

TABLE I

DEG.	RAD.	CURVE NO.			DEG.	RAD.	CURVE NO.			DEG.	RAD.	CURVE NO.			DEG.	RAD.	CURVE NO.							
		20°-1'	40°-1'	100°-1'			20°-1'	40°-1'	100°-1'			20°-1'	40°-1'	100°-1'			20°-1'	40°-1'	100°-1'					
0°8'	42972			400	1°00'	5730				2°30'	2292		23	6°00'	955		24	12°00'	478					
0°9'	38197			375	1°02'	5545	275	140	55	2°36'	2204	110	55	22	6°02'	950		9%	12°29'	460	23			
0°10'	34977			350	1°06'	5209				2°45'	2084			21	6°06'	940	47		13°00'	442			4%	
0°11'	31252			325	1°09'	4982	250		50	2°52'	1999	100	50	20	6°14'	920	23		13°03'	440	22	11		
0°12'	28648			275	1°10'	4911				3°00'	1910	95		19	6°22'	900	45	9	13°41'	420	21			
0°14'	24555			250	1°12'	4775		120		3°03'	1879		47		6°31'	880		22	14°00'	410				
0°15'	22918			225	1°13'	4709			47	3°11'	1800	90	45	18	6°45'	849		8%	14°22'	400	20	10	4	
0°17'	20222			200	1°16'	4523	225		45	3°22'	1702	85		17	6°50'	839		21	15°00'	383				
0°18'	19099			190	1°18'	4407		110		3°30'	1637				7°00'	819			15°07'	380	19	9%		
0°19'	18093			180	1°20'	4297				3°35'	1599	80	40	16	7°10'	800	40	20	8	15°20'	375			3%
0°20'	17189			170	1°26'	3997	200	100	40	3°46'	1521		38		7°33'	759	38	19	7%	16°00'	359	18	9	
0°21'	16370		400	160	1°30'	3820	190	95	38	3°49'	1501	75		15	7°58'	720	36	18		16°25'	350			3%
0°23'	14947		375	150	1°35'	3619	180	90	36	3°59'	1439		36		8°00'	717				16°55'	340	17	8%	
0°24'	14324		350	140	1°38'	3508			35	4°00'	1433				8°12'	699	35		7	17°00'	338			
0°26'	13222		325	130	1°40'	3438				4°05'	1403	70	35	14	8°26'	680	34	17		18°00'	320	16	8	
0°28'	12278		300	120	1°41'	3404	170	85	34	4°13'	1359		34		8°41'	660	33			19°00'	303			
0°30'	11459				1°44'	3306			33	4°21'	1317		33		8°49'	650		6%		19°11'	300	15	7%	3
0°31'	11090		275	110	1°48'	3183	160	80	32	4°25'	1298	65		13	8°58'	640	32	16		20°00'	288			
0°34'	10111		250	100	1°50'	3125				4°30'	1274		32		9°00'	637				20°34'	280	14	7	
0°38'	9047		225	90	1°51'	3097		31		4°37'	1241		31		9°15'	620	31			22°10'	260	13	6%	
0°40'	8594		85	1°55'	2989	150	75	30		4°47'	1198	60	30	12	9°34'	600	30	15	6	23°04'	250			2%
0°43'	7995	400	200	80	1°59'	2889		29		4°56'	1162		29		9°54'	579	29			24°03'	240	12	6	
0°45'	7639		190		2°00'	2865				5°00'	1146				10°00'	574				26°16'	220	11	5%	
0°46'	7473		375	75	2°03'	2795	140	70	28	5°07'	1120		28		10°14'	561	28			28°57'	200	10	5	2
0°48'	7162		180		2°07'	2707		27		5°12'	1102	55		11	10°38'	540	27		5%	30°31'	190	9%		
0°49'	7016		350	70	2°12'	2605	130	65	26	5°18'	1081		27		11°00'	522				32°15'	180	9	4%	
0°50'	6876		170		2°15'	2547				5°30'	1042				11°02'	520	26	13		34°13'	170	8%		
0°53'	6486	325	160	65	2°18'	2491		25		5°31'	1039		26		11°29'	500	25	5		36°25'	160	8	4	
0°57'	6031	300	150	60	2°23'	2404	120	60	24	5°44'	1000	50	25	10	11°58'	480	24	12		38°57'	150	7%	3%	1%

TABLE II

## TURNOUTS, CROSSOVERS, LADDERS and SLIP SWITCHES

GAGE 4'-8 1/2" = 4.7083'

FROG NO.	CURVE NO.			THEORET'L TURNOUT			PRAC. TURNOUT		FROG ANGLE	CR'OVER FROG DIST.				LADDER FROG DIST.				SLIP SWITCH			FROG NO.			
	20°-1'	40°-1'	100°-1'	DEG.	RAD.	LEAD	SWITCH	LEAD		12°-0''	13°-0''	15°-0''	12°-2''	12°-0''	13°-0''	15°-0''	12°-2''	SP&SP	FP&FP	FP&FP				
4	7 1/2	3 1/2	1 1/2	38°09'	153.0	37.7	10	38.0	14°15'	12°-0''	13°-0''	15°-0''	12°-2''											
5	12	6	2 1/2	24°17'	237.8	47.1			11°25'	12.3	17.5	27.2	13.1											
6	17	8 1/2	3 1/2	16°51'	341.4	56.5	10	55.0	9°32'	15.0	20.9	32.9	16.0	72.45	78.49	90.57	73.46	38.6	56.5	5				
7	23	12	4 1/2	12°23'	463.7	65.9			8°10'	17.6	24.6	38.5	18.8	84.48	91.52	105.60	85.65	44.9	65.9	7				
8	30	15	6	9°29'	605.0	75.3	18	70.0	7°09'	20.3	28.3	44.2	21.6	96.41	104.44	120.50	97.75	51.3	75.3	8				
9	38	19	7 1/2	7°30'	765.1	84.7			6°22'	22.9	31.9	49.8	24.4	108.21	117.23	135.27	109.71	57.8	84.8	9				
10	47	24	9 1/2	6°04'	944.0	94.2	18	85.0	5°43'	25.6	35.6	55.5	27.3	120.47	130.51	150.59	122.14	64.3	94.2	10				
11	55	29	11	5°01'	1141.7	103.6			5°12'	28.2	39.2	61.1	30.0	132.40	143.43	165.50	134.24	70.6	103.6	11				
12	70	34	14	4°13'	1358.4	113.0	30	96.0	4°46'	30.8	42.8	66.8	32.8	L = 2GN FD = CC - 2GN(Aprox)	R = 2GN <sup>2</sup> + G			77.2	113.0	12				
15	110	55	21	2°42'	2121.1	141.3	30	120.0	3°49'	38.6	53.6	83.5	41.1					96.3	141.3	15				
20	190	95	38	1°31'	3769.0	188.3	30	155.0	2°52'	51.5	71.5	111.4	54.8											
24	275	140	55	1°03'	5426.4	226.0	30	175.0	2°23'	62.0	86.0	134.0	66.0											

All measurements are theoretical except those shown in columns SL, PR, L and SS which are practical being based on Penna. R. R. Cos. Standards



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Degrees of Curve, Radii and Curve Numbers for Plotting Railroad Track Work.