



AUSTRALIAN RAIL TRACK CORPORATION LTD

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CPH's 1 and 7 approaching Ardglen Tunnel

TRAIN OPERATING CONDITIONS

northern

Northern Section Pages

NORTHERN SECTION PAGES

Status sheet 2 (Issued August 2004)

This table shows the current status of units in this manual.

This sheet must be used to check that your manual contains all of these units and that each unit is up to date.

When a new status sheet is forwarded to you, it is your responsibility to add, remove or replace any pages or units from this manual as instructed in the **bold** print on the new status sheet.

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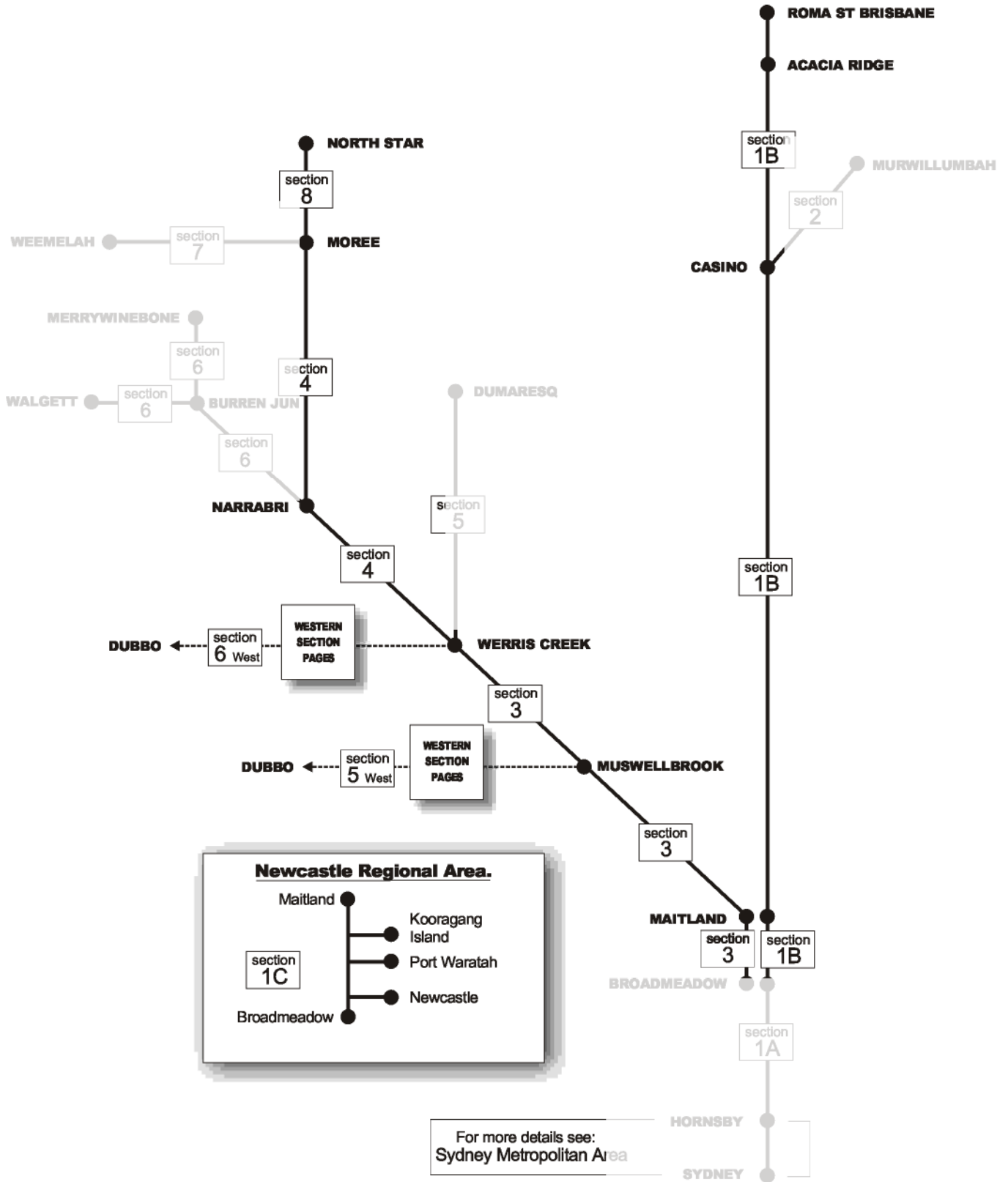
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SECTION LOCATION MAP



For Coal Train working see separate section

Enfield Yards - Broadmeadow - Morandoo section 1A

Maximum Speed of Locomotives and Rolling Stock

Class of Track	SECTIONS			Notes
	Hornsby - Cowan	Cowan - Boronia	Boronia - Hawkesbury River	
Line Map reference	A	B	C	
Locomotives				
Multiple Locos	4	4		
S1	(b)	(b)	60	
S2	100	100	100	
S3	115	115	115	
S4	80	115	115	(a)
S5	115	115	115	
S6	115	115	115	
S7	90	90	90	
S8	115	115	115	
S9	115	115	115	
S10	115	115	115	
S11	80	80	80	
S12	100	100	100	
S13	100	100	100	
Freight				
Class A	115	115	115	
Class B	100	100	100	
Class C	80	80	80	
Class D	65	65	65	
Class E	80	80	80	
Class F	65	65	65	
Class G	N/A	N/A	N/A	
Passenger				
XPT	160	160	160	
Xplorer	145	145	145	
Diesel Train	115	115	115	
Loco Hauled	115	115	115	
Accident Cranes				
70 tonne	60	60	60	
110 tonne	115	115	115	
120 tonne	50	50	50	
Notes				

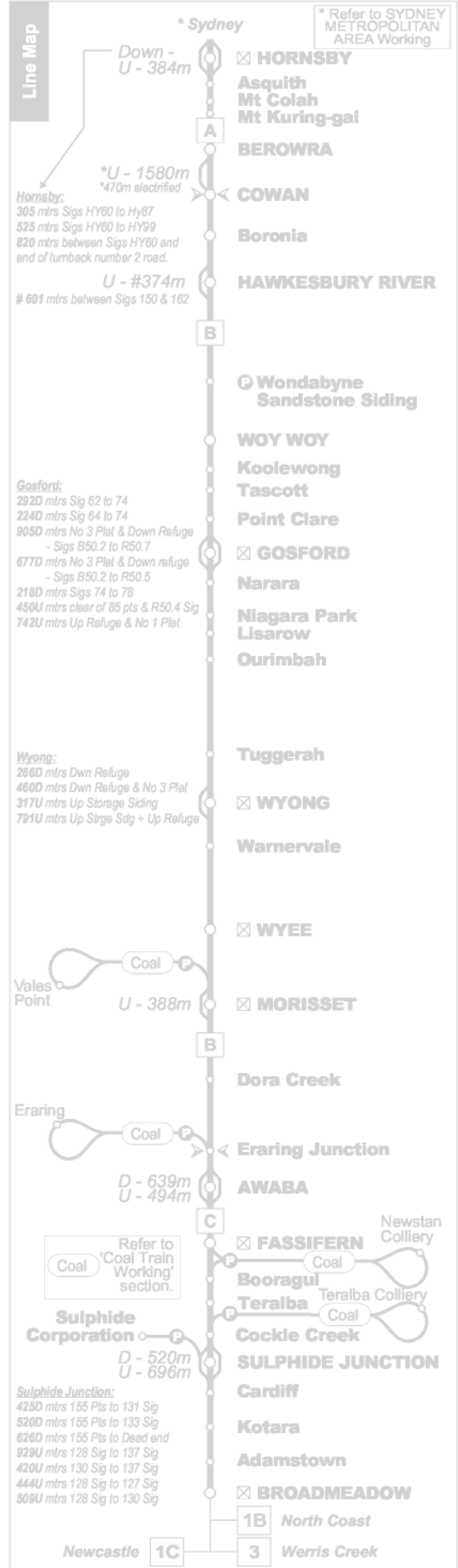
NOTES:

(a) Maximum speed of 40km/h through Boronia Tunnel No 3 (Down & Up North 54.300km to 54.500km)

(b) See Special conditions Page 8 of this section.

Safeworking System

Hornsby - Cowan	Rail Vehicle Detection
Cowan - Boronia	Rail Vehicle Detection (Bi directional)
Boronia - Hawkesbury River	Rail Vehicle Detection (Bi directional)
Hawkesbury River - Broadmeadow	Rail Vehicle Detection



UP	LOADS & CONDITIONS SECTIONS	LOCO- MOTIVE CLASS = L	LOCOMOTIVES					TRAIN DATA		NOTES
			SINGLE	DOUBLE	TRIPLE	QUAD	QUIN	VEHICLE CLASS	SECT RUN TIMES	
			LOADS TONNES							
1	MORANDOO / B'MEADOW - SYD METROP	L2	1000	2000	3000	4000	A	A1		
2	MORANDOO / B'MEADOW - SYD METROP	L7	735	1470	2205	2940	A	A1		
3										
4	MORANDOO / B'MEADOW - SYD METROP	L2	1230	2460	3690	4920	AB	B1		
5	MORANDOO / B'MEADOW - SYD METROP	L4	970	1940	2910	3880	AB	B1		
6	MORANDOO / B'MEADOW - SYD METROP	L7	909	1818	2727	3636	AB	B1		
7										
8	MORANDOO / B'MEADOW - SYD METROP	L2	1230	2460	3690	4920	ABCE	C1		
9	MORANDOO / B'MEADOW - SYD METROP	L4	970	1940	2910	3880	ABCE	C1		
10	MORANDOO / B'MEADOW - SYD METROP	L7	909	1818	2727	3636	ABCE	C1		
11	MORANDOO / B'MEADOW - SYD METROP	L9	590	1180	1770	2360	ABCE	C1		
12										
13	MORANDOO / B'MEADOW - SYD METROP	L3	1200	2400	3600	4800	ABCE	C2		
14	MORANDOO / B'MEADOW - SYD METROP	L4	1131	2262	3393	4524	ABCE	C2		
15	MORANDOO / B'MEADOW - SYD METROP	L5	1056	2112	3168	4224	ABCE	C2		
16	MORANDOO / B'MEADOW - SYD METROP	L6	926	1852	2778	3704	ABCE	C2		
17	MORANDOO / B'MEADOW - SYD METROP	L7	909	1818	2727	3636	ABCE	C2		
18	MORANDOO / B'MEADOW - SYD METROP	L8	822	1644	2466	3288	ABCE	C2		
19	MORANDOO / B'MEADOW - SYD METROP	L9	750	1500	2250	3000	ABCE	C2		
20	MORANDOO / B'MEADOW - SYD METROP	L10	725	1450	2175	2900	ABCE	C2		
21	MORANDOO / B'MEADOW - SYD METROP	L11	640	1280	1920	2560	ABCE	C2		
22	MORANDOO / B'MEADOW - SYD METROP	L12	615	1230	1845	2460	ABCE	C2		
23	MORANDOO / B'MEADOW - SYD METROP	L13	310	615	925	1230	ABCE	C2		
24										
25	MORANDOO / B'MEADOW - SYD METROP	L4	1131	2262	3393	4524	ABCDE	D1		
26	MORANDOO / B'MEADOW - SYD METROP	L10	725	1450	2175	2900	ABCDE	D1		
27	MORANDOO / B'MEADOW - SYD METROP	L13	410	820	1230	1640	ABCDE	D1		
28										

UP	SECTIONAL RUNNING TIMES						FULL SECTIONAL LOADS														GRADE				
	A1		B1		C1		D1		Loco		LOCOMOTIVE CATEGORIES = L														
	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14											
MORANDOO to:	15	15	15	15	15	15	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	Level						
PORT WARATAH	10	10	10	10	10	10	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	Level						
SCHOLEY ST	4	4	4	4	4	4	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	Level						
ISLINGTON JUN	3	3	3	3	3	2	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	Level						
WOODVILLE JUN	4	4	4	4	4	3	4426	4090	3869	3645	3223	3132	2899	2641	2542	2281	2188	1527	1:185						
BROADMEADOW	3	3	3	3	3	2	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	Level						
ADAMSTOWN	8	9	9	9	11	7	2161	1992	1882	1766	1557	1519	1392	1268	1224	1090	1047	731	1:70						
SULPHIDE JUN	9	9	9	10	13	8	2161	1992	1882	1766	1557	1519	1392	1268	1224	1090	1047	731	1:69						
FASSIFERN	4	4	4	5	6	4	2080	1894	1789	1678	1479	1444	1322	1204	1163	1035	994	693	1:66						
AWABA	12	14	14	15	20	11	2161	1992	1882	1766	1557	1519	1392	1268	1224	1090	1047	731	1:72						
MORISSET	6	7	7	7	10	6	2289	2111	1995	1872	1651	1610	1478	1346	1299	1158	1112	776	1:73						
WYEE	9	9	12	12	16	9	2161	1992	1882	1766	1557	1519	1392	1268	1224	1090	1047	731	1:72						
WYONG	6	7	8	8	10	7	3587	3314	3134	2949	2607	2535	2342	2133	2055	1841	1766	1232	1:132						
OURIMBAH	7	8	8	8	10	7	2289	2111	1995	1872	1651	1610	1478	1346	1299	1158	1112	776	1:75						
GOSFORD	8	8	8	9	9	7	2654	2449	2315	2175	1920	1870	1720	1567	1511	1350	1295	904	1:90						
WOY WOY	6	7	7	7	9	6	1892	1743	1646	1543	1359	1328	1214	1105	1068	949	912	636	1:60						
Wondabyne X/Over	8	8	8	8	9	7	2791	2576	2435	2289	2021	1968	1812	1650	1591	1422	1365	952	1:94						
HAWKESBURY RIVER	11	16	16	18	21	8	1230	1200	1131	1056	926	909	822	750	725	640	615	410	1:40						
Boronia X/Over	5	6	7	8	9	3	1458	1341	1265	1183	1040	1018	925	842	815	721	693	483	1:45						
COWAN	5	6	6	7	9	4	2161	1992	1882	1766	1557	1519	1392	1268	1224	1090	1047	731	1:72						
BEROWRA	4	4	4	4	5	4	2161	1992	1882	1766	1557	1519	1392	1268	1224	1090	1047	731	1:68						
Mt Kuring-gai X/Over	5	5	5	5	6	5	2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820	1:82						
HORNSBY	4	4	4	4	5	3	2161	1992	1882	1766	1557	1519	1392	1268	1224	1090	1047	731	1:72						
THORNLEIGH	5	5	5	5	6	5	2161	1992	1882	1766	1557	1519	1392	1268	1224	1090	1047	731	1:72						
EPPING	4	4	4	4	5	4	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	DG						
WEST RYDE	2	2	2	2	2	2	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	DG						
RHODES	2	2	3	3	3	2	3587	3314	3134	2949	2607	2535	2342	2133	2055	1841	1766	1232	1:132						
NTH STRATHFIELD JUN	6	6	6	6	6	4	2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820	1:80						
FLEM MARKETS	3	3	3	3	3	2	2881	2659	2514	2363	2086	2032	1871	1704	1643	1469	1410	984	1:100						
FLEM GOODS JUN	8	8	8	8	8	6	2881	2659	2514	2363	2086	2032	1871	1704	1643	1469	1410	984	1:100						
CHULLORA JUN	5a	5a	5a	5a	5a	5a	2881	2659	2514	2363	2086	2032	1871	1704	1643	1469	1410	984	1:100						
ENFIELD YARDS																									

Location of Speed signs

LOCATION	KILO- METRAGE	DOWN NORM	XPT	UP NORM	XPT
For previous speed signs See SYDNEY METROPOLITAN section					
HORNSBY	33.864				
	33.950	X60	X85	..	..
Down refuge	34.010	60	85	..	..
Up Boards on Down Refuge	34.010	..	..	X60	X85
	34.090	X45	..	..	..
Up Board on Down Refuge	34.100	..	..	40	..
	34.110	..	..	80	..
Up Board on Down Main	34.120	..	..	70	..
Down Board on Up Main	34.135	X45	..	..	..
Down Boards on Up Main	34.155	70	85	..	..
Down Brd on Tumback Sdg	34.220	60	..	..	..
Up Brd on Tumback Sdg	34.220	..	..	X45	..
Up Board on Down Main	34.245	..	..	X45	..
	34.345	X45	..	..	..
	34.425	70	85	..	..
Down Refuge	34.470	60	70	..	..
	34.470	..	..	X45	..
Up Brd on Tumback Sdg	34.535	X60	X70	..	..
Down Refuge	34.535	..	..	60	70
Up Boards on Down Refuge	34.535	..	..	60	70
Down Brd on Tumback Sdg	34.595	X60	..	..	..
Up Brds on Tumback Sdg	34.595	..	..	60	..
Up Brds on Tumback Sdg	34.625	..	..	X60	..
Up Brds on Tumback Sdg	34.750	..	..	60	..
Up Board on Down Main	34.750	..	..	X60	..
	34.900	..	..	70	85
Down Boards on Up Main	35.010	X55	X65	..	..
	35.200	115	125	..	..
ASQUITH	35.694				
	37.100	..	..	115	125
	37.167	..	..	100	105
	37.400	90	95	..	..
MT COLAH	37.675				
	37.937	..	..	95	100
	38.000	100	105	..	..
	39.800	..	..	100	105
	40.175	75	80	..	..
MT KURING-GAI	40.667				
	41.380	70	75	..	..
	42.005	..	..	70	75
	42.500	85	90	..	..
	44.170	..	..	80	90
	44.390	X50	X50	..	..
On Down Loop	44.710	X50	..	..	..
BEROWRA	44.661				
	44.800	115	120	..	..
	44.840	..	..	75	85
	46.780	..	..	100	110
On Up Loop	46.995	..	..	X50	..
	47.075	80	85	..	..
On Up Loop	47.200	..	..	50	..
	47.485	60	65	..	..
	48.540	..	..	60	65
On Up Loop	48.590	..	..	35	..
On Up Loop	48.660	..	..	X35	..
COWAN	48.814				

LOCATION	KILO- METRAGE	@ DOWN MAIN		UP	
		NORM	XPT	NORM	XPT
	48.555	X25	X35	..	..
	48.890	..	..	X25	X35
	48.960	80	90	..	..
	49.620	..	..	80	90
	49.950	65	70	..	..
	51.375	X50	X50	65	70
BORONIA	51.409				
	51.510	60	65	X50	X50
	51.740	..	..	60	65
	52.440	70	75	..	..
	53.000	..	..	70	75
	53.230	65	70	..	..
	53.400	..	..	65	70
	53.730	55	60	..	..
	55.750	..	..	55	60
	56.050	60	65	..	..
	56.400	..	..	60	65
	56.590	X50	X50	..	..
	56.910	70	75	X50	X50
	57.450	..	..	70	75
HAWKESBURY RIVER	57.397				
		@ UP MAIN			
		UP		DOWN	
		NORM	XPT	NORM	XPT
	48.960	..	..	80	90
	49.620	80	90	..	..
	49.950	..	..	65	70
	51.230	65	70	X50	X50
BORONIA	51.409	X50	X50	60	65
	51.740	60	65	..	..
	52.440	..	..	70	75
	53.000	70	75	..	..
	53.230	..	..	65	70
	53.400	65	70	..	..
	53.730	..	..	55	60
	55.750	55	60	..	..
	56.050	..	..	60	65
	56.700	60	65	X50	X50
	56.780	X50	X50	..	..
	56.910	..	..	60	65
	57.450	60	65	..	..
HAWKESBURY RIVER	57.397				
LOCATION	KILO - METRAGE	DOWN NORM	XPT	UP NORM	XPT
	58.436	#50	#50	#50	#50
Hawkesbury River Bridge	#Permanent speed when travelling 'Wrong Road' over bridge				
	58.115	80	90	80	90
	60.590	..	..	100	105
	60.890	95	105	..	..
	61.300	..	..	80	85
	61.630	65	70	..	..
	62.000	..	..	70	75
	65.060	..	..	65	70
WONDABYNE	65.146				
	65.580	..	..	50	60
	66.380	..	..	70	80
	66.625	55	60	..	..
	67.050	115	125	55	60
	68.900	..	..	110	110
	69.200	100	110	..	..
	69.500	..	..	100	110
	69.730	115	125	..	..
	72.100	..	..	115	125
	72.360	80	85	..	..
WOY WOY	72.617				

@ Bidirectional working is provided on the Down and Up Main Lines between Cowan – Boronia – Hawkesbury River.

