**JUNCTION SLAB NOTES:**

1. When an F-Shape Traffic Railing is used with precast copings, provide bars 3D @ 8" spacing between bars 5V2 within 6'-0" of Expansion Joints.

2. Construct the expansion joints, V-Grooves, and face of coping plumb.

3. Provide Class II concrete for slightly aggressive environments or Class IV for moderate or extremely aggressive environments.

4. Dowel Load Transfer Devices will be hot-dip galvanized ASTM A 36 smooth round bar, or GFRP smooth round bars with a minimum shear strength of 22 ksf in accordance with ASTM D 7617. Install Dowel Load Transfer Devices in accordance with Specification Section 350.

5. Construct Expansion Joints in junction slabs and C-I-P copings plumb and perpendicular or radial to the Gutter Line. Provide at 90'-0" maximum intervals as shown. Provide 3-1/2" Mortar plugs in open joints at the base of traffic railings to contain runoff.

6. Shear Keys in junction slabs are required when GFRP bars are used for Dowel Transfer Devices and are optional with steel dowel bars. Tongue slope on Shear Key must be constant and between 3° to 45° from horizontal.

7. Provide and install Preformed Expansion Joint Filler in accordance with Specification Section 932.

8. Construct 1/2 V-Grooves in junction slabs and C-I-P copings at 30'-0" maximum intervals as shown. Space V-Grooves equally between 1/2" Expansion Joints and/or Begin or End Junction Slab. V-Groove locations are to coincide with V-Groove locations in the Traffic Railing.

9. Shoulder or Roadway Pavement is required on top of the junction slab for its entire length on the traffic side of the Traffic Railing. See Typical Sections on Sheet Nos. 2 and 3 for details.

10. Spacing shown is along the Gutter Line.

11. For Precast Coping only, provide Dowel Bars 4D embedded 1'-0" and extend 9" above the top of MSE wall panels. Field cut as necessary to maintain 2" minimum cover to the top of the buildup concrete. See Wall Company Drawings for number and spacing of Dowel Bars 4D.

12. Work this Index with the following:

   - Index No. 20900 - Approach Slabs (Flexible Pavement Approaches)
   - Index No. 20890 - Approach Slabs (Rigid Pavement Approaches)

13. The following Indexes contain details of the intersection of the retaining wall at approach slabs:

   - Index No. 20900 - Approach Slabs (Flexible Pavement Approaches)
   - Index No. 20890 - Approach Slabs (Rigid Pavement Approaches)

**CROSS REFERENCE:** For Detail "A", see Sheet 2

**PARTIAL PLAN VIEW FOR F-SHAPE TRAFFIC RAILING**

(Skewed Approach Slab Shown, Perpendicular Approach Slab Similar) (Precast Coping Shown, C-I-P Coping Similar) (Traffic Railing not Shown for Clarity)

- Dowel Load Transfer Devices (See Typical Sections for details)
- Top of Junction Slab
- Approach Slab
- Expansion Joint
- 1/2" Preformed Expansion Joint
- Top of Precast Coping
- C-I-P Traffic Railing
- Bottom of Retaining Wall
- V-Groove
- Mortar Plug
- Top of C-I-P Building Concrete
- Dowels 4D (Typ.)
- Top of Precast Coping
- Base of Traffic Railing
**PARTIAL END VIEW OF TRAFFIC RAILING END TRANSITION FOR GUARDRAIL ATTACHMENT**
(Showing Bars 5V and Bars 5S)  
(Precast Coping Shown, C-I-P Coping Similar)

NOTE: See Index No. 420 and Index No. 425, Detail "A" for details.

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**ESTIMATED QUANTITIES FOR PRECAST COPING**

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<tr>
<th>ITEM</th>
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<td>Concrete (C-I-P Junction Slab)</td>
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<td>Additional Reinf. @ Expansion Joints (Steel Dowels)</td>
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(The above concrete quantities are based on a max. super-elevation of 6.25% and a 32" F-Shaped Traffic Railing.)

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**PRECAST COPING**

**C-I-P COPING**

**DETAIL "A"**
(Showing locations of ½" V-Grooves and ½" Preformed Expansion Joint Filler)
Description:

- **Coping Line**
- **Gutter Line**
- **Bars 4P5** (Typ.)
- **Bars 5B1**
- **Bars 7P1 & 4V1** (Typ.)
- **2'-6" (Typ.)**
- **5'-0" Interior Post (Typ.)**
- **5'-0" End Post**

**Cross References:**
1. For Detail "A" see Sheet 2.
2. For "Expansion Joint Detail" see Sheet 1.
3. For "Junction Slab Notes" see Sheet 1.

**Partial Plan View of Guardrail Transition at Begin or End Retaining Wall**

- **Bars 5B2**
- **Bars 4L @ 8" (Typ.)**
- **Bars 4A @ 4" (Typ.)**

**Partial Plan View of Coping with Curb**

- **Bars 5B2**
- **Bars 4L (Typ.)**
- **Bars 4P5 (Typ.)**

**Plan View**

- **Sides (Typ.)**
- **5'-0" End Post**
- **5'-0" Interior Post (Typ.)**
- **Varies - 5'-0" (Typ.)**

**Notes:**
- Field cut reinforcement as required to maintain minimum concrete cover (Typ.).
- Transfer Devices
- 

- **2'-0" Lap Splice**
- **4L V-Groove Spacing ~ 30'-0" Min., 90'-0" Max.** (See Note 5, Sheet 1)
- **2'-0" V-Groove Spacing ~ 30'-0" Max.** (See Note 7, Sheet 1)
- 

**Corral Shape Traffic Railings**

- **Bars 4L @ 8" (Typ.)**
- **Bars 5C @ 8" sp. (Tie to Bars 4A)**

**Additional Details:**
- Approach Slab (See Note 12 Sheet 1)
- 

- **Transfer Devices**
- 

**CORRAL SHAPE TRAFFIC RAILINGS**
PARTIAL ELEVATION VIEW OF OUTSIDE FACE OF COPING

(End Transition and Typical Precast Coping with Curb shown, C-I-P Coping similar)

PARTIAL ELEVATION VIEW OF OUTSIDE FACE OF COPING

(Precast Coping at Expansion Joint and Typical Precast Coping without Curb shown, C-I-P Coping similar)
SECTION A-A
(TYPICAL SECTION C-I-P COPING WITHOUT CURB)

SECTION B-B
(TYPICAL SECTION WITH CURB)
(Precast Coping Shown, C-I-P Coping Similar)

SECTION C-C
(TYPICAL SECTION TRANSITION COPING)
(Precast Coping Shown, C-I-P Coping similar)

SECTION D-D
(TYPICAL SECTION TRANSITION COPING)
(Precast Coping Shown, C-I-P Coping similar)