

Curve Details: Mile End - Wolseley

Nov-16

Note

- [1] Rated speed at ARTC Normal Limits (80mm cant deficiency and 55mm/sec rate of change of cant and cant deficiency with cog 2400mm 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

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					
3.440										Keswick	3.440km South Line is 0km Crystal Brook Line
3.432	3.458	L	1000	0	0	0	40		50		
3.587	3.714	L	198	0	30	30	40	94	37		Survey Monument realignment Transfield Services 2010
3.740										Mile End dn t/o	
3.787	3.907	R	200	0	30	30	40	94	37		Survey Monument realignment Transfield Services 2010
3.961	4.003	R	1024	0	0	0	90		54		Some data from TRC
4.091	4.214	L	1250	20	30	30	90		94		Some data from TRC
4.322	4.451	R	1150	30	45	40	90		102		Some data from TRC
4.620	4.780	L	950	30	40	35	90		92		TRC
4.830	5.020	LCOMP	890/1600	30	75	80	90		91		TRC
5.260										Goodwood MG diamonds	
5.330	5.412	L	300	55	15	22	55		57		
5.474	5.521	R	2000	0	0	0	55		60		
5.621	5.701	R	3000	0	0	0	90		69		
7.921	8.094	L	2012	25	30	30	90		115		Some data from TRC
8.312	8.393	R	450	65	36	36	60		74		
8.417	8.497	L	450	65	36	36	60		74		
8.591	8.815	R	450	65	36	36	50		74		
8.961	9.332	R	790	55	55	55	90		83		Torrens Park re-alignment per Transfield Services
9.401	9.694	R	710	60	60	60	90		93		Torrens Park re-alignment per Transfield Services
10.500	11.040	R	1280	55	40	50	90		116		
11.254	11.783	L	604	45	100	60	70				
11.882	12.007	R	410	70	35	35	70		72		Some data from TRC
12.027	12.155	L	430	80	25	25	70		76		Some data from TRC
12.918	13.499	R	352	55	50	30	60		64		
13.582	13.950	L	215	100	50	50	60	98	57		Some data from TRC
13.950	14.300	RCOMP	1006	20	60	0	60		92		Some data from TRC
14.300	14.587	RCOMP	634	25	0	80	60		75		Some data from TRC
14.653	14.955	LCOMP	283	75	40	0	60	75	61		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					
14.955	15.010	LCOMP	320	75	0	80	60		65		Some data from TRC
15.080	15.240	L	2012	20	40	40	60		130+		Some data from TRC
15.300	15.690	L	206	100	70	70	60	106	56		Some data from TRC
15.690	16.000	R	251	80	70	70	60	89	58		Some data from TRC
16.000	16.300	L	280	80	50	80	60		62		Some data from TRC
16.440	16.700	L	317	80	80	80	60		66		Some data from TRC
16.700	17.169	R	250	80	60	80	60	90	58		Some data from TRC
17.380	17.830	LCOMP	300	65	60	40	60		61		Some data from TRC. Min radius between transitions at 18.300km about 2000m
17.830	17.879	LCOMP	308	75	40	0	60	83	59		Some data from TRC
17.879	17.956	LCOMP	245	75	0	0	60	98	57		Some data from TRC
17.956	18.113	LCOMP	280	75	0	25	60	77	61		Some data from TRC
18.184	18.355	RCOMP	261	85	40	0	60	78	60		
18.355	18.510	RCOMP	265	85	0	50	60	75	61		Some data from TRC
18.510	18.770	RCOMP	620	35	0	60	60		77		Some data from TRC
18.780	19.330	L	658	45	30	80	60		83		Some data from TRC
19.469	19.770	R	640	35	80	80	60		76		Refer IAN 763
19.787	20.152	L	404	70	80	40	55		72		Refer IAN 763
20.199	20.483	R	208	90	50	90	55	88	54		Refer IAN 763
20.611	20.795	R	330	50	80	90	55		58		Refer IAN 763
20.983	21.297	R	205	90	60	70	55	84	54		
21.330										Belair up t/o	
21.360	21.610	LCOMP	200/ 282	80 70	35 0	0 35	55 55		52 60		Some data from TRC
21.625	21.800	R	700	60	35	35	55		91		
21.930	22.247	R	550	70	40	70	75		84		
22.996										Belair dn t/o	
23.044	23.420	R	240	80	40	0	50		57		
23.444	23.616	L	190	70	50	60	50	82	50		
23.628	23.915	R	190	60	40	40	50	88	48		
23.940	24.327	L	200	60	60	50	50	87	48		
24.400	24.667	R	200	60	40	50	50	87	48		
24.916	25.419	L	201	60	60	40	50	87	49		Some data from TRC
25.450	25.533	L	335	40	20	40	50		58		
25.556	25.721	R	247	50	40	40	50		52		
25.724	25.882	L	195	60	50	40	50	85	49		
25.891	26.174	R	219	60	40	30	50	76	51		
26.199	26.368	L	208	50	30	60	50	92	48		
26.516	26.727	R	327	30	40	40	50		55		Some data from TRC
26.906	27.140	R	211	70	80	40	50		52		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					
27.300	27.777	L	200	60	50	50	50	87	48		