Location of Speed signs

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
	72.905	..	..	80	80
KOOLEWONG	73.150	90	100	..	..
	74.819				
	75.060	..	..	90	95
	75.360	65	70	..	..
	75.920	..	..	70	75
TASCOTT	76.280	85	90	..	..
	76.906				
POINT CLARE	78.050				
	78.080	..	..	90	95
	78.300	115	120	..	..
	79.200	..	..	115	120
	80.265	60	60	90	95
GOSFORD	80.850	..	..	55	60
	80.908				
	81.035	80	90	55	60
	83.680	..	..	80	85
	83.985	75	80	..	..
NARARA	84.590	..	..	75	80
	84.597				
	84.890	80	100	..	..
	85.640	..	..	100	115
NIAGARA PARK	86.130	75	80	..	..
	86.193				
	86.735	..	..	75	80
	87.020	105	115	..	..
LISAROW	87.970	..	..	100	105
	87.729				
	88.290	115	125	..	..
OURIMBAH	90.000	110	115	..	..
	90.607				
	92.230	..	..	115	125
	92.530	115	140	..	..
	96.840	..	..	115	140
	97.140	115	120	..	..
	97.720	..	..	110	120
TUGGERAH	98.020	115	140	..	..
	98.540				
	99.700	..	..	115	150
WYONG	100.000	115	130	..	..
	101.082				
	101.540	..	..	115	130
WARNERVALE	101.700	..	160	..	..
	105.896				
	106.350	..	..	115	150
	106.800	100	105	..	..
	108.400	..	..	115	120
	111.790	..	..	100	110
	112.090	115	130	..	..
	112.840	..	..	115	160
	114.370	..	..	105	115
WYEE	114.680	115	160	..	..
	114.864				
	116.820	115	125	..	..
	117.080	..	..	115	140
	119.020	..	..	110	120
	119.590	85	90	..	..
	120.250	..	..	80	85
MORISSET	120.800	115	125	..	..
	123.334				

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
	124.300	..	..	115	125
	124.505	75	85	..	..
	125.270	..	..	75	80
	125.620	..	..	85	90
	125.920	100	105	..	..
	126.110	..	..	95	105
DORA CREEK	126.400	110	120	..	..
	127.232				
	129.240	..	..	105	115
	129.540	90	95	..	..
	130.900	..	..	85	95
	131.200	70	75	..	..
	131.685	..	..	70	75
	132.490	..	..	80	85
	135.045	70	80	..	..
	136.170	..	..	65	70
AWABA	137.270	75	85	..	..
	137.305				
	137.800	..	..	75	80
	138.090	115	125	..	..
	139.860	..	..	115	140
	140.150	100	105	..	..
	140.800	..	..	95	100
	141.080	75	80	..	..
FASSIFERN	142.180	..	..	75	80
	142.313				
	142.480	100	105	..	..
52 Points # On South Fork	142.510	X25	..	..	..
	142.710	#10	..	#25	..
	143.200	..	..	100	105
	143.500	70	75	..	..
	144.850	..	..	75	80
	145.150	85	90	..	..
BOORAGUL	146.060	..	..	80	85
	146.392				
	146.460	..	..	75	85
	146.900	75	80	..	..
TERALBA	147.530	..	..	75	80
	147.565				
	147.800	115	130	..	..
	149.230	..	..	115	140
	149.550	110	115	..	..
COCKLE CREEK	150.626				
	153.260	..	..	100	110
SULPHIDE JUNCTION	153.400				
	153.560	75	85	..	..
	154.600	..	..	80	85
CARDIFF	155.000	70	75	..	..
	155.083				
	156.060	65	75	..	..
	156.410	..	..	70	75
	156.700	85	90	..	..
	158.670	..	..	75	80
KOTARA	158.922				
	159.540	100	100	..	..
ADAMSTOWN	160.280	..	..	95	105
	161.120				
	162.020	..	..	80	90
	162.320	95	100	..	..
BROADMEADOW	162.730	..	..	85	95
	162.935				

Station Data

Station	Kilo-metrage	Signal box Status	Hours of signal box	Facilities
Hornsby	33.864	A	Always	P
Asquith	35.694			P
Mt Colah	37.675			P
Mt Kuring-gai	40.667			P
Berowra	44.661	C	Controlled from Hornsby	P
Cowan	48.814	C	Controlled from Hornsby	LP, P
Boronia	51.409	C	Controlled from Hornsby	L
Hawkesbury River	57.397	C	Controlled from Hornsby	P
Hawkesbury River Bridge	58.436			
Wondabyne	65.146			P
Wondabyne Sandstone Siding	65.335			
Woy Woy	72.617			P
Koolewong	74.819			P
Tascott	76.906			P
Point Clare	78.050			P
Gosford	80.908	A	Always	P, TT, WC
Narara	84.597			P
Niagara Park	86.193			P
Lisarow	87.729			P
Ourimbah	90.607			P
Tuggerah	98.540			P
Wyong	101.082	A	Always	P
Warnervale	105.896			P
Wyee	114.864	P	Mon/Tue 0445 – 1700, Wed – Fri 0545 – 1700, Sat 0715 – 1445, Sun & Public Holidays- Closed	P
Vales Point Coal	119.230	C	Controlled from Morisset	L
Morisset	123.334	A	Always	P
Ering Coal	132.590	C	Controlled from Broadmeadow Signal Control Centre	L
Dora Creek	127.232			P
Awaba	137.305	C	Controlled from Broadmeadow Signal Control Centre	P,LP
Fassifern	142.313		Attended as required for Newstan Colliery	P
Booragul	146.392			P
Teralba	147.565			P
Teralba Colliery				L
Cockle Creek	150.626			P
Sulphide Junction	153.400	C	Controlled from Broadmeadow Signal Control Centre	
Cardiff	155.083			P
Kotara Tickhole Tunnel	157.642			L
Kotara	158.922			P
Adamstown	161.120	C	Controlled from Broadmeadow Signal Control Centre	P
Broadmeadow Marshalling Yards		C	Controlled from Broadmeadow Signal Control Centre	
Broadmeadow	162.935	C	Controlled from Broadmeadow Signal Control Centre	P

Out-of-gauge steel trains

Out-of-gauge steel trains may operate between Enfield Yards and Broadmeadow Yards subject to the conditions shown for Out-of-gauge steel trains contained in the **General Instruction Pages** section.
The locations where crossings may be made as authorised are as follows:

Flemington - Rhodes	Flemington – North Strathfield goods Line signal ST301G – Down relief line
Epping	Down Suburban clear platform Sydney end
Pennant Hills – Thornleigh	Down relief line
Hornsby	
Gosford	No 3 Platform Road to Starting Signal No 32
Wyong	Down refuge line
Awaba	Down refuge line
Sulphide Junction	Down refuge line

Advisory Speedsigns

Special advisory speedsigns have been positioned approaching signals at the locations shown below. Drivers of trains (except XPT's / EMU's) are required to regulate the speed of their train at such locations to ensure that before reaching the signal indicated the speed is not in excess of that figure shown on the special advisory sign. If at any point approaching the signal it is seen to be exhibiting a full clear indication, normal track speed for the train concerned may be resumed.

Location	Signal no	Speed shown on board
34.470km	Hornsby Up 3 rd Home, Main No. 21.	60
40.734km	Mt Kuring-gai Up Automatic 25.20	60
50.351km	Cowan Down Automatic 31.5	60
141.540km	Fassifern No 48 Down Home, Main (88.1)	60
142.145km	Fassifern Down Second Home, Main (88.5)	60
159.790km	Broadmeadow No 201 Down Accept (B201)	60
160.075km	Broadmeadow No 203 Down Home (B203)	60

Tonnage Signals

Certain signals listed herein are treated as **Tonnage Signals**, that is to say, in order to avoid the risk of trains over a certain tonnage being brought to a stand at signals where it would be difficult for them to restart, these tonnage signals must not be passed by trains conveying loads in excess of 75% of the prescribed load unless the Tonnage signal is in the clear position (or by telephone instructions in the case of failure)

The following signals are to be treated as a Tonnage signal, in accordance with **NSG 608**:

Signal no	Kilometrage	Section located
WR1	17.880	Meadowbank – West Ryde
N13.87 / NS13.87	22.305	Eastwood – Epping
N14.75 / NS14.75	23.747	Epping – Cheltenham
N19.93	32.046	Normanhurst – Hornsby
# 146	57.290	Hawkesbury River
# 148	57.295	Hawkesbury River
# 150	57.300	Hawkesbury River
# 148 Repeater	57.420	Hawkesbury River
40.9	65.804	Wondabyne – Woy Woy
78.8	126.900	Dora Creek – Morisset
79.9	128.420	Dora Creek – Awaba

The signals at Hawkesbury River are fitted with a notice plate which reads as follows:

TONNAGE SIGNAL

**TRAINS OVER
PRESCRIBED
LOAD TO WAIT
UNTIL SIGNAL IS
AT FULL CLEAR
OR 'T' INDICATOR
IS ILLUMINATED**

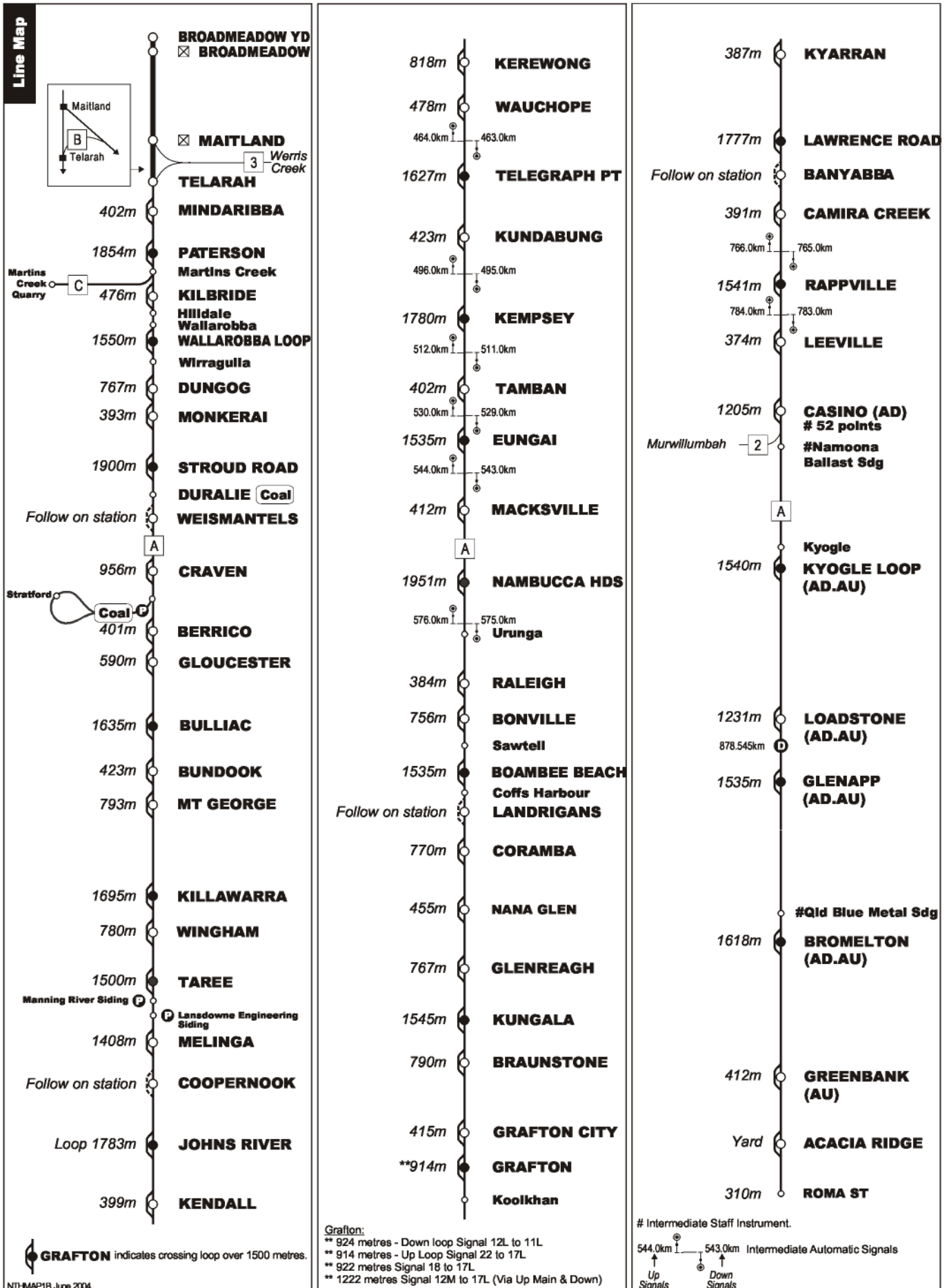
Transfer of 90 class (S1) locomotives Kooragang – Enfield – Kooragang for wheel lathe attention

90 Class locomotives (S1 category) may be transferred from Kooragang/Port Waratah to Enfield and return for wheel lathe attention subject to the following conditions:

1. Each locomotive travels light locomotive unattached. (single locomotive)
To overcome the necessity of the 90 class locomotive (S1 category) being driven long end leading a suitable locomotive can be used in multiple with a 90 class (S1 category) on the following lines:
 - (a) Delec to Campsie and return.
 - (b) North Strathfield/Strathfield to Delec via Chullora and Flemington Goods Junction and return.
 - (c) North Strathfield/Strathfield to Delec via Sefton Park Junction, Bankstown and Campsie and return.
2. The axle loads are to be decreased by ensuring the locomotive has a reduced fuel load.
3. The locomotive must reduce its speed to **20km/hr** when traversing the following bridges:
Main North: 150.534km, 112.051km, 93.921km, 92.070km, 88.811km, 86.440km, 12.628km
Bankstown Line: 19.202km
4. **Maximum track speed:**
Kooragang/Port Waratah – Eraring Junction – Kooragang/Port Waratah = **60km/hr**.
Enfield – Eraring Junction – Enfield = **50km/hr**.
5. Sector Civil Engineers to be advised at least 48 hours in advance.
6. Transfer of this locomotive from **Kooragang to Enfield** is to be done under block working conditions as per NPR722.
Transfer of this locomotive from Enfield to Kooragang must be blocked worked where specified in the General Instruction Pages of the train Operating Conditions Manual, Section 2, page 4, - **Block Working of all classes of light locomotives**.

Broadmeadow - Brisbane

section 1B



Maximum Speed of Locomotives and Rolling Stock													
Class of Track	SECTIONS (b) Maitland - Brisbane			Telarah Triangle	Martins Creek Quarry	Notes	Class of Track	SECTIONS (b) Maitland - Brisbane			Telarah Triangle	Martins Creek Quarry	Notes
	1	1	1					1	1	1			
Line Map reference	A	B	C				Line Map reference	A	B	C			
Locomotives							Freight						
Multiple Locos	4	4	4				Class A	115	20	115			
S1	N/A	N/A	N/A				Class B	100	20	100			
S2	100	20	N/A				Class C	80	20	80			
S3	115	20	N/A				Class D	65	20	65			
S4	80	20	N/A			(a)	Class E	80	20	80			
S5	115	20	20				Class F	65	20	65			
S6	115	20	20				Class G	N/A	N/A	N/A			
S7	90	20	20										
S8	115	20	20				Passenger						
S9	115	20	20				XPT	160	20	160			
S10	115	20	20				Xplorer	145	20	145			
S11	80	20	20				Diesel Train	115	20	115			
S12	100	20	20				Loco Hauled	115	20	115			
S13	100	20	20										
S14	70	20	20				Accident Cranes						
							70 tonne	60		60			
							110 tonne	115	20	115			
							120 tonne	50		50			
							Notes						

NOTES:

- (a) Maximum speed of 40 km/h through No 1 Platform Maitland.
- (b) See SECTION 3 for details Broadmeadow to Maitland.

Safeworking System	Broadmeadow to Woodville Junction	Rail Vehicle Detection
	Woodville Junction to Islington Junction	Rail Vehicle Detection
	Islington Junction to Casino	Rail Vehicle Detection
	Casino to Kyogle Loop	Electric Staff
	Kyogle Loop to Loadstone	Electric Staff
	Loadstone to Glenapp	Electric Staff
	Glenapp to Bromelton	Electric Staff
	Bromelton to Greenbank	Electric Staff
	Greenbank to Acacia Ridge	Rail Vehicle Detection
	Acacia Ridge to Clapham	Queensland Safeworking System
	Clapham to Roma Street	Queensland Safeworking System

NorthMaxspeed1B

DOWN	LOADS & CONDITIONS SECTIONS	LOCO- MOTIVE CLASS = L	LOCOMOTIVES					TRAIN DATA		NOTES
			SINGLE	DOUBLE	TRIPLE	QUAD	QUIN	VEHICLE CLASS	SECT RUN TIMES	
			LOADS TONNES							
1	BROADMEADOW – ACACIA RIDGE	L2	1000	2000	3000	4000	A	A1		
2	BROADMEADOW – ACACIA RIDGE	L7	735	1470	2205	2940	A	A1		
3										
4	BROADMEADOW – ACACIA RIDGE	L2	1500	3000	4500	6000	AB	B1		
5	BROADMEADOW – ACACIA RIDGE	L3/L4/L7	970	1940	2910	3880	AB	B1		
6	BROADMEADOW – ACACIA RIDGE	L9/L10	610	1220	1830	2440	AB	B1		
7	BROADMEADOW – ACACIA RIDGE	L12	550	1100	1650	2200	AB	B1		
8	BROADMEADOW – ACACIA RIDGE	L13	250	500	750	1000	AB	B1		
9										
10	BROADMEADOW – ACACIA RIDGE	L2	1600	3200	4800	6400	ABCE	C1		
11	BROADMEADOW – ACACIA RIDGE	L3/L4/L7	1160	2320	3480	4640	ABCE	C1		
12	BROADMEADOW – ACACIA RIDGE	L9/L10	740	1480	2220	2960	ABCE	C1		
13	BROADMEADOW – ACACIA RIDGE	L12	660	1320	1980	2640	ABCE	C1		
14	BROADMEADOW – ACACIA RIDGE	L13	300	600	900	1200	ABCE	C1		
15										
16	BROADMEADOW – ACACIA RIDGE	L2	1850	3700	5550	7400	ABCE	C2		
17	BROADMEADOW – ACACIA RIDGE	L3/L4/L7	1400	2800	4200	5600	ABCE	C2		
18	BROADMEADOW – ACACIA RIDGE	L9/L10	900	1800	2700	3600	ABCE	C2		
19	BROADMEADOW – ACACIA RIDGE	L12	750	1500	2250	3000	ABCE	C2		
20	BROADMEADOW – ACACIA RIDGE	L13	375	750	1125	1500	ABCE	C2		
21										
22	BROADMEADOW – ACACIA RIDGE	L2	2080	4160	6240	8320	ABCE	C3		
23	BROADMEADOW – ACACIA RIDGE	L3/L4	1500	3000	4500	6000	ABCE	C3		
24	BROADMEADOW – ACACIA RIDGE	L9/L10	980	1960	2940	3920	ABCE	C3		
25	BROADMEADOW – ACACIA RIDGE	L12	870	1740	2610	3480	ABCE	C3		
26	BROADMEADOW – ACACIA RIDGE	L13	415	830	1245	1660	ABCE	C3		
27										
28	BROADMEADOW – GRAFTON	L2	2414	4828	7242	9656	ABCE	C4		
29	BROADMEADOW – GRAFTON	L3	2227	4454	6681	8908	ABCE	C4		
30	BROADMEADOW – GRAFTON	L4	2104	4208	6312	8416	ABCE	C4		
31	BROADMEADOW – GRAFTON	L5	1967	3934	5901	7868	ABCE	C4		
32	BROADMEADOW – GRAFTON	L6	1743	3486	5229	6972	ABCE	C4		
33	BROADMEADOW – GRAFTON	L7	1699	3398	5097	6796	ABCE	C4		
34	BROADMEADOW – GRAFTON	L8	1561	3122	4683	6244	ABCE	C4		
35	BROADMEADOW – GRAFTON	L9	1422	2844	4266	5688	ABCE	C4		
36	BROADMEADOW – GRAFTON	L10	1372	2744	4116	5488	ABCE	C4		
37	BROADMEADOW – GRAFTON	L11	1224	2448	3672	4896	ABCE	C4		
38	BROADMEADOW – GRAFTON	L12	1175	2350	3525	4700	ABCE	C4		
39	BROADMEADOW – GRAFTON	L13	600	1200	1800	2400	ABCE	C4		
40										
41	BROADMEADOW – ACACIA RIDGE	L13	693	1386	2079	2772	ABCE	C5		

