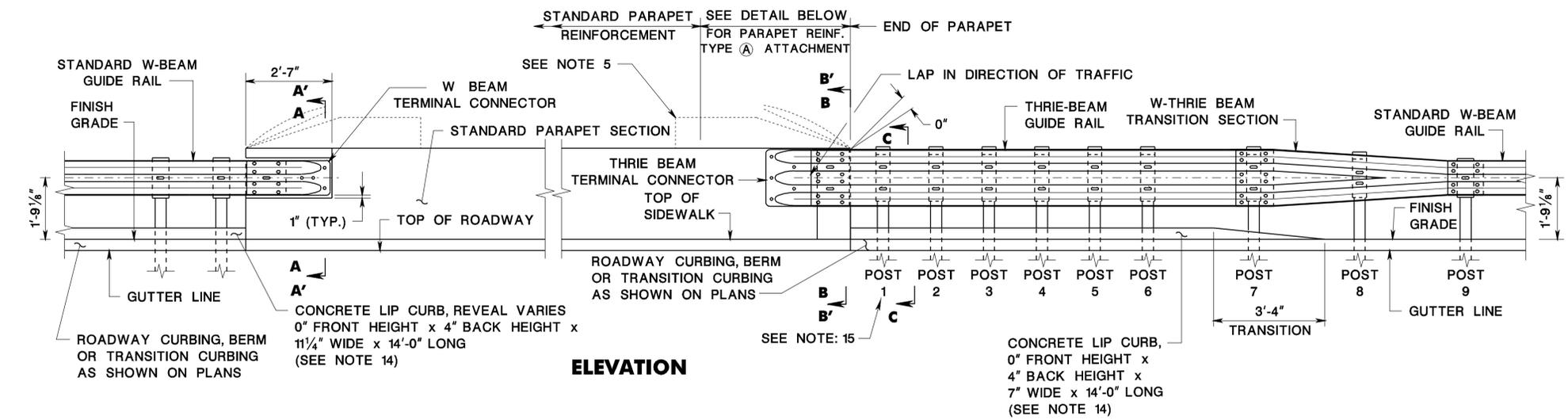
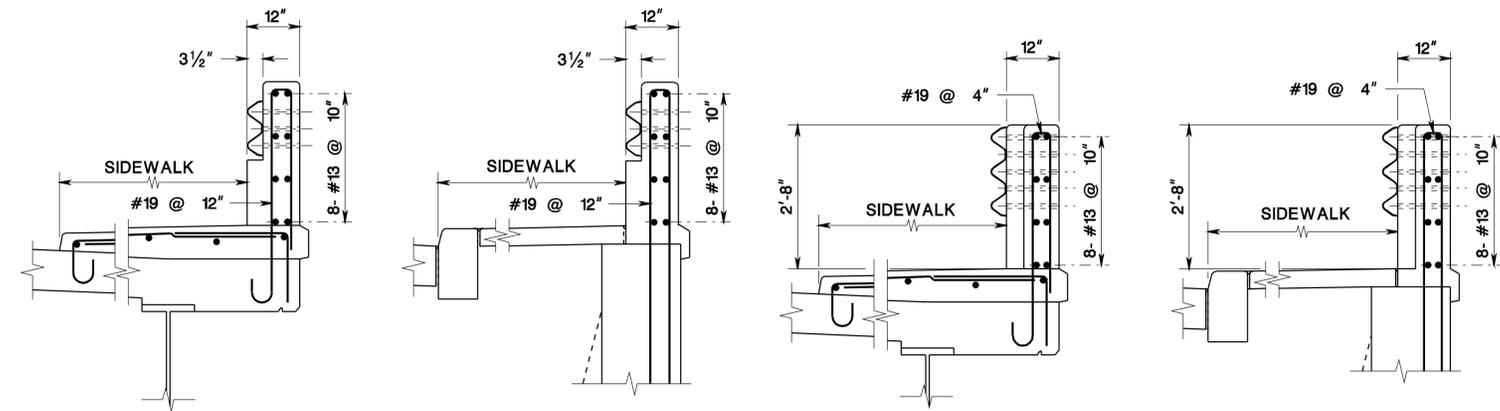


