### Notes

1. Pipe railing and pipe railing splices shall be bent to the horizontal curve where the radius of curvature is less than 200 ft.

2. Shop drawings of railing shall be submitted for approval showing complete dimensions and details of fabrication and including an erection diagram. Material specifications shall be provided in the shop drawings for all components.

3. Cutting shall be done by sawing or milling and all cuts shall be true and smooth. Flame cutting will not be permitted.


5. Pipe railing, pipe balusters, and pipe railing splices shall be adequately wrapped to insure surface protection during handling and transportation to the job site.

### Part Material Specification

- **Pipes**: ASTM A53 Grade B Schedule 40 (STD. PIPE), galvanized in accordance with AASHTO M 312.
- **Washers**: ASTM A520 Grade B, galvanized in accordance with AASHTO M 292.
- **Channels**: ASTM A950, galvanized in accordance with AASHTO M 312.
- **Drive Pins**: ASTM A270 or A240 Type 302 Stainless Steel.
- **Anchor Bolts**: ASTM F883, Type 302 Stainless Steel.
- **Nuts**: Tamper-proof type zinc alloy see special provisions Section 6-06.2.

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### Cut Section

- **Resin Bonded Anchors or Anchor Bolts**:
  - Bend before galvanizing.
  - End section varies.
- **Railing Spacing**:
  - Max.
  - Parallel to grade (Typ.)
  - Normal to grade (Typ.)
- **Anchor Spacing**:
  - Max.
  - See part elevation.
- **End of Traffic Barrier**
  - bending before galvanizing.
  - Typical interior section (varies).
- **Joint**
  - Bend before galvanizing.
  - End section varies.
- **Traffic Barrier**
  - Top of traffic barrier.
  - Top of bridge deck at curb line.

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### Elevation

- Baluster attachment details not shown.

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### Standard Railings

- Bridge and Structures Office
- Washington State Department of Transportation

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**Bridge Railing Type: BP-12**

**Detail 1 of 2**