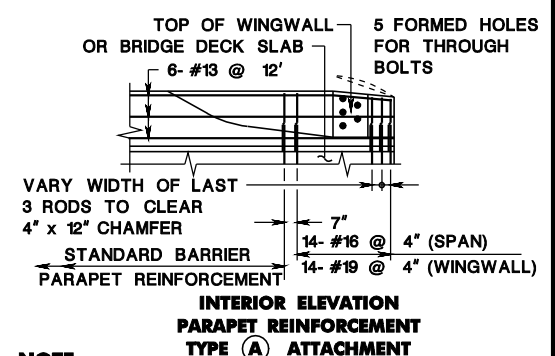
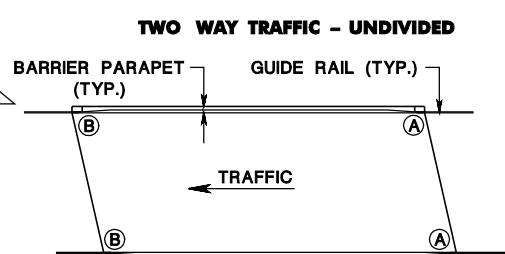
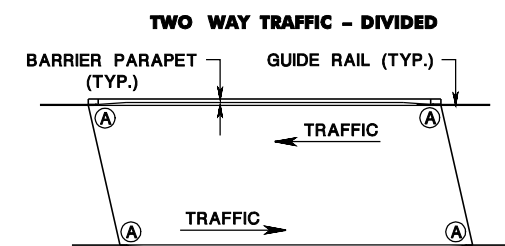
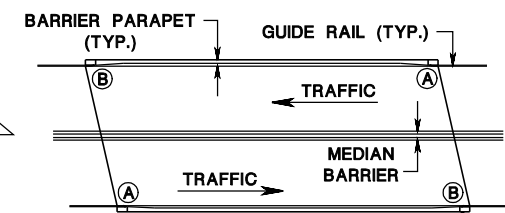
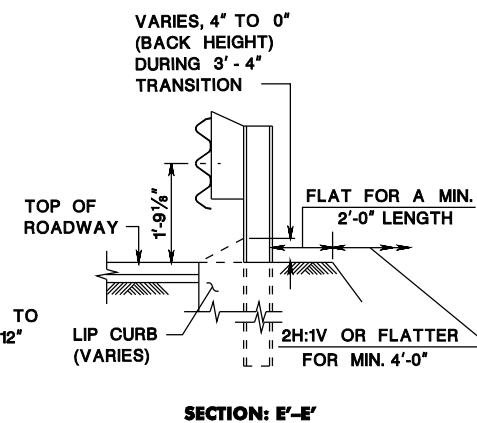
