Common Crossing (All Standards)

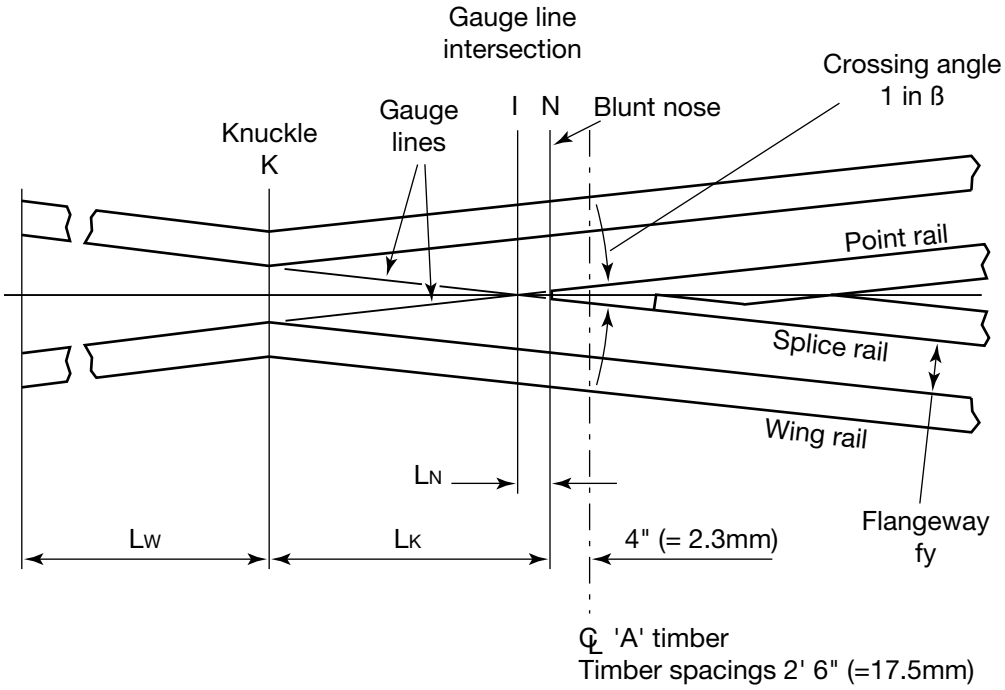

Figure 1 1 in 8 Common Crossing in bullhead rail.

The dimensions for common crossings from 1 in 3 to 1 in 8 are shown below.

Crossing Angle 1 in ß	Length of Wing Rail	Length of Check Rail	Length of Point Rail	Length of Splice Rail	S7 o		0F		0C		Length f Splice Rail
				1.6mm rail head	LW	LK	LW	LK	LW	LK	2.35mm rail head
3	67.7	91.0	63.6	59.1	37.8	4.4	35.7	6.5	34.3	7.9	56.8
3½	67.7	87.5	63.6	59.1	37.6	5.1	35.1	7.6	33.5	6.2	56.4
4	85.8	91.0	81.1	75.4	55.4	5.9	52.6	8.7	50.8	10.5	72.8
4½	85.8	91.0	81.1	75.4	55.2	6.6	50.0	9.8	50.0	11.8	72.2
5	85.8	91.0	81.1	75.4	54.0	7.3	51.4	10.9	49.1	13.2	71.7
5½	85.8	91.0	81.1	75.3	54.8	8.0	50.8	12.0	48.3	14.5	71.1
6	85.8	91.0	81.1	74.4	54.5	8.8	50.2	13.1	47.5	15.8	69.9
6½	85.8	91.0	81.1	74.4	54.3	9.5	49.6	14.2	46.7	17.1	69.5
7	85.8	91.0	98.6	91.9	54.1	10.1	48.9	15.3	45.8	18.4	86.6
8	85.8	91.0	98.6	91.3	53.7	11.7	47.9	17.5	44.3	21.0	86.3

Notes: The distance from the knuckle K to the gauge line intersection I, L_I = flangeway (fy) x ß
The distance from the gauge line intersection to the blunt nose N, $L_N = 0.44ß$
The distance from the knuckle K to the blunt nose N, $L_K = L_I + L_N = (f_y + 0.44)ß$
S7 = 1.46ß 0F = 2.2ß 0C = 2.6ß

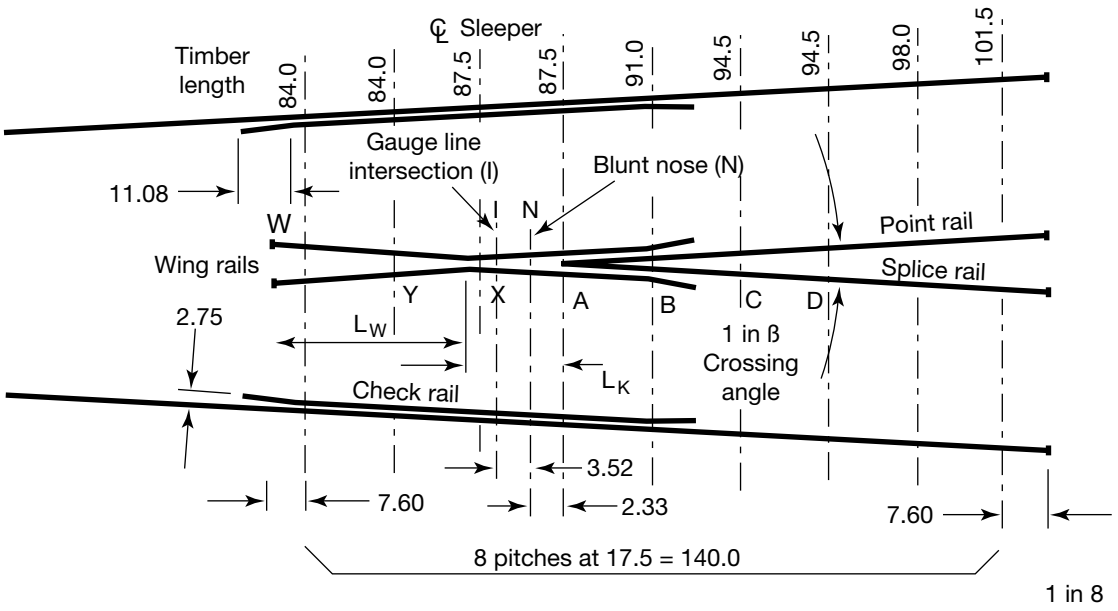

Figure 2 Layout of a common crossing

Notes: Wing rail = 85.8mm Check rail = 91.0mm
A is chair under nose, located 2.33mm ahead of c/l of sleeper.
B, C, and D are special chairs under point and splice rails.
X and Y are special chairs under wing rails.

Chairing of Bullhead Common Crossings

Crossing - 1 in						
3		X	A	B		
3½		X	A	B		
4		X	A	B		
4½		X	A	B	C	
5		X	A	B	C	
5½		X	A	B	C	
6		X	A	B	C	
6½	Y	X	A	B	C	
7	Y	X	A	B	C	D
8	Y	X	A	B	C	D

Baseplates for Flat Bottom Crossings
No flat bottom crossings less than 1 in 4

Crossing - 1 in						
4		X	A	B		
4½		X	A	B	C	
5		X	A	B	C	
5½		X	A	B	C	
6	Y	X	A	B	C	D
6½	Y	X	A	B	C	D
7	Y	X	A	B	C	D
8	Y	X	A	B	C	D