NOTE:
1. Posts ① and ③ may be wood or steel.
2. Use wood posts for CRT posts.
3. The minimum length of guardrail, including the end terminals, upstream and downstream of posts ② and ⑦ is 62.5 feet.
4. In locations where the culvert headwall extends above the finished grade to act as a vertical roadway curb, the maximum height of the culvert headwall above the finished grade is 2 inches.
5. See Details C617-31 or C617-32 for other assembly details.
General Information
- All graphics and text will be in the sheet model.
- **Appropriate Applications.**
  Long-span guardrail systems are used to span low-fill culverts. This drawing may also be used if an impenetrable object is encountered at post locations during construction.

<table>
<thead>
<tr>
<th>Crash Test Criteria</th>
<th>MASH Test Level</th>
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<tbody>
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<td><strong>Crash Test Criteria</strong></td>
<td>MASH Test Level</td>
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<tr>
<td>FHWA Eligibility Letter</td>
<td>TL-3</td>
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<td>TF 13 Designator</td>
<td>B-189, B-133, B-211A</td>
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<td>Crash Test Report</td>
<td>SGR20a·b, SGR38a·e</td>
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<tr>
<td>MnDOT Report No TRP-03-187-07</td>
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</table>

- **Limitations.**
  The maximum span is 25 feet.
- **Layout Guidance.**
  See AASHTO *Roadside Design Guide* Section 5.4.2
  See the FLH *Midwest Guardrail System FAQ* document for more information.

**Applicable SCRs**
- Section 563 (if weathering agent applied to galvanized elements)
- Section 617
- Section 710
- Section 725 (if weathering agent applied to galvanized elements)

**Typical Pay Item Used**
- 61701-4550 Guardrail system MGS, type 2, class A wood posts [LNFT] for galvanized steel
- 61701-5150 Guardrail system MGS, type 4, class B wood posts [LNFT] for weathering steel
  Note: long-span systems are paid for using the same pay item as roadside rail.

**Updates**
- **February 2019**
  - New Detail drawing
- **April 2020**
  - Revised note 3, added note 4, minor CADD edits
- **September 2021**
  - Updated for OpenRoads Designer