

QUANTITY OF HOOK TWIN TIE PLATES					
MARK	L23	L27	LR23	LR27	LR31
TYPE I RAILS	10	4	4	2	0
TYPE II RAILS	10	6	2	2	2
TYPE III RAILS	8	8	2	2	2

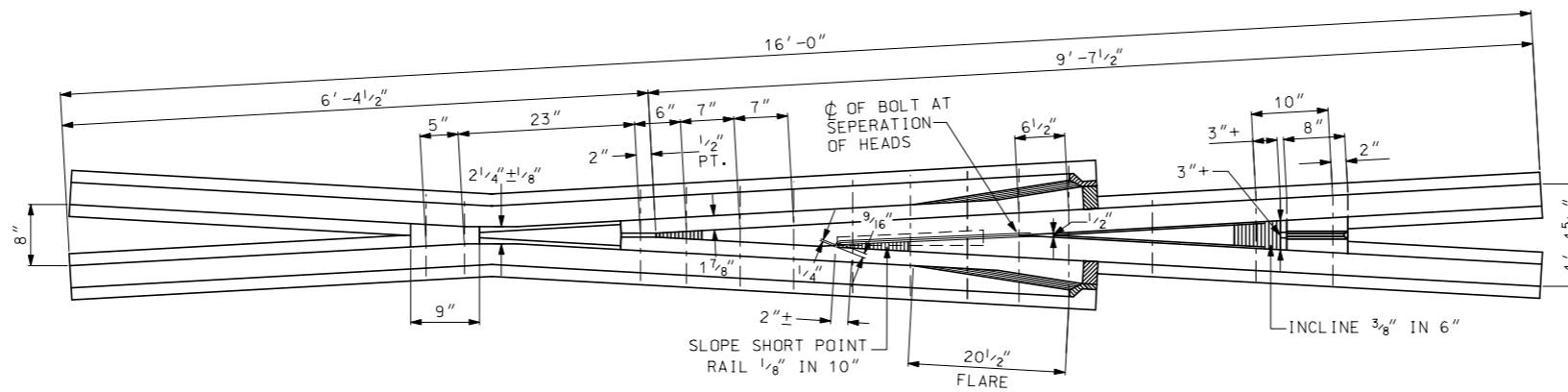
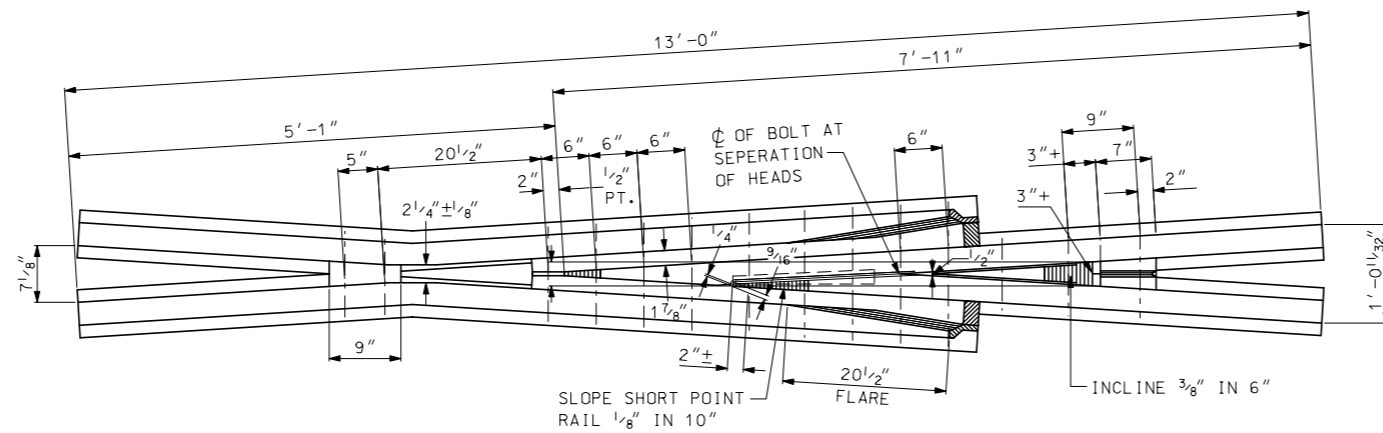
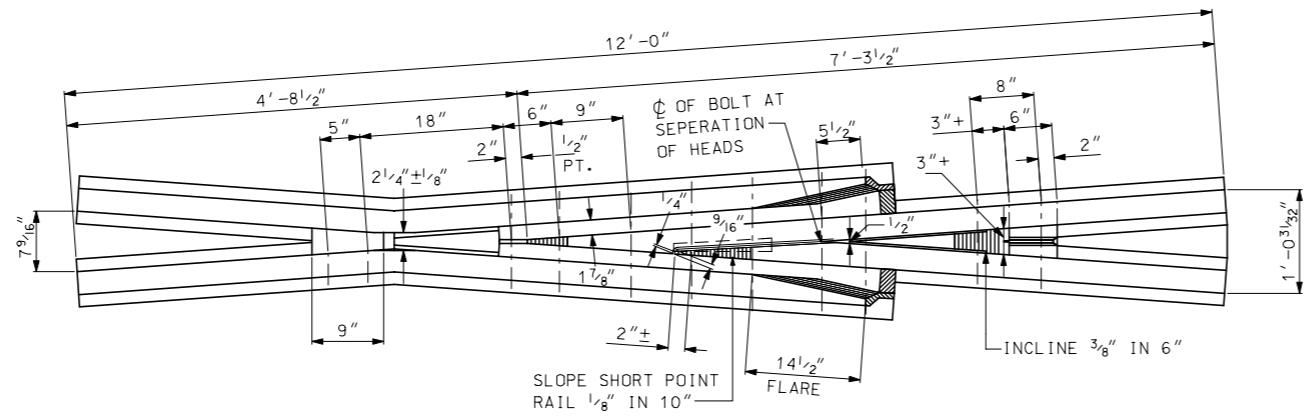
No. 7 BOLTED RIGID FROG  
ANGLE 8° -10' -16"

