**Integral End Bent with Shallow Superstructure**

Use when distance between upper and lower construction joints in wings is less than 28 1/2".

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**General Notes:**

- **Maintaining Steel:** Concrete traffic barrier delineators shall be placed on top of the barrier as shown on Missouri Standard Plan 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall be considered completely covered by the contract unit price for Type D Barrier.
- **Minimum Clearance to Reinforcing Steel:** At a minimum of 1 1/2" except as shown for bars embedded into end bent.

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**Details of Guard Rail Attachment**

- **Left barrier shown, right barrier similar.**
- **Note:** This drawing is not to scale. Follow dimensions.

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**Type D Barrier at End Bents**

- **Plan:**
  - 1/8" cts.
  - 2-1/8" cts.
  - 2-1/4" cts.
  - 1-7/8" cts.

- **Elevation:**
  - 2-1/8" cts.
  - 2-1/4" cts.
  - 1-7/8" cts.

- **Notes:**
  - Construction Joint
  - 1-1/2"Ø Holes
  - 1/4" Holes

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**K10-K11 Bar Permissible Alternate Shape**

(Other bars not shown for clarity. The K10-K11 bar combination may be furnished as shown or as per the contractor's option.)

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**Construction Notes:**

- Use when distance between upper and lower construction joints in wings is less than 28 1/2".

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**Supersedes:** July 2020

**Effective:** Sep. 2021

**District:**

**MO**

**Date Prepared:** 11/13/2023

**County:** JEFFERSON CITY, MO 65102

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**JOB NO.**

**PROJECT NO.**

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**Note:** This drawing is not to scale. Follow dimensions.
ALTERNATE DETAILS FOR SKEWED BRIDGES REQUIRING K3 BARS

Standard Drawing Guidance: (do not show on plans)

- For skews greater than 3 degrees, use alternate details above, which substitutes a K3 bar for the end K2 bar. For skews greater than 41 degrees, two K3 bars are required.

- Dimensions are based on a 2.0% sloped deck. Subtract 1/8" for a 3/16" per foot sloped deck.

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Dimensions are based on a 2.0% sloped deck. Subtract 1/8" for a 3/16" per foot sloped deck.