UP	LOADS & CONDITIONS SECTIONS	LOCO- MOTIVE CLASS = L	LOCOMOTIVES					TRAIN DATA		NOTES
			SINGLE	DOUBLE	TRIPLE	QUAD	QUIN	VEHICLE CLASS	SECT RUN TIMES	
			LOADS TONNES							
1	ACACIA RIDGE – BROADMEADOW	L2	1000	2000	3000	4000	A	A1		
2	ACACIA RIDGE – BROADMEADOW	L7	735	1470	2205	2940	A	A1		
3										
4	ACACIA RIDGE – BROADMEADOW	L2	1500	3000	4500	6000	AB	B1		
5	ACACIA RIDGE – BROADMEADOW	L3/L4/L7	970	1940	2910	3880	AB	B1		
6	ACACIA RIDGE – BROADMEADOW	L9/L10	610	1220	1830	2440	AB	B1		
7	ACACIA RIDGE – BROADMEADOW	L12	550	1100	1650	2200	AB	B1		
8	ACACIA RIDGE – BROADMEADOW	L13	250	500	750	1000	AB	B1		
9										
10	ACACIA RIDGE – BROADMEADOW	L2	1600	3200	4800	6400	ABCE	C1		
11	ACACIA RIDGE – BROADMEADOW	L3/L4/L7	1160	2320	3480	4640	ABCE	C1		
12	ACACIA RIDGE – BROADMEADOW	L9/L10	740	1480	2220	2960	ABCE	C1		
13	ACACIA RIDGE – BROADMEADOW	L12	660	1320	1980	2640	ABCE	C1		
14	ACACIA RIDGE – BROADMEADOW	L13	300	600	900	1200	ABCE	C1		
15										
16	ACACIA RIDGE – BROADMEADOW	L2	1850	3700	5550	7400	ABCE	C2		
17	ACACIA RIDGE – BROADMEADOW	L3/L4/L7	1400	2800	4200	5600	ABCE	C2		
18	ACACIA RIDGE – BROADMEADOW	L9/L10	900	1800	2700	3600	ABCE	C2		
19	ACACIA RIDGE – BROADMEADOW	L12	750	1500	2250	3000	ABCE	C2		
20	ACACIA RIDGE – BROADMEADOW	L13	375	750	1125	1500	ABCE	C2		
21										
22	ACACIA RIDGE – BROADMEADOW	L2	2050	4100	6150	8200	ABCE	C3		
23	ACACIA RIDGE – BROADMEADOW	L3/L4	1500	3000	4500	6000	ABCE	C3		
24	ACACIA RIDGE – BROADMEADOW	L9/L10	980	1960	2940	3920	ABCE	C3		
25	ACACIA RIDGE – BROADMEADOW	L12	870	1740	2610	3480	ABCE	C3		
26	ACACIA RIDGE – BROADMEADOW	L13	415	830	1245	1660	ABCE	C3		
27										
28	GRAFTON - BROADMEADOW	L2	2414	4828	7242	9656	ABCE	C4		
29	GRAFTON - BROADMEADOW	L3	2227	4454	6681	8908	ABCE	C4		
30	GRAFTON - BROADMEADOW	L4	2104	4208	6312	8416	ABCE	C4		
31	GRAFTON - BROADMEADOW	L5	1967	3934	5901	7868	ABCE	C4		
32	GRAFTON - BROADMEADOW	L6	1743	3486	5229	6972	ABCE	C4		
33	GRAFTON - BROADMEADOW	L7	1699	3398	5097	6796	ABCE	C4		
34	GRAFTON - BROADMEADOW	L8	1561	3122	4683	6244	ABCE	C4		
35	GRAFTON - BROADMEADOW	L9	1422	2844	4266	5688	ABCE	C4		
36	GRAFTON - BROADMEADOW	L10	1372	2744	4116	5488	ABCE	C4		
37	GRAFTON - BROADMEADOW	L11	1224	2448	3672	4896	ABCE	C4		
38	GRAFTON - BROADMEADOW	L12	1175	2350	3525	4700	ABCE	C4		
39	GRAFTON - BROADMEADOW	L13	600	1200	1800	2400	ABCE	C4		
40										
41	ACACIA RIDGE – BROADMEADOW	L13	693	1386	2079	2772	ABCE	C5		

UP	SECTIONAL RUNNING TIMES								FULL SECTIONAL LOADS														GRADE		
	A1	B1	C1	C2	C3	C4	D1	Loco	LOCOMOTIVE CATEGORIES = L																
									L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14			
ACACIA RIDGE	↻	↻		↻	↻		↻	↻		↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	↻	
GREENBANK	16a	18a	21a	22a	23a		32a	15a		2055	1894	1789	1678	1479	1444	1322	1204	1163	1035	994	693				1:66
BROMELTON	17a	18a	20a	21a	21a		25a	16a		2161	1992	1882	1766	1557	1519	1392	1268	1224	1090	1047	731				1:70
GLENAPP	33a	35a	39a	41a	42a		63a	32a		2055	1894	1789	1678	1479	1444	1322	1204	1163	1035	994	693				1:66
LOADSTONE	27a	33a	34a	38a	40a		58a	26a		2055	1894	1789	1678	1479	1444	1322	1204	1163	1035	994	693				1:66
KYOGLÉ LOOP	24a	24a	25a	25a	25a		25a	23a		3587	3314	3134	2949	2607	2535	2342	2133	2055	1841	1766	1232				1:137
CASINO	27a	28a	29a	29a	29a		32a	25a		2055	1894	1789	1678	1479	1444	1322	1204	1163	1035	994	693				1:66
LEEVILLE	9	9	9	9	10		11	9		2340	2158	2039	1914	1688	1646	1511	1377	1328	1184	1137	793				1:77
RAPPVILLE	12	13	15	15	15		20	12		2055	1894	1789	1678	1479	1444	1322	1204	1163	1035	994	693				1:66
CAMIRA CREEK	15	15	16	16	16		20	15		2055	1894	1789	1678	1479	1444	1322	1204	1163	1035	994	693				1:66
Banyabba (F)	11	12	13	14	14		19	11		2055	1894	1789	1678	1479	1444	1322	1204	1163	1035	994	693				1:66
LAWRENCE ROAD	4	5	5	6	6		8	4		3096	2858	2702	2541	2245	2185	2014	1835	1768	1582	1518	1059				1:113
KYARRAN	22	23	24	26	27		32	20		2055	1894	1789	1678	1479	1444	1322	1204	1163	1035	994	693				1:66
GRAFTON	13a	13a	13a	14a	14a		16a	12a		2055	1894	1789	1678	1479	1444	1322	1204	1163	1035	994	693				1:66
GRAFTON CITY	3	3	3	3	3		3	3		4624	4274	4044	3809	3369	3274	3033	2761	2658	2386	2288	1600				Level
BRAUNSTONE	14	18	18	20	22		25	33		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:80
KUNGALA	16	16	18	18	19		19	20		2654	2449	2315	2175	1920	1870	1720	1567	1511	1350	1295	904				1:90
GLENREAGH	9	9	10	10	11		11	14		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:80
NANA GLEN	11	11	11	11	11		12	16		2990	2760	2609	2453	2167	2109	1944	1770	1707	1526	1465	1022				1:105
CORAMBA	10	11	11	11	12		13	17		3032	2799	2647	2489	2198	2140	1972	1796	1731	1549	1486	1037				1:107
Landrigans (F)	8	8	8	8	9		10	15		3199	2954	2793	2627	2321	2259	2083	1897	1828	1636	1570	1096				1:114
BOAMBEE BEACH	14	14	14	14	14		14	15		4624	4274	4044	3809	3369	3274	3033	2761	2658	2386	2288	1600				Level
BONVILLE	6	6	7	7	7		7	8		4624	4274	4044	3809	3369	3274	3033	2761	2658	2386	2288	1600				Level
RALEIGH	9	9	10	10	11		11	15		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:80
NAMBUCCA HEADS	17	17	18	18	19		19	21		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:80
MACKSVILLE	12	13	13	13	14		15	19		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:80
EUNGAI	16	16	16	16	17		18	24		3587	3314	3134	2949	2607	2535	2342	2133	2055	1841	1766	1232				1:133
TAMBAN	12	13	13	14	14		15	18		3475	3210	3035	2856	2524	2455	2267	2065	1989	1781	1709	1193				1:129
KEMPSEY	13	14	15	15	16		16	19		2536	2339	2211	2077	1833	1786	1642	1495	1442	1288	1236	862				1:85
KUNDABUNG	15	15	15	16	16		17	21		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:80
TELEGRAPH POINT	11	11	13	13	13		13	16		4023	3717	3516	3311	2927	2845	2631	2397	2308	2070	1985	1385				1:162
WAUCHOPE	13	14	14	15	15		16	19		3398	3138	2968	2792	2467	2400	2216	2018	1944	1741	1670	1166				1:127
KEREWONG	7	7	8	8	8		8	9		3199	2954	2793	2627	2321	2259	2083	1897	1828	1636	1570	1096				1:117
KENDALL	12	12	12	13	13		13	16		4476	4137	3914	3687	3260	3169	2932	2671	2571	2307	2213	1544				1:190
JOHNS RIVER	15	15	15	15	15		15	19		4624	4274	4044	3809	3369	3274	3033	2761	2658	2386	2288	1600				1:201
Coopermook (F)	10	10	11	11	11		11	14		4337	4008	3792	3571	3158	3069	2840	2687	2491	2235	2143	1496				1:178
MELINGA	10	10	10	10	11		11	13		3679	3398	3214	3025	2674	2600	2404	2188	2108	1889	1812	1264				1:143
TAREE	12	12	12	12	13		13	16		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:80
WINGHAM	11	11	11	11	11		12	14		2881	2659	2514	2363	2086	2032	1871	1704	1643	1469	1410	984				1:101
KILLAWARRA	7	8	8	9	9		11	15		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:80
MT GEORGE	15	15	16	16	17		18	22		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:81
BUNDOOK	7	7	8	8	8		8	13		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:82
BULLIAC	11	13	13	13	14		15	19		2536	2339	2211	2077	1833	1786	1642	1495	1442	1288	1236	862				1:85
GLOUCESTER	14	14	14	15	15		17	20		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:80
BERRICO	7	8	8	8	9		10	14		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:80
CRAVEN	10	11	11	12	12		13	17		2654	2449	2315	2175	1920	1870	1720	1567	1511	1350	1295	904				1:89
Weismantels (F)	10	11	11	11	11		11	11		4624	4274	4044	3809	3369	3274	3033	2761	2658	2386	2288	1600				DG
STROUD ROAD	10	11	11	11	11		11	13		2512	2317	2190	2057	1815	1769	1626	1481	1428	1275	1224	854				1:84
MONKERAI	12	15	16	18	20		23	31		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:80
DUNGOG	9	9	9	9	9		9	9		4624	4274	4044	3809	3369	3274	3033	2761	2658	2386	2288	1600				DG
WALLAROBBA LOOP	11	11	11	12	12		12	14		2946	2720	2571	2363	2135	2079	1915	1744	1681	1503	1443	1007				1:102
KILBRIDE	9	10	10	11	12		13	18		2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820				1:81
PATERSON	8	8	9	9	9		9	8		3300	3047	2882	2711	2395	2330	2150	1959	1887	1689	1621	1131				1:122
MINDARIBBA	8																								

Location of Speed signs

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
BROADMEADOW	162.935				
	163.600	..	..	95	100
	163.670	X30	X30	X30	X30
WOODVILLE JUNCTION	163.685				
WOODVILLE JUN BOX	163.690				
	163.910	40	45	X30	X30
	164.000	..	..	40	40
	164.310	X25	X25	40	40
	164.410	..	..	X25	X25
ISLINGTON JUN BOX	164.647				
	164.710	115	120	..	..
WARATAH	165.964				
	166.840	..	..	115	150
HANBURY JUN BOX	167.934				
WARABROOK	168.685				
	168.090	80	90	90	110
	170.110	115	120	80	90
SANDGATE	170.509				
	171.600	115	160	115	150
	175.000	..	..	115	160
HEXHAM	175.530				
	175.725	..	..	85	90
	176.800	115	150	..	..
TARRO	178.178				
	179.290	..	..	115	150
BERESFIELD	179.806				
	180.070	..	..	95	105
	181.750	115	130	..	..
THORNTON	182.194				
	183.000	115	150	..	..
	184.960	115	115	..	..
METFORD	185.117				
	185.800	..	..	115	160
	186.540	..	..	115	140
	186.800	..	..	115	115
	187.550	95	105	..	..
	187.690	..	..	95	100
VICTORIA STREET	187.919				
	188.150	..	..	80	85
EAST MAITLAND	188.831				
	189.350	100	110	..	..
	191.400	90	105	..	..
HIGH STREET	191.409				
	192.200	..	..	90	95
	192.225	X25	X25	..	..
	192.280	X15	X15	..	..
	192.293	..	..	X25	X25
MAITLAND	192.548				
	192.900	X25	..	..	..
	192.950	..	85	X25	X25
	193.200	80	85	..	..
	194.565	X25	X25	..	..
TELARAH	194.739				
	194.890	80	85	..	..
	197.330	110	110	80	85
	199.630	..	..	110	110
	199.880	70	75	..	..
	200.260	..	..	70	75
	200.520	80	85	..	..
MINDARIBBA	203.462				
	204.830	..	..	80	85
	205.090	70	75	..	..
	206.570	..	..	70	75
	206.870	90	95	..	..
	210.400	70	75	90	95
	210.940	..	..	70	75
	211.250	80	85	..	..
PATERSON	213.224				
	213.340	75	80	80	85
	214.000	115	125	75	80
	216.080	..	..	115	125
	216.380	110	115	..	..
	216.940	..	..	110	115
	217.200	75	80	..	..
	217.930	..	..	75	80
	218.200	80	85	..	..
MARTINS CREEK	218.532				
Quarry Siding	219.176				
	219.700	..	..	80	85
	219.960	65	70	..	..
	220.980	..	..	65	70
	221.290	115	125	..	..
	222.900	..	..	115	130
	223.100	105	110	..	..
KILBRIDE	223.472				
	224.530	..	..	105	110
	224.820	75	80	..	..
Hilldale	226.372				
	227.140	..	..	75	80
	227.420	70	75	..	..
	228.330	..	..	70	75
	228.630	80	85	..	..
	231.250	..	..	80	85
	231.550	95	100	..	..
WALLAROBBA	231.673				
	233.020	..	..	95	100
	233.400	70	75	..	..
WALLAROBBA LOOP	234.000				
	235.350	..	..	70	75
	235.600	115	120	..	..
	236.700	..	..	115	120

Location of Speed signs (continued)

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
	237.000	70	75	..	..
	238.850	..	..	70	75
	238.960	75	85	..	..
	241.300	..	..	75	85
	241.620	70	75	..	..
	242.110	..	..	70	75
	242.400	110	115	..	..
DUNOGG	245.199				
	245.300	..	..	110	115
	245.470	65	70	..	..
	245.830	..	..	65	70
	246.200	105	115	..	..
	248.180	..	..	105	115
	248.460	70	75	..	..
	251.200	..	..	70	75
MONKERAI	254.011				
	260.900	..	..	65	75
STROUD ROAD	266.545				
	274.780	..	..	70	75
	275.090	100	105	..	..
	277.000	..	..	100	105
	277.310	105	115	..	..
WEISMANTELS	278.109				
	278.300	..	..	105	115
	278.540	70	75	..	..
	280.390	..	..	70	75
	280.700	80	85	..	..
	283.150	..	..	80	85
	283.150	..	..	80	85
	283.270	70	75	..	..
	285.850	..	..	70	75
	286.130	75	80	..	..
	287.640	..	..	75	80
	287.940	65	70	..	..
	290.090	..	..	65	70
	290.730	115	120	..	..
CRAVEN	290.517				
	291.760	X35	..	..	..
Stratford Ball Loop Jun	291.843				
	292.060	..	..	115	120
	292.360	80	80	..	..
	293.110	..	..	80	80
	293.400	115	125	..	..
	295.960	..	..	115	125
	296.240	70	75	..	..
	297.250	..	..	70	75
	297.500	75	80	..	..
	299.700	..	..	75	80
	300.000	70	75	..	..
BERRICO	301.887				
	309.276				
GLOUCESTER	314.610	..	..	70	75
	314.910	65	70	..	..
	320.160	..	..	65	70
	320.410	60	65	..	..
	321.860	..	..	60	65
	322.150	70	75	..	..
BULLIAC	324.024				
	324.833	X40*	X40*	40*	40*
<i>* On Loop</i>	324.915	..	..	X40	X40
	328.780	55	60	..	..
	331.830	..	..	70	75
	332.110	60	65	..	..
	333.760	70	75	60	65
BUNDOOK	334.492				
	336.020	65	70	..	..
	336.470	..	..	65	70
	337.200	65	70	60	65
	338.540	..	..	65	70
	338.840	70	75	..	..
	341.060	..	..	70	75
	341.360	95	100	..	..
MT GEORGE	342.116				
	343.300	..	..	95	100
	343.530	80	90	..	..
	345.100	..	..	80	90
	345.540	60	60	..	..
	345.700	110	115	..	..
	346.790	..	..	110	115
	347.080	70	75	..	..
	349.050	..	..	70	75
	349.320	80	90	..	..
	350.500	..	..	80	90
	350.800	100	110	..	..
	351.800	..	..	100	110
	352.040	70	75	..	..
	352.320	..	..	70	75
	352.620	85	90	..	..
	353.310	..	..	85	90
	353.600	70	75	..	..
	357.715	..	..	70	75
	357.840	100	110	..	..
	359.460	..	..	100	110
	359.690	70	75	..	..
KILLAWARRA	360.273				
	361.755	X40*	X40*	40*	40*
<i>* On Loop</i>	361.840	..	..	X40	X40
	364.380	..	..	70	75
	365.900	..	..	65	70
	366.190	60	65	..	..
WINGHAM	367.055				
	367.820	..	..	60	65
	368.120	70	75	..	..
	370.990	..	..	70	75
	371.290	80	85	..	..
	372.900	50	50	..	..
	373.040	80	85	..	..
	373.170	..	..	80	85
	373.400	100	125	..	..
	375.060	70	75	100	125
	376.400	..	..	70	75
	376.700	75	85	..	..
	377.770	..	..	75	85

Location of Speed signs (continued)

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
TAREE	378.000	65	70	..	..
	378.602				
	378.770	55	65	..	..
	379.140	..	..	55	65
	379.400	70	75	..	..
	379.600	..	..	70	75
	379.900	75	85	..	..
	381.860	..	..	75	85
	382.100	100	110	..	..
	384.890	..	..	100	110
	385.120	80	85	..	..
	385.340	..	..	80	85
385.640	70	75	..	..
Lansdowne Eng Sdg	387.872				
	388.760	..	..	70	75
	388.960	90	95	..	..
	390.030	..	..	90	95
	390.350	65	70	..	..
	391.610	..	..	65	70
	391.860	100	110	..	..
MELINGA	392.267				
	393.970	..	..	100	110
	394.190	80	85	..	..
	395.110	..	..	80	85
	395.400	70	75	..	..
	402.800	..	..	..	75
	403.550	..	..	..	70
COOPERNOOK	403.555				
	407.550	..	..	70	75
	407.850	80	85	..	..
	408.570	..	..	80	85
	408.870	105	110	..	..
	411.630	..	..	105	110
	411.930	85	90	..	..
	412.740	..	..	85	90
	413.040	70	75	..	..
	413.480	..	..	70	75
	413.780	90	95	..	..
	414.730	..	..	90	95
	415.030	95	105	..	..
	415.940	X25	X35	..	..
On Loop	416.020	25	35*	X25*	X35*
JOHNS RIVER	417.801				
	417.980	X25*	X35*	25*	35*
	418.050	..	..	X25	X35
	419.150	..	..	95	105
	419.490	70	75	..	..
	421.310	..	..	70	75
	421.500	70	80	..	..
	423.260	..	..	70	75
	423.460	70	75	..	..
	424.690	..	..	70	75
	424.970	80	90	..	..
	427.140	..	..	80	90
	427.420	70	75	..	..
KENDALL	433.011				
	433.765	..	..	70	75
	433.820	80	85	..	..
	435.450	..	..	80	85
	435.730	70	75	..	..
	436.330	..	..	70	75
	436.600	95	105	..	..
	437.900	..	..	95	105
	438.100	70	75	..	..
	438.830	..	..	70	75
	439.130	90	100	..	..
	441.380	..	..	90	100
	441.670	70	75	..	..
KEREWONG	446.033				
	449.130	..	..	70	75
	449.430	95	105	..	..
	449.870	..	..	95	105
	450.000	115	140	..	..
	452.100	..	..	115	140
	452.350	115	120	..	..
	454.350	100	100	115	120
WAUCHOPE	455.005				
	455.250	115	120	100	100
	459.550	..	..	115	120
	459.850	80	85	..	..
	461.400	..	..	80	85
	461.700	70	75	..	..
	461.980	..	..	70	75
	462.290	105	115	..	..
	463.500	..	..	105	115
	463.850	90	100	..	..
	464.340	..	..	90	100
	465.180	85	95	..	..
	466.980	..	..	85	95
	467.250	70	75	..	..
	471.310	..	..	70	75
	471.650	80	90	..	..
	472.400	..	..	80	90
TELEGRAPH POINT	472.470				
	472.700	115	125	..	..
	485.150	..	..	115	125
	485.450	105	115	..	..
KUNDABUNG	487.197				
	487.920	90	95	105	115
	488.340	70	75	..	..
	491.860	..	..	70	75
	492.080	75	85	..	..
	494.000	..	..	75	85
	494.170	70	75	..	..
	495.780	..	..	70	75
	496.000	80	85	..	..
	497.300	..	..	80	85
	497.620	70	75	..	..
	499.820	..	..	70	75
	500.120	80	90	..	..
	502.010	..	..	80	90
	502.220	65	75	..	..

