



1. Design lengths mentioned below assume a CSG structure type carrying an HS 20-44 loading with an 8" deck and 4" of asphalt.
2. Girder working stress reactions relating to span lengths may be different for different structure types. Girder working stress reactions should be verified.
3. All bolts and threaded rod shall be A449 high strength steel.
4. Grout threaded rod into holes with a non-shrink epoxy grout.
5. The Contractor shall verify all dimensions prior to ordering materials.
6. Installation and all items shown shall be paid for under Item 512-00120 Bearing Repair Corbel.
7. All welding shall be performed per AWS D1.1 with low hydrogen electrodes.

1. Remove loose concrete and clean exposed reinforcing steel.
2. Bolt the form in place and restore the abutment to its original section using an approved grout (Duracal, etc).
3. Allow curing time as recommended by the Manufacturer before removing the form.
4. Locate and mark centerline of the girder on the face of the Abutment Bearing Seat.
5. Mark location of bolt holes on the abutment, see elevation view and section.
6. Drill holes in the abutment and grout bolts in place.
7. Cut holes in plywood form to match bolt holes in the abutment.
8. Using the form for a pattern, cut the bolt holes in the front plate.
9. Attach plates and tighten bolts (100 Lb-Ft torque).
10. Raise the support assembly until the elastomeric pad is compressed  $\frac{1}{16}$ " (200 psi x pad area = Jacking Force).
11. Field weld the support assembly to the front plate.
12. Paint all steel as directed by the Engineer.

Where one size or dimension is shown, it is good for all designs up to 95 feet.

Where three sizes or dimensions are shown -

No asterisk, For structures with span lengths up to 50 feet  
(girder working stress reaction = 107 Kip).

\* For structures with span lengths up to 80 feet  
(girder working stress reaction = 154 Kip).

\*\* For structures with span lengths up to 95 feet  
(girder working stress reaction = 175 Kip).

Delete as needed for your design.

All seals for this set of drawings are applied to the cover page(s)	Print Date: \$DATES\$	<div><div></div><div></div><div></div><div></div></div>	Sheet Revisions			Colorado Department of Transportation		As Constructed		BEARING REPAIR DETAILS			Project No./Code	
	File Name: Sheet_B-509-2A.dgn		Date:	Comments	Init.	<div><div></div><div>2829 West Howard Place, 3rd Floor Denver, CO 80204 Phone: 303-512-4079 FAX: 303-757-9197</div></div> <div>Staff Bridge Branch</div> <div>Initials</div>	No Revisions:		107-175 KIP			Project Number		
	Horiz. Scale: None      Vert. Scale: As Noted						Revised:	Designer:      XXXXXXXX	Structure Numbers	X-XX-XX	Code			
	Unit Information      Unit Leader Initials							Detailer:      XXXXXXXX		X-XX-XX				
								Void:	Sheet Subset:      BRIDGE	Subset Sheets: BXX of XXX		Sheet Number		