

D1 Somerton - Laverton - Melbourne

RAS DIRN Section Page

Applicability

ARTC Network Wide

SMS

Publication Requirement

Internal / External

Primary Source

Document Status

Version #	Date Reviewed	Prepared by	Reviewed by	Endorsed	Approved
2.0	1 Dec 22	Operations Standards	Stakeholders	Operations Standards Manager	Head of Operations Standards 16/12/2022

Amendment Record

Amendments to the RAS are published at the following link

<https://www.artc.com.au/customers/standards/route/access/>

Changes throughout this document are highlighted with this colour

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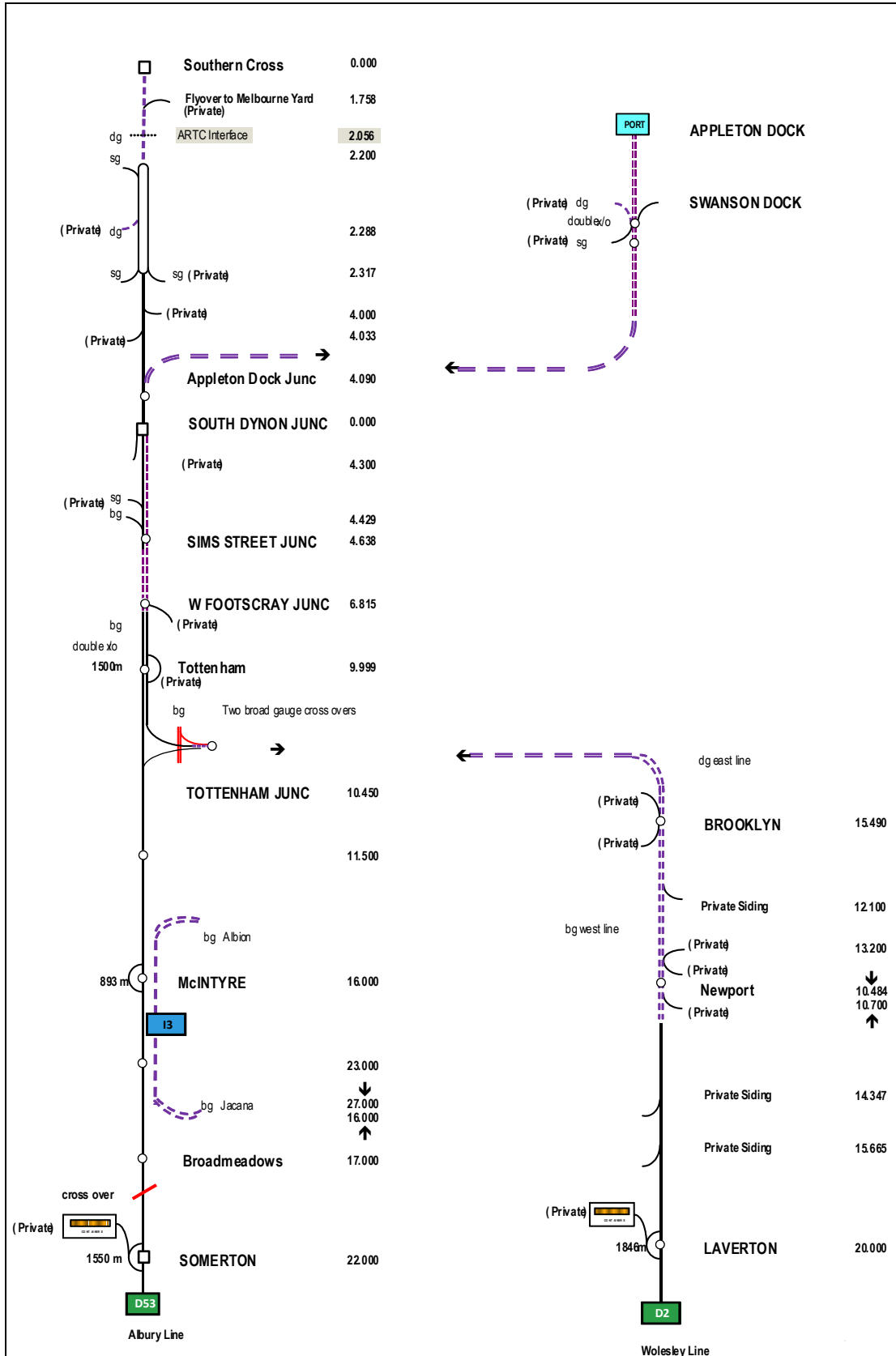
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1 Network Diagram

Note: These line maps are indicative only. For detailed diagrams, refer to relevant Network Information Book.



