SPREAD FOOTING ADJACENT TO SKEWED APPROACH SLAB AND WITH BARRIER WALL INLET

**NOTES**

1. **CONSTRUCTION REQUIREMENTS:** Construct the Spread Footing level transversely and expansion joints plumb; do not construct the spread footing perpendicular to the roadway surface. Slip forming is not permitted.

2. **CONCRETE:** Use Class II concrete for slightly aggressive environments. Use Class IV concrete for moderately or extremely aggressive environments. Concrete will be in accordance with Specification Section 346.

3. **DOWELS:** Dowel Load Transfer Devices will be ASTM A36 smooth round bar and hot-dip galvanized in accordance with Specification Section 962. Install Dowel Load Transfer Devices in accordance with Specification Section 350.

4. Construct 3⁄8" Expansion joints plumb and perpendicular or radial to Gutter Line. Provide at 30'-0" maximum intervals as shown.

5. Construct 1⁄2" V-Grooves plumb and provide at 90'-0" maximum intervals as shown. Space V-Grooves equally between 1⁄2" Expansion Joints and/or Begin or End Spread Footing. V-Groove locations are to coincide with V-Groove locations in the Railing/Noise Wall.

6. **FULL REQUIREMENTS:** Shoulder or Roadway pavement or Fill is required on top (1'-0" minimum depth) for the entire length of the spread footing on both sides of the Railing/Noise Wall. See Section B-B for details.

7. **FILL REQUIREMENTS:** Shoulder or Roadway pavement or Fill is required on top (1'-0" minimum depth) for the entire length of the spread footing on both sides of the Railing/Noise Wall. See Section B-B for details.

8. Provide and install Preformed Expansion Joint Filler as shown. See Index No. 5210 for Bars 5V and 5S1.

9. **BARB WALL INLET:** Construct the Spread Footing level transversely and expansion joints plumb; do not construct the spread footing perpendicular to the roadway surface. Slip forming is not permitted.

10. **V-Groove Spacing:** 30'-0" maximum intervals as shown. Space V-Grooves equally between 3⁄8" Expansion Joints and/or Begin or End Spread Footing. V-Groove locations are to coincide with V-Groove locations in the Railing/Noise Wall.

11. **Open Joint:** Provide 3⁄8" Open Joint in Traffic Railing/Noise Wall) (Spread Footing expansion joints are required at 3⁄8 open joints in Traffic Railing/Noise Wall)

**SECTION A-A**

**SECTION THRU SPREAD FOOTING AND BARRIER WALL INLET**

(Bars 5P, 5R and 5S1 in Traffic Railing/Noise Wall not shown for clarity)

**EXPANSION JOINT DETAIL**

(3⁄8" open joints in Traffic Railing/Noise Wall) (Spread Footing expansion joints are required at 3⁄8 open joints in Traffic Railing/Noise Wall)

**CROSS REFERENCE:**

For Section B-B and Detail "A", see Sheet No. 2. 
### REINFORCING STEEL BENDING DIAGRAMS

### BILL OF REINFORCING STEEL

<table>
<thead>
<tr>
<th>MARK</th>
<th>SIZE</th>
<th>LENGTH</th>
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<tbody>
<tr>
<td>A</td>
<td>5</td>
<td>6'-8&quot;</td>
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<tr>
<td>B</td>
<td>5</td>
<td>AS REQ</td>
</tr>
<tr>
<td>U</td>
<td>5</td>
<td>11'-0&quot;</td>
</tr>
</tbody>
</table>

### DOWEL

| 1" Ø Smooth Bar | 2'-0" |

### BAR 5U

### REINFORCING STEEL NOTES:

1. All bar dimensions in the bending diagrams are out to out.
2. All reinforcing steel at the open joints will have a 2" minimum cover.
3. Lap splices for Bars 5B will be a minimum of 2'-2".
4. 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.

### REINFORCING STEEL BENDING DIAGRAMS

### ESTIMATED T-SHAPED SPREAD FOOTING QUANTITIES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete (Footings)</td>
<td>CY/FT</td>
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</tr>
<tr>
<td>Reinforcing Steel (Typical)</td>
<td>LB/FT</td>
<td>51.80</td>
</tr>
<tr>
<td>Additional Rein. @ Expansion Joint</td>
<td>LB</td>
<td>27.38</td>
</tr>
</tbody>
</table>

**Note:** The reinforcing steel quantity accounts for the difference between the shorter Stirrup Bars 5V for junction slabs or bridges, and the longer Stirrup Bars 5V for spread footings.

### CROSS REFERENCE:

For location of Section B-B, see Sheet 1.

### DETAIL "A"

(Showing Locations of ½" V-Grooves and ¾" Preformed Expansion Joint Fillers)

### TYPICAL SECTION THRU SPREAD FOOTING

(Bars 5P, 5R and 5S1 in Traffic Railing/Noise Wall not shown for clarity)

### NOTES:

1. Match Cross Slope of Travel Lane or Shoulder.
2. Place 6 ~ Bars 5B inside Stirrup Bars 5V as shown.
3. See Index No. 5210 for Bars 5V and Bars 5S1.

### PARTIAL END VIEW OF RAILING END TRANSITION FOR GUARDRAIL ATTACHMENT

(Showing Bars 5V, Bars 5S1 and Bars 5B inside of Stirrup Bars 5V)

**NOTE:** See Index No. 5210, Detail "A" for details.