<table>
<thead>
<tr>
<th>NAME</th>
<th>MANUFACTURER</th>
<th>TEST LEVEL</th>
<th>POST AND BLOCKOUT</th>
<th>RAIL</th>
<th>DISTINGUISHING CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NatureRail</td>
<td>Gregory Highway Products</td>
<td>TL-2</td>
<td>6&quot; diameter Wood clad steel post.</td>
<td>Composite rail:</td>
<td>Rail height 2' - 3 1/2&quot; &lt;br&gt; - All wood appearance blends into the surrounding environment. &lt;br&gt; - Dynamic Deflection 2m: 4' - 3&quot;&lt;br&gt; - 4m: 6' - 2&quot;&lt;br&gt; - Use along the edge of roadway.</td>
</tr>
<tr>
<td>Ironwood Aesthetic Barrier</td>
<td>West - East Partners, LLC</td>
<td>TL-3</td>
<td>53 x 5.7, 5' - 3&quot; long steel post,</td>
<td>Composite rail:</td>
<td>Rail height 2' - 2&quot; &lt;br&gt; - All wood appearance blends into the surrounding environment. &lt;br&gt; - Dynamic deflection 5' - 4 1/2&quot;&lt;br&gt; - No crash worthy end terminal is currently available; acceptable end treatments include anchoring in a backslope or flaring the barrier to the edge of the clear zone.</td>
</tr>
<tr>
<td>High Tension Cable Barrier</td>
<td>Brifen (WRSF)</td>
<td>TL-3 and TL-4</td>
<td>Sizes and post spacing vary.</td>
<td>Three and four cable designs available.</td>
<td>All systems are proprietary. &lt;br&gt; - Blends in with surrounding environment, and reduces visual impairment. &lt;br&gt; - Refer to manufacturer’s specifications for distance from post to embankment hinge point. &lt;br&gt; - Refer to manufacturer’s specifications for availability of end treatments. Steel posts are typically galvanized. Coating alternatives are available to enhance aesthetic appearance. &lt;br&gt; - Use in medians and along edge of roadways.</td>
</tr>
<tr>
<td></td>
<td>Gibraltar</td>
<td></td>
<td></td>
<td></td>
<td>For details on a specific system please go to manufacturer’s website. For a comparison of all systems, please refer to FHWA Cable Barrier Chart</td>
</tr>
</tbody>
</table>
### Aesthetic Barrier

**Deception Pass Log Rail**

- **Manufacturer:** S. I. Storey Lumber Co.
- **Post and Blockout:** 6'' x 8'' x 10''
- **Rail:** 12'' diameter log rail
- **DISTINGUISHING CHARACTERISTICS:**
  - Rail height 2'-3''
  - Wood and rock appearance blends into the surrounding environment.
  - Design reduces visual impairment of the environment.
  - No crashworthy end terminal is currently available; acceptable end treatments include anchoring in a backslope or flaring the barrier to the edge of the clear zone.

**TimBarrier StreetGuard Plus**

- **Manufacturer:** S.I. Storey Lumber Co.
- **Post and Blockout:** 6'' x 8'' x 10''
- **Rail:** 4'' x 12'' x 7'-11''
- **DISTINGUISHING CHARACTERISTICS:**
  - Rail height 2'-5''
  - All wood appearance blends into the surrounding environment.
  - Use along edge of roadway.
  - No crashworthy end terminal is currently available; acceptable end treatments include anchoring in a backslope or flaring the barrier to the edge of the clear zone.
  - Dynamic deflection 4'-4''.