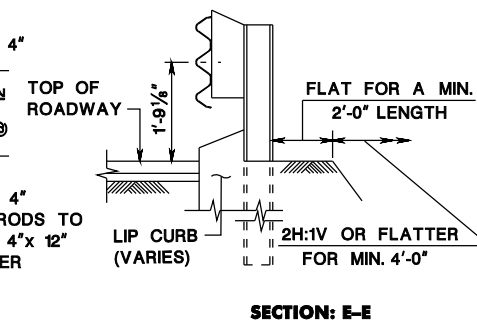
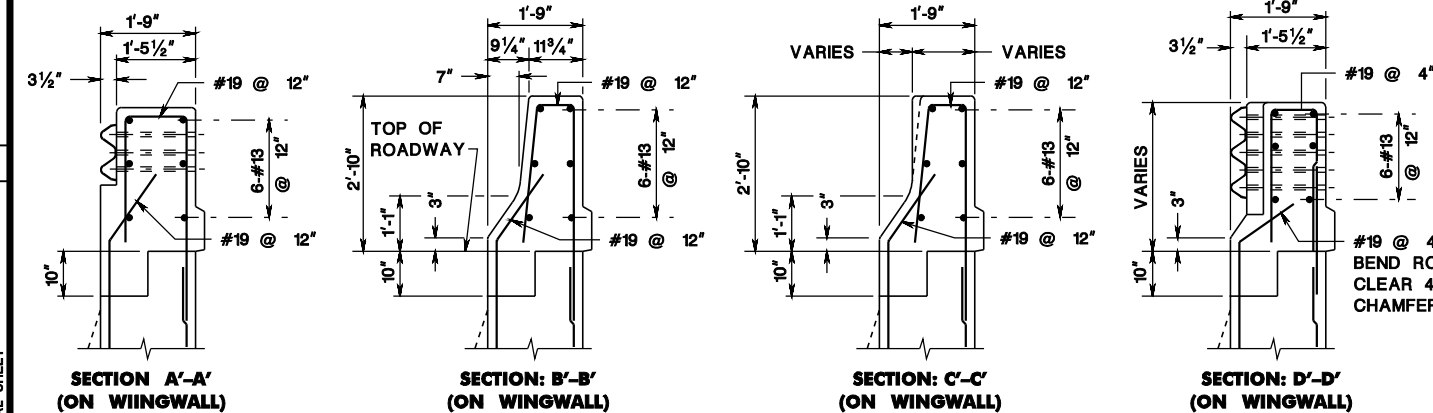
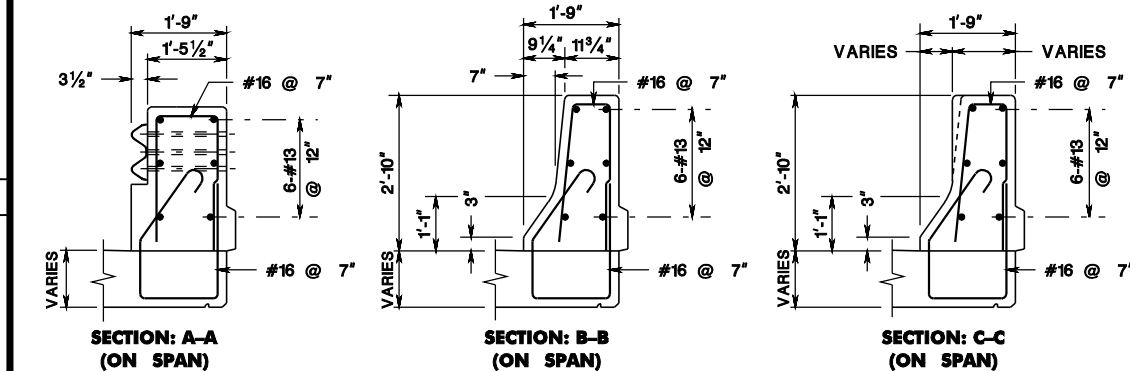
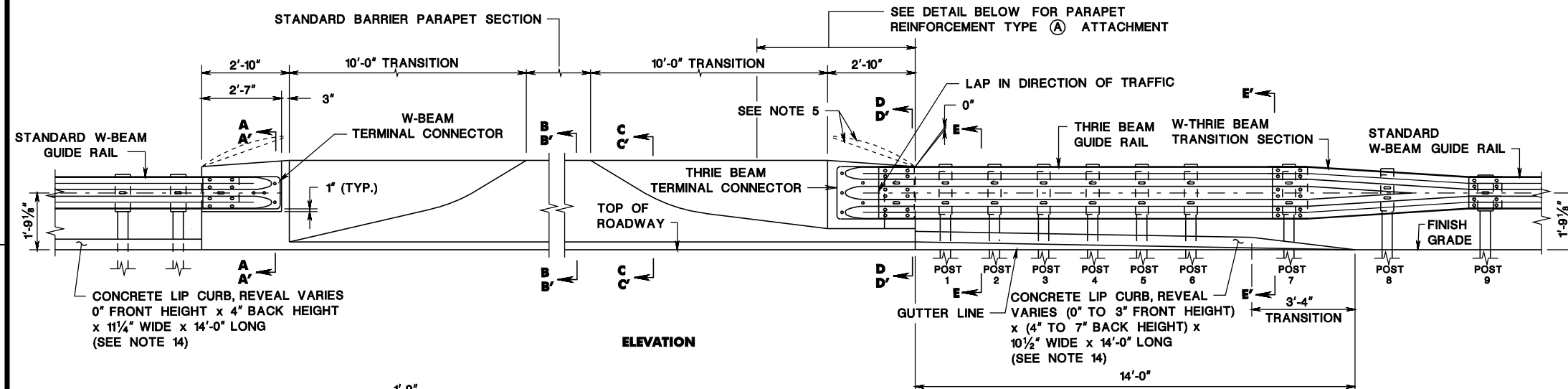
**NOTES:**

