



NOTES:

SCALE: 1" = 1'-0"

1. This bearing shall be used only in situations where the standard bearing assembly shown on Dwg. No. 8.1.2 cannot be used (i.e. some bridge retrofits, where no keeper blocks, keys and backwalls can be provided as longitudinal and/or transverse restraint to the superstructure). It must never be used with the full depth diaphragms detailed in Chapter 3 of Part II of this Bridge Manual, as well as to provide seismic restraint in situations where the seismic ground acceleration coefficient $A_s \geq 0.05$.
2. D = Diameter of Elastomeric Bearing Pad; $WS = D + 2$;
For anchor bolts not exceeding $1\frac{1}{2}$ " ϕ , $LS = (D \text{ or width of bottom flange, whichever is greater}) + 12$ "; For anchor bolts greater than $1\frac{1}{2}$ " ϕ , LS shall be determined by Designer.
Length of shear plate = (length of slot) + 3", or for oversized holes = $WS/2$.
3. The end of the beam and sole plate may be flush, however the sole plate cannot extend beyond the beam end. If required, increase the length of beam so that it stays flush with sole plate.
4. If necessary, cope sole plate and beam bottom flange to maintain a minimum of 3" clearance.
5. Depending on the bearing size, the width of the bridge seat may need to be increased to maintain this clearance.
6. Use slotted hole where longitudinal expansion is required.
Width of slot = (bolt diameter $\times 1.25$), rounded up to nearest $\frac{1}{4}$ ".
Length of slot = (calculated total thermal movement range $\times 1.5$) + (width of slot), rounded up to nearest $\frac{1}{4}$ ".
Where a fixed bearing is required, substitute an oversized hole for a slot. Diameter of hole = (bolt diameter $\times 1.25$), rounded up to nearest $\frac{1}{4}$ ".
7. Sole plate must be tapered if slope of beam bottom flange due to roadway grade and camber exceeds 1%. Provide detail of tapered sole plate as shown on Dwg. No. 8.1.6.



LRFD BRIDGE

MANUAL, PART II

BEARING WITH ANCHOR BOLTS PLAN

ELASTOMERIC BEARINGS – STEEL BEAMS

DATE OF ISSUE
JUNE 2013

DRAWING NUMBER

8.1.4