27.784	28.072	R	204	60	50	40	50	86	48		
28.083	28.221	L	202	60	40	40	50	86	48		
28.238	28.443	R	203	60	50	50	50	86	48		
28.464	28.702	L	218	60	40	50	50	75	51		
28.717	28.843	R	213	60	40	40	50	78	51		Some data from TRC
29.470	29.859	L	239	50	60	30	50		51		Some data from TRC
29.874	30.069	R	195	70	60	60	50	81	50		
30.065	30.231	L	205	70	50	60	50	81	50		Survey Monument realignment Transfield Services 2010
30.228	30.545	R	201	60	60	45	50	87	49		Some data from TRC
30.605	30.680	R	314	40	20	20	50		57		Some data from TRC
30.682										Mount Lofty up t/o	
30.770	30.880	L	300	45	40	40	50		56		TRC
31.010	31.058	RCOMP	183/	80	40	0	50	81	51		Some data from TRC
31.058	31.340	RCOMP	230	60	0	40	50		52		Some data from TRC
31.362	31.476	L	210	80	40	40	55	82	55		Survey Monument realignment Transfield Services 2010
31.504										Mount Lofty dn t/o	
31.517	31.751	R	240	80	50	40	55		57		
31.775	32.108	L	260	80	50	50	55		59		
32.146	32.401	R	260	80	50	50	55		59		
32.439	32.977	L	220	60	50	50	55	102	51		
33.256	33.535	L	667	40	50	50	55		82		Some data from TRC
33.535	33.770	R	420	60	70	50	55		71		Some data from TRC
34.350	34.540	R	450	40	50	50	55		67		TRC
34.560	34.710	R	205	80	60	50	55	94	53		Some data from TRC
34.743	34.989	L	275	50	40	55	55	80	55		
35.408	35.498	R	583	60	60	40	55		83		
35.569	35.840	L	392	80	50	60	55		73		
35.909	36.136	R	370	80	80	80	55		71		
36.172	36.390	L	450	60	45	45	55		73		Some data from TRC
36.418	36.681	R	242	80	50	40	55		57		Some data from TRC
36.695	36.839	L	280	70	60	50	55		60		
37.550	37.770	R	266	70	40	40	55		58		Some data from TRC
37.770	38.100	L	217	80	40	80	55	84	54		Some data from TRC
38.100	38.200	R	401	30	40	40	55		61		
38.500	38.600	R	246	60	40	40	55	85	54		
38.700	38.900	L	238	60	40	40	55	90	53		
39.350	39.490	L	405	30	40	40	55		64		Some data from TRC
39.670	39.890	L	200	80	40	30	50		52		Some data from TRC
40.160	40.630	R	221	80	50	50	50		55		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						
40.720	40.970	R	198	80	40	50		52		Some data from TRC		
40.970	41.100	L	249	50	50	40		52				
41.428								50		Ambleside up turnout	Ambleside Loop 1:12	
41.510	41.708	Right	300	60	30	30		38.5	50			
41.799	41.923	Left	215	80	40	40		57.4	50			
42.040	42.179	Right	215	80	40	40		50	57.4			
42.357	42.638	Left	205	100	50	50		50	74.4			
43.113	43.592	Left	800	30	20	20		50	23.2			
43.761								50		Ambleside Dn turnout	Ambleside Loop 1:12	
43.783	43.798	Right	3000	0	0	0		50	1.4			
44.030	44.450	R	400	70	40	40		60			Some data from TRC	
44.500	44.910	L	301	80	60	60		60			Some data from TRC	
44.920	45.180	R	287	80	60	60		60			Some data from TRC	
45.300	45.600	RCOMP	236	60	40	40		50			Some data from TRC	
45.600	45.700	RCOMP	350	30	20	40		50			Some data from TRC	
45.581										Balhannah up t/o		
45.800	46.010	L	1500	25	32	60		75		102		
46.445											Balhannah dn t/o	
47.197	47.300	R	405	80	40	40		75	84	74		
47.632	47.773	L	750	80	40	40		75		97		
47.815	48.020	R	800	80	40	40		75		97		
48.410	48.726	L	800	80	40	40		75		97		
48.882	49.241	R	1208	50	40	40		75		112		
49.269	49.557	L	603	50	40	40		75		81		
49.578											Mt. Barker up t/o	Turnout 1:12 - Mt. Barker Loop
49.613	49.735	R	385	40	20	20		55				Altmans fence area
50.212	50.297	L	240	70	35	35		55				BBQ Area
50.346	50.635	R	261	70	40	40		55				Rock Cutting Area
50.746	51.252	L	221	80	60	40		55	81	55		
51.352											Mt. Barker dn t/o	Turnout 1:12 - Mt. Barker Loop
51.522	51.741	R	230	80	60	60		55	75	56		
52.400	52.606	R	229	60	50	60		50		52		Some data from TRC
53.083	53.232	R	283	50	50	50		55	76	56		
53.262	53.658	L	239	60	40	50		55	89	53		
53.858	54.168	L	200	80	50	40		55	98	52		
54.195	54.543	R	240	60	47	50		55	89	53		
54.586	54.926	R	301	80	40	47		65	86	64		
54.995	55.305	L	304	80	40	40		65	84	64		
55.420	55.570	R	400	70	50	40		65		71		Some data from TRC
55.710	55.800	R	500	60	60	40		65		77		TRC

