the Designer Note:

- Changed the word “plotting” to printing.

At Approved Signature Block in Lower Left Corner:

Since the "Revision" block is full the detail was reapproved, and the previous revision dates were removed.

At DESIGN DATA block:

- Removed the "Design Data Block" from the lower right corner of the detail. The information that was included in the Design Data Block has been added to the MnDOT LFRD Bridge Design Manual.

**Revised 11-08-2018**

Under NOTES:

- Changed numbered note ⑤ *from* “Refer to bearing pad restraint sheet for additional information and details” *to* “Refer to bearing pad restraint B-Detail for additional information and details”.

**Revised 11-02-2017**

Under NOTES:

- Changed numbered note ⑤ to read: Refer to bearing pad restraint sheet for additional information and details.

At SECTION Y-Y:

- Changed the note *from*: Welded Bar (Typ.) ⑤ *to*: Restraint Bar (Typ.) ⑤.
- Removed the weld symbol pointing to the restraint bar.

At the SIDE ELEVATION and SECTION X-X:

- Added the restraint bars under the bearing plate.
- Changed the curved plate leader line for clarity at the Side Elevation.

At the DESIGNER NOTE:

- Removed the 1<sup>st</sup> designer note pertaining to the anchor rods.
- Added new note: Per note ⑤ include B307 and modify as necessary.

Updated the DESIGN DATA box to read:

- MAX. FACTORED SHEAR RESISTANCE:
  - 50.3 KIPS PER 1½” DIA. PINTLE
  - 36.2 KIPS PER 1½” DIA. ANCHOR ROD

At the bearing TABLE:

- Rotated the column titles for Shape Factor & Pintle Dia. to acquire width space for table.
- Added the RESTRAINT PATTERN column along with numbered note ⑤.

**Revised 11-03-2015**

At BEARING PLATE DETAIL:

- Changed from welded “keeper” studs” to a welded “keeper” bar.
- Added the 3/16” fillet weld symbol to the welded bar on the lower left side of the detail.
- Changed the “Welded Stud ⑤” *to* “Welded Bar (Typ.) ⑤”

Under NOTES:

- Changed all notes to “Active Voice” if needed.

- Changed numbered note ⑤ to read: 3/8" x 3/8" bar installed on bearing plate around perimeter of bearing pad. Bar length is 2" less than adjacent pad dimension, centered on pad. Centerline of bar to edge of pad dimension = 1/2".

Added DESIGNER NOTE:

- Two 1½" diameter anchor rods have a factored horizontal resistance of 95 kips. Designer shall increase diameter, number of rods or both when needed.  
When specifying offset dimension "M", consider the size and proximity of the diaphragm and longitudinal pier reinforcement to allow adequate room for installation of anchor rods.

**Revised 11-06-2013**

Under NOTES:

- In the 3<sup>rd</sup> note, Changed the galvanize spec. number from 3394 to 3392.
- Removed the "MnDOT" from the MnDOT Spec. references throughout the detail.

**Revised 12-17-2008**

Under NOTES: Minor spelling correction to note⑤.

**Revised 08-10-2006**

Under NOTES: Revised ① *from* THE RADIUS OF THE CURVED PLATE SHALL BE 1'-4" MINIMUM AND 2'-0" MAXIMUM UNLESS OTHERWISE SPECIFIED IN THE TABLE. FINISH TO ... *to* THE MIN. RADIUS SHALL BE 16" UNLESS OTHERWISE SPECIFIED IN THE TABLE. THE MAX. RADIUS SHALL BE 24". FINISH TO ...

In the TABLE: Added +/- column under ANCHOR ROD OFFSET