Location of Speed signs (continued)

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
KEMPSEY	502.820	..	..	65	75
	503.100	80	85	..	..
	503.572				
	503.600	..	..	80	85
	505.000	80	90	..	..
	* On Loop 505.130	X40*	X40*	40*	40*
	505.210	..	..	X40	X40
	510.540	..	..	80	90
	510.900	115	160	..	..
	513.560	..	..	115	160
TAMBAN	513.800	115	125	..	..
	516.500	..	..	115	125
	516.800	80	90	..	..
	517.000	..	..	80	90
	517.300	70	75	..	..
	520.562				
	521.520	..	..	70	75
	521.850	75	85	..	..
	522.500	..	..	75	85
	523.000	105	115	..	..
EUNGAI	525.200	..	..	105	115
	525.470	80	85	..	..
	525.790	..	..	80	85
	526.070	70	75	..	..
	530.460	..	..	70	75
	530.800	75	85	..	..
	532.150	..	..	75	85
	532.450	70	75	..	..
	534.400	..	..	70	75
	534.556				
MACKSVILLE	534.600	60	65	..	..
	535.050	..	..	60	65
	535.300	70	75	..	..
	536.400	..	..	70	75
	536.700	105	115	..	..
	538.270	..	..	105	115
	538.510	..	..	70	75
	538.510	..	..	70	75
	538.530	70	75	..	..
	538.690	..	..	60	60
* On Loop	542.810	..	..	70	75
	543.050	95	100	..	..
	545.170	..	..	95	100
	545.560	70	75	..	..
	552.418				
	553.500	..	..	70	75
	553.800	80	85	..	..
	555.500	..	..	80	85
	555.790	70	75	..	..
	558.500	60	60	70	75
* On Loop	558.950	..	..	60	60
	559.230	80	85	..	..
	560.050	..	..	80	85
	560.330	70	75	..	..
	563.480	X40	X40	..	..
	* On Loop 563.560	40*	40*	X40*	X40*
	564.470	..	..	70	75
	564.800	75	80	..	..
	LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
NAMBUCCA HEADS	565.082				
	566.330	..	..	75	80
	566.700	80	90	..	..
	568.160	..	..	80	90
	568.400	70	75	..	..
	568.920	50	50	..	..
	569.060	70	75	..	..
	569.630	..	..	70	75
	569.870	80	85	..	..
	573.400	..	..	80	85
URUNGA	573.650	70	75	..	..
	574.090	..	..	70	75
	574.600	100	100	..	..
	576.080	115	115	..	..
	579.100	90	95	115	115
	580.918				
	581.200	..	..	90	95
	581.460	70	75	..	..
	581.800	..	..	70	75
	582.050	80	85	..	..
RALEIGH	582.500	..	..	80	85
	582.800	100	105	..	..
	584.290	..	..	100	105
	584.660	85	95	..	..
	584.900	..	..	85	95
	585.260	115	120	..	..
	586.455				
	587.810	..	..	115	120
	588.100	70	75	..	..
	593.570	..	..	70	75
BONVILLE	593.890	100	110	..	..
	596.494				
	598.000	..	..	100	110
	598.310	80	90	..	..
	598.880	..	..	80	90
	599.200	95	100	..	..
	600.668				
	600.810	..	..	95	100
	601.100	80	90	..	..
	602.100	..	..	80	90
SAWTELL	602.400	115	140	..	..
	606.790				
	606.800	..	..	115	140
	607.130	70	80	..	..
	607.550	100	100	70	80
	607.814				
	610.650	..	..	100	100
	611.130	80	85	..	..
	611.330	..	..	80	85
	611.500	65	70	..	..
BOAMBEE BEACH	619.500	..	..	65	70
	619.709				
	619.870	60	65	..	..
	620.260	..	..	60	65

Location of Speed signs (continued)

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
CORAMBA	620.600	65	70	..	..
	627.960				
	630.740	..	..	65	70
	631.000	80	90	..	..
	632.080	..	..	80	90
	632.940	70	75	..	..
NANA GLEN	639.000	..	..	70	75
	639.357	60	65	..	..
	639.529				
	639.980	80	95	60	65
	641.990	70	75	80	95
	646.860	..	..	70	75
	646.960	85	90	..	..
	648.100	..	..	85	90
	648.390	70	75	..	..
	651.240	..	..	70	75
*When loop is occupied	651.540	115	120	..	..
	651.590	..	..	70*	75*
When loop is occupied	651.700	..	..	40	40*
	651.881				
GLENREAGH	653.400	..	..	115	120
	654.000	80	85	..	..
	662.470	..	..	80	85
	662.770	115	125	..	..
	664.460				
	665.520	..	..	115	125
	665.910	80	85	..	..
	668.180	..	..	80	85
	668.560	115	115	..	..
	670.960	..	..	115	115
KUNGALA	671.320	80	85	..	..
	674.130	..	..	80	85
	674.500	115	125	..	..
	679.680	..	..	115	125
	680.250	80	85	..	..
	682.500	..	..	80	85
	683.269				
	683.270	70	75	70	70
	683.770	80	85	70	75
	687.800	..	..	80	85
BRAUNSTONE	688.160	70	75	..	..
	694.236	..	..	70	75
	694.617	50	50	..	..
	695.420	..	..	50	50
	695.748				
	696.140	60	65	50	50
	696.500	75	80	..	..
	698.848				
	699.320	..	..	75	80
	699.580	115	130	..	..
GRAFTON CITY	704.000	..	..	115	130
	704.450	80	85	..	..
	705.300	..	..	80	85
GRAFTON					
CORAMBA	705.580	60	65	..	..
	705.920	..	..	60	65
	706.200	90	95	..	..
	707.870	..	..	90	95
	708.050	70	75	..	..
	708.800	80	90	70	75
	712.750	..	..	80	90
	713.140	70	75	..	..
	713.636				
	KYARRAN	714.570	70	75
714.750		80	85	..	..
717.710		..	..	80	85
719.900		..	..	70	75
720.180		80	85	..	..
721.070		..	..	80	85
722.390		90	95	..	..
723.140		..	..	90	95
723.420		60	65	..	..
723.820		..	..	60	65
LAWRENCE ROAD	724.100	80	85	..	..
	724.750	..	..	80	85
	725.290	90	95	..	..
	726.860	..	..	90	95
	727.020	80	85	..	..
	728.350	..	..	80	85
	728.650	70	75	..	..
	732.990	..	..	70	75
	733.290	115	140	..	..
	735.970	..	..	115	140
BANYABBA	736.250	100	110	..	..
	738.660				
	738.920	..	..	100	110
	739.220	90	100	..	..
	739.560	..	..	90	100
	739.900	100	105	..	..
	742.866				
	743.200	..	..	100	105
	743.460	70	75	..	..
	744.000	80	85	70	75
CAMIRA CREEK	744.630	..	..	80	85
	744.950	100	105	..	..
	745.900	..	..	100	105
	746.270	70	75	..	..
	746.820	..	..	70	75
	747.250	80	85	..	..
	747.700	85	90	..	..
	755.200	..	..	85	90
	755.600	80	85	..	..
	756.505				
CAMIRA CREEK	756.900	60	60	..	..
	757.150	..	..	80	85
	757.220	70	75	..	..
	757.310	..	..	60	60
	757.820	60	65	..	..
	758.460	100	105	60	65
	758.930	..	..	100	105

Location of Speed signs (continued)

LOCATION	KILO-METRAGE	DOWN		UP	
		NORM	XPT	NORM	XPT
	759.110	115	120	..	..
	761.200	..	..	115	120
	761.780	80	85	..	..
	763.090	..	..	80	85
	763.330	70	75	..	..
	764.040	..	..	70	75
	764.160	115	125	..	..
	769.270	..	..	115	125
	769.560	80	90	..	..
	772.300	..	..	80	90
	772.600	115	130	..	..
	774.740	..	..	115	130
	775.000	95	100	..	..
	776.000	..	..	95	100
RAPPVILLE	776.226				
	776.396	..	..	90	100
	776.700	100	105	..	..
	781.540	..	..	100	105
	781.840	80	90	..	..
	782.220	..	..	80	90
	782.520	115	130	..	..
	786.120	..	..	115	130
	786.410	80	90	..	..
	787.170	..	..	80	90
	787.470	115	125	..	..
	793.600	115	120	115	125
LEEVILLE	793.666				
	794.900	..	..	115	120
	795.200	110	115	..	..
	795.980	..	..	110	115
	796.240	80	85	..	..
	800.650	..	..	80	85
	800.800	100	105	..	..
	804.090	75	80	100	105
CASINO	805.077				
	806.090	..	..	75	80
	807.140	70	75	..	..
	808.170	..	..	70	75
	808.400	90	95	..	..
Namoona Ballast Siding	809.993				
	810.200	..	..	90	95
	810.410	85	90	..	..
	812.200	..	..	85	90
	812.540	80	85	..	..
	814.000	..	..	80	85
	814.370	75	80	..	..
	816.240	..	..	75	80
	816.480	115	125	..	..
	824.040	95	110	115	125
	824.400	70	80	95	110
	824.990	..	..	70	80
	825.310	115	125	..	..
	827.830	..	..	115	125
	828.050	70	75	..	..
	828.890	..	..	70	75
	829.130	60	65	..	..
KYOGLE	833.798				
	834.550	..	..	60	65
	834.770	115	125	..	..
KYOGLE LOOP	837.110				
	838.970	..	..	115	125
	839.330	80	85	..	..
	839.660	..	..	80	85
	839.940	70	80	..	..
	840.520	80	85	70	80
	841.530	..	..	80	85
	841.850	115	125	..	..
	846.150	..	..	115	125
	846.350	70	75	..	..
	849.500	90	95	70	75
	850.805	..	..	90	95
	850.825	70	75	..	..
	859.390	..	..	70	75
	859.710	60	65	..	..
LOADSTONE	863.440				
	875.988				
NSW/QLD BORDER					
	885.060	..	..	60	65
	885.280	65	70	..	..
	886.230	..	..	65	70
	886.550	75	80	..	..
	887.655	..	..	75	80
GLENAPP	887.705				
	887.760	65	70	..	..
	888.950	70	75	65	70
	891.660	..	..	70	75
	891.880	85	90	..	..
	895.160	..	..	85	90
	895.400	65	70	..	..
	900.990	100	105	65	70
	901.800	..	..	100	105
	902.200	115	125	..	..
	904.250	..	..	115	125
	904.650	100	110	..	..
	912.980	..	..	100	110
	913.380	115	120	..	..
	919.030	100	110	115	120
	919.360	..	..	100	110
	919.760	115	125	..	..
Qld Blue Metal Sdg	922.600				
	922.820	100	110	115	125
	925.600	90	100	100	110
BROMELTON	931.714				
	929.800	115	125	90	100
	934.850	100	110	115	125
	940.260	..	..	100	110
	940.540	90	100	..	..
	941.000	..	..	90	100
	941.270	100	110	..	..
	945.830	115	125	100	110
	952.210	..	..	115	125
	952.450	90	100	..	..
	953.880	115	125	90	100
GREENBANK	955.552				

Location of Speed signs (continued)

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT	LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
	958.670	95	100	115	125						
	962.150	..	..	95	100						
	962.390	90	95	..	..				
	963.450	..	..	90	95						
	963.820	100	105	..	..				
	967.000	..	..	100	105						
	967.340	90	95	..	..				
	971.640	100	105	..	..				
	972.160	..	..	90	95						
ACACIA RIDGE	974.693										
	Refer to Queensland for speed signs between Acacia Ridge and Roma Street										
ROMA ST	986.737										

Station Data

Station	Kilo-metrage	Signal box Status	Hours of signal box	Facilities
Broadmeadow	162.935	C	Controlled from Broadmeadow SCC	
Woodville Junction Signal Box	163.690	A	Always	
Islington Junction Signal Box	164.647	A	Always	
Waratah	165.964			P
Hanbury Junction Signal Box	167.934	A	Always	
Warabrook	168.685			P
Sandgate	170.509			P
Hexham	175.530			P
Tarro	178.178			P
Beresfield	179.806			P
Thornton	182.194	C	Controlled from Maitland	P
Metford	185.117			P
Victoria Street	187.919			P
East Maitland	188.831			P
High Street	191.409			P
Maitland	192.548	A	Always	P
Telarah	194.739	C	Controlled from Broadmeadow SCC	P
Mindaribba	203.462	C	Controlled from Broadmeadow SCC	P
Paterson	213.224	C	Controlled from Broadmeadow SCC	P
Martins Creek	218.532	C	Controlled from Broadmeadow SCC	P
Kilbride	223.472	C	Controlled from Broadmeadow SCC	
Hilldale	226.372			P
Wallarobba	231.673			P
Wallarobba Loop	234.000	C	Controlled from Broadmeadow SCC	
Wiraguila	237.972			P
Dungog	245.199	C	Controlled from Broadmeadow SCC	P
Monkerai	254.011	C	Controlled from Broadmeadow SCC	
Stroud Road	266.545	C	Controlled from Broadmeadow SCC	
Weismantels	278.109		Follow on location only	
Craven	290.517	C	Controlled from Broadmeadow SCC	
Stratford Balloon Loop Junction	291.843	C	Controlled from Broadmeadow SCC	
Berrico	301.887	C	Controlled from Broadmeadow SCC	
Gloucester	309.276	C	Controlled from Broadmeadow SCC	P

 Station Data (continued)

Station	Kilo-metrage	Signal box Status	Hours of signal box	Facilities
Bulliac	324.024	C	Controlled from Broadmeadow SCC	
Bundook	334.492	C	Controlled from Broadmeadow SCC	
Mt George	342.116	C	Controlled from Broadmeadow SCC	
Killawarra	360.273	C	Controlled from Broadmeadow SCC	
Wingham	367.055	C	Controlled from Broadmeadow SCC	P
Taree	378.602	C	Controlled from Broadmeadow SCC	P
Lansdowne Engineering Siding	387.872		Release from Broadmeadow SCC	
Melunga	392.267	C	Controlled from Broadmeadow SCC	
Cooperbrook	403.555		Follow on location only	
Johns River	417.801	C	Controlled from Broadmeadow SCC	
Kendall	433.011	C	Controlled from Broadmeadow SCC	
Kerewong	446.033	C	Controlled from Broadmeadow SCC	
Wauchope	455.005	C	Controlled from Broadmeadow SCC	P
Telegraph Point	472.470	C	Controlled from Broadmeadow SCC	
Kundabung	487.197	C	Controlled from Broadmeadow SCC	
Kempsey	503.572	C	Controlled from Broadmeadow SCC	P
Tambaran	520.562	C	Controlled from Broadmeadow SCC	
Eungai	534.556	C	Controlled from Broadmeadow SCC	
Macksville	552.418	C	Controlled from Broadmeadow SCC	P
Nambucca Heads	565.082	C	Controlled from Broadmeadow SCC	P
Urunga	580.918			P
Raleigh	586.455	C	Controlled from Broadmeadow SCC	
Bonville	596.494	C	Controlled from Broadmeadow SCC	
Sawtell	600.668			P
Boambee Beach	606.790	C	Controlled from Broadmeadow SCC	
Coffs Harbour	607.814			P
Landrigans	619.709	C	Controlled from Broadmeadow SCC	
Coramba	627.960	C	Controlled from Broadmeadow SCC	
Nana Glen	639.529	C	Controlled from Broadmeadow SCC	
Glenreagh	651.881	C	Controlled from Broadmeadow SCC	
Kungala	664.460	C	Controlled from Broadmeadow SCC	
Braunstone	683.269	C	Controlled from Broadmeadow SCC	
Grafton City	695.748	C	Controlled from Broadmeadow SCC	P
Grafton	698.848	C	Controlled from Broadmeadow SCC	
Rocla Sdg				S
Koolkhan	706.750		Release from Broadmeadow SCC	
Kyarran	713.636	C	Controlled from Broadmeadow SCC	
Lawrence Road	738.660	C	Controlled from Broadmeadow SCC	
Banyabba	742.866	C	Controlled from Broadmeadow SCC	
Camira Creek	756.505	C	Controlled from Broadmeadow SCC	
Rappville	776.226	C	Controlled from Broadmeadow SCC	
Leeville	793.666	C	Controlled from Broadmeadow SCC	
Casino	805.077	C	Controlled from Broadmeadow SCC	ISI, P
Namoona Ballast Siding	809.993			ISI, S
Kyogle	833.798			P
Kyogle Loop	837.110	U	Unattended	
Loadstone	863.440	U	Unattended	
NSW/QLD Border	875.988			
Glenapp	887.705	U	Unattended	
Qld Blue Metal Sdg	922.600			ISI, S
Bromelton	931.714	U	Unattended	
Greenbank	955.552	U	Unattended	
Acacia Ridge	973.693		Queensland control	
Clapham	978.743		Queensland control	
Yeerongpilly	979.787		Queensland control	
Brisbane Transit Centre	986.737		Queensland control	P

Out-of-gauge steel trains

Out-of-gauge steel trains may operate between Broadmeadow Yards and Clapham subject to the conditions shown for Out-of-gauge steel trains contained in the **General Instruction Pages** section.

1. To avoid excessive delays between **Telarah and Clapham (Qld)** only a train **NOT** conveying passengers, standing at or proceeding through a block station or interlocking on an adjacent track, may pass or be passed by the special train conveying the Out-of-gauge steel at a speed not exceeding **10 km/hr**.

2. In exception to the conditions shown in clause 1 between **Telarah and Clapham (Qld)**, the wide Out-of-gauge steel train may pass or be passed by a train conveying passengers or a freight train at a speed not exceeding **25 km/hr** at the locations shown below.

Broadmeadow to Maitland

1. Between Broadmeadow and crossover 39W Down Main Woodville Junction, the Out-of-gauge steel train on the Down Main and another train on the Up Relief Road may traverse simultaneously.

2. Between Islington Junction Signal M102/7 and C102/7 and the Down Main Second Home Signal Maitland, trains may traverse the Up and Down Coal Roads whilst the Out-of-gauge train is traversing the Down Main line.

3. Alternatively the Out-of-gauge steel train traversing the Down Coal Road may be passed by trains traversing the Up and Down Main line.

Telarah to Clapham

Telarah	Loop line between Signal No 276 and No 299
Dungog	Island Platform
Stroud Road	Loop line
Gloucester	Loop line
Killawarra	Loop line
Taree	Loop line
Kendall	Loop line
Wauchope	Loop line
Telegraph Point	Loop line
Kempsey	Loop line
Eungai	Loop line
Macksville	Loop line
Nambucca Heads	Loop line
Boambee Beach	Loop line
Glenreagh	Loop line
Kungala	Loop line
Grafton City	Loop line
Grafton	No. 1 and No. 2 Down Reception Siding
Lawrence Road	Loop line
Camira Creek	Loop line
Casino	Loop line
Kyogle Loop	Loop line
Loadstone	Loop line
Glenapp	Loop line
Bromelton	Loop line

 **Advisory Speedsigns**

Special advisory Speedsigns have been positioned approaching signals at the locations shown below. Drivers of trains (except XPT's / EMU's) are required to regulate the speed of their train at such locations to ensure that before reaching the signal indicated the speed is not in excess of that figure shown on the special advisory board. If at any point approaching the signal it is seen to be exhibiting a full clear indication, normal track speed for the train concerned may be resumed.

