

Curve Details: Tottenham to NSW Border (River Murray Bridge)



Jul-15

Note

- [1] Rated speed at ARTC Normal Limits (80mm cant deficiency and 55mm/sec rate of change of cant and cant deficiency with cog 2500mm above rail level, and twist fault of 5mm in 14m transition)
- [2] Cant deficiencies in mm shown where they are 75mm or more for existing curve speeds
- [3] Curve data taken from PTC curve register dated May 1993 and June 2000 EM80 run

Note in comments

TRC Curve data from track recordings

Curve		Hand	Radius m	Cant mm	Transition		Exist posted Speed	Cant def(2)	Rated Speed (1)	Location	Comments
Start	End				Up	Dn					
8.290										Tottenham up t/o	
8.350	8.500	R	890	50	75	75	80		99		TRC
8.870	9.040	L	500	90	90	60	80		85		TRC
9.040	9.260	R	625	80	100	100	80		92		TRC
9.575	9.775	L	1450	65	70	50	80		130+		TRC
9.775	9.955	R	1000	55	75	55	80		107		TRC
9.990										Tottenham dn t/o	
9.993										T/o to W Line	
10.040	10.120	L	1800	20	30	30	95		107		TRC
10.120	10.430	R	1100	70	65	65	95		119		TRC
10.500	11.600	R	1400	60	120	120	95		129		TRC
12.090	12.290	L	2200	15	60	60	95		130+		TRC
12.360	12.550	R	2500	30	30	30	95		130		TRC
13.760	13.880	RCOMP	850	100	55	60	95		107		TRC
to	13.920	RCOMP	3000	60			95		130+		TRC
to	14.200	RCOMP	305	90	90	110	65		66		TRC
14.230	14.500	R	350	80	80	100	65		69		TRC
14.880	15.129	L	2293	80	60	50	115		122		
15.490										McIntyre up t/o	
16.600										McIntyre dn t/o	
21.010	21.550	R	1150	100	120	105	115		130+		Some data from TRC
22.130										Tullamarine up t/o	
23.015	23.740	R	1150	100	120	120	115		130+		Some data from TRC
23.240										Tullamarine dn t/o	
24.380	24.998	L	624	100	105	105	95		98		Some data from TRC
26.197	26.715	L	694	80	120	120	80		97		Some data from TRC

Curve		Hand	Radius m	Cant mm	Transition		Exist posted Speed	Cant def(2)	Rated Speed (1)	Location	Comments
Start	End				Up	Dn					
26.760	26.890	RCOMP	2716	40	45		80		130+		Some data from TRC
26.890	16.100	RCOMP	600	100	55	60	80		96		Some data from TRC
											Change in kilometrage, 27km becomes 16km
16.100	16.300	L	1100	50	40	35	80		104		Some data from TRC
16.300	16.720	RCOMP	625/ 900	80	45	45	80 80		92		Some data from TRC
16.720	16.850	L	1200	40	45	60	80		110		Some data from TRC
16.870	16.990	L	1200	40	45	30	80		100		Some data from TRC
16.990	17.062	R	1900	30	30	30	115		115		Some data from TRC
17.062	17.558	L	905	100	100	100	115		118		
19.400	19.900	R	1116	100	100	100	125		130		Some data from TRC
20.790	21.270	L	1116	100	100	100	125		130		Some data from TRC
21.750										Somerton up t/o	
23.600										Somerton dn t/o	
25.661	26.012	RCOMP	1046/ 1287	100	100	100	125 125		126		Some data from TRC Some data from TRC
26.012	26.210	LCOMP	1489/ 1782	70	70	70	130 130		130+ 130+		
26.263	26.431	RCOMP	2072/ 2756	50	50	50	130 130		130+ 130+		
32.157	32.546	RCOMP	3219/ 3882	30	30	45	130 130		130+ 130+		
32.917	33.054	R	1649	60	60	60	130		130+		
33.142	33.363	L	1626	70	70	70	130		130+		
33.410	33.554	R	2000	50	50	50	130		130+		Some data from TRC
33.410										Donnybrook up t/o	
34.735										Donnybrook dn t/o	
34.809	35.305	LCOMP	1106/ 1247	100	115	115	125 125		130		
35.986	36.459	RCOMP	1710/ 1810	60	60	70	130 130		130+ 130+		
40.023	40.442	L	1810	60	70	70	130		130+		
41.304	41.510	R	2072	50	75	60	130		130+		
41.510	41.815	LCOMP	1931/ 2414	50	50	50	130 130		130+ 130+		
41.860	42.036	R	2072	50	75	50	130		130+		
47.043	47.546	RCOMP	1161/	100	110	110	130		130+		Some data from TRC

