### Type 1-31 Guardrail

**Placement**
- Post Spacing: 6'-0" (1800 mm)

**Solid / Obstruction**

**Required Clearance**
- 2'-0" (600 mm)

**See Note #1**

**Type 1-31 Guardrail**

**Typical Guardrail Placement**

*When the required 3'-0" (900 mm) clearance to obstruction is available*

**Type 2-31 Guardrail**

**Typical Guardrail Placement**

**Type 1-31 Guardrail Placement**

**Type 2-31 Guardrail Placement**

**Obstruction**

**See Note #1**

**Required Clearance**
- 2'-0" (600 mm)

**Type 2-31 Guardrail**

**Typical Guardrail Placement**

*When 2'-0" (600 mm) to 3'-0" (900 mm) of clearance to obstruction is available*

<table>
<thead>
<tr>
<th>FLARE RATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESIGN SPEED</td>
</tr>
<tr>
<td>70 MPH (110 km/h)</td>
</tr>
<tr>
<td>60 MPH (100 km/h)</td>
</tr>
<tr>
<td>55 MPH (90 km/h)</td>
</tr>
<tr>
<td>50 MPH (80 km/h)</td>
</tr>
<tr>
<td>45 MPH (70 km/h)</td>
</tr>
<tr>
<td>40 MPH (60 km/h)</td>
</tr>
<tr>
<td>30 MPH (50 km/h)</td>
</tr>
</tbody>
</table>

**Type 3-31 Guardrail**

**Typical Median Guardrail Placement**

*Notes:*
- The distance from the edge of the travel lane or shoulder to the face of guardrail should be maximized. This area shall be graded 10:1 or flatter.
- Place guardrail delineators at the intervals specified in the Delaware Manual on Uniform Traffic Control Devices.

**Delaware Department of Transportation**

Types 1-31, 2-31, and 3-31 Guardrail Applications

**Approved**

**Recommended**

Signature on file: 12/27/2010

**SHT. 1 OF 3**

**12/22/10**