Location	Signal no	Speed shown on board
172.580	Down Automatic, Hexham (M107.3)	90
172.580	No 56 Down Accept, Hexham (C107.3)	90
175.246	No 12 Up Starting, Hexham (M108.6)	80
175.246	No 11 3rd Up Home, Hexham (C108.6)	80
176.800	Down Automatic, Tarro (M109.9)	80
176.800	Down Automatic, Tarro (C109.9)	80
179.665	Down Automatic (M111.9)	85
179.665	Down Automatic (C111.9)	85
182.080	Up Automatic (M113.0)	90
182.080	Up Starting (C113.0)	90
186.100	Up Automatic (M115.4)	85
186.100	Up Automatic (C115.4)	85
188.636	Up Automatic (M117.0)	75
188.636	Up Automatic (C117.0)	75
190.650	Up Automatic (C118.4)	80
191.530	Up Automatic (C118.8)	80
202.005	Down Distant Mindaribba	65
307.262	Down Distant Gloucester	55
404.953	Up Distant Coopernook	55
506.053	Up Distant Kempsey	70
554.558	Up Distant Macksville	65
681.614	Down Distant Braunstone	70

Maximum Speed of Locomotives and Rolling Stock

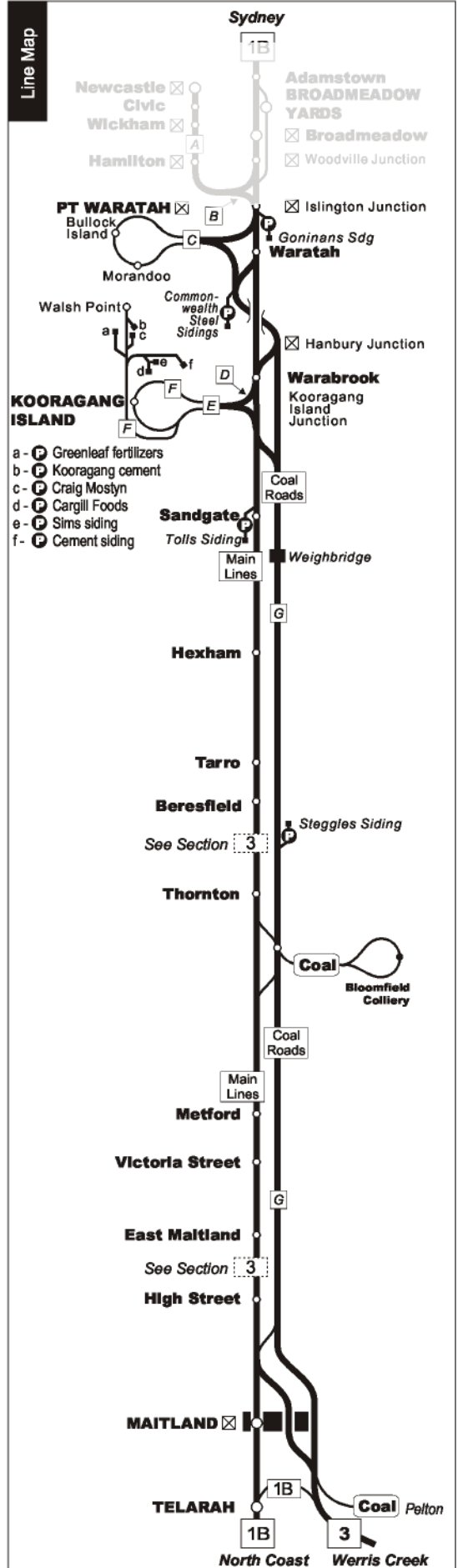
SECTIONS	Maximum Speed of Locomotives and Rolling Stock							Notes
	Woodville Jun - Newcastle	Hamilton - Islington Junction	Islington Junction - Port Waratah	Kooragang Island Jun - Hunter River Bridge + North & South Forks	Hunter River Bridge - 170.590km	Kooragang Island Jun - 176.225km and yard areas	Down & Up Coal Road Waratah - Maitland	
Class of Track	1	1	2	2	1C	1C	1XC	
Line Map reference	A	B	C	D	E	F	G	
Locomotives								
Multiple Locos	4	4	4	4	4	4	4	
S1	20(b)	20	15	25	60	25	80	
S2	20(b)	20	15	25	60	25	100	
S3	20(b)	20	15	25	60	25	115	
S4	20(b)	20	15	25	60	25	115	
S5	80	40	15	25	60	25	115	
S6	80	40	15	25	60	25	115	
S7	80	40	15	25	60	25	90	
S8	80	40	15	25	60	25	115	
S9	80	40	15	25	80	25	115	
S10	80	40	15	25	60	25	115	
S11	80	40	15	25	60	25	100	
S12	80	40	15	25	60	25	100	
S13	80	40	15	25	80	25	100	
Freight								
Class A	80	40	15	25	80	25	115	
Class B	80	40	15	25	80	25	100	
Class C	80	40	15	25	80	25	80	
Class D	65	40	15	25	60	25	65	
Class E	80	40	15	25	60	25	80	
Class F	65	40	15	25	65	25	80	
Class G	N/A	N/A	15	25	40	25	60	
Passenger								
XPT	80	40	15	25	80	25	160	
Xplorer	80	40	15	25	80	25	145	
Diesel Train	80	40	15	25	80	25	115	
Loco Hauled	80	40	15	25	80	25	115	
Accident Cranes								
70 tonne	60	40	15	25	--	25	60	
110 tonne	80	40	15	25	80	25	115	
120 tonne	50	40	15	25	--	25	50	
Notes			(a)	(a)				

NOTES:

- (a) C class 100 tonne coal hoppers permitted on this line.
- (b) Woodville Junction to Hamilton Junction ONLY

Safeworking System

Broadmeadow to Woodville Junction	Down and Up Main - Rail Vehicle Detection
Woodville Junction to Hamilton	Down and Up Relief - Rail Vehicle Detection
Hamilton to Newcastle	Rail Vehicle Detection
Hamilton to Islington Junction	Rail Vehicle Detection
Islington Junction to Hanbury Junction	Rail Vehicle Detection
Hanbury Junction to Maitland	Rail Vehicle Detection
Islington Junction to Port Waratah	Rail Vehicle Detection
Kooragang Isl Jun to Kooragang Island	Rail Vehicle Detection
Kooragang Island to Walsh Point	Yard working



Location of Speedsigns

Broadmeadow to Maitland (via Main) See SECTION 1B

Broadmeadow to Newcastle

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
BROADMEADOW	162.395				
	163.600	..	..	95	100
	163.670	X30	X30	X30	X30
WOODVILLE JUNCTION	163.685				
WOODVILLE JUNCTION SIGNAL BOX	163.690				
	163.910	40	..	..	..
	164.310	X25	..	..	..
	164.330	..	..	40	..
	164.410	80	..	X25	..

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
HAMILTON	164.633				
WICKHAM	165.934				
CIVIC	167.021				
	167.670	..	..	80	..
	167.750	30	..	..	..
NEWCASTLE	168.103				

Waratah – Maitland Coal Roads

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
WARATAH	164.000	40	45	..	..
	165.964				
	166.080	X25	X25	..	..
	166.290	..	..	X25	X25
	167.170	40	45	..	..
HANBURY JUNCTION	167.658				
	167.670	..	..	40	45
	167.755	100	110	..	..
	168.185	..	..	110	110
	168.575	115	135	..	..
	170.000	..	..	115	135
	170.340	100	110	..	..
	170.800	..	..	100	110
	172.000	..	..	20	110
	172.300	40	40	..	..
	172.400	..	..	20	20
	172.630	..	..	115	120
	172.800	40	160	..	..
	173.900	115	160	..	..
	174.200	..	..	115	160
HEXHAM	175.530				
* For Up weighbridge	176.000	..	..	*80	160
	176.395	..	..	115	160
	177.180	115	140	..	..
	177.890	..	..	115	140

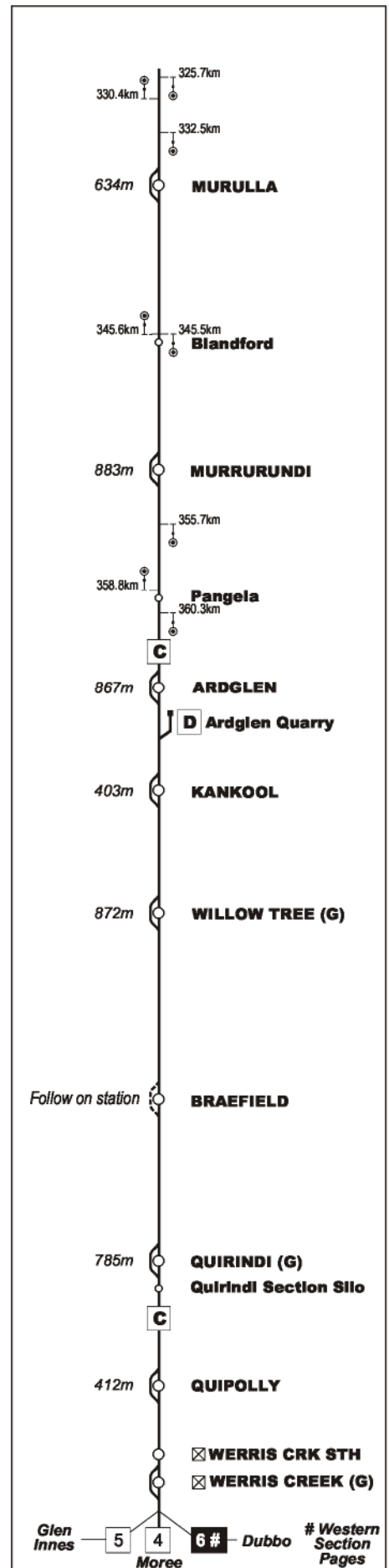
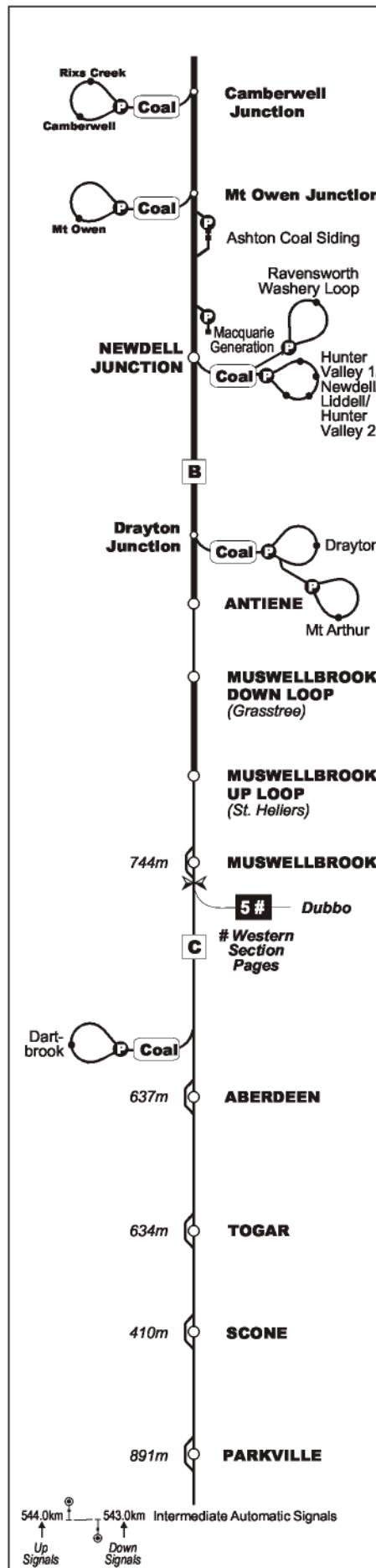
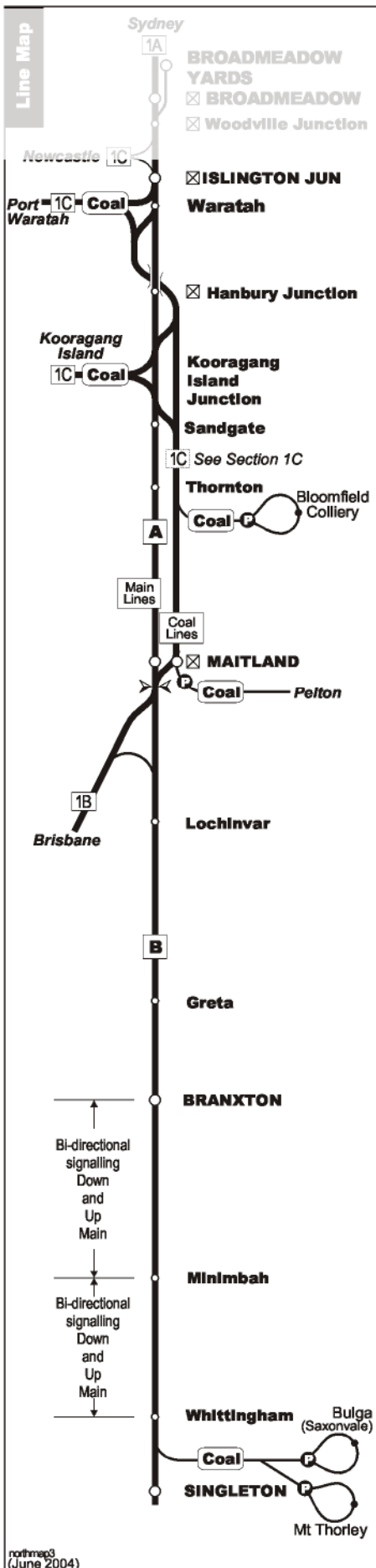
LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
	178.115	90	95	..	..
	178.390	..	..	90	95
	178.520	115	140	..	..
	181.600	..	..	115	140
	181.940	65	70	..	..
THORNTON	182.194				
	182.500	..	..	65	70
	182.740	115	160	..	..
	185.370	80	80	..	..
	186.200	..	..	115	160
	186.640	115	125	80	80
	187.460	..	..	100	115
	187.760	95	100	..	..
	188.380	..	..	85	95
	188.700	110	115	..	..
	190.600	..	..	90	100
	191.800	50	55	110	115
	192.050	X25	X25	..	..
MAITLAND	192.548				
	192.700	..	..	50	55
	192.740	25	..	25	..
	192.800	X25	..	..	..
	193.320	25	..	..	..
	193.400	..	..	50	..

Station Data

Station	Kilo-metrage	Signal box Status	Hours of signal box	Facilities
See SECTION 1B for details Broadmeadow to Maitland				
Hamilton	164.633	A	Always	P
Wickham	165.934	A	Always	P
Civic	167.021			P
Newcastle	168.103	A	Always	P

Broadmeadow - Werris Creek

section 3



Maximum Speed of Locomotives and Rolling Stock

(Refer to SECTION 1C for COAL ROADS)							(Refer to SECTION 1C for COAL ROADS)							
SECTIONS							SECTIONS							
Broadmeadow - Maitland - DOWN MAIN							Broadmeadow - Maitland - DOWN MAIN							
Maitland - Waratah - UP MAIN							Maitland - Waratah - UP MAIN							
Waratah - Brdmeadow - UP MAIN							Waratah - Brdmeadow - UP MAIN							
Maitland - Muswellbrook							Maitland - Muswellbrook							
Muswellbrook - Werris Creek							Muswellbrook - Werris Creek							
Ardglen Quarry Siding							Ardglen Quarry Siding							
Notes							Notes							
Class of Track	1	1XC	1	1XC	1	S	Class of Track	1	1XC	1	1XC	1	S	
Line Map reference	A	B	C	D	E	F	Line Map reference	A	B	C	D	E	F	
Locomotives							Freight							
Multiple Locos	4	4	4	4	4	4	Class A	115	115	115	115	115	20	
S1	80	80	80	80	60	N/A (c)	Class B	100	100	100	100	100	20	
S2	100	100	100	100	100	N/A	Class C	80	80	80	80	80	20	
S3	115	115	115	115	115	N/A	Class D	65	65	65	65	65	20	
S4	115	115	115	115	115	N/A	Class E	80	80	80	80	80	20	
S5	115	115	115	115	115	20	Class F	65	80	65	80	65	N/A	
S6	115	115	115	115	115	20	Class G	N/A	60	N/A	60	40	N/A (a,b)	
S7	90	90	90	90	90	20								
S8	115	115	115	115	115	20								
S9	115	115	115	115	115	20	Passenger							
S10	115	115	115	115	115	20	XPT	160	160	160	160	160	N/A	
S11	80	80	80	80	80	20	Xplorer	145	145	145	145	145	N/A	
S12	100	100	100	100	100	20	Diesel Train	115	115	115	115	115	N/A	
S13	100	100	100	100	100	20	Loco Hauled	115	115	115	115	115	N/A	
							Accident Cranes							
							70 tonne	60	60	60	60	60		
							110 tonne	115	115	115	115	115		
							120 tonne	50	50	50	50	50		
							Notes							

NOTES:

(a) Under **SECTION E - MUSWELLBROOK - WERRIS CREEK**, G Class vehicles loaded to 120 tonnes, are only permitted to run between Dartbrook Coal loader and Muswellbrook.

(b) Up Main line Maitland to Hanbury Junction **ONLY**.)

(c) Under **SECTION E** 90 Class locomotives are only permitted to run between Muswellbrook and Dartbrook Coal Loader.

Safeworking System

Broadmeadow to Branxton
 Branxton to Minimbah
 Minimbah to Whittingham
 Whittingham to Werris Creek South
 Werris Creek South to Werris Creek

Rail Vehicle Detection
 Rail Vehicle Detection (Bi - directional)
 Rail Vehicle Detection (Bi - directional)
 Rail Vehicle Detection
 Staff and Ticket

UP	LOADS & CONDITIONS SECTIONS	LOCO- MOTIVE CLASS = L	LOCOMOTIVES					TRAIN DATA		NOTES
			SINGLE	DOUBLE	TRIPLE	QUAD	QUIN	VEHICLE CLASS	SECT RUN TIMES	
			LOADS TONNES							
1	WERRIS CREEK - BRDMEADOW/MORANDOO	L2	1300	2600	3900	5200	--	AB	B1	
2	WERRIS CREEK - BRDMEADOW/MORANDOO	L3/L4	970	1940	2910	3880	--	AB	B1	
3										
4	WERRIS CREEK - BRDMEADOW/MORANDOO	L2	1300	2600	3900	5200	--	ABCE	C1	
5										
6	WERRIS CREEK - BRDMEADOW/MORANDOO	L3	1200	2400	3600	4800	--	ABCE/ *D	C2/ *D1	
7	WERRIS CREEK - BRDMEADOW/MORANDOO	L4	1130	2260	3390	4520	--	ABCE/ *D	C2/ *D1	
8	WERRIS CREEK - BRDMEADOW/MORANDOO	L5	1056	2112	3168	4224	--	ABCE/ *D	C2/ *D1	
9	WERRIS CREEK - BRDMEADOW/MORANDOO	L6	926	1852	2778	3704	--	ABCE/ *D	C2/ *D1	
10	WERRIS CREEK - BRDMEADOW/MORANDOO	L7	909	1818	2727	3636	--	ABCE/ *D	C2/ *D1	
11	WERRIS CREEK - BRDMEADOW/MORANDOO	L8	822	1644	2466	3288	--	ABCE/ *D	C2/ *D1	
12	WERRIS CREEK - BRDMEADOW/MORANDOO	L9	750	1500	2250	3000	--	ABCE/ *D	C2/ *D1	
13	WERRIS CREEK - BRDMEADOW/MORANDOO	L10	725	1450	2175	2900	--	ABCE/ *D	C2/ *D1	
14	WERRIS CREEK - BRDMEADOW/MORANDOO	L11	640	1280	1920	2560	--	ABCE/ *D	C2/ *D1	
15	WERRIS CREEK - BRDMEADOW/MORANDOO	L12	615	1230	1845	2460	--	ABCE/ *D	C2/ *D1	
16	WERRIS CREEK - BRDMEADOW/MORANDOO	L13	310	620	930	1240	--	ABCE/ *D	C2/ *D1	
17										
18	MUSWELLBROOK - BRDMEADOW/MORANDOO	L2	2160	4320	6480	--	--	ABC	C3	
19	WERRIS CREEK - BRDMEADOW/MORANDOO	L13	410	820	1230	1640	--	ABCE/ *D	C3/ *D2	
20										
21	WERRIS CK - WILLOW TREE MURRURUNDI - BRDMEADOW/MORANDOO	L3	2111	4222	6333	--	--	ABCE/ *D	C4/ *D3	1
22	WERRIS CK - WILLOW TREE MURRURUNDI - BRDMEADOW/MORANDOO	L4	1995	3990	5985	--	--	ABCE/ *D	C4/ *D3	1
23	WERRIS CK - WILLOW TREE MURRURUNDI - BRDMEADOW/MORANDOO	L5	1872	3744	5616	--	--	ABCE/ *D	C4/ *D3	1
24	WERRIS CK - WILLOW TREE MURRURUNDI - BRDMEADOW/MORANDOO	L6	1651	3302	4953	--	--	ABCE/ *D	C4/ *D3	1
25	WERRIS CK - WILLOW TREE MURRURUNDI - BRDMEADOW/MORANDOO	L7	1610	3220	4830	--	--	ABCE/ *D	C4/ *D3	1
26	WERRIS CK - WILLOW TREE MURRURUNDI - BRDMEADOW/MORANDOO	L8	1478	2956	4434	--	--	ABCE/ *D	C4/ *D3	1
27	WERRIS CK - WILLOW TREE MURRURUNDI - BRDMEADOW/MORANDOO	L9	1346	2692	4038	5384	--	ABCE/ *D	C4/ *D3	1
28	WERRIS CK - WILLOW TREE MURRURUNDI - BRDMEADOW/MORANDOO	L10	1299	2598	3897	5196	--	ABCE/ *D	C4/ *D3	1
29	WERRIS CK - WILLOW TREE MURRURUNDI - BRDMEADOW/MORANDOO	L11	1158	2316	3474	4632	--	ABCE/ *D	C4/ *D3	1
30	WERRIS CK - WILLOW TREE MURRURUNDI - BRDMEADOW/MORANDOO	L12	1112	2224	3336	4448	--	ABCE/ *D	C4/ *D3	1
31	WERRIS CK - WILLOW TREE MURRURUNDI - BRDMEADOW/MORANDOO	L13	776	1552	2328	3104	--	ABCE/ *D	C4/ *D3	1

(1) These loads require assistance from Willow Tree to Murrurundi. To calculate the permissible load for a given locomotive combination reference must be made to the information published in Section 2 page 3 in this manual to determine the type and number of assistant locomotives required. Loads for mixed locomotive combinations that do not require reduction can be calculated as follows –

Example line 22, 2 x L4 category hauling 3990 tonnes.

Ruling grade between Willow Tree and Murrurundi is 1:40 therefore the load for 2 x L4 category locomotives is 2260 tonnes leaving 1730 tonnes residue. Additional locomotives would be a single L4 category(1130t) and a single L9 category (750t). Since these locomotives can be marshalled together without any load reduction a (ref. TOC manual Section 2 **General Instructions** page 3) then the new locomotive consist is 3 x L4 + 1 x L9.