Curve		Hand	Radius m	Cant mm	Transition		Exist posted Speed	Cant def(2)	Rated Speed (1)	Location	Comments
Start	End				Up	Dn					
			1227				130	130+			
47.120									Wallan up t/o		
47.764	48.214	R	1207/	90	115	105	130	130+			
			1261				130	130+			
48.523	48.683	R	2635	40	50	50	130	130+			
49.080							130	130+	Wallan dn t/o		
49.874	50.332	L	1378	80	105	105	130	130+			
51.039	51.184	R	2635	40	45	45	130	130+			
51.217	51.996	L	965/	100	105	100	115	122			
			1006				115				
52.063	52.250	R	2414	50	50	50	130	130+		Some data from TRC	
52.250	52.790	L	1146/	100	105	105	130	130+		Some data from TRC	
			1267					130+			
53.030	53.240	R	2072	75	50	50	130	130+		Some data from TRC	
53.240	53.480	L	1319	100	90	90	130	130+		Some data from TRC	
53.526	54.220	R	925/	100	90	90	115	118		Some data from TRC	
			986				115				
54.913	55.423	R	925/	100	100	100	115	118			
			1026				115				
55.454	55.599	L	2233	50	50	50	130	130+			
57.201	57.780	L	1153	100	120	120	115	130+		115 due to level xing at 58.024km	
58.410	59.279	R	937/	100	90	105	115	119			
			969				115				
59.279	60.010	L	945/	100	105	105	115	120			
			986				115				
60.190	60.343	R	2514	50	50	50	130	130+			
60.907	61.060	R	2420	50	50	50	130	130+			
61.211	62.217	L	921/	100	105	105	115	118			
			1036				115				
62.217	63.360	R	921/	100	105	100	115	118			
			1026				115				
63.360	63.558	L	1408	70	70	70	130	130+		Some data from TRC	
63.589	64.206	R	907/	100	100	90	100	118			
			990								
64.273	64.844	R	1382/	80	80	85	130	130+			
			1468				130	130+			
65.740									Apex Sdg	MGD	
66.602	67.075	L	1750/	60	70	85	130	130+			

Curve		Hand	Radius m	Cant mm	Transition		Exist posted Speed	Cant def(2)	Rated Speed (1)	Location	Comments
Start	End				Up	Dn					
			1931				130	130+			
67.650	68.808	RCOMP	1350/	80	85	85	130	130+			
			1669				130	130+			
71.032	71.680	LCOMP	1488/	70	85	85	130	130+			
			1529				130	130+			
71.739	72.820	LCOMP	925/	100	105	90	115	118		Some data from TRC	
			1046				115				
72.820	73.553	RCOMP	925/	100	90	90	115	118		Some data from TRC	
			1046				115				
73.580									Broadford up t/o		
73.600	74.430	RCOMP	965/	100	100	100	115	121		Some data from TRC	
			1126								
74.760									Broadford dn t/o		
74.800	74.945	R	2233	50	50	50	130	130+			
75.020	75.134	L	2528	40	40	45	130	130+			
75.268	75.992	RCOMP	764/	100	120	105	105	108			
			925				105				
76.049	76.963	LCOMP	829/	100	105	85	105	113			
			905				105				
77.502	78.576	LCOMP	804/	100	115	120	105	111			
			986				105				
79.044	79.562	R	1408	80	90	105	130				
81.116	81.588	RCOMP	1448/	70	70	90	130	130+			
			1549				130	130+			
81.666	82.139	L	1448	70	85	75	130	130+			
84.395	85.142	RCOMP	1810/	60	75	75	130	130+			
			1931				130	130+			
88.478	89.172	RCOMP	1448/	70	90	90	130	130+			
			1569				130	130+			
88.800									Tallarook up t/o		
89.463	89.900	LCOMP	1307/	80	90	85	130	130+		Some data from TRC	
			1448				130	130+			
89.960									Tallarook dn t/o		
89.974	90.073	R	2897	40	45	40	130	130+			
90.096	90.188	L	2635	40	40	40	130	130+			
90.340	90.422	L	2434	40	40	40	130	130+		Some data from TRC	
90.504	90.557	R	2756	40	40	40	130	130+			
91.361	92.168	LCOMP	1448/	70	70	105	130	130+			

