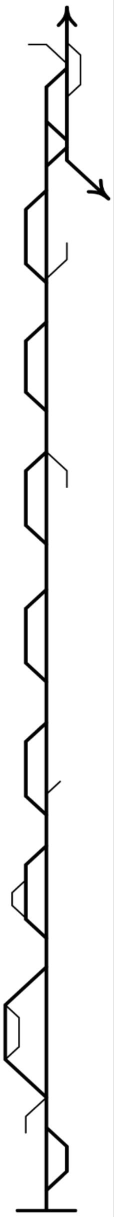
Network Operating Diagrams

EYRE PENINSULA DIVISION

SOUTHBOUND (UP) CAPACITY ENGINE LOADS 830/DA	NJ	NJ+830	SECTION RUN TIME	MAX AXLE LOAD (TONNES)	SAFEWORKING SYSTEM	KILOMETRE POST	BUCKLEBOO SUB-DIVISION STATIONS AND SECTION DISTANCES	KILOMETRE FROM CUMMINS	MAXIMUM TRAIN CROSSING LENGTH	MAXIMUM SPEED SEE NOTE (4)	NORTHBOUND (DOWN) CAPACITY ENGINE LOADS SECTION RUN TIME	830/DA	NJ	NJ+830
					TRAIN ORDER WORKING		JUNCTION WITH THEVENARD LINE							
						67.50	**CUMMINS**	0.00	846					
1100 t	1100 t	1650 t	95 mins	16t			40.060Km			30 KmH	90 mins	900 t	950 t	1930 t
						108.00	**UNGARRA**	40.60	347					
825 t	800 t	1500 t	70 mins	16t			32.420Km			30 KmH	65 mins	750 t	800 t	1400 t
						104.52	**WHARMINDA**	73.00	582					
1200 t	1250 t	950 t	45 mins	16t			32.140Km NOTE 11			30 KmH	45 mins	900 t	900 t	1700 t
						172.66	**RUDALL**	105.20	455					
	1150 t	1900 t	40 mins	16t			12.640Km			30 KmH	40 mins			
						185.30	**KIELPA**	117.80	502					
			35 mins	16t			13.300Km			30 KmH	35 mins			
						198.60	**DARKE PEAK**	131.10	463					
			40 mins	16t			19.700Km			30 KmH	40 mins	650 t	600 t	1200 t
						218.30	**WADDIKEE**	150.80	477					
			65 mins	16t			32.420Km NOTE 12			30 KmH	65 mins		800 t	
						244.60	**KIMBA**	177.10	515					
900 t	950 t	1500 t	75 mins	16t			35.700Km			30 KmH	75 mins	900 t	1100 t	1650 t
						280.30	**BUCKLEBOO** END OF LINE	212.80	613					

STRIP MAP



NOTE (11) LOADING ON MAIN LINE IS CONDUCTED AT 171Km (DISTANCE FROM PORT LINCOLN)
NOTE (12) LOADING ON MAIN LINE IS CONDUCTED AT 247Km (DISTANCE FROM PORT LINCOLN)

Cummins to Buckleboo (Narrow Gauge)

Major Associated Infrastructure

No major earthworks exist on this line.

Major Bridges and Culverts:	75.96km	5 Span Transom Bridge
	116.64km	4 Span Open Deck Culvert
	160.72km	5 Span Open Deck Culvert
	178.61km	4 Span Open Deck Culvert
	184.94km	4 Span Open Deck Culvert
	238.66km	5 Span Open Deck Culvert
	248.20km	5 Span Open Deck Culvert

Height and Width Limits

Locomotives and Rollingstock must conform to ROA Standard Rollingstock Plate A

Major Track Work Planned

Track is currently non-operational and has been since May 2019.

An upgrade of the Port Lincoln to Cummins, Cummins to Kimba and Cummins to Wudinna lines was completed in 2007/2008. Work increased track longevity, but did not alter maximum track speeds or maximum axle loading. Programs to replace sleepers continued in ensuing years to maintain track longevity, but an additional upgrade would be required if track were to be made operational again.

Train Control

Train control is by train order.

