Install post adapter unit on top of box culverts or similar situations when standard post embeddings are not possible. Not intended for use on intakes.

Contractor may elect to fabricate posts using a 6-foot post and adjusting in the field as follows:

A. Saw off top end to proper length and drill new holes.
B. Treat the sawed end and drilled holes with two coats of organic zinc rich paint containing at least 94% zinc dust. Ensure the surfaces to be treated are free of oil residues due to sawing or drilling.

The price bid for "Steel Beam Guardrail, Post Adapter Unit, BA-210" is full compensation for furnishing, assembling, and installing the adapter unit as shown. Quantity shown in the contract documents.

Bolt length equals slab thickness plus 2 inches. Use 2 - 2.5 inch washers per bolt.

Base Plate

Steel Guardrail Post

Culvert Headwall

12" Blockout

3" dia. (typ.)

$5$ dia. (typ.)

31" Mounting height

10:1 Slope (max.)

7" min.

12" min.

Drill $\frac{1}{2}$" Holes

Possible Contract Items:

Steel Beam Guardrail, Post Adapter Unit, BA-210

Incidental to Steel Beam Guardrail:

Incidental to Adapter Unit:

1 - 12" x $\frac{3}{4}$" x $\frac{3}{4}$" ASTM A36 Steel Plate

1 - 11" x $\frac{3}{4}$" x $\frac{3}{4}$" ASTM A36 Steel Plate

4 - 1" ASTM A307 Hex Head bolts with one nut and two washers per bolt

Possible Tabulations:

108-8A
108-8B
108-8C

Twelve inch minimum to end of top of culvert if no headwall is present.

Bolt length to provide a minimum of 8 inch embedment. Use 1 - 2.5 inch washer per bolt.

Possible Contract Items:

Steel Beam Guardrail
Steel Beam Guardrail, Post Adapter Unit, BA-210

Incidental to Steel Beam Guardrail:

W6 x 9 or W6 x 8.5 Steel Guardrail Post (variable length)
6" x 12" x 14" Blockout

Possible Tabulations:

108-8A
108-8B
108-8C

Twelve inch minimum to end of top of culvert if no headwall is present.

Bolt length to provide a minimum of 8 inch embedment. Use 1 - 2.5 inch washer per bolt.

Possible Contract Items:

Steel Beam Guardrail
Steel Beam Guardrail, Post Adapter Unit, BA-210

Incidental to Steel Beam Guardrail:

W6 x 9 or W6 x 8.5 Steel Guardrail Post (variable length)
6" x 12" x 14" Blockout

Possible Tabulations:

108-8A
108-8B
108-8C
Minimum 5 posts at half post spacing

3' 1.5" Post Spacing (Half Post Spacing)

Minimum 5 posts at half post spacing

Minimum 12 inches between post and edge of culvert.

Minimum 4 inches between edge of culvert and center of anchor.

Guardrail Post Adapter Unit

Revisions:
- Increased offset to 12" in Typical Sections.
- Added Sheet 2.
- Added washers to circle notes 1 and 6.

Approved by Design Methods Engineer