Curve		Hand	Radius m	Cant mm	Transition		Exist posted Speed	Cant def(2)	Rated Speed (1)	Location	Comments
Start	End				Up	Dn					
			1569				130	130+			
94.697	95.396	RCOMP	1448/	70	90	75	130	130+			
			1529				130	130+			
95.580	95.741	R	2233	50	50	50	130	130+			
96.705	96.835	R	2635	40	40	40	130	130+			
96.835	96.941	L	2635	40	40	40	130	130+			
97.238	97.512	LCOMP	1187/	90	90	90	130	78	130+		
			1287				130	130+			
97.550	98.297	RCOMP	684/	100	120	115	80	102			
			804				80				
98.387	98.532	R	784	60	45	50	80	96			
98.600	98.860	L	605	60	60	60	80	85		Some data from TRC	
							80			Seymour platform area 98.70km	
98.911	99.018	L	634	60	40	45	80	87			
99.080									To loco	MGD	
99.140									T/o to loco		
99.200	99.410	LCOMP	1223	70	65	30	100	124		100 due to level xing at 99.772km	
to	99.700	LCOMP	1429/	50		30	100	125		100 due to level xing at 99.772km	
			1529				100			100 due to level xing at 99.772km	
to	99.800	LCOMP	2156	30		40	100	130+		100 due to level xing at 99.772km	
99.888	100.162	LCOMP	1167/	70	65	90	100	122		100 due to level xing at 99.772km	
			1448				100				
100.180									Seymour up t/o		
100.230	100.429	L	1207	90	105	90	130	130+		Some data from TRC	
101.850									Seymour dn t/o		
101.822	102.110	L	1207	90	105	90	130	130+		Some data from TRC	
102.110	102.363	R	1207	90	100	100	130	130+		Some data from TRC	
102.401	102.523	R	2897	40	40	40	130	130+			
108.721	108.874	R	2233	50	60	60	130	130+			
108.996	109.362	R	937	100	115	90	115	120			
109.392	109.908	RCOMP	968/	100	100	100	115	122			
			1046				115				
112.751	113.300	L	1452/	70	90	70	130	130+			
			1489				130	130+			
115.538	115.782	R	2072	50	50	60	130	130+			
115.843	116.125	L	1287	80	90	120	130	130+			
116.156	116.435	RCOMP	2072/	50	60	50	130	130+			
			2233				130	130+			