TYPE B ATTACHMENT PLAN TYPE A ATTACHMENT

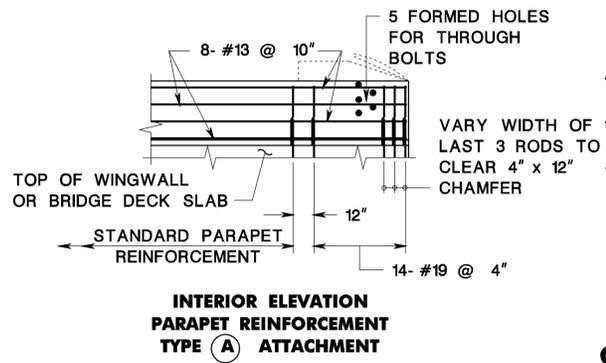
- NOTES:**
- THIS GUIDE RAIL TRANSITION IS APPROPRIATE FOR CONNECTION TO A VERTICAL CONCRETE SHAPE.
 - FOR RECOMMENDED ATTACHMENT TYPE, REFER TO "BRIDGE ATTACHMENT TYPES", THIS SHEET.
 - ALL CROSS SLOPES BETWEEN THE PAVEMENT EDGE AND POSTS SHALL BE 10H:1V OR FLATTER.
 - EMBANKMENT MATERIAL CONFORMING TO THE NJDOT STANDARD SPECIFICATIONS SECTION 203 SHALL 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.
 - WHEN RAILING IS INSTALLED ON TOP OF PARAPET, PARAPET END SHALL BE MODIFIED TO ACCOMMODATE HORIZONTAL RAIL ATTACHMENT TO PARAPET. REFER TO STANDARD RAILING PLATE FOR ATTACHMENT DETAILS.
 - AT TYPE A ATTACHMENTS, THRIE BEAM RAIL ELEMENT WILL REQUIRE ADDITIONAL POST MOUNTING HOLES FOR POST #1, 3 & 5. CAUTION, HOLES ARE TO BE SHOP PUNCHED OR DRILLED BEFORE GALVANIZATION. NO FIELD DRILLING IS PERMITTED.
 - POSTS 1 THRU 7 SHALL BE 7'-2" LONG WITH 4'-10" POST EMBEDMENT. POST 8 SHALL BE 6'-8" LONG WITH 4'-6" POST EMBEDMENT. POST 9 SHALL BE 6'-8" LONG WITH 4'-4" POST EMBEDMENT.
 - LOCATE CONDUIT AT END OF PYLON SO AS NOT TO INTERFERE WITH GUIDE RAIL POST SPACING.
 - LOCATE DRAINAGE INLETS AND ELECTRIC JUNCTION BOXES ON APPROACHES SO AS NOT TO INTERFERE WITH GUIDE RAIL POST SPACING.
 - STRUCTURAL STEEL PLATES AND SHAPES SHALL CONFORM TO AASHTO M270 AND SHALL BE GALVANIZED AS PER AASHTO M111.
 - HIGH STRENGTH STEEL BOLTS, NUTS AND WASHERS SHALL CONFORM TO AASHTO M164. ZINC COATED BOLTS, NUTS AND WASHERS SHALL BE TREATED ACCORDING TO AASHTO M232M.
 - THE THICKNESS OF THRIE-BEAM, W-BEAM AND W-THRIE BEAM TRANSITION SHALL BE 12-GAUGE.
 - FOR ADDITIONAL THRIE BEAM, AND W-BEAM DETAILS REFER TO CD-609-1, CD-609-3, AND CD-609-12.
 - CONCRETE LIP CURB TO BE PAID UNDER 9"x16" CONCRETE VERTICAL CURB, SEE CD-607-1.9. CONCRETE LIP CURB MAY BE OMITTED AT UNDERPASS, WHERE EROSION CONTROL IS NOT NECESSARY.
 - 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.



ELEVATION



SECTION: A-A (ON SPAN) SECTION: A'-A' (ON WINGWALL) SECTION: B-B (ON SPAN) SECTION: B'-B' (ON WINGWALL)



INTERIOR ELEVATION PARAPET REINFORCEMENT TYPE A ATTACHMENT

GUIDE RAIL ATTACHMENT - NEW CONSTRUCTION (SIDEWALK WITH PARAPET)

NOTE: REINFORCEMENT STEEL IS IN METRIC UNITS.

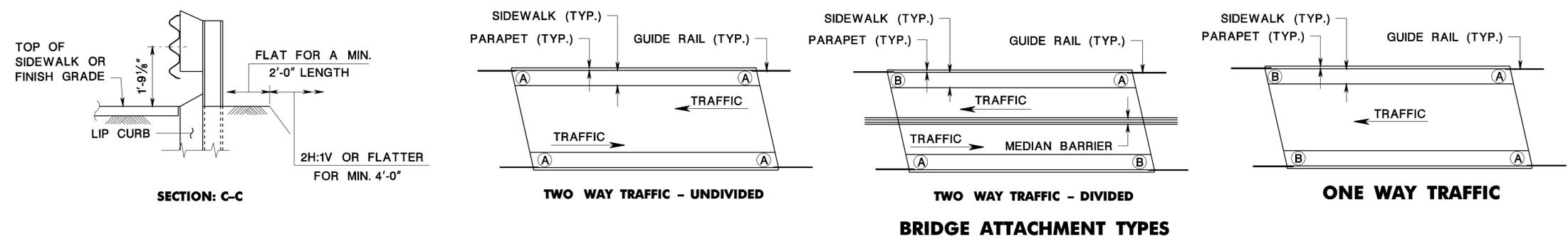
BEAM GUIDE RAIL ATTACHMENTS

N.T.S.

CD-609-15

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS



BRIDGE ATTACHMENT TYPES