**Steel-Backed Log Rail**

- **Manufacturer:** FHWA
- **Post and Blockout:** 8'' x 6'' x 8'' notched into log post
- **Rail:** 10'' diameter log rail
- **DISTINGUISHING CHARACTERISTICS:**
  - Rail height 2'-7''
  - Wood appearance blends into the surrounding environment.
  - No crashworthy end terminal is currently available; acceptable end treatments include anchoring in a backslope or flaring the barrier to the edge of the clear zone.
  - Dynamic deflection 4''

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<tbody>
<tr>
<td>Steel-Backed Timber Guardrail</td>
<td></td>
<td>NCHRP 350</td>
<td>10&quot; x 12&quot; x 7' long timber post. Post spacing 5'.</td>
<td>Composite Rail: 6&quot; x 10&quot; wood rail backed with a 3/8&quot; thick steel plate.</td>
<td>Rail height 2'-3&quot;. All wood appearance blends into the surrounding environment.</td>
</tr>
<tr>
<td>TL-2 (no blockouts)</td>
<td></td>
<td>MASH</td>
<td>Wood blockouts 4&quot; x 9&quot; x 12&quot;</td>
<td></td>
<td>System can connect to Straight and Curved Stone Masonry Guardwall.</td>
</tr>
<tr>
<td>Steel Backed Timber Guardrail Tangent End Terminal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dynamic deflection 1'-11&quot; with blockout</td>
</tr>
<tr>
<td>Merritt Parkway Aesthetic Guardrail</td>
<td>Connecticut DOT</td>
<td>TL-3</td>
<td>9 - 6&quot; x 10&quot; weakened wood posts. 9 - 6&quot; x 10&quot; rail segment with angled ends and special attachment hardware.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rustic-appearance Metal Beam Guardrail</td>
<td></td>
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<tr>
<td>For a complete comparisons of these systems, please refer to FHWA Roadside Post and Beam Chart</td>
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<tr>
<td>Random Rubble Cavity Wall</td>
<td><a href="http://www.fhwa.dot.gov/files/technology/hq/Random-rubble/B181RubbleGuardwall-WFLHD-FIN.pdf">Link</a></td>
<td>TL-1</td>
<td>Wall width 1'-6&quot;&lt;br&gt;Composed of alternating height sections:&lt;br&gt;Section 1 is 1'-6&quot; tall x 12' long&lt;br&gt;Section 2 is 2' tall x 5'-6&quot; long.&lt;br&gt;Reinforced concrete footings and core wall are poured and stone placed prior to filling the cavity with concrete.&lt;br&gt;Rock size is between 12&quot; and 1'-6&quot; with smaller rocks and masonry mortar.</td>
<td>Wall height: 1'-6&quot; and 2' alternating height sections&lt;br&gt;Stone facing blends into the surrounding environment. No crashworthy end terminal is currently available; acceptable end treatments include anchoring in a backslope or flaring the barrier to the edge of the clear zone.</td>
</tr>
<tr>
<td>Rough Stone Masonry Guardwall</td>
<td><a href="http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/barriers/pdf/b64d.pdf">Link</a></td>
<td>TL-2</td>
<td>Wall width: 2' single or 2'-3&quot; double faced.&lt;br&gt;Three main components: reinforced concrete foundation slab, inner reinforced concrete core wall and rough stone masonry face with an attachment system.&lt;br&gt;Masonry face can have the projections a maximum of 1-1/2&quot; beyond the working line. Avoid projections oriented toward oncoming traffic. Rake joints can be up to 2&quot; deep, and mortar beds can be 2'-3&quot; thick.</td>
<td>Wall height: 1'-10&quot;&lt;br&gt;Stone facing blends into the surrounding environment. No crashworthy end terminal is currently available; acceptable end treatments include anchoring in a backslope or flaring the barrier to the edge of the clear zone.</td>
</tr>
<tr>
<td>Rough Stone Masonry Guardwall</td>
<td><a href="http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/barriers/pdf/b202.pdf">Link</a></td>
<td>TL-3</td>
<td>Wall width: 2’ single or double faced.&lt;br&gt;Three main components: reinforced concrete foundation slab, inner reinforced concrete core wall and rough stone masonry facing with an anchor attachment system.&lt;br&gt;Masonry face can have the projections a maximum of 1-1/2&quot; beyond the working line. Avoid projections oriented toward oncoming traffic. Rake joints can be up to 2&quot; deep, and mortar beds can be 2'-3&quot; thick.</td>
<td>Wall height: 2'-3&quot;&lt;br&gt;Stone facing blends into the surrounding environment. Used in medians when double-faced. No crashworthy end terminal is currently available; acceptable end treatments include anchoring in a backslope or flaring the barrier to the edge of the clear zone.</td>
</tr>
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</table>
## Aesthetic Barrier

