### Notes

The barrier rail in each span shall not be cast until all slab concrete in that span has been cast and has reached a minimum compressive strength of 3,000 psi.

When expansion joint seal is required, the joint in the deck shall be spaced to the casting of vertical concrete barrier rail.

All reinforcing steel in barrier rails shall be epoxy coated.

*#5* bars shall be installed using an adhesive anchoring system. Shear testing for the adhesive bonding system is not required.

Grooved contraction joints, 3⁄4" in depth, shall be placed in all exposed edges of the barrier rail and in accordance with Article 825-10(B) of the Standards for Highway Bridges. GROOVED CONTRACTION JOINTS, 3⁄4" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STATE OF NORTH CAROLINA STANDARD SPECIFICATIONS. THE CONTRACTION JOINT SHALL BE LOCATED AT EACH EXPANSION JOINT. ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF BARRIER RAIL SEGMENTS LESS THAN 20 FEET IN LENGTH. NO. OF CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.

Field testing for the adhesive bonding system is not required.

When EVAZOTE joint seal is required, the joint in the deck shall be sawed after sawing the joint. The yield load for the #5 S3 bars is 18.6 kips.

The #5 S3 bars shall be installed, using an adhesive anchoring system, prior to the casting of vertical concrete barrier rail.

All reinforcing steel in barrier rails shall be epoxy coated.

### Bill of Material

<table>
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<td>#5</td>
<td>BAR</td>
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<td>1'-0&quot;</td>
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</tbody>
</table>

**All bar dimensions are out to out.**

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### Diagrams

- **Plan:** End View
- **Elevation at Expansion Joints:** Barrier Rail Details
- **Section S-S:** Section Thru Rail
- **Section 5-5:** End of Rail Details
- **Notes:** Barrier Rail Details

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**Bar Types:**

- #5
- #5 S1
- #5 S2
- #5 S3

**Epoxy Coated Reinforcing Steel:**

- #5

**Vertical Concrete Barrier Rail:**

- Standard No.: CBR2