**GUARDRAIL TERMINAL TYPES 7 & 8**

**REVISIONS**
- IDAHO TRANSPORTATION DEPARTMENT
- ORIGINAL DRAWING NO. 612-3
- STANDARD DRAWING
- REQUIRES STD. DWG. 612-3

**NOTES**
1. THE TYPE 7 TERMINAL SHALL ONLY BE USED OUTSIDE THE CLEAR ZONE OR WHEN THE APPROACH SPEED IS 20 MPH OR LESS. OTHERWISE AN APPROPRIATE NCHRP 350 TERMINAL IS REQUIRED.
2. THE GUARDRAIL ALONG THE APPROACH ROADWAY MAY BE ANGLED 0° TO EITHER SIDE OF THE PERPENDICULAR AXIS TO THE MAIN ROADWAY. HOWEVER, PLANE RATES ALONG ROADWAYS WITH 35 MPH OR GREATER SPEEDS MUST FOLLOW STANDARD TAPER RATES (SEE TABLE OF MAXIMUM TAPERS).
3. THE ROADWAY IN FRONT THE CURVED PORTION OF THE TERMINAL SHALL BE 15° TO EITHER SIDE OF THE PERPENDICULAR AXIS TO THE MAIN ROADWAY. OTHERWISE AN APPROPRIATE NCHRP 350 TERMINAL IS REQUIRED.
4. THIS DRAWING REQUIRES STANDARD DRAWING 612-1 AND IS SUBJECT TO THE W-BEAM GUARDRAIL INSTALLATION REQUIREMENTS AND HARDWARE/ACCESSORY SPECIFICATIONS.
5. ALL TERMINAL HARDWARE ITEMS SHALL MEET THE SPECIFICATIONS IN THE "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE" EDITION OF THE AMERICAN WELDING SOCIETY.
6. WHEN FASTENING THE CABLE ENDS THE OUTSIDE NUTS SHALL BE TIGHTENED AGAINST INSIDE NUTS A MINIMUM OF 100 FT-LEFTS.
7. ALL CURVED GUARDRAIL SHALL BE SHIP BENT. FIELD BENDING WILL NOT BE ALLOWED.
8. ALL CURVED RAIL SECTIONS SHALL BE 12'-6" IN LENGTH AND BOLTED TO THE POSTS ONLY AT THE LAPS.
9. THE ANCHOR CABLE FROM POST #1 TO POST #2 MUST BE ATTACHED IN THE FAR SIDE OF THE FOUNDATION TUBE FOR LEFT-HAND INSTALLATION.
10. NOT TO SCALE.

**TABLE OF MAXIMUM TAPERS**

<table>
<thead>
<tr>
<th>Delta Angle</th>
<th>Rail Radii (in)</th>
<th>Rail Angles (deg)</th>
<th>Posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>75°-105°</td>
<td>80</td>
<td>75°-105°</td>
<td>10</td>
</tr>
<tr>
<td>75°-105°</td>
<td>60</td>
<td>75°-105°</td>
<td>10</td>
</tr>
<tr>
<td>75°-105°</td>
<td>50</td>
<td>75°-105°</td>
<td>10</td>
</tr>
<tr>
<td>75°-105°</td>
<td>40</td>
<td>75°-105°</td>
<td>10</td>
</tr>
<tr>
<td>75°-105°</td>
<td>30</td>
<td>75°-105°</td>
<td>10</td>
</tr>
</tbody>
</table>

**GUARDRAIL TERMINAL TYPES 7 & 8**

**ORIGINAL SIGNED BY:**

- TOM COLE
- ASSISTANT CHIEF ENGINEER
- TS: DEVELOPMENT

**ORIGINAL STORED:**

- Boise, Idaho
-ốt Scales Shown

**GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE**

**BOISE IDAHO**

**PACKAGE**

- STANDARD DRAWING 612-3
- REQUIRES STD. DWG. 612-1