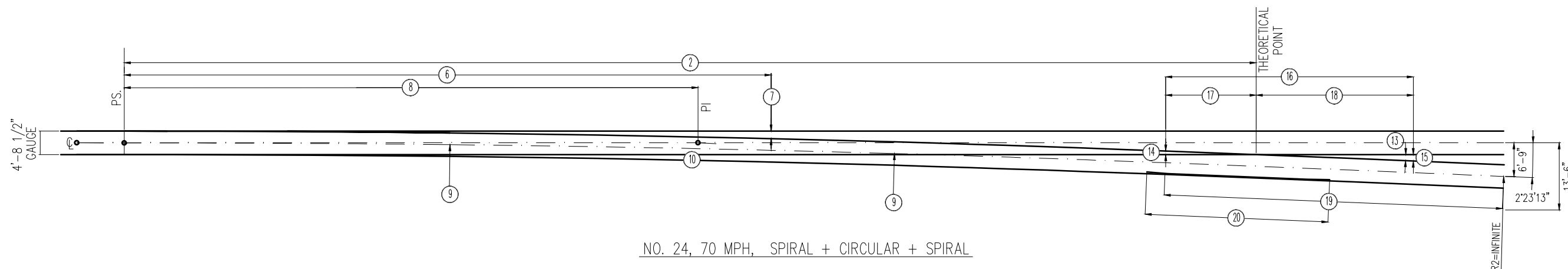


DISTANCE AND OFFSET FOR CLOSURE RAIL ON GAUGE LINES

"D" DISTANCE FROM PS	"O" OFFSET FOR No.24 TURNOUT
0'-0"	0.052"
10'-0"	0.229"
20'-0"	0.549"
30'-0"	1.031"
40'-0"	1.693"
50'-0"	2.552"
60'-0"	3.628"
70'-0"	4.938"
80'-0"	6.491"
90'-0"	8.289"
100'-0"	10.331"
110'-0"	12.617"
120'-0"	15.147"
130'-0"	17.922"
140'-0"	20.941"
150'-0"	24.204"
160'-0"	27.712"
170'-0"	31.453"
180'-0"	35.408"
190'-0"	3'-3.558"
200'-0"	3'-7.882"
210'-0"	4'-0.361"
220'-0"	4'-4.974"
230'-0"	4'-9.702"
240'-0"	5'-2.524"
250'-0"	5'-7.421"
260'-0"	6'-0.372"
270'-0"	6'-5.358"



TURNOUT #	GEOMETRY	DIVERGING V	UNBALANCED SUPERELEVATION	FROG	THEO. LEAD	ENTRY JERK	REMARK
70 MPH NO. 24	(1) GEOMETRY: S+C+S R=11,100'/4913'/INFINITE, (2) TANGENTIAL SWITCH POINT.	70 MPH	4"	CURVED	227'-5 3/4"	0.1 g/s	DESIGN SPEED 70 MPH AND SEE NOTES 4 & 5

TURNOUT NO.	SWITCH AREA				CLOSURE AREA								FROG AREA							
	①	②	③	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰	⑱	⑳		
24	103'-3"	227'-5 3/4"	N/A	N/A	SEE TABLE "DISTANCE AND OFFSET FOR CLOSURE RAIL ON GAUGE LINES"		115'-3 21/32"	4913'	19'58"	N/A	N/A	223'13"	8 7/16"	15 13/32"	49'-9"	18'-2"	31'-7"	67'-11 1/16"	26'-6"	60 MPH

LEGEND

- P.S. = POINT OF SWITCH
- P.I. = POINT OF INTERSECTION
- P.F. = POINT OF FROG
- T.P. = THEO. POINT
- S.T. = SPIRAL TO TANGENT
- C.S. = CURVE TO SPIRAL

NOTES:

- 1) GEOMETRY, S(SPIRAL) + C(CIRCULAR) + S(SPIRAL).
- 2) 4" UNBALANCED SUPERELEVATION
- 3) ENTRY JERK CALCULATION IS BASED ON (768") BETWEEN BOLSTER CENTERS IN A METROLINX BI-LEVEL COACH CAR.
- 4) NOTES 1,2 AND 3 YIELD A MAXIMUM DESIGN SPEED OF 70 MPH. THE TURNOUT MAXIMUM OPERATING SPEED HAS BEEN SET AT 60 MPH AND IS SUBJECT TO ACCEPTABLE CROR SIGNAL INDICATION AND 5 MPH INCREMENTAL CHANGES BASED UPON FUTURE PASSENGER COMFORT FORMULA OR PASSENGER SURVEY FEEDBACK ANALYSIS.
- 5) THE TURNOUTS' ORIGINAL MAXIMUM OPERATING SPEED REQUIRES THE DEVELOPMENT OF AN ACCEPTABLE METROLINX CROR SIGNAL INDICATION.

METRIC CONVERSION: 1 inch=25.4mm, 1 foot=304.8mm

No.	Date	Revision	By Approved
2	22/08/30	REVISED "SUPERELEVATION" TO "UNBALANCED SUPERELEVATION" SWITCH ALIGNMENT CLEARLY INDICATED. MPF DIMENSIONS CLARIFIED	
1	20/12/09	UPDATED #24 TURNOUT INFORMATION AND REMOVED ALL REFERENCES TO #26.5 TURNOUT	
0	19/04/19	INITIAL VERSION ESTABLISHED	

No. Date Revision By Approved

Standard / GEOMETRY FOR HIGHER SPEED TURNOUT NO. 24 WITH CURVED MPF

Drawn RFP Checked GGS Approved *Jim Pittman* Chief Engineer



Date APR. 19, 2019 Plan Number GTS-0006 Rev 2