Curve		Hand	Radius m	Cant mm	Transition		Exist posted Speed	Cant def(2)	Rated Speed (1)	Location	Comments
Start	End				Up	Dn					
55.901	56.184	R	334	70	50	40	65	79	65		
56.195	56.429	L	395	70	30	50	65		71		
56.567	56.725	R	800	30	30	30	65		86		
56.785	57.013	L	399	70	50	30	65		71		
57.050	57.414	R	300	80	40	50	65	86	64		
57.529	57.909	L	300	80	40	40	65	86	64		
57.940	58.360	R	282	70	40	40	65		70		
58.710	59.275	L	463	50	40	40	65		72		Some data from TRC
59.372	59.744	R	241	80	40	40	60	96	57		
59.782	59.887	L	360	70	40	40	65		68		
60.014	60.336	L	320	80	50	40	65	76	66		
60.642	60.782	RCOMP	355	80	75	0	65	78	66		Survey Monument realignment Transfield Services 2010
60.782	60.959	RCOMP	306	80	0	50	65				Survey Monument realignment Transfield Services 2010
60.996	61.236	L	306	80	40	60	65	83	64		
61.258	61.468	R	311	80	120	80	65	80	65		
61.487										Petwood up t/o	
61.527	61.630	L	1800	0	20	40	65		85		Some data from TRC
61.630	61.730	R	3000	0	40	20	65		100		Some data from TRC
62.035	62.175	R	446	80	40	40	55		78		Some data from TRC
62.175	62.360	R	300	75	40	40	55		63		Some data from TRC
62.410	62.580	L	380	65	50	80	55		68		Some data from TRC
62.701										Petwood dn t/o	
62.734	62.866	LCOMP	266	80	60	0	60		63		Survey Monument realignment Transfield Services 2010
62.866	63.148	LCOMP	272	80	0	50	60				Survey Monument realignment Transfield Services 2010
63.218	63.711	R	300	80	50	50	60		64		
63.841	64.003	L	315	80	80	50	60		65		
64.434	64.620	LCOMP	320	80	60		60		66		
64.620	64.824	LCOMP	455	80			60		78		
64.824	64.968	LCOMP	300	80		60	60		64		
64.981	65.303	R	250	80	40	40	60	90	58		
65.614	65.762	R	248	80	40	40	60	91	58		
65.785	66.016	L	240	80	40	40	60	97	57		
66.033	66.213	R	302	70	50	40	60		62		
66.231	66.478	L	393	90	50	50	60		75		
67.031	67.230	R	395	90	50	50	75	78	75		
67.548	67.824	R	396	90	50	50	75	78	75		
68.490	69.218	L	402	90	50	50	75	75	76		
69.247	69.414	R	565	60	60	50	75		82		
70.030	70.100	L	3500	15	30	30		5	75		
70.180	70.260	L	3500	15	30	30		5	75		