2 Route Capacity

LAVERTON – TOTTENHAM [^]			
TRAIN TYPE	MAXIMUM SPEED (KM/H)	MAXIMUM AXLE LOAD (TONNES)	
		LOCOS	WAGONS
FREIGHT	115	22.8*	20
	110	22.8*	21
	100#	22.8*	23
	80	22.8*	25
PASSENGER		LOCOS	CARRIAGES
EXPRESS ¹	130	N/A	19
LOCO HAULED ² (Includes non-express DMU and rail motors)	115	22.8*	19

SOMERTON – TOTTENHAM [^]			
TRAIN TYPE	MAXIMUM SPEED (KM/H)	MAXIMUM AXLE LOAD (TONNES)	
		LOCOS	WAGONS
FREIGHT	115	22.8*	20
	110	22.8*	21
	80	22.8*	23
PASSENGER		LOCOS	CARRIAGES
EXPRESS ¹	130	N/A	19
LOCO HAULED ² (Includes non-express DMU and rail motors)	115	22.8*	19

TOTTENHAM – DYNON – APPLETON DOCK PRECINCT (PORT OF MELBOURNE) ^{^^}			
TRAIN TYPE	MAXIMUM SPEED (KM/H)	MAXIMUM AXLE LOAD (TONNES)	
		LOCOS	WAGONS
FREIGHT	115	22.8*	20
	110	22.8*	21
	80	22.8*	23
PASSENGER		LOCOS	CARRIAGES
EXPRESS ^{1, 3}	115	N/A	19
LOCO HAULED ² (Includes non-express DMU and rail motors)	115	22.8*	19

SOUTH DYNON – MOONEE PONDS JUNCTION			
TRAIN TYPE	MAXIMUM SPEED (KM/H)	MAXIMUM AXLE LOAD (TONNES)	
FREIGHT		LOCOS	WAGONS
	115	22.8*	20
	110	22.8*	21
	80	22.8*	23
PASSENGER		LOCOS	CARRIAGES
	EXPRESS ¹	N/A	19
	LOCO HAULED ² (Includes non-express DMU and rail motors)	22.8*	19

General Notes:

- Route capacity applies where vehicle characteristics and conditions permit.

Referenced Notes:

[^] Includes the western leg of Tottenham triangle

^{^^} Includes both North and South legs of Tottenham triangle

* 134t maximum locomotive weight. These posted axle loads are to account for the variability in axle loads for some classes of locomotive. The maximum locomotive weight must still be adhered to.

Only for rolling stock approved to operate at 100km/h loaded above 21TAL.

1. Express speeds are for train types that are approved to run to “Express Speed Boards” by the ARTC Network Rules only.

2. For all other passenger trains:

- Freight locomotive speed limits apply for diesel locomotive hauled passenger trains
- Freight wagon speeds apply where freight wagons are marshalled as part of the train
- DMU and rail motors are to adhere to carriage axle loads.

3. Operation of Express Passenger trains permitted between Tottenham and Dynon

3 Special Access Conditions

3.1 Port of Melbourne – Swanson Dock and Appleton Dock

In accordance with permanent engineering waiver TC/0149 Port of Melbourne – Port Rail Transformation – Gauge Widening, the following conditions apply at the Port of Melbourne:

- Speed restriction for yard operation: 15km/h
- Modern powered rail lubrication
- Restriction of operation: No steam loco operations permitted (or any other bogie without centre axle end float).

4 Permanent Speed Restrictions

MELBOURNE – SOMERTON					
LINE SEGMENT	EXCEPTION TO MAXIMUM SPEEDS LOCATION	RESTRICTED SPEED			
SOUTHERN CROSS	0.000 KM – 2.056KM	REFER TO ADJACENT TRACK OWNER			
NOTE: 2.000 KM BECOMES 2.056 KM)					
		WEST BOUND DOWN		EAST BOUND UP	
		FREIGHT	PASSENGER	FREIGHT	PASSENGER
ARTC BOUNDARY	2.056 KM - 3.500 KM MAIN LINE	40	40	40	40
	3.500 KM – 3.950 KM MAIN LINE	40	40	40	40
APPLETON DOCK PRECINCT (PORT OF MELBOURNE)	0.000 KM - 3.950 KM MAIN & LOCAL LINE	15	15	15	15
SOUTH DYNON JUNC	3.950 KM – 4.247KM MAIN & LOCAL LINE	15	35		
	3.950 KM – 4.670KM MAIN LINE			15	30
	LOCAL LINE			25	30
SIMS STREET	4.247KM – 4.670KM MAIN & LOCAL LINE	30	30		
SIMS STREET	4.670KM – 5.290KM MAIN LINE			15	65
	LOCAL LINE			30	65
	5.290KM – 6.900KM MAIN & LOCAL LINE			65	65
	4.670KM – 6.900KM MAIN & LOCAL LINE	65	65		