QUANTITY OF HOOK TWIN TIE PLATES					
MARK	L23	L27	LR23	LR27	LR31
TYPE I RAILS	12	4	2	2	0
TYPE II RAILS	12	6	2	4	2
TYPE III RAILS	10	8	2	4	2

No. 8 BOLTED RIGID FROG  
ANGLE 7° -09' -10"

QUANTITY OF HOOK TWIN TIE PLATES					
MARK	L23	L27	LR23	LR27	LR31
TYPE I RAILS	14	4	4	2	0
TYPE II RAILS	14	6	2	4	2
TYPE III RAILS	12	8	2	4	2

No. 9 BOLTED RIGID FROG  
ANGLE 6° -21' -35"



NOTES

1. RAIL AND JOINT BARS.  
Purchaser shall specify weight and designation of rail section and joint drilling and shall supply complete details of joint bars.
2. FILLERS.  
Main filler shall be rolled of steel in one continuous length, per Plan Basic No.325, and shall maintain the required flangeways throughout. Point fillers shall be of steel.
3. HEEL RISER BLOCK.  
Heel riser block shall be of steel rail, head up, with flange upset to fit properly over and rest upon the bases of adjoining rails, or of other approved design that will ensure a proper bearing on bases of the point rails and will provide rolled or forged steel wearing surface equal in hardness to rail steel.
4. PLATES.  
Hook Twin tie plates as listed in tables shall be furnished with frogs unless otherwise specified. For detail and application of these plates, see Plan Basic No.241. Quantities shown are based on 19 1/2" tie spacing with center of one tie 4" back of 1/2" point. Rails in tables are classified by the following widths.  
  
TYPE I RAILS. Rails having base up to 5 3/16" and head 2 9/16" inclusive.  
  
TYPE II RAILS. Rails having base up to 5 1/2" and head 2 3/4" inclusive.  
  
TYPE III RAILS. Rails having base up to 6" and head 3" inclusive.
5. ALTERNATES.  
To be furnished when specified, Hook Twin Tie Plates - For use with joint bars having toe extending beyond rail base. Type H plates of suitable length to be substituted for Type L plates at toe joint and for Type LR plates at heel joint and quantities listed in tables modified to agree.
6. GENERAL REFERENCES:  
(a) SECTIONS AND ADDITIONAL DATA. See Plan Basic No.320.  
(b) FLARES. See Plan Basic No.350 for details.  
(c) BEVELING. See Plan Basic No.1005 details for beveling of running rail ends.  
(d) BONDING. Per details specified by purchaser.
7. SPECIFICATIONS.  
See Plan Basic No.100, Bolt sizes and details shall be per Plan Basic No.100, section M11.

AMERICAN RAILWAY ENGINEERING  
AND MAINTENANCE OF WAY ASSOCIATION

No. 7, No. 8 AND No. 9  
BOLTED RIGID FROGS

PLAN NO. 323-03