### Smooth Stone Masonry Guardwall
- **Test Level:** TL-3
- **Components:**
  - Wall width: 2' single or double faced.
  - Three main components: reinforced concrete foundation slab, inner reinforced concrete core wall and rough stone masonry face with an attachment system.
  - Masonry face can have the projections a maximum of 1-1/2" beyond the working line. Avoid projections oriented toward oncoming traffic. Rake joints can be up to 2" deep, and mortar beds can be 2'-3'- 3" thick.
- **Characteristics:**
  - Wall height: 2'-3" with 3" crenulations above primary height.
  - Stone facing blends into the surrounding environment.
  - No crashworthy end terminal is currently available; acceptable end treatments include anchoring in a backslope or flaring the barrier to the edge of the clear zone.

### Precast Concrete Guardwall
- **Test Level:** TL-3
- **Components:**
  - Wall width 2'-2"
  - 10-ft long pre-cast units include 12 inch deep footings.
  - Foundation, core, and concrete stone facing are precast as a single unit.
- **Characteristics:**
  - Wall height: 2'-3'-1/2"
  - Precast concrete stone facing and capstone blend into the surrounding environment.
  - Use in medians if double-faced or along edge of roadway.
  - Approved for use with 4" mountable curb at any offset.
  - No crashworthy end terminal is currently available; acceptable end treatments include anchoring in a backslope or flaring the barrier to the edge of the clear zone.

### Stone Cast Barrier
- **Test Level:** TL-3
- **Components:**
  - Unit dimension: 2'-7" tall; 1'-7" width at top and 2' at bottom.
  - Unit footing: 1' deep x 4' wide, cast integrally with its stem.
  - Foundation, stem, and stone veneer cast integrally as a single unit.
  - Units can be made in 5'10" or 20' long segments, and can be curved to fit a specified radius.
- **Characteristics:**
  - Wall height: 2'-7"
  - No crashworthy end terminal is currently available; acceptable end treatments include anchoring in a backslope or flaring the barrier to the edge of the clear zone.

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Aesthetic Barrier

March 12, 2015

California's Type 60 Concrete Barrier
e.g.: Mission Arch, Deep Cobblestone Reveal, Dry stack, Fracture Granite

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<tr>
<td></td>
<td></td>
<td>TL-3</td>
<td></td>
<td>Wall height: 2'-3&quot; (vertical wall) to 2'-8&quot; (single-slope barrier)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No crashworthy end terminal is currently available; acceptable end treatments include anchoring in a backslope or flaring the barrier to the edge of the clear zone.</td>
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Barrier has a constant single slope approximately 9 degs from the vertical.

General texture guidelines:
1. Sandblast textures with a maximum relief of 1/5".
2. Images or geometric patterns inset into the face of the barrier 1" or less and having 45-deg or flatter chamfered or beveled edges.
3. Textures or patterns of any shape and length inset into the face of the barrier up to the 1/2" deep and 1" width.
4. Any pattern or texture with gradual undulations that have a maximum relief of 3/4" over a distance of 1'.
5. Gaps, slots, grooves or joints of any depth with a maximum width of 3/4" and a maximum surface differential across these features of 1/5" or less.
6. Any pattern or texture with a maximum relief of 2'-1/2", if such pattern begins 2' or higher above the base of the barrier and all leading edges are rounded or sloped. No part of this pattern or texture should protrude above the plane of the lower, untextured portion of the barrier.

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