Communications

Communication with train control is by CDMA or Next Gen mobile phone. Train to train and train to ground communication is by VHF radio.

Rail Safety and Accreditation Requirements

Drivers working on ORA lines must be qualified in the ARTC Code of Practice and the current ORA Addendum. They must also be able to demonstrate that they have been signed off as having route knowledge on the line in question.

Locomotives and rollingstock must be certified as conforming to ROA standards and be accredited to run on the ORA Network.

Track Safety Record

No major derailments have occurred on the Cummins to Buckleboo line in the last two years. **The line is currently non-operational.**

Average Transit Times

Average transit time Cummins to Kimba 9.15 hours. For trains to Buckleboo add an additional hour.

Minimum Radius Curves

There are three 402 metre curves between the 121.5 and 123 km marks.

Ruling Grade

The ruling grade on this line is 1:45.

Current Train Paths

ORA ran grain trains on demand but on a timetable as shown below depending upon the end destination. An indicative timetable for a common destination is shown. Trains run five days per week and weekends, to the same timetable, when required.

Destination	Dep Cummins	Arrive Kimba	Dep Kimba	Arrive Cummins
Kimba	11.30 hrs	20.45 hrs	22.15 hrs	7.30 hrs

Estimated Available Capacity

Train paths with one hour separation from ORA paths are available for use. If opposing movements are required then train size is limited to 307 metres. Paths for longer size trains can be negotiated on written request.

Provided paths are appropriately spaced and scheduled to take into account the requirements of other users it is estimated that an additional three trains per 24 hour period could be run on this track without significantly effecting transit times.

Approximate Floor Price

An approximate floor price of $0.96 per net tonne has been calculated for the line segment between Cummins and Kimba where ORA conducts most of its business. Between Kimba and Buckleboo where ORA trains are not currently running regularly, the annual recovery required would be approximately $2,500 assuming regular services.

Approximate Ceiling Price

An approximate ceiling price of $29.07 per net tonne has been calculated for the line segment between Cummins and Kimba where ORA conducts most of its business. Between Kimba and Buckleboo where ORA trains are not currently running regularly, the annual recovery required would be approximately $509,000 assuming regular services.

Pricing Comments

Floor and ceiling prices have been calculated based upon the principles stated in the body of the Information Brochure. An interest rate of 11.0% has been used in any Discounted Cash Flow Analysis denoting ORA's Weighted Average Cost of Capital.

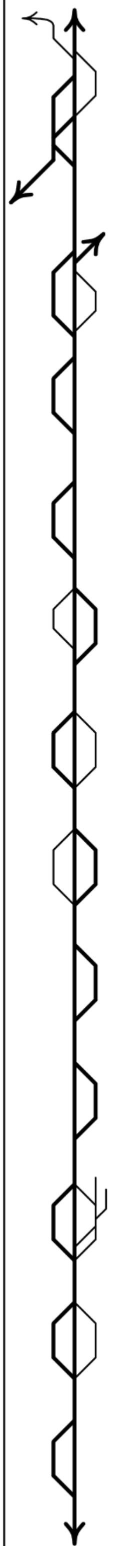
The result has been reported in net tonnes based upon estimated average tonnes hauled on this line segment. The result for between Kimba and Buckleboo has been reported as an annual charge in lieu of a viable option.
Prices shown are based upon current levels of traffic and tonnes and are to be used as a guide only. Actual prices offered will be based upon detailed information supplied.

Floor and Ceiling prices would have to take into account capital investment if the line were reopened.