UP	SECTIONAL RUNNING TIMES										FULL SECTIONAL LOADS													GRADE			
	B1	C1	C2	C3	C4	D1	D2	D3	Loco	LOCOMOTIVE CATEGORIES = L																	
										L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13					
WERRIS CREEK	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#
WERRIS CRK. STH	2	2	2	2	3	2	2	3	1	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	1:261					
QUIPOLLY	9	9	10	11	12	11	11	12	6	2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820	1:82					
QUIRINDI	7	8	9	11	14	11	13	15	6	2289	2111	1995	1872	1651	1610	1478	1346	1299	1158	1112	776	1:75					
#BRAEFIELD	5	6	6	7	7	7	8	9	4	2289	2111	1995	1872	1651	1610	1478	1346	1299	1158	1112	776	1:75					
WILLOW TREE	7	8	9	9	10	10	11	12	6	2607	2405	2274	2136	1885	1837	1689	1539	1484	1325	1272	887	1:88					
KANKOOL	7	8	10	14	%	10	14	&	6	1300	1200	1131	1056	926	909	822	750	725	640	615	410	1:40					
ARDGLEN	13	13	17	20	%	17	20	&	7	1300	1200	1131	1056	926	909	822	750	725	640	615	410	1:40					
MURRURUNDI	13	13	13	14	%	14	14	&	11	3398	3138	2968	2792	2467	2400	2216	2018	1944	1741	1670	1166	1:127					
MURULLA	9	10	10	10	11	12	12	13	8	2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820	1:82					
PARKVILLE	11	13	14	14	14	16	17	17	11	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	DG					
SCONE	6	7	7	7	7	7	7	7	6	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	DG					
TOGAR	6	7	7	7	7	8	8	8	5	3096	2858	2702	2541	2245	2185	2014	1835	1768	1582	1518	1059	1:112					
ABERDEEN	4	5	5	5	5	6	6	6	4	2607	2405	2274	2136	1885	1837	1689	1539	1484	1325	1272	887	1:87					
DARTBROOK JCT	3	3	4	4	4	4	4	5	3	2881	2659	2514	2363	2086	2032	1871	1704	1643	1469	1410	984	1:101					
MUSWELLBROOK	6	7	7	7	7	8	8	8	6	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	Level					
ST HELIERS	7	7	7	8	9	8	8	9	6	3940	3640	3443	3242	2866	2786	2576	2346	2260	2026	1943	1356	1:154					
GRASS TREE	4	4	4	4	5	4	4	5	3	2881	2659	2514	2363	2086	2032	1871	1704	1643	1469	1410	984	1:102					
ANTIENE	6	6	7	8	10	7	9	11	5	2881	2659	2514	2363	2086	2032	1871	1704	1643	1469	1410	984	1:100					
DRAYTON JCT.	2	2	2	2	2	2	2	2	1	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	Level					
NEWDELL JCT.	6	8	8	8	8	9	10	10	6	2536	2339	2211	2077	1833	1786	1642	1495	1442	1288	1236	862	1:85					
MT.OWEN JCT.	5	7	7	7	7	8	8	9	5	2536	2339	2211	2077	1833	1786	1642	1495	1442	1288	1236	862	1:86					
CAMBERWELL JCT.	6	6	7	8	10	8	10	12	5	2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820	1:82					
SINGLETON	6	7	7	8	9	8	9	10	5	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	1:251					
WHITTINGHAM	3	4	4	4	4	5	5	5	3	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	DG					
MINIMBAH X/OVER	6	7	8	9	11	9	11	14	6	2414	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820	1:80					
BRANXTON	7	8	9	9	10	10	11	12	6	2881	2659	2514	2363	2086	2032	1871	1704	1643	1469	1410	984	1:100					
MAITLAND	16	19	20	22	25	23	25	27	15	2881	2659	2514	2363	2086	2032	1871	1704	1643	1469	1410	984	1:101					
THORNTON	11	11	12	13	13	13	13	14	8	2990	2760	2609	2453	2167	2109	1944	1770	1707	1526	1465	1022	1:105					
HEXHAM	4	5	5	5	5	6	6	6	4	2946	2720	2571	2418	2135	2079	1915	1744	1681	1503	1443	1007	1:103					
K'GANG NTH JCT	4	5	5	5	5	6	6	6	4	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	Level					
K'GANG STH JCT	1	1	1	1	1	1	1	1	1	2881	2659	2514	2363	2086	2032	1871	1704	1643	1469	1410	984	1:100					
WARABROOK X/OVER	1	1	1	1	1	1	1	1	1	2654	2449	2315	2175	1920	1870	1720	1567	1511	1350	1295	904	1:90					
HANBURY JCT	1	1	1	1	1	1	1	1	1	2881	2659	2514	2363	2086	2032	1871	1704	1643	1469	1410	984	1:100					
WARATAH	1	1	1	1	2	2	2	2	1	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	Level					
XYZ X/OVER	1	1	1	1	1	1	1	1	1	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	Level					
ISLINGTON JCT	1	1	1	1	1	1	1	1	1	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	Level					
WOODVILLE JCT	1	1	1	1	1	1	1	1	1	4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	Level					
BROADMEADOW	3	3	3	3	3	3	3	3	2	4426	4090	3869	3645	3223	3132	2899	2641	2542	2281	2188	1527	1:185					
WARATAH										#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	
PORT WARATAH /MORANDOO										4624	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600	Level					

Follow on location.
 % Refer to Full Sectional load running times C2/C3
 & Refer to Full Sectional load running times D1/D2

Location of Speed signs

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
For speed sign location and other details between BROADMEADOW AND MAITLAND see SECTION 1B For Coal road Speed signs see SECTION 1C					
MAITLAND	192.340	25	25	..	..
	192.548				
	192.670	..	..	25	25
	192.950	..	..	X25	..
	192.980	..	125	..	..
	193.400	115	130	..	..
	201.950	..	..	115	130
	202.250	100	115	..	..
	202.420	..	..	100	115
	202.601				
LOCHINVAR	204.290	115	125	..	..
	204.860	..	..	115	130
	206.290	..	..	95	110
	206.590	115	135	..	..
	210.660	115	125	..	..
	210.808				
GRETA	211.400	..	..	115	125
	211.700	105	110	..	..
	211.810	..	..	105	115
	212.110	115	135	..	..
	214.120	..	..	115	130
	215.184	..	..	X70	X35
BRANXTON	215.554				
	215.395	115	140	..	..
Down sign on Up Main	217.000	..	..	115	140
Down sign on Up Main	217.300	115	140	..	..
Up sign on Down Main	218.380	..	..	115	135
	218.680	105	110	..	..
	219.880	..	..	115	125
Down sign on Up Main	220.180	95	110	..	..
	220.850	..	..	95	110
Down sign on Up Main	221.150	105	120	..	..
Up sign on Down Main	221.560	..	..	105	110
	221.610	..	..	105	120
	221.860	115	125	..	..
Down sign on Up Main	221.910	115	130	..	..
	224.020	..	..	115	130
Up sign on Down Main	224.020	..	..	115	125
	224.320	95	105	..	..
Down sign on Up Main	224.320	100	115	..	..
	225.430	..	..	100	115
Up sign on Down Main	225.430	..	..	95	105
Down sign on Up Main	225.600	X70	X85	..	..
	225.720	X70	X85	..	..
	225.730	115	130	..	..
Down sign on Up Main	225.730	105	125	..	..
Up sign on Down Main	225.755	..	..	X70	X85
	225.875	..	..	X70	X85
	227.149	..	..	105	125
Down sign on Up Main	227.449	115	130	..	..
	231.300	..	..	115	130
WHITTINGHAM	233.999				
	234.240	X75	..	..	..
Up sign on Down Main	234.270	..	..	115	130
Down sign on Up Main	234.288	X75	..	..	..
	234.421	X55	..	..	..
	234.761	..	..	X75	..

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT	
SINGLETON	235.430	115	130	..	..
	237.500	..	..	115	150
	238.350	X25	X25	..	..
	238.885					
	238.980	..	..	115	130
	239.050	..	..	X25	X25
	239.280	100	110	..	..
	239.820	..	..	100	120
	240.430	75	85	..	..
	241.590	..	..	95	105
CAMBERWELL JCT	241.890	100	110	..	..
	243.500	90	100	..	..
	244.800	..	..	105	115
	245.810	..	..	85	95
	246.110	80	90	..	..
	246.934					
	247.670	100	105	..	..
	250.610	..	..	80	90
	250.920	..	110	..	..
	252.740	90	95	..	..
MT OWEN JCTCTION	253.070	..	..	90	100
	253.925					
	254.500	115	130	..	..
NEWDELL JCTCTION	256.210	100	110	..	..
	258.910	..	..	115	130
	259.770	..	..	110	115
	260.070	115	135	..	..
	262.275	X35	..	..	..
	262.305					
	262.350	X35	..	..	..
	Up sign on Down Main	262.370	X25	..
		272.810	115	150
	DRAYTON JCTCTION	272.010				
ANTIENE	272.300	110	120	..	..
	273.600	..	..	105	115
	273.900	..	..	80	90
	273.910	80	90	..	..
	273.941					
	274.480	..	..	X50	X55
	275.520	..	..	80	90
	275.820	90	95	..	..
	276.170	..	..	90	95
	276.460	100	105	..	..
GRASSTREE	278.740	..	..	100	105
	279.040	115	130	..	..
	280.350	..	..	115	130
	280.600	X50	X55	..	..
	280.740	..	..	X50	X55
	280.909					
	281.000	115	130	..	..
	283.059	..	..	115	130
	283.993					
	ST HELIERS	284.650	50	115
*On Loop		284.700	*X50	*X55
		284.830	X50	X55
		285.250	50	95
		287.350	50	95
		287.650	50	75

Location of Speedsigns

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
	287.960	X50	X55	..	..
	288.020	70	75	..	..
*On Loop	288.110	..	..	*X50	*X55
	288.560	..	..	70	75
MUSWELLBROOK	288.783				
	288.850	35	45	..	..
*On Loop	288.870	*X25	*X25	..	..
	289.200	..	..	35	45
	289.670	105	115	..	..
	291.750	..	..	105	115
	292.050	90	95	..	..
	292.670	..	..	90	95
	292.900	115	160	..	..
	294.800	..	..	115	160
	295.110	80	95	..	..
	295.430	100	110	80	95
DARTBROOK JCTCTON	296.550				
	296.530	..	..	100	110
	296.830	115	160	..	..
ABERDEEN	300.733				
	301.900	..	..	115	160
	302.200	110	125	..	..
	302.250	..	..	X25	..
	302.580	..	..	110	125
	302.880	115	160	..	..
	306.970	..	..	115	160
TOGAR	307.107				
	307.720	115	160	..	..
	311.680	..	..	115	160
	311.980	115	120	..	..
	312.140	..	..	115	145
	313.160	..	..	110	110
	313.460	75	85	..	..
	313.980	..	..	75	85
	314.180	X25	X25	..	..
*On Loop	314.315	*25	*25	..	..
SCONE	314.662				
	315.150	..	..	50	55
	315.450	115	160	..	..
	321.500	..	..	115	160
	321.540	X40	X45	..	..
	321.750	..	..	60	60
PARKVILLE	321.917				
	322.690	..	..	X40	X45
	323.500	..	..	115	160
	324.700	30	160	115	..
	324.780	115	..	30	135
	327.760	..	..	115	135
	328.060	105	115	..	..
	330.540	..	..	105	115
	330.830	95	105	..	..
	331.305	..	..	95	105
	331.610	115	120	..	..
	332.130	..	..	95	105
	338.520	..	..	115	120
	338.820	95	105	..	..
MURULLA	339.400				
	339.610	..	..	95	105
	339.910	100	110	..	..
	340.520	..	..	100	110
	340.820	95	100	..	..
	342.160	..	..	95	100
	342.460	115	135	..	..

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
	342.990	..	..	115	135
	344.290	100	110	..	..
	344.810	..	..	100	110
	345.110	115	135	..	..
	346.550	..	..	115	135
	346.850	110	120	..	..
	347.300	..	..	110	120
	347.600	115	145	..	..
	349.850	..	..	115	145
	350.150	115	125	..	..
	350.490	..	..	115	125
	350.790	115	145	..	..
	351.490	X40	X45	..	..
	352.230	..	..	115	145
MURRURUNDI	352.327				
	352.530	70	85	..	..
	352.540	..	..	X40	X45
	352.750	..	..	70	85
	353.950	75	80	..	..
	355.180	..	..	75	80
	355.480	115	120	..	..
	356.610	..	..	115	135
	356.910	55	60	..	..
	362.320	..	..	55	60
	362.620	60	65	..	..
ARDGLEN	363.278				
	363.280	..	..	60	65
	363.580	55	60	..	..
	364.130	..	..	X40	X45
	366.060	..	..	55	60
	366.360	50	55	..	..
	367.010	..	..	50	55
	367.310	60	65	..	..
KANKOOL	368.333				
	368.440	..	..	60	65
	368.740	80	85	..	..
	370.120	..	..	80	85
	370.420	70	80	..	..
	370.860	..	..	70	80
	371.160	105	115	..	..
	371.590	..	..	105	115
	371.890	115	120	..	..
	373.280	..	..	115	120
	373.580	115	115	..	..
	375.000	..	..	115	..
	375.390	X40	X45	..	..
WILLOW TREE	375.735				
	376.490	..	..	X40	X45
	379.490	..	..	X40	X45
	379.460	..	..	115	150
	379.760	115	135	..	..
	380.000	..	..	115	135
	380.160	115	160	..	..
BRAEFIELD	386.013				
	388.920	..	..	115	160
	389.220	95	100	..	..
	390.560	..	..	95	100
	390.860	85	95	..	..
	391.300	..	..	85	95
	391.600	95	110	..	..
	391.920	..	..	95	110
	392.220	115	135	..	..
	392.280	X40	X45	..	..

Location of Speedsigns

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT	LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
QUIRINDI	392.703										
150											
Quirindi Section Silo	393.370	..	..	X40	X45	Werris Creek Sth Signal Box	408.300	105	105	115	150
	394.523						409.320	..	..	65	65
	397.160	..	..	115	135		409.742				
	397.460	110	115	..	..				
	400.520	..	..	110	115	WERRIS CREEK	410.600	X25	..	..	..
	400.820	115	155	..	..		410.844				
QUIPOLLY	402.014										

Station Data

Station	Kilo-metrage	Signal box Status	Hours of signal box	Facilities
Maitland	192.548	A	Always	P
Lochinvar	202.601			P
Allandale	205.925			P
Greta	210.808			P
Branxton	215.554	C	Controlled from Broadmeadow SCC	P
Belford	222.678			P
Minimbah	226.095	C	Controlled from Broadmeadow SCC	
Singleton	238.885	C	Controlled from Broadmeadow SCC	P
Padulla	244.550			
*Camberwell Coal	246.934	C	Controlled from Broadmeadow SCC	
*Mt Owen Coal	253.925	C	Controlled from Broadmeadow SCC	
Ashton Coal	256.560	C	Controlled from Broadmeadow SCC	
Newdell Junction	262.305	C	Controlled from Broadmeadow SCC	
*Ravensworth Coal	264.960	C	Controlled from Broadmeadow SCC	
*Newdell	265.912	C	Controlled from Broadmeadow SCC	
*Liddell Coal	267.408	C	Controlled from Broadmeadow SCC	
Drayton Junction	272.010	C	Controlled from Broadmeadow SCC	
*Drayton Coal	278.440	C	Controlled from Broadmeadow SCC	
Antiene	273.941	C	Controlled from Broadmeadow SCC	
Grassfree	280.909	C	Controlled from Broadmeadow SCC	
St Heliers	283.993	C	Controlled from Broadmeadow SCC	
Muswellbrook	288.783	C	Controlled from Broadmeadow SCC	P
*Dartbrook Coal	296.649	C	Controlled from Broadmeadow SCC	
Aberdeen	300.733	C	Controlled from Broadmeadow SCC	P
Togar	307.107	C	Controlled from Broadmeadow SCC	
Scone	314.662	C	Controlled from Broadmeadow SCC	P
Parkville	321.917	C	Controlled from Broadmeadow SCC	
Murulla	339.381	C	Controlled from Broadmeadow SCC	
Murrurundi	352.327	C	Controlled from Broadmeadow SCC	P
Ardglen	363.278	C	Controlled from Broadmeadow SCC	
Kankool	368.333	C	Controlled from Broadmeadow SCC	
Willow Tree	375.735	C	Controlled from Broadmeadow SCC	P
Quirindi	392.703	C	Controlled from Broadmeadow SCC	P
Quirindi Wheat Sdg	394.249			
Quipolly	402.014	C	Controlled from Broadmeadow SCC	
Werris Creek Sth Box	409.742		Sun 1000 to 1800, 2300 Sun continuous to 2300 Sat	TT
Werris Creek	410.844		Sun 1000 to 1800, 2300 Sun continuous to 2300 Sat	P

* On Branch

Bank Locomotive working

Conditions for loaded Trains between Willow Tree and Ardglen

1. Trains with 20 to 40 tonnes gross mass vehicles in the trailing 1000 tonnes, one bank locomotive may power; trains with 40 to 60 gross mass tonne vehicles in the trailing 1000 tonnes, two bank locomotives may power; trains with vehicles of minimum mass 60 tonne gross mass in the trailing 1000 tonnes, three bank locomotives may power. When three locomotives are used for banking, loading in front of the trailing 1000 tonnes must not comprise any vehicles with less than 15 tonnes of loading whose individual deck lengths exceed 23.7 metres whilst they are attached to vehicles less than 14.6 metres in length.
2. The automatic coupling lifter on the leading bank locomotive must be locked in the open position by means of the approved latching device.
3. The air hoses are not to be connected between the train and the bank locomotives.
4. An adaptor will be fitted on the rear vehicle to accommodate the flashing tail light other than in auto coupler knuckle.
5. Maximum train speed not to exceed 50 km/hr between Willow Tree and Ardglen.
6. Bank locomotives not to pass Ardglen Up Starting signals.

Method of operation:

1. Train to be stopped at allocated marker signs in the Up Refuge Loop at Willow Tree and remain with the automatic brake applied.
 2. Bank locomotives are to compress against the rear of the train standing in the loop.
 3. Bank locomotive Driver to notify train driver by radio when ready to assist.
 4. Train Driver to notify Bank Locomotive driver when the starting signal is cleared and the train is ready to proceed.
 5. When acknowledgement is received Train Driver is to release automatic brakes and bank locomotives to commence pushing.
 6. Train Driver to begin throttling up when load meter registers approximately 400 amps, release locomotive brakes and allow train to proceed.
 7. Maximum speed when assisted from rear not to exceed 50 km/hr. The Driver only is to control speed of train between Willow Tree and Ardglen.
 8. Signal indicators enroute to be relayed by Train Crew to Bank Locomotive Driver.
 9. On arrival at Ardglen the bank locomotives must only assist the train to such distance as will allow the bank locomotives to stop and remain inside the Ardglen Up Starting signals, being on either Main or Loop line.
 10. In the event of Bank Locomotives failing to release from the rear of train at Ardglen, the train is to proceed to Murrurundi where bank locomotives are to be detached. The Bank Locomotive Driver is to notify the train Driver of the circumstances when clear of Ardglen Tunnel.
 11. The trailing load for Marshalling Restrictions purposes behind the rear Train Locomotive, is calculated as "the train load, less the sum of the Full Sectional Loads for the operational Bank Locomotives (for the section Willow Tree to Ardglen)
- In the event of failure, the train must be cleared from the section on the authority of a Special Authority Order, should the bank locomotive/s be required to return to Willow Tree with portion of the load. This must be done on the authority of a separate Special Authority Order.

Grade control valve operation

Grade control valves are to be set to the EX position on all wagons of all trains travelling in the Northern Region with the following exceptions:

Section Of Track Requiring Use of Grade Control Valves

Down North - Ardglen to Kankool

Up North - Ardglen to Murrurundi

Note: When traversing the above sections of track:

1. Grade control valves are to be placed in the IP position only on loaded vehicles (i.e. those with empty/load valves in the **LOADED** position).
2. Vehicles without load compensation are to operate in the EX position unless the mass of the vehicle is 20 tonne or more in which case the grade control valve is to be placed in the IP position.
3. At least 50% of the tonnage of the loaded vehicles must have operational grade control valves.