Curve		Hand	Radius m	Cant mm	Transition		Exist posted Speed	Cant def(2)	Rated Speed (1)	Location	Comments
Start	End				Up	Dn					
70.300										Callington up t/o	1:12 turnout Callington Loop
70.720	71.100	R	405	100	90	90	75	64	75		
71.714	72.010	L	400	90	50	50	75		76		Some data from TRC
72.451										Callington dn t/o	1:12 turnout Callington Loop
72.490	72.835	L	800	90	60	60	100		107		TRC
73.627	74.703	R	950	70	50	80	105		110		Some data from TRC
75.356	75.631	R	800	80	50	50	105	83	104		
75.838	76.063	L	390	80	50	50	70		73		
76.371	76.550	L	385	80	50	50	70		72		
76.698	77.090	L	360	80	40	50	70	81	70		
80.591	80.705	R	4000	0	0	0	115		115+		Rated on cant deficiency only
80.754										Monarto up t/o	
80.820	80.913	L	2500	0	0	0	115		115+		Rated on cant deficiency only
80.994	81.020	R	2500	0	0	0	115		115+		Rated on cant deficiency only
82.409	82.515	L	5000	0	30	30	115		130+		TRC
82.695										Monarto dn t/o	
82.700	82.790	R	3500	0	30	30	115		121		TRC
85.110	85.597	L	806	80	50	50	105	81	105		
85.766	86.286	R	808	80	50	50	105	81	105		
86.588	87.054	R	840	80	50	50	105	75	106		
87.119	87.555	L	799	80	60	50	105	83	104		
89.060	89.463	L	280	75	100	95	60	77	61		TRC
89.463	89.675	R	275	70	40	40	60	84	59		Some data from TRC
89.985	90.269	R	281	70	50	40	60		60		
90.693	90.880	R	238	80	40	50	60	98	57		
90.896	91.073	L	240	80	40	40	60	97	57		
91.116	91.286	R	240	80	55	40	60	97	57		
91.300	91.574	L	248	80	40	55	60	91	58		
91.655	91.775	R	400	80	40	40	75	86	73		
92.213	92.472	R	833	80	50	40	100		106		
94.664	94.850	L	2000	45	50	50	100		130+		TRC
95.720										Murray Bridge up t/o	
96.215	96.665	R	893	45	50	30	60		97		Some data from TRC
96.665	96.760	L	278	40	40	45	50		53		Some data from TRC
96.786										Murray Bridge dn t/o	
96.787	97.086	L	250	45	35	40	50		52		Some data from TRC
97.275	97.900	RCOMP	390/300	70	100	60	50		62		
											Some data from TRC, most of curve on Murray Bridge
97.940	98.100	L	272	80	50	70	50		61		TRC
98.107	98.402	R	385	80	70	60	70		72		

Curve		Hand	Radius m	Cant mm	Transition		Exist posted Speed	Cant def(2)	Rated Speed (1)	Location	Comments
Start	End				Up	Dn					
98.464	99.199	L	400	60	80	70	70	85	69		
99.252	99.801	R	402	60	80	80	70	84	69		
100.630	100.741	R	1300	60	80	80	115		124		Some data from TRC
103.030										Monteith up t/o	1:12 turnout Monteith Loop
104.417	104.818	L	2010	50	40	40	115		130+		
105.069										Monteith Dn t/o	1:12 turnout Monteith Loop
105.645	105.994	R	1998	50	40	40	115		130+		
107.197	107.835	L	800	100	56	56	115	95	111		Some data from TRC
107.876	108.599	R	1003	75	50	50	115	81	115		
115.294	115.747	R	6036	0	20	20	115		130+		
117.050	117.220	R	8000	0	20	20	115		130+		TRC
117.590	117.700	R	6000	0	20	20	115		130+		TRC
117.830										Tailem Bend up t/o	
120.100										Tailem Bend dn t/o	
120.415	120.510	L	1700	35	40	40	115		120		Some data from TRC
120.610	120.750	R	2700	30	40	40	115		130+		
122.100	122.249	R	3333	30	30	30	115		130+		Some data from TRC
122.260	122.375	R	2273	50	30	30	115		120		Some data from TRC
133.152	133.640	R	6036	20	30	30	115		130+		Some data from TRC
135.279	135.547	L	4024	20	30	30	115		130+		Some data from TRC
136.486	136.811	L	2012	50	50	50	115		130+		Some data from TRC
144.347	144.721	L	4024	20	20	20	115		130+		Some data from TRC
147.135	147.383	L	4024	20	30	30	115		130+		Some data from TRC
150.545	151.294	L	1250	65	100	80	115		124		Some data from TRC
151.798										Coomandook up t/o	1:12 turnout Coomandook Loop
151.956	152.753	R	1203	60	80	70	115		119		Some data from TRC
153.940										Coomandook dn t/o	1:12 turnout Coomandook Loop
158.886	159.489	R	1660	50	80	50	115		130+		
161.994	162.493	R	780	120	80	80	115	80	115		
163.764	164.502	L	1607	50	80	70	115		130+		
169.836	170.343	R	798	115	80	80	115	81	115		
171.657	172.022	L	797	115	80	80	115	81	115		
177.041	177.256	R	3200	20	80	40	115		130+		
179.942	180.361	L	1221	80	80	60	115		129		
182.881										Coonalpyn up t/o	
184.652										Coonalpyn dn t/o	
190.116	190.369	R	1715	50	60	60	115		130+		
192.019	192.238	L	3195	20	60	40	115		130+		
194.381	194.875	L	1615	50	80	80	115		130+		
208.307	208.530	L	11000	10	20	20	115		130+		