THIS PAGE IS INTENTIONALLY BLANK

EYRE PENINSULA DIVISION

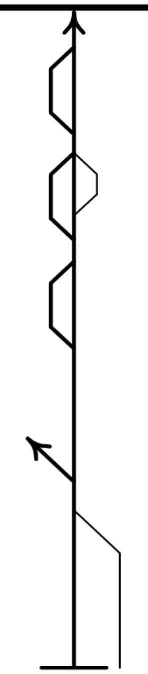
THEVENARD SUB-DIVISION



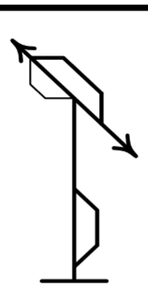
SOUTHBOUND (UP) CAPACITY ENGINE LOADS 830/DA	NJ	NJ+830	SECTION RUN TIME	MAX AXLE LOAD (TONNES)	SAFEWORKING SYSTEM	KILOMETRE POST	STATIONS AND SECTION DISTANCES	KILOMETRE FROM CUMMINS	MAXIMUM TRAIN CROSSING LENGTH	MAXIMUM SPEED SEE NOTE (4)	NORTHBOUND (DOWN) CAPACITY ENGINE LOADS SECTION RUN TIME	830/DA	NJ	NJ+830
					TRAIN ORDER WORKING	67.50	**CUMMINS**	0.00	846					
1800 t	1200 t	1200 t	20 mins	16t			JUNCTION WITH BUCKLEBOO LINE 14.230Km			30 KmH	20 mins	1100 t	1120 t	1610 t
						81.73	**YEELANNA** JUNCTION WITH KAPINNIE LINE	14.23	485					
			60 mins	16t			31.620Km			30 KmH	60 mins	1000 t	1000 t	1360 t
						113.35	**TOOLIGIE**	45.85	467					
			30 mins	16t			15.550Km			30 KmH	30 mins	1100 t	1200 t	2200 t
						128.90	**MURDINGA**	61.40	479					
			25 mins	16t			19.590Km			30 KmH	50 mins	1000 t	1100 t	1700 t
						148.49	**LOCK**	80.99	747					
1650 t	1050 t	1100 t	75 mins	16t			41.710Km			30 KmH	60 mins			
						190.20	**WARRAMBOO**	122.70	307					
1850 t	1130 t		30 mins	16t			12.910Km			30 KmH	35 mins	1150 t	1350 t	2200 t
						203.11	**KYANCUTTA**	135.61	383					
1720 t	1200 t		35 mins	16t			13.130Km			30 KmH	30 mins			
						216.24	**WUDINNA**	148.74	488					
	1100 t		30 mins	16t			21.330Km			30 KmH	35 mins	1000 t	1100 t	1700 t
						237.57	**YANINEE**	170.07	513					
2200 t	1200 t		30 mins	16t			15.830Km			30 KmH	30 mins	1100 t	1200 t	1930 t
						253.40	**MINNIPA**	185.84	500					
1850 t	1050 t	1000 t	70 mins	16t			33.790Km			30 KmH	75 mins			2200 t
						287.19	**POOCHERA**	219.69	494					
			25 mins	16t			19.450Km			30 KmH	25 mins			1800 t
						306.64	**CUNGENA**	239.14	426					
							26.560Km							

EYRE PENINSULA DIVISION

THEVENARD SUB-DIVISION



STATIONS AND SECTION DISTANCES	KILOMETRE POST	KILOMETRE FROM CUMMINS	MAXIMUM TRAIN CROSSING LENGTH	MAX AXLE LOAD (TONNES)	SAFEWORKING SYSTEM	MAXIMUM SPEED SEE NOTE (4)	SOUTHBOUND (UP) CAPACITY ENGINE LOADS 830/DA	SOUTHBOUND NJ	SOUTHBOUND NJ+830	SOUTHBOUND SECTION RUN TIME	NORTHBOUND (DOWN) CAPACITY ENGINE LOADS SECTION RUN TIME	NORTHBOUND 830/DA	NORTHBOUND NJ	NORTHBOUND NJ+830
CUNGENA	306.64	239.14	426		TRAIN ORDER WORKING									
26.560Km				16t	TRAIN ORDER WORKING	30 KmH	1850 t	1050 t	1000 t	35 mins	35 mins	1100 t	1200 t	1800 t
WIRRULLA	333.20	265.70	476		TRAIN ORDER WORKING									
24.350Km				16t	TRAIN ORDER WORKING	30 KmH	1850 t	1050 t	1000 t	30 mins	30 mins	1100 t	1200 t	1800 t
NUNJIKOMPITA	357.55	290.05	687		TRAIN ORDER WORKING									
72.130Km				16t	TRAIN ORDER WORKING	30 KmH	1500 t	800 t	850 t	95 mins	95 mins	1100 t	1200 t	1900 t
JUNCTION WITH PENONG LINE **PENONG JCT** NOTE 13	429.68	362.18			TRAIN ORDER WORKING									
4.820Km				16t	TRAIN ORDER WORKING	30 KmH	1500 t	800 t	850 t	10 mins	10 mins	1100 t	1200 t	1900 t
THEVENARD END OF LINE	434.50	367.00			TRAIN ORDER WORKING									



