TEMPORARY DETOUR BRIDGE
THRIE-BEAM GUARDRAIL

Limit of Payment for Temporary Guardrail

W-Beam Guardrail See Index 400

End Span

Approach Span

Limit of Payment for Thrie-Beam Panels on Bridge

Traffic Railing - Class B (10 Gauge)

Begin or End Detour Bridge

Bearing

PARTIAL PLAN - TRAILING END

TWO-WAY TRAFFIC

PARTIAL ELEVATION - TRAILING END

ONE-WAY TRAFFIC

END TRANSITION APPLICATION DETAILS
Thrie-Beam Panel Connection Spacing

Traffic Railing - Class B (10 Gauge) Thrie-Beam Panels

10'-0" \(\equiv\) 02 Spacing (Typ.)

\(\equiv\) 01

\(\equiv\) 02

\(\equiv\) 02

\(\equiv\) 02

Thrie-Beam Expansion Panel (See Detail)

Top Bolt

Thrie Beam

Top Bolt

Top of Steel Grid Deck

PARTIAL ELEVATION SHOWING TYPICAL THRIE-BEAM PANEL ARRANGEMENT

PARTIAL ELEVATION SHOWING THRIE-BEAM PANELS AT EXPANSION JOINT

THRIE-BEAM EXPANSION PANEL DETAIL

\(\frac{3}{8}" \times 2\frac{1}{2}"\) Bolt Slots
(Typ. Ea. End)

\(\frac{3}{8}" \times 1\frac{1}{4}"\) Splice Bolt Slots
(Typ. Ea. End)

\(\frac{3}{8}" \times 1\frac{1}{4}"\) Splice Bolt Slots
(Typ. Ea. End)

\(\frac{3}{8}" \times 1\frac{1}{4}"\) Bolt Slots (Typ.)
TEMPORARY DETOUR BRIDGE
THRIE-BEAM GUARDRAIL

DESCRIPTION:

1. **As directed by the Engineer** in order to limit vibration induced vertical displacement of the Thrie-Beam Panels, provide Contractor supplied, one time use, commercially available 5/16" (Min.) Galvanized Wire Rope w/ Ferrules or other approved wire type positioned and tensioned as required to secure the Panels.

2. **Steel Grid Deck**: Used for the bridge deck to provide structural support.

3. **Asphalt Pavement**: Used as the surface material for the bridge deck.

4. **Guardrail Post**: Used to support the guardrail system along the bridge.

5. **Backer Plate**: Used to reinforce the connection between the steel grid deck and the guardrail system.

6. **Offset Block**: Used to adjust the alignment of the guardrail system.

7. **W6x9 Post**: Used as the main support post for the guardrail system.

8. **Top Bolt**: Used to secure the guardrail system to the bridge deck.

9. **Bent Cap**: Used to connect the guardrail system at the top.

10. **Bottom Cap Plate**: Used to connect the guardrail system at the bottom.

11. **Splice Bolt Slots**: Used for connecting the guardrail system longitudinally.

12. **Steel Post Plate**: Used to reinforce the connection between the steel grid deck and the guardrail system.

13. **Galv. Wire Rope**: Used as the horizontal tension member to keep the Thrie-Beam Panels in place.

14. **Asphalt Pavement**: Used at the approach spans to provide a smooth surface for vehicles.

15. **Thrie-Beam Top Bolt**: Used to connect the Thrie-Beam Panels at the top.

16. **Type K Terminal Connector**: Used to connect the guardrail system to the bridge deck at the ends.

17. **Type K Barrier Unit**: Used to connect the Thrie-Beam Panels longitudinally.

18. **End Posts Only**: Used to reinforce the connection at the ends of the bridge deck.

19. **4'-1" Splice Bolt Slots**: Used for connecting the guardrail system longitudinally.

20. **2'-1" Post Bolt Offset Block**: Used to adjust the alignment of the guardrail system.

21. **3/8" x 7" Lag Screws**: Used to secure the Timber Bent Cap.

22. **1 3/16" Ø (Min.) Galvanized Wire Rope w/ Ferrules**: Used to connect the Thrie-Beam Panels.

23. **Gusset Plates**: Used to reinforce the connection between the steel grid deck and the guardrail system.

24. **Clear Pin and Channel**: Used to provide a clear path for the Thrie-Beam Panels to slide.

25. **End Posts Only**: Used to reinforce the connection at the ends of the bridge deck.

26. **1 1/2" Ø Hole**: Used for installing the Steel Post Plate.

27. **5" x 1 1/2" Bolt Slots**: Used for connecting the Steel Post Plate.

28. **Offset Block**: Used to adjust the alignment of the guardrail system.

29. **1"Ø Hole**: Used for installing the Gallium Wire Rope.

30. **2"Ø Hole**: Used for installing the Steel Post Plate.

31. **4"Ø Hole**: Used for installing the Steel Post Plate.

32. **10'-0" 1/2" Ø Holes**: Used for installing the Steel Post Plate.

33. **3/8" Ø Holes**: Used for installing the Steel Post Plate.

34. **5"Ø Holes**: Used for installing the Steel Post Plate.

35. **1 1/2" Ø Hole**: Used for installing the Steel Post Plate.

36. **1 1/2" Post Plate & Recessed Nut**: Used to reinforce the connection between the steel grid deck and the guardrail system.

37. **2 1/2" Post Plate & Recessed Nut**: Used to reinforce the connection between the steel grid deck and the guardrail system.

38. **1/2" Ø Hole**: Used for installing the Steel Post Plate.

39. **5/8" Ø Hole**: Used for installing the Steel Post Plate.

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41. **1 1/2" Ø Hole**: Used for installing the Steel Post Plate.

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100. **1"Ø Hole**: Used for installing the Steel Post Plate.

101. **1 1/2" Ø Hole**: Used for installing the Steel Post Plate.

102. **1 1/2" Post Plate & Recessed Nut**: Used to reinforce the connection between the steel grid deck and the guardrail system.

103. **2 1/2" Post Plate & Recessed Nut**: Used to reinforce the connection between the steel grid deck and the guardrail system.
PLAN VIEW OF TRANSITION BLOCK
(GUARDRAIL NOT SHOWN FOR CLARITY)

ELEVATION OF TRANSITION BLOCK
(GUARDRAIL AND POSTS NOT SHOWN FOR CLARITY)

ESTIMATED QUANTITIES

<table>
<thead>
<tr>
<th>ITEM</th>
<th>UNIT</th>
<th>QUANTITY</th>
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<tbody>
<tr>
<td>Concrete Class NS</td>
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<tr>
<td>Reinforcing Steel</td>
<td>LB</td>
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</tr>
<tr>
<td>Guardrail (Reset)</td>
<td>LP</td>
<td>12.5</td>
</tr>
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</table>

REINFORCING STEEL: Reinforcing steel shall be ASTM A615, Grade 60.

ANCHOR RODS: Steel Anchor Rods shall be ASTM A36, ASTM A709 Grade 36 or ASTM A615
Grade 60 hot-dip galvanized in accordance with Specification Section R62.