Curve		Hand	Radius m	Cant mm	Transition		Exist posted Speed	Cant def(2)	Rated Speed (1)	Location	Comments
Start	End				Up	Dn					
211.074										Tintintara up t/o	1:12 turnout Tintintara Loop
213.134										Tintintara dn t/o	1:12 turnout Tintintara Loop
216.075	216.297	R	8700	10	20	20	115		130+		Some data from TRC
219.609	220.215	L	1208	80	70	80	115		128		Some data from TRC
220.754	221.893	L	3998	20	60	40	115		130+		
223.489	224.149	R	2006	40	80	60	115		130+		
227.030										Coombe up t/o	
228.798										Coombe dn t/o	
229.799	230.606	R	1201	80	60	80	115		128		Some data from TRC
243.869	244.578	L	8240	10	60	20	115		130+		
245.837										Keith up t/o	1:12 turnout Keith Loop
247.340	247.470	R	4000	0	20	20	115		130+		Some data from TRC
247.856	247.980	L	6000	0	30	30	115		130+		TRC
247.893										Keith dn t/o	1:12 turnout Keith Loop
249.290	249.390	L	6000	0	20	20	115		130+		TRC
249.820	249.900	R	6000	0	30	30	115		130+		TRC
253.645	254.209	L	1617	50	80	60	115		130+		
257.402	258.082	L	1612	50	60	80	115		130+		
258.577	259.124	R	1620	50	80	60	115		130+		
262.066	262.769	L	1615	50	80	80	115		130+		
263.724	264.312	R	1616	50	30	80	115		130+		
271.895										Wirriga up t/o	
272.031	272.484	R	2735	20	60	30	115		125		
273.669										Wirriga dn t/o	
292.773	293.577	R	1603	50	50	50	115		130+		Some data from TRC
293.670											
294.080	294.307	LCOMP	790	70	60	0	75		100		Some data from TRC
294.307	294.452	LCOMP	420	70	0	0	75	88	73		Some data from TRC
294.452	294.608	LCOMP	1019	70	0	60	75		113		Some data from TRC
294.700	294.900	L	5000	0				31	115		
295.070										Bordertown up turnout	Turnout 1:12 - Bordertown Loop
295.250	295.570	R	816	75	75	40		70	100		
297.439										Bordertown Dn turnout	Turnout 1:12 - Bordertown Loop
300.805	301.399	L	802	70	60	80	100	77	101		Some data from TRC
305.850	305.950	L	2700	30	30	30	115		130+		Some data from TRC
305.972										Wolseley up t/o	
306.060	306.140	R	2300	30	30	30	115		130+		Some data from TRC
306.561	306.780	R	4000	20	60	60	115		130+		TRC
307.070	307.180	L	1800	20	60	60	115		123		Some data from TRC
307.100										Wolseley dn t/o	Partly on curve

Curve		Hand	Radius	Cant	Transition		Exist posted	Cant	Rated	Location	Comments
Start	End		m	mm	Up	Dn	Speed	def(2)	Speed (1)		
307.240	307.380	R	1800	20	60	60	115		123		TRC
307.480	307.610	R	1900	10	40	40	115		115		TRC
307.820	308.233	L	1662	80	80	60	115		130+		Some data from TRC
308.623	309.010	R	4100	20	20	20	115		130+		