STATIONS AND SECTION DISTANCES	KILOMETRE POST	KILOMETRE FROM CUMMINS	MAXIMUM TRAIN CROSSING LENGTH	MAX AXLE LOAD (TONNES)	SAFEWORKING SYSTEM	MAXIMUM SPEED SEE NOTE (4)	SOUTHBOUND 830/DA	SOUTHBOUND NJ	SOUTHBOUND NJ+830	SOUTHBOUND SECTION RUN TIME	NORTHBOUND SECTION RUN TIME	NORTHBOUND 830/DA	NORTHBOUND NJ	NORTHBOUND NJ+830
JUNCTION WITH THEVENARD LINE **YEELANNA**	81.73	38.20	485		TRAIN ORDER WORKING									
23.970Km				16t	TRAIN ORDER WORKING	20 KmH	1100 t	1100 t	2200 t	80 mins	80 mins	1150 t	1350 t	2200 t
KAPINNE END OF LINE	105.01	14.23	509		TRAIN ORDER WORKING									

NOTE (13) POINTS TO BE LEFT SET FOR KEVIN MAIN LINE

Thevenard to Cummins (Narrow Gauge)

Major Associated Infrastructure
No major earthworks exist on this line.

Major Bridges and Culverts	96.74km	4 Span Rail Deck Culvert.

Height and Width Limits
Locomotives and Rollingstock must conform to ROA Standard Rollingstock Plate A

Major Track Work Planned
Track is currently non-operational and has been since May 2019.
An upgrade of the Port Lincoln to Cummins, Cummins to Kimba and Cummins to Wudinna lines was completed in 2007/2008. Work increased track longevity, but did not alter maximum track speeds or maximum axle loading. Programs to replace sleepers continued in ensuing years to maintain track longevity, but an additional upgrade would be required if track were to be made operational again.

Train Control
Train control is by train order.

Communications
Communication with train control is by CDMA or Next Gen mobile phone. Train to train and train to ground communication is by VHF radio.

Rail Safety Requirements
Drivers working on ORA lines must be qualified in the ARTC Code of Practice and the current ORA Addendum. They must also be able to demonstrate that they have been signed off as having route knowledge on the line in question.

Locomotives and rollingstock must be certified as conforming to ROA standards and be accredited to run on the ORA Network

Track Safety Record
No major derailments have occurred on the Thevenard to Cummins line in the last two years. **The line is currently non-operational.**

Average Transit Times

Cummins to Lock: 3hrs. Lock to Wudinna: 1.5 hrs. Wudinna to Thevenard: 8 hrs

Minimum Radius Curves
There is a 207 metre curve at the 167.5 km mark between Cummins and Wudinna.

Ruling Grade
The ruling grade between Cummins and Wudinna is 1:70. After Wudinna a number of 1:45 grades occur between the 320 km point and Thevenard.

Current Train Paths
ORA ran grain trains on demand but on time tables as shown below depending upon the end destination. An indicative timetable, for a more common destination, is shown. Trains run five days per week and weekends, to the same timetables, when required.

Destination	Dep Cummins	Arrive Lock	Dep Lock	Arrive Cummins
Lock	16.30 hrs	19.30 hrs	22.30 hrs	1.30 hrs

Estimated Available Capacity

Train paths with one hour separation from ORA paths are available for use. If opposing movements are required then train size is limited to 383 metres. Paths for longer size trains can be negotiated on written request.

Provided paths are appropriately spaced and scheduled to take into account the requirements of other users it is estimated that an additional three trains per 24 hour period could be run on this track without significantly effecting transit times.

