TRAFFIC RAILING NOTES

This Traffic Railing Retrofit has been structurally evaluated to be equivalent or greater in strength to a design which has been successfully crash tested previously and approved for a NCHRP Report 350 Test Level A rating, except for the Tapered End Transition on Index No. 484.

CONCRETE: Concrete for the Traffic Railing (Vertical Face Retrofit), Spread Footing Approaches and replacement curb sections shall be Class IV. Concrete for Curb Transition Blocks shall be Class II (Bridge Deck).

REINFORCING STEEL: Reinforcing steel shall be ASTM A615, Grade 60, except Expansion Dowel Bar which shall be ASTM A36 smooth round bar hot-dip galvanized in accordance with the Specifications.

EXPANSION SLEEVE ASSEMBLY: Pipe sleeve shall be ASTM D2243 PVC pipe, S803.5. End Cap shall be ASTM D2466 PVC socket fitting, Schedule 40. End of Sleeve assembly at railing open joint shall be sealed with silicone to prevent concrete intrusion during railing casting. A compressible expanded polyurethane plug is required in the opposite and of the assembly for correct dowel positioning during railing casting. Correct dowel positioning is required in order to provide for thermal movement of the deck.

ADHESIVE-BOUND ANCHORS AND COVERS: Adhesive Bonding Material/Systems for Anchors and Dowels shall comply with Specification Section 937 and be installed in accordance with Specification Section 416. The field testing procedure (as required by Specification Section 416) shall be 25,000 lbs for Dowel Bars 60 on the inside face of the railing (1/8" embedment) and 10,500 lbs for Dowel Bars 60 along the outside face of the railing (1/16" embedment).

BRIDGES ON CURVED ALIGNMENTS: The details presented in these Standards are shown for bridges on tangent alignments. Details for bridges on horizontally curved alignments are similar.

NAME, DATE AND BRIDGE NUMBER: The Name and Bridge Number shall be placed on the Traffic Railing so as to be seen on the driver’s right side when approaching the bridge. The Date shall be placed on the driver’s left side when approaching the bridge. The Date shall be the year the bridge was constructed. Letters and figures may be 3" tall block plastic as approved by the Engineer or 3/4" V-Grooves. V-Grooves shall be formed by preformed letters and figures.

LEVEL MARKERS: Elevation Markers shall be placed on the top surface of the end bents as directed by the Engineer when portions of the existing traffic railing carrying existing elevation markers are removed. Markers to be furnished by the Florida Department of Transportation and installed by the Contractor.

SURFACE FINISH: Unless otherwise shown in the Plans, place a Class 5 Applied Finish Coating on the top and sides of the Traffic Railing (Vertical Face Retrofit).

REFLECTIVE RAILING MARKERS: Reflective Railing Markers shall meet Specification Section 933. Install markers on top of the Traffic Railing 2" from the face on the traffic side of the spacing shown in the table below. Reflective color (white or yellow) shall match the color of the near adeline.

PAYMENT: Payment under Traffic Railing (Vertical Face Retrofit) include all materials and labor required to construct the railing. Incidental work as required for transition blocks, curbs, spread footings approaches, reflective railing markers (including installation) shall also be included under Traffic Railing (Vertical Face Retrofit).

NAME, DATE AND BRIDGE NUMBER LETTERING DETAIL:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete</td>
<td>CY/100</td>
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</tr>
<tr>
<td>Rebar</td>
<td>lb./ft</td>
<td>13.27</td>
</tr>
</tbody>
</table>

ESTIMATED TRAFFIC RAILING QUANTITIES (Quantities are based on a 9" curb, no curb cross slope and 1/8"-1/16" embedment length of Bars 60. If the curb height or embedment length differs from that shown, increase or decrease quantity by the given per inch increments.) See Index No. 484, Sheet 4 for Spread Footing Approach Quantities.

PARTIAL ELEVATION OF RAILING SHOWING SLIDING PLATE JOINT AT BEGIN OR END BRIDGE (Scheme 1 shown, Schemes 2, 3 and 4 similar) (Guardrail Transition or continuation of Traffic Railing not show for clarity.)