PLAN (BRIDGE MOUNTED RAILING/NOISE WALL SHOWN, WALL OR FOOTING MOUNTED RAILING/NOISE WALL SIMILAR) (Reinforcing Steel not shown for clarity)

ELEVATION OF INSIDE FACE OF RAILING/NOISE WALL (BRIDGE MOUNTED RAILING/NOISE WALL SHOWN, WALL OR FOOTING MOUNTED RAILING/NOISE WALL SIMILAR) (Reinforcing Steel not shown for clarity)

Notes:
1. Work this with Indexes 521-512 through 521-515.
2. Construct Traffic Railing/Noise Wall and joints plumb, not perpendicular to the roadway surface.
3. Concrete:
   A. Class II for slightly aggressive environments.
   B. Class IV for moderately or extremely aggressive environments.
4. Provide 1/2" open joints every 30 to 90 feet. Align open joints with construction joints in the Approach Slab or footing.
5. Install Barrier Delineators 2'-4" above the riding surface in accordance with Specification Section 705.
6. Slip forming of the traffic railing portion is permitted.
ELEVATION OF RAILING/NOISE WALL REINFORCING STEEL
(INTERMEDIATE OPEN JOINT ShOWN, DECK JOINT SIMILAR)
(Bars 5S1 in Railing not shown for clarity)

ELEVATION OF RAILING/NOISE WALL END TAPER (ADJACENT TO TRAFFIC RAILING SHOWN, GUARDRAIL ATTACHMENT SIMILAR SEE DETAIL "A", SHEET 5)
(Bars 5S1 in Railing not shown for clarity)

NOTES:
* Field Cut Bars SR & 5S1 to maintain clearance.
** Terminate 2/3 V-groove at construction joint & cast top of railing with End Taper.
*** Bar spacing shown for Bars 5V only applies when Single-Slope Traffic Railing continues. For transition to guardrail see Sheet 5.
CROSS REFERENCE:
For locations of Section A-A see Sheet 1.
For location of View B-B, see Sheet 5.

Approach Slab

Asphalt Overlay

Riding Surface

6" Min.
Embed.

Const. Joint Required

2" Cover (Top)

3½'

9½'

8" Min. Bridge Deck thickness, 10" Min. over exterior girder if Dim. A exceeds 1'-6"

8" Min. Bridge Deck thickness, 10" Min. over exterior girder if Dim. A exceeds 1'-6"

SECTION A-A
TYPICAL SECTION THRU TRAFFIC RAILING/NOISE WALL
(Section Thru Bridge Deck Shown, Section Thru Approach Slab Similar)

VIEW B-B
END VIEW OF RAILING END TRANSITION FOR GUARDRAIL ATTACHMENT AT END OF APPROACH SLAB
(Flexible Pavement Approach Slab Shown, Rigid Pavement Approach Slab Similar)

NOTES:
1. Bottom Bars 5S1 shown are part of the Traffic Railing/Noise Wall reinforcing. See Superstructure Sheets in the Plans for additional Bridge Deck Reinforcing.

NOTES:
1. Bottom Bars 5S1 shown are part of the Traffic Railing/Noise Wall reinforcing. See Superstructure Sheets in the Plans for additional Bridge Deck Reinforcing.
Paint Recessed Surfaces Black

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

**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.

**DETAIL "B" - SECTION AT INTERMEDIATE OPEN JOINT**

**ESTIMATED TRAFFIC RAILING/NOISE WALL QUANTITIES**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>QUANTITY</th>
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<tbody>
<tr>
<td>Concrete (Railing)</td>
<td>CY/LF</td>
<td>0.107</td>
</tr>
<tr>
<td>Concrete (Noise Wall)</td>
<td>CY/LF</td>
<td>0.136</td>
</tr>
<tr>
<td>Reinforcing Steel (Typical)</td>
<td>LB/LF</td>
<td>69.96</td>
</tr>
<tr>
<td>Additional Remk. @ Open Joint</td>
<td>LB</td>
<td>229.83</td>
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(The above quantities are based on the bridge mounted typical section, 2% deck cross slope and railing on low side of deck.)

**REINFORCING STEEL BENDING DIAGRAMS**

**BILL OF REINFORCING STEEL**

<table>
<thead>
<tr>
<th>MARK</th>
<th>SIZE</th>
<th>LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>5</td>
<td>5'-2&quot;</td>
</tr>
<tr>
<td>R2</td>
<td>5</td>
<td>5'-25/&quot;</td>
</tr>
<tr>
<td>R3</td>
<td>5</td>
<td>4'-10&quot;</td>
</tr>
<tr>
<td>S1</td>
<td>5</td>
<td>As Req</td>
</tr>
<tr>
<td>S2</td>
<td>5</td>
<td>7'-3&quot;</td>
</tr>
<tr>
<td>V</td>
<td>5</td>
<td>6'-61/2&quot;</td>
</tr>
</tbody>
</table>

**REINFORCING STEEL NOTES:**
1. All bar dimensions in the bending diagrams are cut to cut.
2. All reinforcing steel at the open joints shall have a 2" minimum cover.
3. Bars 5R shall be one continuous or lap spliced bar. No mechanical couplers are permitted.
4. Bars SS1 may be continuous or spliced at the construction joints. Lap splices for Bars 5R2 and 5S1 shall be a minimum of 2'-2".
5. The Contractor may use Welded Wire Reinforcement (WWR) when approved by the Engineer. WWR must consist of deformed wire meeting the requirements of Specification Section 931.

**CROSS REFERENCE:**
For locations of Detail "B", see Sheet 1.
DETAIL "A" NOTES:

1. Begin placing Railing Bars 5V at the railing end and proceed toward the guardrail (thrie beam) terminal connector to ensure placement of guardrail bolt holes. Pair Bars 5R with Bars 5V as shown. Clearance of Bars 5R & 5V to guardrail bolt holes shall be checked to prevent cutting of bars if holes are to be drilled. Shift bars locally where conflicts occur.

2. For Guardrail connection details see Index 536-001.

3. Omit Railing End Transition if a 36' Single-Slope Traffic Railing is used beyond the End Taper. See the Plan Sheets.

4. Field cut Bars 5R2 to maintain cover. Field cut Bars 5V and lap as necessary to maintain cover; field cut & bend Bars 5R1 front leg (more plumb) to maintain cover and tie to S1 Bars.

PLAN - RAILING END TRANSITION
(Showing Bars 5R, and Bars 5S1) (Bars 5V & Noise Wall Reinforcement not shown for Clarity)

FIELD CUT Bars 5V: lap and field bend to maintain clearance

FIELD BEND 5S1 Bars to maintain cover

DETAIL "A" NOTES:

1. Begin placing Railing Bars 5V at the railing end and proceed toward the guardrail (thrie beam) terminal connector to ensure placement of guardrail bolt holes. Pair Bars 5R with Bars 5V as shown. Clearance of Bars 5R & 5V to guardrail bolt holes shall be checked to prevent cutting of bars if holes are to be drilled. Shift bars locally where conflicts occur.

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PLAN - RAILING END TRANSITION
(Showing Bars 5V and Bars 5S1) (Bars 5R not shown for Clarity)