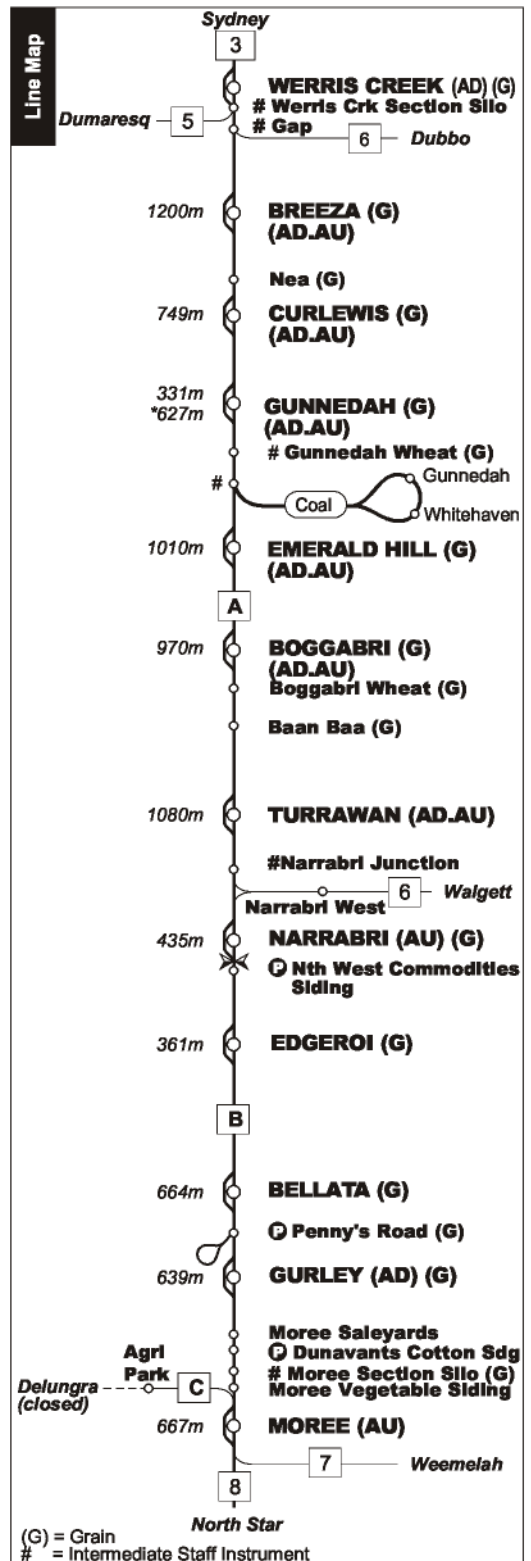
Werris Creek - Moree

section 4

Maximum Speed of Locomotives and Rolling Stock

Class of Track	SECTIONS			D	E	F	Notes
	Werris Creek - Narrabri	Narrabri - Moree	Moree - Agripark				
Line Map reference	A	B	C				
Locomotives							
Multiple Locos	4	4	4				
S1	N/A	N/A	N/A				
S2	100	50	N/A				
S3	115	60	N/A				
S4	N/A	N/A	N/A				
S5	115	60	N/A				
S6	115	100	N/A				
S7	90	90	N/A				
S8	115	100	N/A				
S9	115	100	N/A				
S10	115	100	N/A				
S11	80	80	N/A				
S12	100	100	20				
S13	100	100	20				
Freight							
Class A	115	100	20				
Class B	100	80	20				
Class C	80	80	20				
Class D	65	60	20				
Class E	80	70	20				
Class F	65	N/A	N/A				
Class G	N/A	N/A	N/A				
Passenger							
XPT	160	140	N/A				
Xplorer	145	140	N/A				
Diesel Train	115	100	20				
Loco Hauled	115	100	20				
Accident Cranes							
70 tonne	60		20				
110 tonne	115	80	N/A				
120 tonne	60		N/A				
Notes							

NOTES:



Safeworking System	Werris Creek to Breeza	Electric Staff	Turrawan to Narrabri	Electric Staff
	Breeza to Curlewis	Electric Staff	Narrabri to Edgeroi	Staff and Ticket
	Curlewis to Gunnedah	Electric Staff	Edgeroi to Bellata	Staff and Ticket
	Gunnedah to Emerald Hill	Electric Staff	Bellata to Gurley	Staff and Ticket
	Emerald Hill to Boggabri	Electric Staff	Gurley to Moree	Electric Staff
	Boggabri to Turrawan	Electric Staff	Moree to Agri Park	Yard Working

DOWN LOADS & CONDITIONS SECTIONS		LOCO- MOTIVE CLASS = L	LOCOMOTIVES					TRAIN DATA		NOTES
			SINGLE	DOUBLE	TRIPLE	QUAD	QUIN	VEHICLE CLASS	SECT RUN TIMES	
			LOADS TONNES							
1	WERRIS CREEK – MOREE	L4	900	1800	2700	3600	--	ABC/ *D	1/ *6	
2										
3	WERRIS CREEK – MOREE	L11	550	1100	1650	2200	--	ABC/ *D	2/ *6	
4	WERRIS CREEK – MOREE	L13	--	--	--	850	--	ABC/ *D	2/ *6	
5										
6	WERRIS CREEK – MOREE	L4	1396	2792	4188	--	--	ABC/ *D	3/ *6	
7	WERRIS CREEK – MOREE	L6	1149	2298	3447	--	--	ABC/ *D	3/ *6	
8	WERRIS CREEK – MOREE	L8	1024	2048	3072	--	--	ABC/ *D	3/ *6	
9										
10	WERRIS CREEK – MOREE	L5	1307	2614	3921	--	--	ABC/ *D	4/ *6	
12	WERRIS CREEK – MOREE	L7	1125	2250	3375	--	--	ABC/ *D	4/ *6	
13	WERRIS CREEK – MOREE	L9	933	1866	2799	3732	--	ABC/ *D	4/ *6	
14	WERRIS CREEK – MOREE	L10	902	1804	2706	3608	--	ABC/ *D	4/ *6	
15	WERRIS CREEK – MOREE	L11	800	1600	2400	3200	--	ABC/ *D	4/ *6	
16	WERRIS CREEK – MOREE	L12	768	1536	2304	3072	--	ABC/ *D	4/ *6	
17	WERRIS CREEK – MOREE	L13	380	760	1140	1520	--	ABC/ *D	4/ *6	
18										
19	WERRIS CREEK – MOREE	L13	536	1072	1608	2144	--	ABC/ *D	5/ *7	

DOWN	SECTIONAL RUNNING TIMES								FULL SECTIONAL LOADS														GRADE		
									LOCOMOTIVE CATEGORIES = L																
	1	2	3	4	5	6	7	Loco	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14			
WERRIS CREEK	☺	☺	☺	☺	☺	☺	☺	# ☺																	
BREEZA	21a	21a	21a	21a	21a	24a	25a	16a	2954	2793	2627	2321	2259	2083	1897	1828	1636	1570	1096						1:114
CURLEWIS	21a	21a	22a	22a	24a	26a	27a	17a	2449	2315	2175	1920	1870	1720	1567	1511	1350	1295	904						1:93
GUNNEDAH	15a	15a	16a	17a	19a	19a	20a	13a	2227	2104	1976	1743	1699	1561	1422	1372	1224	1175	820						1:82
EMERALD HILL	15a	15a	16a	16a	17a	18a	19a	13a	3047	2882	2711	2395	2330	2150	1959	1887	1689	1621	1131						1:119
BOGGABRI	18a	18a	19a	19a	20a	22a	23a	15a	2449	2315	2175	1920	1870	1720	1567	1511	1350	1295	904						1:90
TURRAWAN	28a	28a	32a	32a	37a	35a	40a	23a	1479	1396	1307	1149	1125	1024	933	902	800	768	536						1:52
NARRABRI	22a	22a	23a	23a	24a	25a	27a	18a	2449	2315	2175	1920	1870	1720	1567	1511	1350	1295	904						1:90
EDGEROI	29a	24a	30a	27a	31a	30a	33a	20/28	2659	2514	2363	2086	2032	1871	1704	1643	1469	1410	984						1:102
BELLATA	24a	19a	24a	20a	21a	24a	25a	15/24	2954	2793	2627	2321	2259	2083	1897	1828	1636	1570	1096						1:116
GURLEY	22a	18a	23a	19a	21a	23a	25a	15/22	2111	1995	1872	1651	1610	1478	1346	1299	1158	1112	776						1:75
MOREE	33a	25a	33a	26a	28a	33a	33a	21/33	4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600						Level

Light locomotive running times on right hand side of column between Edgeroi and Moree apply to S2, S3 and S5 category locomotives. All dual times shown in this column are arrival times.

UP	LOADS & CONDITIONS SECTIONS	LOCO- MOTIVE CLASS = L	LOCOMOTIVES					TRAIN DATA		NOTES
			SINGLE	DOUBLE	TRIPLE	QUAD	QUIN	VEHICLE CLASS	SECT RUN TIMES	
			LOADS TONNES							
1	MOREE – WERRIS CREEK	L4	1130	2260	3390	4520	--	ABCE/*D	1/*6	
2										
3	MOREE – WERRIS CREEK	L10	725	1450	2175	2900	--	ABCE/*D	2/*6	
4	MOREE – WERRIS CREEK	L11	640	1280	1920	2560	--	ABCE/*D	2/*6	
5										
6	MOREE – WERRIS CREEK	L4	1995	3990	5985	--	--	ABCE/*D	3/*7	
7	MOREE – WERRIS CREEK	L6	1651	3302	4953	--	--	ABCE/*D	3/*7	
8	MOREE – WERRIS CREEK	L8	1478	2956	4434	--	--	ABCE/*D	3/*7	
9										
10	MOREE – WERRIS CREEK	L5	1872	3744	5616	--	--	ABCE/*D	4/*7	
11	MOREE – WERRIS CREEK	L7	1610	3220	4830	--	--	ABCE/*D	4/*7	
12	MOREE – WERRIS CREEK	L9	1346	2692	4038	--	--	ABCE/*D	4/*7	
13	MOREE – WERRIS CREEK	L10	1299	2598	3897	--	--	ABCE/*D	4/*7	
14	MOREE – WERRIS CREEK	L11	1158	2316	3474	--	--	ABCE/*D	4/*7	
15	MOREE – WERRIS CREEK	L12	1112	2224	3336	--	--	ABCE/*D	4/*7	
16	MOREE – WERRIS CREEK	L13	560	1120	1680	2240	--	ABCE/*D	4/*7	
17										
18	MOREE – WERRIS CREEK	L13	776	1552	2328	3104	--	ABCE/*D	5/*8	
19										
20	WERRIS CREEK YARD	L13	675	--	--	--	--	ABCE		1

Note 1. This load is conditional on the train being loaded while propelling. On completion of loading the locomotive would be standing adjacent to the loading bin and must receive a clear run into Werris Creek Yard.

UP	SECTIONAL RUNNING TIMES									FULL SECTIONAL LOADS														GRADE	
	1	2	3	4	5	6	7	8	Loco	LOCOMOTIVE CATEGORIES = L															
									#	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14		
MOREE	☺	☺	☺	☺	☺	☺	☺	☺	☺																
GURLEY	33a	29a	34a	31a	36a	33a	34a	36a	21/33		4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600				Level
BELLATA	22a	20a	25a	24a	28a	22a	25a	29a	15/22		2659	2514	2363	2086	2032	1871	1704	1643	1469	1410	984				1:100
EDGEROI	24a	21a	25a	24a	27a	24a	26a	28a	15/24		3481	3292	3099	2739	2664	2462	2242	2160	1935	1857	1296				1:143
NARRABRI	27a	24a	29a	26a	28a	27a	29a	31a	18/27		2339	2211	2077	1833	1786	1642	1495	1442	1288	1236	862				1:87
TURRAWAN	24a	23a	28a	28a	33a	26a	29a	33a	18a		2449	2315	2175	1920	1870	1720	1567	1511	1350	1295	904				1:90
BOGGABRI	30a	30a	39a	40a	46a	35a	43a	50a	23a		2111	1995	1872	1651	1610	1478	1346	1299	1158	1112	776				1:75
EMERALD HILL	18a	19a	21a	21a	25a	22a	23a	25a	15a		4274	4044	3809	3369	3274	3032	2761	2658	2386	2288	1600				Level
GUNNEDAH	16a	16a	19a	20a	24a	18a	21a	24a	13a		2449	2315	2175	1920	1870	1720	1567	1511	1350	1295	904				1:89
CURLEWIS	17a	17a	20a	20a	23a	19a	22a	24a	13a		2760	2609	2453	2167	2109	1944	1770	1707	1526	1465	1022				1:106
BREEZA	22a	22a	26a	27a	31a	25a	29a	32a	17a		2858	2702	2541	2245	2185	2014	1835	1768	1582	1518	1059				1:111
WERRIS CRK	22a	22a	31a	33a	41a	24a	33a	41a	16a		2111	1995	1872	1651	1610	1478	1346	1299	1158	1112	776				1:76

Light locomotive running times on right hand side of column between Moree and Narrabri apply to S2, S3 and S5 category locomotives. All dual times shown in this column are arrival times.

Location of Speed signs

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
WERRIS CREEK	410.844				
	410.885	90	90	..	..
	411.710	115	130	90	90
	415.270	100	105	115	130
GAP	416.050				
	416.600	115	140	100	105
	431.500	..	..	115	140
	431.800	105	105	..	..
	432.310	..	..	105	105
	432.870	115	125	..	..
BREEZA	433.937				
	436.175	100	110	115	125
	436.855	115	120	100	110
	439.160	..	..	115	120
	439.500	115	130	..	..
	440.990	..	..	115	130
	441.400	115	140	..	..
Nea Wheat Siding	450.164				
	456.000	..	..	115	140
	456.300	115	130	..	..
	457.000	115	115	..	..
	457.500	..	..	115	130
	458.000	75	80	..	..
	458.270	X25	X25	..	..
CURLEWIS	458.485				
	458.980	..	..	75	80
	458.540	115	130	..	..
	459.680	..	..	115	115
	460.000	115	135	..	..
	469.170	..	..	115	135
	469.470	115	125	..	..
	473.200	85	85	..	..
	474.000	..	..	115	125
	475.460	X25	X25	..	..
GUNNEDAH	475.837				
	475.980	..	..	X25	X25
	476.205	80	85	..	..
	477.330	115	160	80	80
Gunnedah Wheat Siding	477.332				
Gunnedah Colliery Jun	480.153				
	492.725	..	..	115	160
	493.025	80	80	..	..
EMERALD HILL	493.360				
	493.680	..	..	X25	X25
	494.338	..	..	80	80
	494.638	115	160	..	..
	500.350	..	..	115	160
	500.650	115	145	..	..
	501.590	..	..	115	145
	501.900	115	160	..	..
	509.600	..	..	115	160
	509.990	115	145	..	..
	514.600	X25	X25	..	..
BOGGABRI	515.174				
	514.625	85	85	..	..
	515.218	..	..	115	145

LOCATION	KILO-METRAGE	DOWN NORM	DOWN XPT	UP NORM	UP XPT
	515.370	..	..	X25	X25
	515.706	..	..	85	85
	516.251	115	145	..	..
	519.800	..	..	115	145
	520.140	115	120	..	..
	522.000	..	..	115	120
	522.335	80	90	..	..
	524.950	115	125	80	90
	526.450	..	..	115	125
	527.000	115	140	..	..
Baan Baa	530.703				
TURRAWAN	547.646				
	562.380	..	..	115	140
	562.680	115	120	..	..
	564.600	80	80	..	..
	564.660	X25	X25	115	120
	564.680	40	40	..	..
NARRABRI JUNCTION	565.009				
	565.200	..	..	40	40
Narrabri Wheat Siding	565.326				
	565.511	20	20	..	..
	565.585	80	80	..	..
	568.280	70	75	..	..
	568.713	50	50	..	..
	568.840	..	..	80	80
	568.860	70	75	..	..
	568.975	..	..	50	50
	569.020	..	..	80	80
NARRABRI	569.240				
	569.870	..	..	30	80
	569.920	30	30	..	..
	569.990	..	..	30	30
	570.040	30	105	..	..
	570.890	100	105	..	..
Christakos Cotton Sdg	572.841				
	575.840	90	95	100	105
	579.850	75	80	90	95
	580.370	100	115	75	80
	585.000	..	..	100	115
	585.310	100	110	..	..
	586.180	..	..	100	110
	586.500	100	140	..	..
	592.700	..	..	100	140
	593.060	100	120	..	..
	593.360	..	..	100	120
EDGEROI	593.561				
	593.830	100	140	X25	X25
BELLATA	615.468				
	622.140	..	..	100	140
	622.350	..	..	80	80

Location of Speed signs

LOCATION	KILO-METRAGE	DOWN		UP	
		NORM	XPT	NORM	XPT
GURLEY	634.700	..	..	100	140
	635.020	100	130	..	..
	635.130	X25	X25	..	..
	635.414				
	635.690	..	..	X25	X25
	640.300	..	..	100	130
	640.600	100	105	..	..
	641.000	80	90	100	105
	641.485	100	130	80	90
	658.870				
Dunavants Cotton Sdg	660.300	..	..	100	130

LOCATION	KILO-METRAGE	DOWN		UP	
		NORM	XPT	NORM	XPT
Moree Wheat Siding	660.300	..	..	100	130
	660.600	100	105	..	..
	663.157				
	664.420	..	..	100	105
MOREE	664.860	70	70	..	..
	665.520	..	..	70	70
	665.601				

Station Data

Station	Kilo-metrage	Signal box Status	Hours of signal box	Facilities
Werris Creek	410.844		See SECTION 3	P
Werris Creek Bulk Wheat Sidings	411.641			G,ISI
Gap	416.050	U	Unattended	ISI
Breeza	433.937	U	Unattended	G,P
Nea Wheat Siding	450.164			G
Curlewis	458.485	U	Unattended	G,P
Gunnedah	475.837	P	Sun 1000 to 1800, 2300 Sun continuous to 2300 Sat	G,P
Gunnedah Stock-yards & Wheat Sdg	477.308			G,ISI
Gunnedah Abattoirs & Vickery Coal loop	479.620			ISI
Emerald Hill	493.360	U	Unattended	G,P
Boggabri	515.174	U	Unattended	G,P
Boggabri Wheat Sdg	516.056			G
Baan Baa	530.703			G
Turrawan	547.646	U	Unattended	
Narrabri Junction	565.009			G,ISI
Narrabri	569.240	U	Unattended	G,P
North West Commodities Sdg	572.841			PS
Edgeroi	593.561	U	Unattended	G,P
Bellata	615.468	U	Unattended	G,P
Pennys Road	623.979			PS,G
Gurley	635.414	U	Unattended	G,P
Moree Sale Yards	658.379			
Dunavants Cotton Sdg	658.870			ISI,PS
Moree Silo Siding	663.157			G,ISI
Moree Vegetable Sdg	663.813			PS
Moree	665.601	U	Unattended	P
INVERELL LINE				
Agri park	668.500			

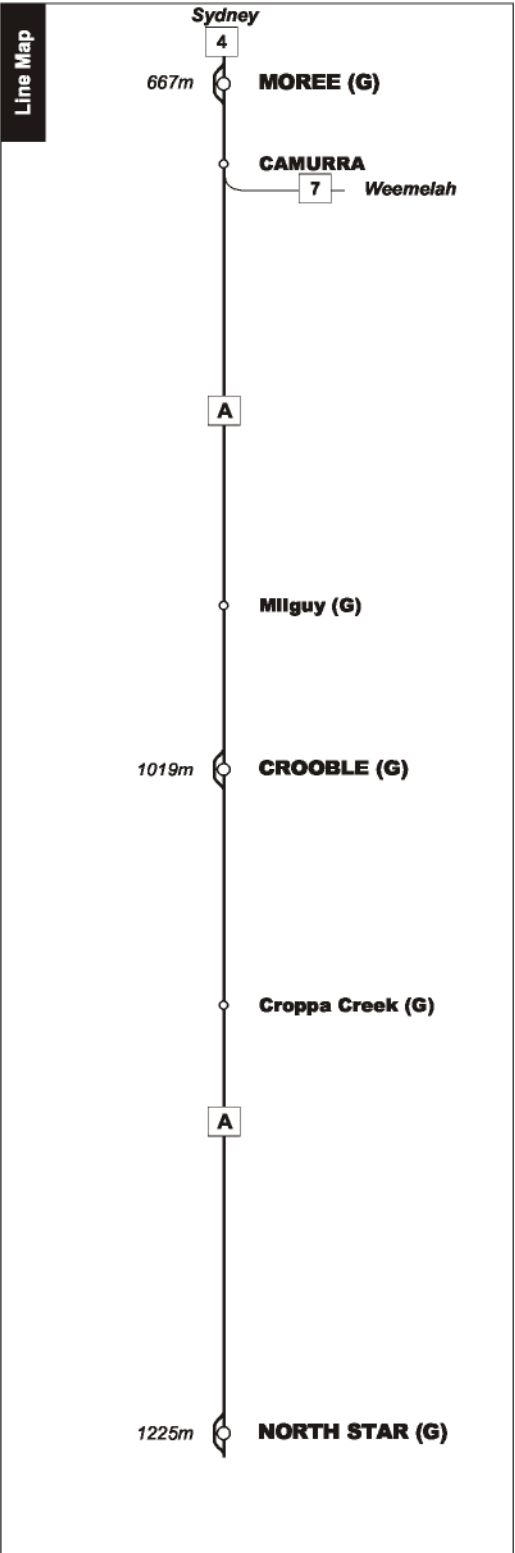
Moree - North Star

section 8

Maximum Speed of Locomotives and Rolling Stock

		SECTIONS							
		Moree - North Star							
Class of Track	3W							Notes	
Line Map reference	A								
Locomotives									
Multiple Locos	4								
S1	N/A								
S2	N/A								
S3	N/A								
S4	N/A								
S5	35								
S6	35								
S7	35								
S8	35								
S9	80								
S10	80								
S11	80								
S12	80								
S13	80								
Freight									
Class A	80								
Class B	80								
Class C	80								
Class D	60								
Class E	60								
Class F	N/A								
Class G	N/A								
Passenger									
XPT	N/A								
Xplorer	N/A								
Diesel Train	80								
Loco Hauled	80								
Accident Cranes									
70 tonne	N/A								
110 tonne	60								
120 tonne	N/A								
Notes									

NOTES:



Safeworking System

Moree to Camurra
 Camurra to Crooble
 Crooble to North Star

Staff and Ticket
 Staff and Ticket
 Staff and Ticket

DOWN LOADS & CONDITIONS SECTIONS	LOCO- MOTIVE CLASS = L	LOCOMOTIVES					TRAIN DATA		NOTES
		SINGLE	DOUBLE	TRIPLE	QUAD	QUIN	VEHICLE CLASS	SECT RUN TIMES	
		LOADS TONNES							
1 MOREE – NORTH STAR	L10	1500	3000	--	--	--	ABCDE	1	
2 MOREE – NORTH STAR	L13	850	1700	2550	3400	--	ABCDE	2	
3 MOREE – NORTH STAR	L13	1100	2200	3300	4400	--	ABCDE	3	
4 MOREE – NORTH STAR	L4	1000	2000	3000	4000	--	ABCDE	4	

DOWN	SECTIONAL RUNNING TIMES								FULL SECTIONAL LOADS														GRADE			
	LOCOMOTIVE CATEGORIES = L																									
	1	2	3	4	5	6	7	Loco	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14				
MOREE	↻	↻	↻	↻				↻																		
CAMURRA	17a	18a	20a	22a				12/21					4270	4000	3809	3370	3360	3260	2700	2660	2450	2290	1600			Level
Milguy	39	47	57	57				25/56					2955	2790	2627	2320	2310	2235	1900	1825	1640	1570	1100			1:120
CROOBLE	14a	16a	18a	21a				10/21					2955	2790	2627	2320	2310	2235	1900	1825	1640	1570	1100			1:118
Croppa Creek	21	25	29	31				13/30					2860	2700	2541	2245	2165	2015	1835	1770	1590	1515	1060			1:113
NORTH STAR	30a	32a	36a	48a				22/48					2860	2700	2541	2245	2160	2015	1835	1770	1590	1520	1050			1:108

Light locomotive running times on right hand side of column between Moree and North Star apply to S5, S6, S7 and S8 category locomotives.