Curve		Hand	Radius m	Cant mm	Transition		Exist posted Speed	Cant def(2)	Rated Speed (1)	Location	Comments
Start	End				Up	Dn					
117.845	118.424	RCOMP	1076/ 1126	100	115	115	125		128		
126.600	127.061	LCOMP	1670/ 1810	60	115	75	130		130+		Some data from TRC
127.436	127.687	L	2233	50	50	50	130		130+		
127.828	127.988	R	2233	50	50	50	130		130+		
130.185	131.229	RCOMP	1529/ 1569	70	90	90	130		130+		
135.753	135.982	R	2152	50	50	50	130		130+		
136.128	136.463	L	1116	100	105	105	125		130		
136.463	136.700	R	1287	80	100	100	130		130+		
136.710										Longwood up t/o	
138.490										Longwood dn t/o	
138.775	139.380	LCOMP	1056/ 1126	100	100	100	125		127		Some data from TRC
142.871	142.963	R	3000	40	40	40	130		130+		
143.356	143.581	RCOMP	1161/ 1207	100	120	105	130		130+		
149.223	150.130	LCOMP	1382/ 1569	80	90	90	130		130+		
150.624	150.867	R	1207	90	90	90	130		130+		
150.867	151.226	L	1207	90	105	90	130		130+		Some data from TRC
151.226	151.515	RCOMP	1935/ 2313	60	60	60	130		130+		
151.880	151.968	L	3882	30	30	30	130		130+		Some data from TRC
152.021	152.082	R	4828	30	0	0	130		130+		
158.508	158.713	R	2414	50	50	50	130		130+		
158.763	159.007	L	1319	80	105	90	130		130+		
159.207	159.382	R	2233	50	50	50	130		130+		
165.942	166.658	RCOMP	1372/ 1448	80	105	105	130		130+		
168.532	168.631	R	3862	30	30	30	130		130+		
168.807	169.100	R	1319	80	90	90	130		130+		Some data from TRC
169.100	169.530	L	1261	80	90	120	130	78	130		Some data from TRC
169.530	169.714	R	1200	90	90	130	130	76	130+		Some data from TRC
169.740										Voilet Town up t/o	
171.500										Voilet Town dn t/o	
169.826	169.933	R	3621	30	30	30	130		130+		

Curve		Hand	Radius m	Cant mm	Transition		Exist posted Speed	Cant def(2)	Rated Speed (1)	Location	Comments
Start	End				Up	Dn					
182.875	182.997	R	2021	50	55	55	130		130+		
183.020	183.149	L	2615	40	55	55	130		130+		
183.704	183.880	L	2152	50	55	55	130		130+		Some data from TRC
183.880	183.971	R	2414	50	55	55	130		130+		Some data from TRC
191.908	193.068	L	5793	20	20	20	130		130+		
194.220	294.360	R	3218	30	30	30	130		130+		Some data from TRC
194.360	194.490	L	4144	30	30	30	130		130+		Some data from TRC
194.859	195.118	R	1207	90	90	90	130		130+		
195.208	195.337	L	2500	40	40	40	130		130+		
195.470										Benalla up t/o	
195.520	195.837	LCOMP	986/ 1006	100	100	100	115		123		Some data from TRC
195.956	196.300	R	1207	90	120	100	130	75	130+		Some data from TRC
196.650										Benalla dn t/o	
197.059	197.251	LCOMP	2535/ 2635	40	45	45	130		130+		
							130		130+		
209.963	210.375	R	1728	60	60	60	130		130+		
216.991	217.586	RCOMP	1076/ 1126	100	120	120	120		128		
							120				
217.890										Glenrowan up t/o	
217.931	218.180	LCOMP	1161/ 1452	90	90	45	125		129		
							125				
to	218.510	LCOMP	2072/ 2414	60		105	125				Some data from TRC
							125				
218.955	219.250	LCOMP	1056	70	105	60	105		115		
to	219.850	LCOMP	855/ 1116		60	100	105	82	104		
							105		119		
to	220.578	LCOMP	1452/ 1615	70		100	105		130+		
							105		130+		
219.650										Glenrowan dn t/o	
222.540	223.226	R	1728	60	90	75	130		130+		
230.294	231.300	RCOMP	1428/ 1609	70	90	90	130		130+		
							130		130+		
231.850										Alumatta up t/o	
232.950										Alumatta dn t/o	
233.087	233.468	L	1559	70	85	105	130		130+		
233.570	233.880	LCOMP	1400	80	90	100	130		130+		
to	233.990	LCOMP	4000/ 20	20		30	130		130+		