Approximate Floor Price

An approximate floor price of $0.96 per net tonne has been calculated for the line segment between Cummins and Wudinna where ORA conducts most of its business. Between Wudinna and Thevenard where ORA trains are not currently running regularly, the annual recovery required would be approximately $8,600 assuming regular services.

Approximate Ceiling Price

An approximate ceiling price of $29.07 per net tonne has been calculated for the line segment between Cummins and Wudinna where ORA conducts most of its business. Between Wudinna and Thevenard where ORA trains are not currently running regularly, the annual recovery required would be approximately $3,000,000 assuming regular services.

Pricing Comments

Floor and ceiling prices have been calculated based upon the principles stated in the body of the Information Brochure. An interest rate of 11% has been used in any Discounted Cash Flow Analysis denoting ORA's Weighted Average Cost of Capital.

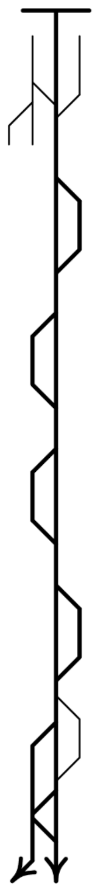
The result has been reported in net tonnes based upon estimated average tonnes hauled on this line segment. The result between Wudinna and Thevenard has been reported as an annual charge in lieu of a viable option.

Prices shown are based upon current business and are to be used as a guide only. Access rates offered will be based upon detailed information supplied.

Floor and Ceiling prices would have to take into account capital investment if the line were reopened.

EYRE PENINSULA DIVISION

PORT LINCOLN SUB-DIVISION



SOUTHBOUND (UP) CAPACITY ENGINE LOADS 830/DA	NJ	NJ+830	SECTION RUN TIME	MAX AXLE LOAD (TONNES)	SAFEWORKING SYSTEM	KILOMETRE POST	STATIONS AND SECTION DISTANCES	KILOMETRE FROM PORT LINCOLN	MAXIMUM TRAIN CROSSING LENGTH	MAXIMUM SPEED SEE NOTE (4)	NORTHBOUND (DOWN) CAPACITY ENGINE LOADS SECTION RUN TIME	830/DA	NJ	NJ+830
						0.00	GWA TERMINAL GWA DIVISIONAL OFFICE **PORT LINCOLN**	0.00						
1200 t	1200 t	1800 t	20 mins	16t	TRAIN ORDER WORKING		7.950Km			30 KmH	18 mins	1100 t	1120 t	1610 t
						7.95	**GRANTHAM**	7.95	658					
			23 mins	16t			13.650Km			30 KmH	22 mins			
						21.60	**COOMUNGA**	21.60	435					
750 t	675 t	1300 t	29 mins	16t			16.480Km			30 KmH	23 mins	750 t	650 t	1200 t
						38.08	**WANILLA**	38.08	544					
1200 t	1200 t	1800 t	20 mins	16t			13.160Km			30 KmH	18 mins			
						51.24	**EDILLILIE**	51.24	663					
			22 mins	16t			16.260Km NOTE 10			30 KmH	22 mins			
						67.50	**CUMMINS** JUNCTION WITH THEVENARD AND BUCKELBOO LINES	67.50	846					

NOTE (10) POINTS TO BE LEFT SET FOR THEVENARD MAIN LINE, EXCEPT WHEN ACTUALLY IN USE.

Cummins to Port Lincoln (Narrow Gauge)

Major Associated Infrastructure
No major earthworks exist on this line.

Major Bridges and Culverts:	54.26km	4 Span transom Bridge
	66.15km	5 Span Raildeck Culvert

Height and Width Limits
Locomotives and Rollingstock must conform to ROA Standard Rollingstock Plate A

Major Track Work Planned
Track is currently non-operational and has been since May 2019.

An upgrade of the Port Lincoln to Cummins, Cummins to Kimba and Cummins to Wudinna lines was completed in 2007/2008. Work increased track longevity, but did not alter maximum track speeds or maximum axle loading. Programs to replace sleepers continued in ensuing years to maintain track longevity, but an additional upgrade would be required if track were to be made operational again.

Train Control
Train control is by train order.

