EXPANSION JOINT SPACING
- (50'-0" Min., 0.439"

Precast Expansion Joint Devices will be hot-dip galvanized ASTM A36 smooth round bar or GFRP smooth round bars with a minimum shear strength of 22ksi in accordance with ASTM C1671.

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

DOWEL LOAD TRANSFER DEVICES:
Bars 5V, 5T ~ 6" sp. (lap with Bars 5A as shown)

Details:
- Expansion Joint Spacing ~ (50'-0" Min., 0.439"
- Preformed Expansion Joint Devices
- 3" Expansion Joint Spacing ~ 30'-0" Max. (See Note 6)
- Expansion Joint Spacing ~ 50'-0" Min., 90'-0" Max. (See Note 4)

BARS 5A @ 6" (Lap with Bars 5B as shown)

NOTES:
1. CONSTRUCTION REQUIREMENTS: Construct the Trench Footing and expansion joints plumb; do not construct the Trench Footing perpendicular to the roadway. Slip forming is not permitted.
2. CONCRETE: Use Class II concrete for slightly aggressive environments. Use Class VI concrete for moderately or extremely aggressive environments. Concrete will be in accordance with Specification Section 346.
3. DOGEL LOAD TRANSFER DEVICES:
   - Bars 5V, 5T ~ 6" sp. (lap with Bars 5A as shown)
   - Spacing 1" Ø Dowels

BARS 5B (Typ.):
- Joints are required when GFRP bars are used for Dowel Transfer Devices and are optional with steel dowel bars. Torque Slope on Shear Key must be constant and between 5" to 45" from the transverse vertical plane.
- Install Dowel Load Transfer Devices in accordance with Specification Section 350.
- Install Dowel Load Transfer Devices in accordance with Specification Section 350.

BARS 5T @ 6" sp.

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. Lap splices Bars 5T and 5V with 5S1 will 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.
6. Construct 1/2" V-Grooves plumb and provide at 30'-0" maximum intervals as shown. Space V-Grooves equally between 1/2" Expansion Joints and/or Begin or End Trench Footing. V-Groove locations are to coincide with V-Groove locations in the Railing/Noise Wall.
7. FULL REQUIREMENTS: Fill is required a distance of 4'-0" on both sides for the entire depth of the trench footing. See Typical Section for details.
8. Match Cross Slope of Travel Lane or Shoulder.
9. Spacing shown is along the Gutter Line. Spacing shown is along the Gutter Line.
10. Work this Standard Drawing with one or both of the following:
   a. Index No. 5210 - Traffic Railing/Noise Wall (8'-0"
   b. Index No. 5211 - Traffic Railing/Noise Wall (14'-0"

DESIGN STANDARDS:
- 2016
- TRAFFIC RAILING/NOISE WALL
- TRENCH FOOTING

BILL OF REINFORCING STEEL

<table>
<thead>
<tr>
<th>MARK</th>
<th>SIZE</th>
<th>LENGTH</th>
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<tbody>
<tr>
<td>A 8'-0&quot; NW</td>
<td>5</td>
<td>6'-1&quot;</td>
</tr>
<tr>
<td>A 14'-0&quot; NW</td>
<td>5</td>
<td>6'-1&quot;</td>
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<tr>
<td>B</td>
<td>5</td>
<td>AS REQ.</td>
</tr>
<tr>
<td>T</td>
<td>5</td>
<td>6'-3&quot;</td>
</tr>
<tr>
<td>V</td>
<td>5</td>
<td>3'-10&quot;</td>
</tr>
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</table>

DOBEL 1" Ø Smooth Bar 2'-0"

BAR 5A
BAR 5B
BAR 5T

EXHIBITED DRAWING

REVISION
07/01/15

INDEX NO.
5215

SHEET NO.
1 of 1