Curve		Hand	Radius m	Cant mm	Transition		Exist posted Speed	Cant def(2)	Rated Speed (1)	Location	Comments
Start	End				Up	Dn					
			6000				130	130+			
to	234.240	LCOMP	1800	50		100	130	130+			
234.310	234.516	R	1348	80	85	90	130	130+		Some data from TRC	
234.818	234.901	L	2897	40	40	40	130	130+			
234.989	235.103	R	4425	30	30	30	130	130+			
237.387	238.065	R	1609	70	90	75	130	130+			
239.436	239.630	R	2132	50	50	50	130			Some data from TRC	
239.630	239.985	L	1002	90	85	85	115	120		Some data from TRC	
240.014	240.334	LCOMP	1018/	90	85	85	115	121			
			1207				115				
251.329	251.969	LCOMP	1368/	80	75	75	125	130+			
			1609				130	130+			
252.747	253.288	RCOMP	1372/	80	75	75	130	130+			
			1468				130	130+			
257.077	257.176	R	4000	30	30	30	130	130+			
257.192	257.420	RCOMP	2233/	50	50	50	130	130+			
			2514				130	130+			
257.420	257.710	LCOMP	1146/	80	75	90	120	125			
			1448				120				
257.710	257.916	R	2112	50	50	50	130	130+		Some data from TRC	
258.165	258.265	R	4506	30	20	20	130	130+			
258.391	260.044	RCOMP	1851/	60	75	60	130	130+			
			2112				130	130+			
265.582	266.710	R	1631	70	90	60	130	130+			
267.156	268.360	LCOMP	1509/	70	70	70	130	130+			
			1730				130	130+			
270.866	271.095	RCOMP	2414/	50	45	45	130	130+			
			2816				130	130+			
271.140	271.544	L	2414	50	45	45	130	130+			
271.400										Chiltern up t/o	
271.708	271.898	R	2313	50	45	45	130	130+			
271.972	272.421	L	1448	70	90	85	130	130+			
273.150										Chiltern dn t/o	
273.638	273.942	L	1307	80	105	75	125	130+			
273.942	274.903	L	1448	70	90	85	130	130+			
275.254	275.696	L	1613	70	90	60	130	130+			
275.972	277.001	R	1146	100	105	115	130	130+			

Curve		Hand	Radius m	Cant mm	Transition		Exist posted Speed	Cant def(2)	Rated Speed (1)	Location	Comments
Start	End				Up	Dn					
277.819	278.444	L	2313	50	60	60	130	130+			
279.791	280.060	R	2152	50	60	60	130	130+		Some data from TRC	
280.060	280.325	L	1319	80	100	100	130	130+		Some data from TRC	
280.431	280.637	R	2233	50	60	60	130	130+			
280.800	281.547	R	1488	70	75	90	130	130+			
285.259	286.349	RCOMP	1810/ 2112	60	75	85	130	130+			
290.089	290.386	RCOMP	2514/ 3017	40	60	60	130	130+			
290.528	290.802	L	1368	80	105	105	130	130+			
290.881	291.963	RCOMP	1066/ 1267	100	120	105	125	127			
292.605	292.964	L	1708	60	85	70	130	130+			
294.925	295.656	LCOMP	1157/ 1247	100	100	100	125	130+			
297.510									Wodonga up t/o		
298.004	298.797	RCOMP	1710/ 2012	60	60	75	115	130+		115 due to level xing at 299.00km	
298.650									Wodonga dn t/o		
300.471	300.601	R	225	30	50	0	40	46		No down alignment transition, but has 20m cant transition	
300.639	300.718	L	250	0	35	20	40	41			
300.725	300.822	L	300	0	35	35	40	45			
301.060	301.190	LCOMP	175	40	0	50	40	42		No up alignment transition, but	
to	301.280	LCOMP	800	40		50	40	118		has 25m cant transition	
to	301.630	LCOMP	300/ 350	40		35	40	55		Down end has 25m cant transition	
301.600									T/o to Bandiana		
301.720									Wodonga Coal Sdgs up t/o		
302.600									Wodonga Coal Sdgs dn t/o		
303.000	304.100	RCOMP	1257/ 1730	70	85	70	80	127			
304.140									Murray River		