UP LOADS & CONDITIONS SECTIONS	LOCO- MOTIVE CLASS = L	LOCOMOTIVES					TRAIN DATA		NOTES
		SINGLE	DOUBLE	TRIPLE	QUAD	QUIN	VEHICLE CLASS	SECT RUN TIMES	
		LOADS TONNES							
1 NORTH STAR – MOREE	L10	1500	3000	4500	--	--	ABCDE	1	
2 NORTH STAR – MOREE	L13	850	1700	2550	3400	--	ABCDE	2	
3 NORTH STAR – MOREE	L13	1100	2200	3300	4400	--	ABCDE	3	
4 NORTH STAR – MOREE	L4	2700	5400	--	--	--	ABCDE	4	

UP	SECTIONAL RUNNING TIMES								FULL SECTIONAL LOADS														GRADE			
	LOCOMOTIVE CATEGORIES = L																									
	1	2	3	4	5	6	7	Loco	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14				
NORTH STAR	↻	↻	↻	↻				↻																		
Croppa Creek	33	37	42	51				21/48					2660	2510	2363	2085	2010	1870	1700	1645	1475	1410	980			1:100
CROOBLE	21a	24a	27a	32a				13/30					2860	2700	2541	2245	2160	2015	1835	1770	1590	1520	1050			1:111
Milguy	13	14	15	22				10/21					2955	2790	2627	2320	2310	2235	1900	1825	1640	1570	1100			1:118
CAMURRA	33a	33a	34a	58a				26/57					4270	4000	3809	3370	3360	3260	2700	2660	2450	2290	1600			Level
MOREE	17a	18a	21a	23a				12/22					4270	4000	3809	3370	3360	3260	2700	2660	2450	2290	1600			Level

Light locomotive running times on right hand side of column between North Star and Moree apply to S5, S6, S7 and S8 category locomotives.

Location of Sharp curves

No speed signs are provided between CAMURRA and NORTH STAR. Refer to MAXIMUM SPEED OF LOCOMOTIVES AND ROLLING STOCK table for maximum speeds.

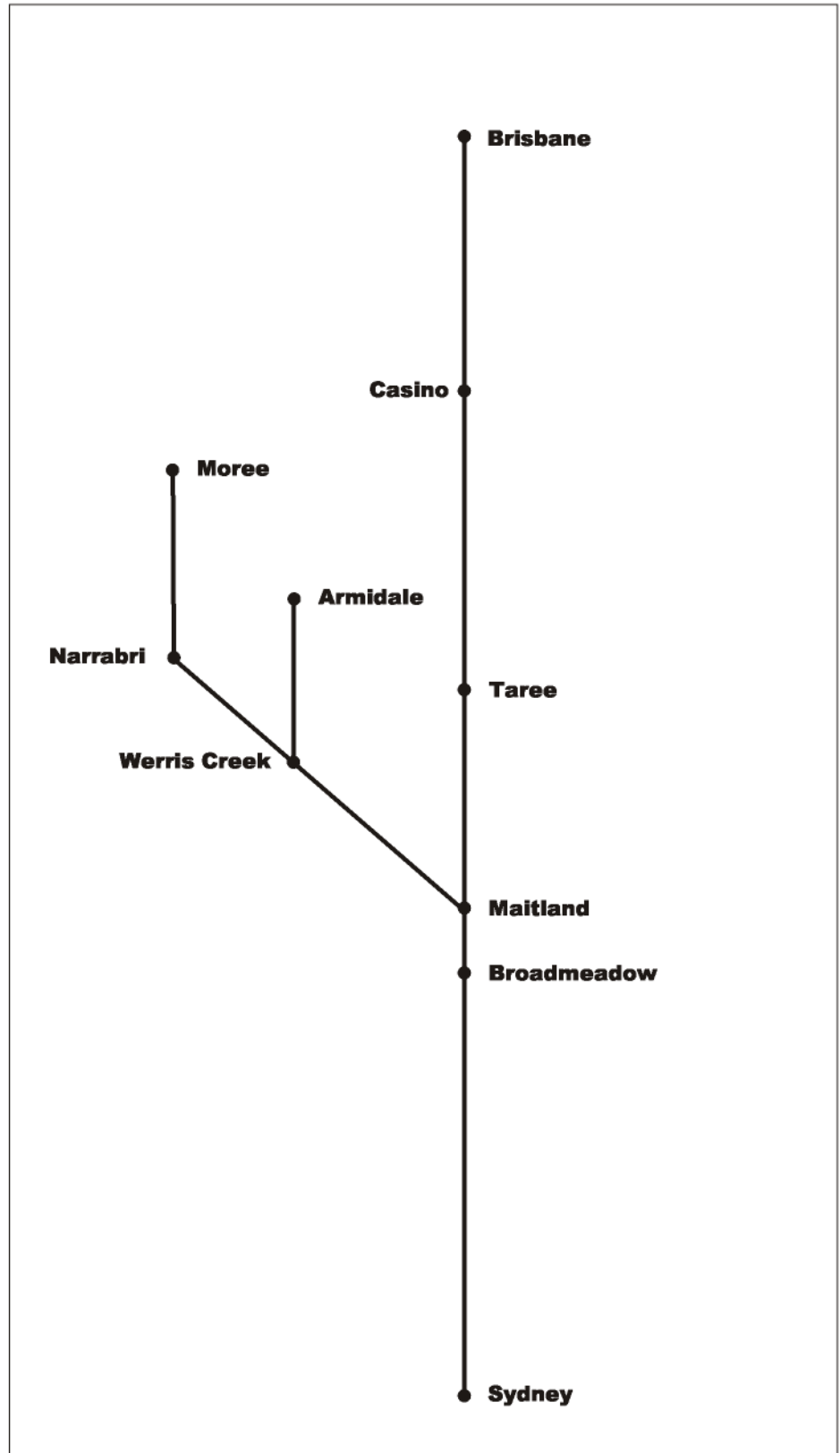
LOCATION	KILO-METRAGE	FROM START KM	TO END KM	RADIUS OF CURVE IN METRES	MAX SPEED
MOREE	665.601				
CAMURRA	676.895				
		677.050	677.350	485	50
		677.510	678.240	240	35
MILGUY	706.818				
CROOBLE	717.906				
CROPPA CREEK	733.599				
NORTH STAR	758.571				
		746.440	746.820	400	45
		746.980	747.360	400	45

Station Data

Station	Kilo-metrage	Signal box Status	Hours of signal box	Facilities
Moree	665.601		Unattended	P
Camurra	676.895	U	Unattended	
Milguy	706.818			G
Crooble	717.906	U	Unattended	G
Croppa Creek	733.599	U	Unattended	G
North Star	758.571	U	Unattended	G

northern

passenger train running times



SYDNEY – CASINO - BRISBANE

COLUMN	AREA	COMPOSITION
Column 1 Down	Sydney – Brisbane	XPT – 7 passenger car consist (160 km/h Max Speed)
Column 2 Down	Sydney – Casino	XPT – 7 passenger car consist (160 km/h Max Speed)
Column 3 Down	Sydney – Brisbane	XPT – 7 passenger car consist (120 km/h Max Speed)
Column 4 Down	Sydney – Casino	XPT – 7 passenger car consist (120 km/h Max Speed)

Down

	1	2	3	4	5
Sydney	↻	↻	↻	↻	
Illawarra Jun	3	3	3	3	
Ashfield	5	5	5	5	
Strathfield	3a	3a	3a	3a	
Nth Strathfield Jun	1	1	1	1	
Rhodes	2	2	2	2	
West Ryde	3	3	3	3	
Epping	3	3	3	3	
Thornleigh	5	5	5	5	
Hornsby	4a	4a	4a	4a	
Berowra	9	9	9	9	
Cowan	3	3	3	3	
Hawkesbury River	8	8	8	8	
Woy Woy	12	12	12	12	
Gosford	7a	7a	7a	7a	
Ourimbah	7	7	7	7	
Wyong	6a	6a	6a	6a	
Wyee	7	7	7	7	
Morisset	6	6	6	6	
Awaba	10	10	10	10	
Fassifern	5a	5a	5a	5a	
Sulphide Junction	9	9	9	9	
Broadmeadow	7a	7a	7a	7a	
Woodville Junction	1	1	1	1	
Islington Junction	1	1	1	1	
Waratah	1	1	1	1	
Hanbury Jun	1	1	1	1	
Thornton	9	9	9	9	
Maitland	6a	6a	7a	7a	
Telarah	4	4	4	4	
Mindaribba	7	7	7	7	
Paterson	7	7	7	7	
Kilbride	7	7	7	7	
Wallerobba Loop	6	6	6	6	
Dungog	10	11a	10	11a	
Monkerai	8	8	8	8	
Stroud Road	10	10	10	10	
Weismantels	9	9	9	9	
Craven	10	10	10	10	
Berrico	8	8	8	8	
Gloucester	6	7a	6	7a	
Bulliac	13	13	13	13	
Bundook	9	9	9	9	
Mt George	7	7	7	7	
Killawarra	13	13	13	13	
Wingham	6	6a	6	6a	
Taree	10a	10a	10a	10a	
Melinda	11	11	11	11	
Coopernook	9	9	9	9	
Johns River	11	11	11	11	

Down

	1	2	3	4	5
Johns River	↻	↻	↻	↻	
Kendall	12	12	12	12	
Kerewong	11	11	11	11	
Wauchope	7a	7a	7a	7a	
Telegraph Point	13	13	13	13	
Kundabung	9	9	9	9	
Kempsey	13a	13a	13a	13a	
Tamban	12	12	12	12	
Eungai	11	11	11	11	
Macksville	14	15a	14	15a	
Nambucca Heads	10	11	10	11	
Urunga	..	..	..	..
Raleigh	15	15	15	15	
Bonville	7	7	7	7	
Sawtell	3a	3a	3a	3a	
Boambee Beach	3	3	3	3	
Coffs Harbour	2a	2a	2a	2a	
Landrigans	10	10	10	10	
Coramba	7	7	7	7	
Nana Glen	9	9	9	9	
Glenreagh	10	10	10	10	
Kungala	9	9	9	9	
Braunstone	12	12	12	12	
Grafton City	11a	11a	11a	11a	
Grafton	3	3	3	3	
Kyarran	10	10	10	10	
Lawrence Road	20	20	20	20	
Banyabba	3	3	3	3	
Camira Creek	7	7	8	8	
Rappville	13	13	13	13	
Leeville	10	10	10	10	
Casino	8a	8a	8a	8a	
Kyogle	22a		22a		
Kyogle Loop	3a		3a		
Loadstone	23a		23a		
Glenapp	24a		24a		
Bromelton	30a		30a		
Greenbank	15a		15a		
Acacia Ridge	12		12		
Clapham	4		4		
Brisbane Transit	13a		13a		

a = To arrive. The next section includes starting time from that location.

All other times are passing.

When required to stop at a passing location, add one minute to that locations passing time and then add one minute to the next section.

BRISBANE – CASINO – SYDNEY

COLUMN	AREA	COMPOSITION
Column 1 Up	Brisbane - Sydney	XPT – 7 passenger car consist (160 km/h Max Speed)
Column 2 Up	Casino - Sydney	XPT – 7 passenger car consist (160 km/h Max Speed)
Column 3 Up	Brisbane - Sydney	XPT – 7 passenger car consist (120 km/h Max Speed)
Column 4 Up	Casino - Sydney	XPT – 7 passenger car consist (120 km/h Max Speed)

Up

	1	2	3	4	5
Brisbane Transit	↻		↻		
Clapham	13		13		
Acacia Ridge	4		4		
Greenbank	12a		13a		
Bromelton	16a		16a		
Glenapp	26a		26a		
Loadstone	24a		24a		
Kyogle Loop	22a		22a		
Kyogle	2a		2a		
Casino	23a	↻	23a	↻	
Leeville	8	8	8	8	
Rappville	8	8	8	8	
Camira Creek	14	14	14	14	
Banyabba	10	10	10	10	
Lawrence Road	3	3	3	3	
Kyarran	18	18	18	18	
Grafton	10	10	10	10	
Grafton City	4a	4a	4a	4a	
Braunstone	11	11	11	11	
Kungala	13	13	13	13	
Glenreagh	9	9	9	9	
Nana Glen	10	10	10	10	
Coramba	9	9	9	9	
Landrigans	7	7	7	7	
Coffs Harbour	10a	10a	10a	10a	
Boambee Beach	2	2	2	2	
Sawtell	4a	4a	4a	4a	
Bonville	4	4	4	4	
Raleigh	7	7	7	7	
Urunga	4a	4a	4a	4a	
Nambucca Heads	13a	13a	13a	13a	
Macksville	11a	11a	11a	11a	
Eungai	14	14	14	14	
Tamban	11	11	11	11	
Kempsey	13a	13a	13a	13a	
Kundabung	13	13	13	13	
Telegraph Point	9	9	9	9	
Wauchope	13a	13a	13a	13a	
Kerewong	7	7	7	7	
Kendall	10	10	10	10	
Johns River	12	12	12	12	
Cooperook	11	11	11	11	
Melinda	9	9	9	9	
Taree	12a	12a	12a	12a	
Wingham	10	11a	10	11a	
Killawarra	6	6	6	6	
Mt George	14	14	14	14	
Bundook	6	6	6	6	
Bulliac	9	9	9	9	

Up

	1	2	3	4	5
Bulliac	↻	↻	↻	↻	
Gloucester	13a	13a	13a	13a	
Berrico	7	7	7	7	
Craven	9	9	9	9	
Weismantels	10	10	10	10	
Stroud Road	9	9	9	9	
Monkerai	10	10	10	10	
Dungog	8a	7	8a	7	
Wallerobba Loop	11	11	11	11	
Kilbride	6	6	6	6	
Paterson	7	7	7	7	
Mindaribba	7	7	7	7	
Telarah	7	7	7	7	
Maitland	3a	3a	3a	3a	
Thornton	6	6	6	6	
Hanbury Jun	7	7	7	7	
Waratah	1	1	1	1	
Islington Junction	1	1	1	1	
Woodville Junction	1	1	1	1	
Broadmeadow	2a	2a	3a	3a	
Sulphide Junction	8	8	8	8	
Fassifern	8a	8a	8a	8a	
Awaba	3	3	3	3	
Morisset	11	11	11	11	
Wye	5	5	5	5	
Wyang	8a	8a	8a	8a	
Ourimbah	6	6	6	6	
Gosford	7a	7a	7a	7a	
Woy Woy	6	6	6	6	
Hawkesbury River	12	12	12	12	
Cowan	9	9	9	9	
Berowra	3	3	3	3	
Hornsby	8a	8a	8a	8a	
Thornleigh	3	3	3	3	
Epping	5	5	5	5	
West Ryde	3	3	3	3	
Rhodes	2	2	2	2	
Nth Strathfield Jun	3	3	3	3	
Strathfield	1a	1a	1a	1a	
Ashfield	3	3	3	3	
Illawarra Jun	5	5	5	5	
Sydney	4a	4a	4a	4a	

a = To arrive. The next section includes starting time from that location.

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SYDNEY – WERRIS CREEK – ARMIDALE / MOREE

COLUMN	AREA	COMPOSITION
Column 1 Down / Up	Sydney – Armidale – Sydney	Xplorer (145 km/h Max Speed)
Column 1 Down / Up	Werris Creek - Moree	Xplorer (145 km/h Max Speed)
Column 2 Down / Up	Sydney – Armidale – Sydney	Xplorer (120 km/h Max Speed)
Column 2 Down / Up	Werris Creek - Moree	Xplorer (120 km/h Max Speed)

Down

	1	2
Sydney	↻	↻
Illawarra Jun	3	3
Ashfield	5	5
Strathfield	3a	3a
Nth Strathfield Jun	1	1
Rhodes	2	2
West Ryde	3	3
Epping	3	3
Thornleigh	5	5
Hornsby	4a	4a
Berowra	9	9
Cowan	3	3
Hawkesbury River	8	8
Woy Woy	12	12
Gosford	7a	7a
Ourimbah	7	7
Wyong	6a	6a
Wyee	7	7
Morisset	6	6
Awaba	10	10
Fassifern	5a	5a
Sulphide Junction	9	9
Broadmeadow	7a	7a
Woodville Junction	1	1
Islington Junction	1	1
Waratah	..	..
Hanbury Jun	..	..
Thornton	..	..
Maitland	16a	18a
Branxton	13	13
Minimbah xovers	..	..
Whittingham	..	..
Singleton	13a	13a
Camberwell Jun	..	..
Mt Owen Jun	..	..
Newdell Jun	15	15
Drayton Jun	..	..
Antiene	6	6
MK53 Grasstree	6	6
MK 54 St Heliers	2	2
Muswellbrook	4a	4a
Aberdeen	9a	9a
Togar	3	3
Scone	7a	7a
Parkville	6	6
Murulla	10	10
Murrurundi	9a	9a
Ardglen	11	11
Kankool	5	5
Willow Tree	5a	5a
Braefield	6	6
Quirindi	5a	5a
Quipolly	7	7
Werris Creek	8a	8a
West Tamworth	25a	25a
Tamworth	5a	5a
Kootingal	15a	16a
Walcha Road	48a	48a
Uralla	27a	27a
Armidale	19a	19a
WERRIS CREEK - MOREE		
Werris Creek	↻	↻
Breeza	15a	15a
Curlewis	15a	15a
Gunnedah	11a	11a
Emerald Hill	11a	11a
Boggabri	13a	13a
Turrawan	20a	20a
Narrabri	15a	15a
Edgeroi	17a	17a
Bellata	15a	15a
Gurley	15a	15a
Moree	18a	20a

Up

	1	2
Armidale	↻	↻
Uralla	19a	19a
Walcha Road	27a	27a
Kootingal	41a	43a
Tamworth	13a	13a
West Tamworth	5a	5a
Werris Creek	25a	25a
Quipolly	8	8
Quirindi	7a	7a
Braefield	4	4
Willow Tree	5a	5a
Kankool	6	6
Ardglen	6	6
Murrurundi	11a	11a
Murulla	8	8
Parkville	10	10
Scone	5a	5a
Togar	5	5
Aberdeen	4a	4a
Muswellbrook	8a	8a
MK 54 St Heliers	5	5
MK53 Grasstree	2	2
Antiene	6	6
Drayton Jun	..	..
Newdell Jun	6	6
Mt Owen Jun	..	..
Camberwell Jun	..	..
Singleton	15a	15a
Whittingham	..	..
Minimbah xovers	..	..
Branxton	13	13
Maitland	13a	13a
Thornton	..	..
Hanbury Jun	..	..
Waratah	..	..
Islington Junction	19	19
Woodville Junction	1	1
Broadmeadow	2a	2a
Sulphide Junction	8	8
Fassifern	8a	8a
Awaba	4	4
Morisset	12	12
Wyee	5	5
Wyong	8a	8a
Ourimbah	6	6
Gosford	7a	7a
Woy Woy	6	6
Hawkesbury River	12	12
Cowan	12	12
Berowra	3	3
Hornsby	7a	7a
Thornleigh	3	3
Epping	6	6
West Ryde	3	3
Rhodes	2	2
Nth Strathfield Jun	3	3
Strathfield	1a	1a
Ashfield	3	3
Illawarra Jun	5	5
Sydney	4a	4a
MOREE - WERRIS CREEK		
Moree	↻	↻
Gurley	18a	18a
Bellata	16a	16a
Edgeroi	15a	15a
Narrabri	16a	17a
Turrawan	14a	14a
Boggabri	20a	20a
Emerald Hill	12a	12a
Gunnedah	11a	11a
Curlewis	11a	11a
Breeza	16a	16a
Werris Creek	16a	16a

a = To arrive. The next section includes starting time from that location.

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