TRAFFIC RAILING NOTES

This railing has been structurally evaluated to be equivalent or greater in strength to other safety shape railings which have been crash tested to NCHRP Report 350 TL-4 Criteria.

CONCRETE AND REINFORCING STEEL: See Structures Plans, General Notes.

MARKERS: Elevation Markers shall be placed on top of the Traffic Railing at the end bents. On bridges longer than 100 ft, one marker shall be placed at each end of the bridge. On bridges 100 ft. or less one marker shall be placed at one end of the bridge only. Markers are to be furnished by the Florida Department of Transportation and installed by Contractor. The cost of installing the markers shall be included in the Contract Unit Price for the Traffic Railing. The Department will determine the vertical Datum information for the marker.

GUARDRAIL: For Guardrail connection details, see Index No. 400.

PEDESTRIAN/BICYCLE RAILING AND SPECIAL HEIGHT BICYCLE RAILING DETAILS: See Index No. 622 for Post, Rail and Rail Expansion Joint fabrication and installation Details and Notes.

V-GROOVES: Construct ½" V-Grooves plum. Space V-Grooves equally between ½" Open joints and/or Deck joints and at V-Groove locations on Retaining Wall Failandings.

REFLECTIVE RAILING MARKERS: Reflective Railings shall meet Specification Section 993. Install markers on top of the Traffic Railing 2" from the face on the traffic side at the spacing shown in the table above. Reflective color (white or yellow) shall match the color of the near edge line. The cost of the reflective markers shall be included in the Contract Unit Price for the Traffic Railing.

TRAFFIC RAILING OH: If the Traffic Railing is to be provided on a retaining wall, the railing section will be the same as shown on Sheet 2. All other details such as the guardrail transition attachment, the maximum spacing of the ½" open joints and ½" V-Groove shall apply.

NAME, DATE, AND BRIDGE NUMBER: The Name and Bridg...
Additional Rail required for Special Height Bicycle Railing

Post "B1" Special Height Bicycle Railing

Bars ST & SX

2 @ 1'-0" sp.

2 @ 1'-0" sp. (Max.) (Alternate with Bars ST)

Bars 5S (Typ.)

Bars ST @ 1'-0" sp. (Max.) (Alternate with Bars 5T)

2" Cover (Top)

3" Cover (Sides)

Slope Varies

Standard Hook Top Steel in Deck (Rotate to maintain cover)

Bars 5S (Typ.)

2" Cover (Top)

3" Cover (Sides)

Slope Varies

Coping

Raised Sidewalk

Approach Slab

SECTION A-A

TYPICAL SECTION THRU TRAFFIC RAILING

SECTION THRU BRIDGE DECK SHOWN

NOTES:

- Omit Railing End Taper and Guardrail if Concrete Barrier Wall is used beyond the Approach Slab. See Structures Plans, Plan and Elevation Sheet and Roadway Plans. If Railing End Taper is omitted, extend Typical Section to the end of the Approach Slab. Begin placing Railing Bars ST and SX on Approach Slab at the railing end and proceed toward Begin or End Bridge to ensure placement of guardrail bolt holes. If required, adjustments to the bar spacing for Bars ST and SX shall be made immediately adjacent to Begin or End Bridge. Shift and rotate Bars ST and SX on Approach Slab in end taper section as required to maintain cover.

- Approach Slab End Detail

VIEW B-B

APPROACH SLAB END VIEW OF TRAFFIC RAILING

CROSS REFERENCE:
For location of Section A-A and View B-B see Sheet 1.

NOTE: For Post "B1", Post "C" and Rail Details, see Index No. 822.

RAILING END DETAIL
CONVENTIONAL REINFORCING STEEL BENDING DIAGRAMS

BILL OF REINFORCING STEEL

<table>
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<th>MARK</th>
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<tr>
<td>S</td>
<td>5</td>
<td></td>
<td>As Reqd</td>
</tr>
<tr>
<td>T</td>
<td>5</td>
<td>9-0</td>
<td></td>
</tr>
<tr>
<td>X</td>
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ROADWAY CROSS-SLOPE

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<td>90°</td>
</tr>
<tr>
<td>2% to 6%</td>
<td>Ø7&quot;</td>
<td>93°</td>
</tr>
<tr>
<td>6% to 10%</td>
<td>Ø4&quot;</td>
<td>96°</td>
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REINFORCING STEEL NOTES:
1. All bar dimensions in the bending diagrams are out to out.
2. The 3-4½" vertical dimensions shown for Bars ST and SX are based on a bridge deck with a 6" thick x 6' wide raised sidewalk at low side of deck, 2% deck cross slope and a counter 2% raised sidewalk cross slope. If the raised sidewalk thickness, width or cross slopes vary from the above amounts, adjust these vertical dimensions accordingly to achieve a 6" minimum embedment into the bridge deck.
3. The reinforcement for the railing on a Retaining Wall shall be the same as detailed with ØA = 90°.
4. All reinforcing steel at the open joints shall have a 2" minimum cover.
5. Bars ST may be continuous or spliced at the construction joints. Bar splices for Bars ST shall be a minimum of 2'-2".
6. The Contractor may utilize Welded Wire Reinforcement when approved by the Engineer. Welded Wire Reinforcement shall conform to ASTM A497.

TRAFFIC RAILING (32" VERTICAL SHAPE)

INTERMEDIATE JOINT SEAL NOTES:
1. At Intermediate Open Joints, seal the lower 6" portion of the open joint with Pre-cured Silicone Sealant in accordance with Specification Section 932.
2. Apply sealant prior to any Class V finish coating and remove all curing compound and loose material from the surface prior to application of bonding agent.
3. The cost of the Pre-cured Silicone Sealant shall be included in the Contract Unit Price for the Traffic Railing.

SECTION THRU RECESSED "V" GROOVE TO FORM INSCRIBED LETTERS AND FIGURES

ESTIMATED TRAFFIC RAILING QUANTITIES

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<tr>
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<tr>
<td>Reinforcing Steel</td>
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(The above quantities are based on a 6" thick x 6' wide raised sidewalk at low side of deck, 2% deck cross slope and counter 2% sidewalk cross slope.)