1. THIS GUIDE RAIL TRANSITION IS APPROPRIATE FOR CONNECTION TO A VERTICAL CONCRETE SHAPE AND SHOULD NOT BE CONNECTED DIRECTLY TO A CONCRETE SAFETY SHAPE. CONCRETE SAFETY BARRIER SHOULD BE TRANSITIONED TO A VERTICAL SHAPE AT THE GUIDE RAIL CONNECTION.
2. FOR RECOMMENDED ATTACHMENT, REFER TO "BRIDGE ATTACHMENT TYPES", ON THIS SHEET.
3. ALL CROSS SLOPES BETWEEN THE PAVEMENT EDGE AND POSTS TO BE 10H:1V OR FLATTER.
4. EMBANKMENT MATERIAL CONFORMING TO THE NJDOT STANDARD SPECIFICATIONS SECTION 203 TO EXTEND FLAT BEHIND THE POSTS AT LEAST 2'-0" AT WHICH POINT A SLOPE OF NO STEEPER THAN 2H:1V SHOULD EXTEND A MINIMUM OF 4'-0" FURTHER.
5. BARRIER PARAPET END MAY HAVE TO BE RECONFIGURED TO ACCEPT DIFFERENT TYPES OF RAILING OR FENCING THAT MAY BE MOUNTED ON TOP OF THE PARAPET.
6. AT TYPE (A) ATTACHMENTS, THRIE BEAM RAIL ELEMENT WILL REQUIRE ADDITIONAL POST MOUNTING HOLES FOR POST #1, #3, AND #5. CAUTION HOLES ARE TO BE SHOP PUNCHED OR DRILLED BEFORE GALVANIZATION. NO FIELD DRILLING IS PERMITTED.
7. POSTS 1 THROUGH 7 TO BE 7'-2" LONG WITH 4'-10" POST EMBEDMENT. POST 8 TO BE 6'-8" LONG WITH 4'-6" POST EMBEDMENT. POST 9 TO BE 6'-8" LONG WITH 4'-4" POST EMBEDMENT.
8. LOCATE CONDUIT AT END OF BARRIER PARAPETS SO AS NOT TO INTERFERE WITH GUIDE RAIL POST SPACING.
9. LOCATE DRAINAGE INLETS AND ELECTRICAL JUNCTION BOXES ON APPROACHES SO AS NOT TO INTERFERE WITH GUIDE RAIL POST SPACING.
10. STRUCTURAL STEEL PLATES AND SHAPES TO CONFORM TO AASHTO M270 AND BE GALVANIZED PER AASHTO M111.
11. HIGH STRENGTH STEEL BOLTS, NUTS, AND WASHERS TO CONFORM TO AASHTO M164. ZINC COATED BOLTS, NUTS, AND WASHERS TO BE TREATED ACCORDING TO AASHTO M232M.
12. THE THICKNESS OF THRIE BEAM, W-BEAM AND W-THRIE BEAM TRANSITION IS 12-GAUGE.
13. FOR ADDITIONAL THRIE BEAM, AND W-BEAM DETAILS REFER TO CD-609-1, CD-609-3, AND CD-609-13.
14. CONCRETE LIP CURB TO BE PAID UNDER 9"x16" CONCRETE VERTICAL CURB, SEE CD-607-1.9.
15. WHEN THE CONFIGURATION OF BRIDGE ABUTMENTS AND WINGWALLS DO NOT ACCOMMODATE THE INSTALLATION OF POST 1, THE POST MAY BE ATTACHED TO THE ABUTMENT HEADER WITH THE USE OF A BASE PLATE.



**NOTE:**  
REINFORCEMENT STEEL IS IN METRIC UNITS.

## BEAM GUIDE RAIL ATTACHMENTS

N.T.S.

CD-609-14

NEW JERSEY DEPARTMENT OF TRANSPORTATION

## CONSTRUCTION DETAILS

ONE WAY TRAFFIC  
**BRIDGE ATTACHMENT TYPES**  
CD-609-14.1