



**LEGEND**

- (A) NESTED THRIE BEAM ELEMENTS (ONE 12 GAUGE ELEMENT NESTED OVER ONE 10 GAUGE ELEMENT)
  - (B) ONE 10 GAUGE THRIE BEAM ELEMENT
  - (C) ONE 12 GAUGE THRIE BEAM ELEMENT
- 10 GAUGE = 0.135" THICK  
12 GAUGE = 0.108" THICK

**NOTES:**

1. Use 5/8" Ø Button head bolts and hex nuts for connections to posts. No washer on rail face for bolted connections to post.
2. The nested rail elements, end cap and single 10 gauge thrie beam element, may be spliced together prior to bolting the elements to the wood post and concrete barrier or railing.
3. Exterior splice bolt holes for rail element splices at Post No. T4 and the connection to the concrete barrier or railing shall be the standard 5/8" x 1 1/8" slot size. Interior splice bolt holes at these locations may be increased up to 1/4" Ø. Only the top 2 and the bottom 2 splice bolts with washers and nuts are required for rail splices at Post No. T4 and the connection to the concrete barrier or railing.
4. The top elevation of Post Nos. T1 through T7 shall not project more than 1" above the top elevation of the rail element.
5. The depth of the metal box spacer varies from the 5/8" to 1 1/2" and is dependent on the width of the concrete railing or wall. The combined dimension for the depth of the metal box spacer plus the width of railing or wall is typically 17 1/8". Where the space between the backside of the concrete railing or wall and the rear thrie beam element is less than 1 1/2", metal plates similar to Plate 'A' are used as spacers.
6. Where the width of the concrete railing or wall is greater than 17 1/8", wood blocks are to be used to fill the space created between the backside of Post No.4 through No.7 and the rear thrie beam element. These wood blocks shall be 8" in width and 1'-2" in length. The dimension between the front thrie beam element and the rear thrie beam element is to match the width of the concrete railing or wall.
7. For details of End Cap (Type TC), see Standard Plan A78C1.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

**Randell D. Hiatt**  
REGISTERED CIVIL ENGINEER

October 30, 2015  
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-17  
CIVIL  
STATE OF CALIFORNIA

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**DOUBLE THRIE BEAM BARRIER  
TRANSITION RAILING  
(TYPE DTB)**

NO SCALE

**A78K**