**TYPICAL TREATMENT OF RAILING ALONG BRIDGE**

**NOTES:**

1. On approach end provide a Roadway Guardrail Transition, Index No. 402 (as shown) or other site specific treatment. See Roadway Plans for limiting station of Roadway Guardrail Transition or other site specific treatment. If limiting station of Roadway Guardrail Transition is on the bridge, attach Thru-Beam Terminals to railing as shown above. If limiting station at Roadway Guardrail Transition is along the Wing Wall, see Schemes 2 or 3, Sheets 2 & 3. On skewed bridges, if the skew deck joint extends across the width of the railing, the 2"-6" minimum dimension shall apply to both the front and back face of the railing. For treatment of railing and end slab details, see Index No. 484 for treatment and details.

2. Field cut Bars 55 and Dowel Bars 60 to maintain clearance within Vertical Face Retrofit Railing.

3. Where existing structure has been removed and not encased in new concrete, match adjoining areas and finish hot by grinding or grinding as required. Exposed existing reinforcing steel is to be removed and new concrete shall be reinforced with hot wire, 0.025 gauge, 6" by 6" using 5/32" diameter.}

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**PARTIAL ELEVATION OF INSIDE FACE OF RAILING**

*Expansion Dowel Assemblies and Bars 4C not shown for clarity*

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**TYPICAL SECTION THRU RAILING ON BRIDGE DECK**

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**TYPICAL SECTION THRU EXISTING TRAFFIC RAILING SHOWING LIMITS OF REMOVAL (BRIDGE DECK SHOWING WING WALL SIMILAR)**

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**CROSS REFERENCE:**

For General Notes, Estimated Quantities, Dowel Detail, Expansion Dowel Detail, Reinforcing Steel Notes & Sectioning Diagram see Index No. 480.
**PARTIAL PLAN OF GUARDRAIL**

1. **Dowel Bars 4L (10" Embedment)**
2. **Existing Approach Slab**
3. **Transition Block (See Note 1)**
4. **Roadway Guardrail Transition (Note 1, Sheet 1)**

**PARTIAL ELEVATION OF INSIDE FACE OF GUARDRAIL**

**SCHEME 1**

**RAILING END TREATMENT FOR PERPENDICULAR OR ANGLED WING WALLS**

1. **Provide Transition Block (as shown) or Curb if existing Approach Slab does not have a curb.** See Roadway Plans. Shape and height of Transition Block or Curb shall match existing bridge curb. Railing End Transition and Transition Block may be omitted on trailing ends with no opposing traffic.
2. **Field bend Dowel Bars 4L within Transition Block as required to maintain 2" top and side clearance and 3" bottom clearance.**
3. **If a Special Steel Guardrail Post is required for attachment to the top of a sloping Wing Wall, saw cut and remove a wedge shaped portion of the sloping Wing Wall as required to provide a level surface for post installation.**

**SCHEME 2**

**RAILING END TREATMENT FOR PARALLEL WING WALLS**

1. **Provide Transition Block (as shown) or Curb if existing Approach Slab Curb does not extend beyond end of existing End Bent Wing Wall, see Roadway Plans. Shape and height of Transition Block or Curb shall match existing bridge curb. Railing End Transition and Transition Block may be omitted on trailing ends with no opposing traffic.**
2. **Field bend Dowel Bars 4L within Transition Block as required to maintain 2" top and side clearance and 3" bottom clearance.**
SCHEME 3 NOTE:
1. See Roadway Plans for limiting station of Roadway Guardrail Transition of other site-specific treatment. If limiting station of Roadway Guardrail Transition is along the Wing Wall, attach Thrive-Beam Terminal Connector to railing as shown above. If limiting station of Roadway Guardrail Transition is on the bridge, see Sheet 1.

PARTIAL PLAN OF RAILING

PARTIAL ELEVATION OF INSIDE FACE OF RAILING
(Railing Reinforcing and Expansion Dowel Assemblies not shown for clarity)

SCHEME 3
RAILING END TREATMENT FOR FLARED WING WALLS