Communications
Communication with train control is by CDMA or Next Gen mobile phone. Train to train and train to ground communication is by VHF radio.

Rail Safety Requirements
Drivers working on ORA lines must be qualified in the ARTC Code of Practice and the current ASR Addendum. They must also be able to demonstrate that they have been signed off as having route knowledge on the line in question.

Locomotives and rollingstock must be certified as conforming to ROA standards and be accredited to run on the ORA Network

Track Safety Record
No major derailments have occurred on the Cummins to Port Lincoln line in the last two years. **The line is currently non-operational.**

Average Transit Times
Port Lincoln to Cummins: Average section time: 2.5 hrs.

Minimum Radius Curves
A number of 503 metre curves occur mainly between the 28 and 38 km marks.

Ruling Grade
A number of short 1:60 grades occur between Port Lincoln and Cummins mainly between the 28 and 38 km points.

Current Train Paths
ORA ran grain trains on demand but on time tables as shown below depending upon the end destination. Indicative timetables for common destinations are shown. Trains run five days per week and weekends to the same timetables when required.

Destination	Dep Pt Lincoln	Arrive Cummins	Dep Cummins	Arrive Pt Lincoln
Rudall	12.00 hrs	14.30 hrs	2.15 hrs	4.45 hrs
Cummins	15.00 hrs	17.30 hrs	19.00 hrs	21.30 hrs

Kimba	09.00 hrs	11.30 hrs	07.30 hrs	10.00 hrs
Lock	14.00 hrs	16.30 hrs	01.30 hrs	04.00 hrs

Estimated Available Capacity
Train paths with one hour separation from ORA paths are available for use. If opposing movements are required then train size is limited to 435 metres. Paths for longer size trains can be negotiated on written request.

Provided paths are appropriately spaced and scheduled to take into account the requirements of other users it is estimated that an additional three trains per 24 hour period could be run on this track without significantly effecting transit times.

Approximate Floor Price
An approximate floor price of $0.96 per net tonne has been calculated for this line segment.

Approximate Ceiling Price
An approximate ceiling price of $29.07 per net tonne has been calculated for this line segment.

Pricing Comments
Floor and ceiling prices have been calculated based upon the principles stated in the body of the Information Brochure. An interest rate of 11% has been used in any Discounted Cash Flow Analysis denoting ORA's Weighted Average Cost of Capital.

The result has been reported in net tonnes based upon estimated average tonnes hauled on this line segment.

Prices shown are based upon current levels of traffic and current tonnages and are to be used as a guide only. Access rates offered will be based upon detailed information supplied.

Floor and Ceiling prices would have to take into account capital investment if the line were reopened.

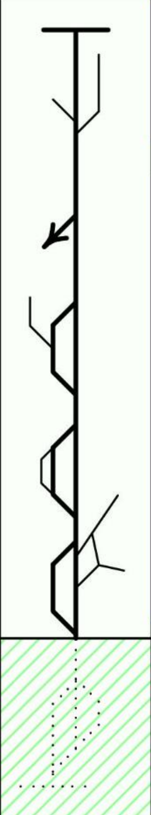
THIS PAGE IS INTENTIONALLY BLANK

EYRE PENINSULA DIVISION

PENONG SUB-DIVISION

Kilometre Post	Stations and Section Distances	Kilometre from Port Lincoln	Maximum Train Crossing Length	Maximum Speed	Max Axle Load (Tonnes)	Safeworking System	Eastbound (Up) 830/DA	Eastbound (Up) NJ	Eastbound (Up) NJ+830	Eastbound Section Run Time (see note 15)	Westbound Section Run Time (see note 15)	Westbound (Down) 830/DA	Westbound (Down) NJ	Westbound (Down) NJ+830
434.50	END OF LINE **THEVENARD** ASR TERMINAL	0.00												
	7.820Km			40 KmH	12t	TRAIN ORDER WORKING	1200 t	1200 t	2100 t	16 mins	15 mins	875 t	850 t	1700 t
	NOTE 13													
429.68	**PENONG JUNCTION**	4.82												
	15.890Km			40 KmH	12t	TRAIN ORDER WORKING	1200 t	1200 t	2100 t	34 mins	32 mins	875 t	850 t	1700 t
445.57	**MOULE**	20.71	634											
	16.480Km			40 KmH	12t	TRAIN ORDER WORKING	1200 t	1200 t	2100 t	44 mins	41 mins	875 t	950 t	1700 t
466.16	**CHARRA**	41.30	674											
	23.980Km			40 KmH	12t	TRAIN ORDER WORKING	1200 t	1200 t	2100 t	51 mins	47 mins	1100 t	1200 t	2000 t
490.14	**KEVIN**	65.28	380											
	NOTE 14													
	15.440Km			40 KmH	12t	TRAIN ORDER WORKING	1000 t	1100 t	1800 t	60 mins	60 mins	850 t	1100 t	1700 t
505.58	**PENONG** END OF LINE	80.72	270											