WEST FOOTSCRAY	NOTE: ABOVE SPEEDS APPLY FOR BOTH STANDARD AND BROAD MOVEMENTS ON DUAL GAUGE TRACK.				
JUNCTION	6.900 KM	8.600 KM			65
	8.600 KM	10.120 KM			80
TOTTENHAM JUNCTION	10.120 KM*	13.980 KM			95
	13.980 KM	14.500 KM			65
MCINTYRE LOOP	14.500 KM	17.200 KM			115
#ON LOOP EXIT BOTH ENDS	16.000 KM				30
	EAST BOUND DOWN		WEST BOUND UP		
		FREIGHT	PASSENGER	FREIGHT	PASSENGER
ALBION INFRASTRUCTURE BOUNDARY TO TULLAMARINE LOOP	13.848 KM - 18.951 KM BG	20* (not posted)	N/A – refer I3	20* (not posted)	N/A – refer I3
TULLAMARINE LOOP NO. 2 ROAD	18.951 KM – 25.635 KM DG	80* (not posted)	80* (not posted)	80* (not posted)	80* (not posted)
TULLAMARINE LOOP TO JACANA INFRASTRUCTURE BOUNDARY	25.635 KM – 26.200 KM BG	20* (not posted)	N/A – refer I3	20* (not posted)	N/A – refer I3
TULLAMARINE	24.380 KM	25.000 KM			95
	25.000 KM	26.200 KM			115
	26.200 KM	17.000 KM			80
	NOTE: 27 KM BECOMES 16 KM				
	17.000 KM	17.560 KM			115
SOMERTON LOOP#	19.380 KM				125 PASSENGER ONLY
	21.270 KM				130 PASSENGER ONLY
	25.660 KM				125 PASSENGER ONLY
	26.020 KM				130 PASSENGER ONLY
	* ON CURVES BETWEEN				

#MELBOURNE END LOOP EXIT	30
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BG = Broad Gauge Operations

DG = Dual Gauge Operations

TOTTENHAM – LAVERTON			
LINE SEGMENT	EXCEPTION TO MAXIMUM SPEEDS LOCATION		RESTRICTED SPEED
	17.218 KM*	17.130 KM	30
TOTTENHAM	17.130 KM*	16.100 KM	50
	16.100 KM*	11.030 KM	60
	11.030 KM*	10.484 KM	40
* SPEEDS APPLY FOR BOTH STANDARD AND BROAD MOVEMENT ON DUAL GAUGE TRACK			
NEWPORT	NOTE: KILOMETRES DECREASING FROM TOTTENHAM TO NEWPORT AND INCREASING FROM NEWPORT TO PYRENEES		
	10.700 KM	11.220 KM	40
	11.220 KM	12.120 KM	80

5 Special Speed Restrictions

MELBOURNE – LAVERTON		
LOCATION	MAXIMUM SPEED	
	WHEN RUNNING FROM LINES DIVERGING FROM THE STRAIGHT TRACK (KM/H)	WHEN RUNNING ON THE STRAIGHT TRACK (KM/H)
ALL DUAL GAUGE TURNOUTS	20	LINE SPEED FOR TYPE OF TRAIN
OVER FACING POINTS HELD BY HAND	15	15
BETWEEN TOTTENHAM AND NEWPORT (KILOMETRES DECREASING TOWARDS NEWPORT) TOTTENHAM JUNCTION GAUGE SEPARATION, BETWEEN 17.125 KM AND 17.100 KM FOR ANY BROAD GAUGE MOVE TO/FROM THE DUAL GAUGE (ACCOUNT DESIGN LAYOUT)	15 BROAD GAUGE	LINE SPEED FOR TYPE OF TRAIN
BROOKLYN BETWEEN 15.600 KM AND 15.560 KM FOR ANY MOVE TO/FROM THE WEST LINE OR TO/FROM SUNSHINE (ACCOUNT DESIGN LAYOUT)	15	LINE SPEED FOR TYPE OF TRAIN
NEWPORT (602 POINTS) BETWEEN 11.010 KM AND 10.970 KM FOR ANY MOVE TO/FROM THE WEST LINE	15	40
BETWEEN ARTC BOUNDARY AND LAVERTON	40	LINE SPEED FOR TYPE OF TRAIN
APPLETON DOCK LINE PARALLEL TO THE MELBOURNE OPERATIONS TERMINAL PAST SHUNT YARD		15 WHISTLE FREQUENTLY AND DIM HEADLIGHT

6 Significant Kilometre Markings

The following locations on the network have kilometre posts that change on the ground and do not follow the measured distance between kilometre posts:

Jacana flyover location

- Tullamarine located at 22.706 km and Somerton located at 22.737 km (Tullamarine is approximately 9 km before Somerton) (27 km becomes 16 km)