**GENERAL NOTES:**

1. General notes that may require specification modifications to accommodate existing conditions and details may need to be amended if the exact bridge abutment wingwall detail is not covered. In all cases, details shown may need to be amended if the specific application guide should be prepared for the specific application.

2. Transition to the bridge railing may be extended where a transition is not recommended. Transition details include the threaded rod and the rail. Transition detail must be shown. Particular care should be taken in identifying the bridge abutment or wingwall condition and providing for proper reinforcement anchorage and approach guard fence post positioning.

3. Transition to the bridge railing may be extended where a transition is not recommended. Transition detail must be shown. Particular care should be taken in identifying the bridge abutment or wingwall condition and providing for proper reinforcement anchorage and approach guard fence post positioning.

4. Transition to the bridge railing may be extended where a transition is not recommended. Transition detail must be shown. Particular care should be taken in identifying the bridge abutment or wingwall condition and providing for proper reinforcement anchorage and approach guard fence post positioning.

**CONSTRUCTION NOTES:**

1. Provide Type VIII epoxy morter on post base plates that are larger than 1 1/2 x 1 1/2 as required. One shop splice per rail member section is permitted with minimum 6% percent penetration.

2. Provide Type VIII epoxy mortar in all interfaces of HSS rail, rail post and plate to approximately 1/4 by grinding.

**MATERIAL NOTES:**

1. Galvanize all metal components of steel rail system. Provide Grade 50 reinforcing steel.

2. Provide Class "C" concrete. As an alternate, provide Class "K" concrete, or a Type II rod, or Type II concrete repair material per DMS-4655 "Concrete Repair Material."

3. Anchor bolts must be 5/8" Dia ASTM A307 or 5/8" or ASTM A490 fully threaded bolts with one heavy hex nut and one hardened washer (ASTM F582) placed under each. Nuts must conform to ASTM A563 fully threaded rods with one heavy hex nut and one hardened washer (ASTM F436) placed under each. Nuts must conform to ASTM A563.

4. Transition to the bridge railing may be extended where a transition is not recommended. Transition detail must be shown. Particular care should be taken in identifying the bridge abutment or wingwall condition and providing for proper reinforcement anchorage and approach guard fence post positioning. Transition detail must be shown. Particular care should be taken in identifying the bridge abutment or wingwall condition and providing for proper reinforcement anchorage and approach guard fence post positioning.

5. Transition to the bridge railing may be extended where a transition is not recommended. Transition detail must be shown. Particular care should be taken in identifying the bridge abutment or wingwall condition and providing for proper reinforcement anchorage and approach guard fence post positioning.

6. Transition to the bridge railing may be extended where a transition is not recommended. Transition detail must be shown. Particular care should be taken in identifying the bridge abutment or wingwall condition and providing for proper reinforcement anchorage and approach guard fence post positioning.

7. Transition to the bridge railing may be extended where a transition is not recommended. Transition detail must be shown. Particular care should be taken in identifying the bridge abutment or wingwall condition and providing for proper reinforcement anchorage and approach guard fence post positioning.

8. Transition to the bridge railing may be extended where a transition is not recommended. Transition detail must be shown. Particular care should be taken in identifying the bridge abutment or wingwall condition and providing for proper reinforcement anchorage and approach guard fence post positioning.
**SECTION A-A OF 9" HIGH CURBS**

(Showing example of 9" Min width curb, wider curbs similar)

- Top of Base Plate
- HSS 6 x 6 x ½ (ASTM A1085 or A500 Gr C).
- See "Material Notes" for anchor bolt information.

**SECTION A-A OF 11" & 12" HIGH CURBS**

(Showing example of 9" Min width curb, wider curbs similar)

- Top of Base Plate
- HSS 6 x 6 x ½ (ASTM A1085 or A500 Gr C).
- See "Material Notes" for anchor bolt information.

**SECTION A-A OF 18" HIGH CURBS**

(Showing example of 9" Min width curb, wider curbs similar)

- Top of Base Plate
- HSS 6 x 6 x ½ (ASTM A1085 or A500 Gr C).
- See "Material Notes" for anchor bolt information.

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**DISCLAIMER:**
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard. These details are not to be used as a standard. See elsewhere in plans for dimensions (curb width and height, slab and overlay thickness). Slope of curb may differ from what is shown. Adjust base plate as necessary to conform to curb face geometry.