

Railroad	NS	Milepost	PC49.5	Subdivision	FORT WAYNE LINE	Date	2/7/2023
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**Alignment & Curve Speed Calculator**

<b>Stations -</b>	-3	-2	-1	POD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Elevation -</b>	1.375	1.438	1.375	1.250	1.313	1.125	1.188	1.250	1.250	1.250	1.188	1.250	1.250	1.250	1.188	1.188			
<b>Curvature -</b>	0.438	0.500	0.563	0.625	0.625	0.563	0.563	0.563	0.563	0.563	0.563	0.625	0.563	0.563	0.563	0.625			

All entries of elevation and curvature must be converted to decimals for proper calculation.

Average Elevation	1.2578
Average Curvature	0.5664
Maximum Curve Speed 3" based on v-max	103.63
Maximum Curve Speed 4" based on v-max	115.16

50
50
0.2676
-3.268
-108.92%
0.2676
-4.268
-106.69%

3 Inch (FRT) Timetable Speed  
 4 Inch (PASS) Timetable Speed  
  
 Actual 3 Inch Unbalance  
 Inches in excess of 3 Inch Unbalance  
 Percent over 3 Inch Unbalance  
  
 Actual 4 Inch Unbalance  
 Inches in excess 4 Inch Unbalance  
 Percent over 4 Inch Unbalance

Fraction to Decimal Chart			
1/16	0.0625	9/16	0.5625
1/8	0.125	5/8	0.625
3/16	0.1875	11/16	0.6875
1/4	0.25	3/4	0.75
5/16	0.3125	13/16	0.8125
3/8	0.375	7/8	0.875
7/16	0.4375	15/16	0.9375
1/2	0.5	1	1

Speedliner Curvature	
31' Cord	0.25 * Speedliner #