STRIP MAP



NOTE (13) POINTS TO BE LEFT SET FOR PENONG LINE
NOTE (14) THE LINE BEYOND KEVIN IS CLOSED, AND IS OWNED BY THE SA GOVERNMENT.
NOTE (15) SECTION TIMES AND TRACK SPEED REFLECT TRACK CONDITION BEFORE TRACK UPGRADES

Kevin to Thevenard (Narrow Gauge)

Major Associated Infrastructure

The Kevin to Thevenard line sits on major earthworks between the outskirts of Thevenard at the 430.63 km point just before the line crosses the Eyre Highway. The line runs through a number of major cuttings in undulating country in the last 15 kilometres before Kevin Yard.

The line is closed between Kevin and Penong.

Height and Width Limits

Locomotives and Rollingstock must conform to ROA Standard Rollingstock Plate A

Major Track Work Planned

No future major works planned at this stage.

Train Control

Train control is by train order.

Communications

Communication with train control is by satellite phone and Next Gen mobile phone. Train to train and train to ground communication is by VHF radio.

Rail Safety Requirements

Drivers working on ORA lines must be qualified in the ARTC Code of Practice and the current ASR Addendum. They must also be able to demonstrate that they have been signed off as having route knowledge on the line in question.

Locomotives and rollingstock must be certified as conforming to ROA standards and be accredited to run on the ORA Network

Track Safety Record

No major derailments have occurred on the Kevin to Thevenard line in the last two years.

Average Transit Times

Thevenard to Kevin	Average section time:	2.25 hrs.
Kevin to Thevenard	Average Section Time	2.83 hrs.

Section times shown reflect current track conditions and do not take into account the effects of proposed track upgrades.

Minimum Radius Curves

A 200 metre curve and a 600 metre curve occur within Kevin Yard.

Ruling Grade

of the ruling grade between Kevin and Thevenard is 1:50.

Current Train Paths

ORA runs three gypsum trains per 24 hour cycle on time tables shown below. Trains run five days per week although some weekend working to the same timetables occurs when required.

Dep Thevenard	Arrive Kevin	Dep Kevin	Arrive Thevenard
3.30 hrs	05.45 hrs	7.00 hrs	9.25 hrs
10.45 hrs	13.00 hrs	14.00 hrs	16.25 hrs
17.45 hrs	20.00 hrs	21.00 hrs	23.25 hrs

Estimated Available Capacity
Train paths with 40 minute separation from ORA paths are available for use. If opposing movements are required then train size is limited to 634 metres, the length of the crossing loop at Moule. Paths for longer trains may not be possible without effecting running times unless investment in additional infrastructure is made.

Provided paths are appropriately spaced and scheduled to take into account the requirements of other users it is estimated that an additional three trains per 24 hour period could be run on this track without significantly effecting transit times.

Approximate Floor Price
An approximate floor price of $0.14 per net tonne has been calculated for this line segment.

Approximate Ceiling Price
An approximate ceiling price of $3.43 per net tonne has been calculated for this line segment.

Pricing Comments
Floor and ceiling prices have been calculated based upon the principles stated in the body of the Information Brochure. An interest rate of 11% has been used in any Discounted Cash Flow Analysis denoting ORA's Weighted Average Cost of Capital.

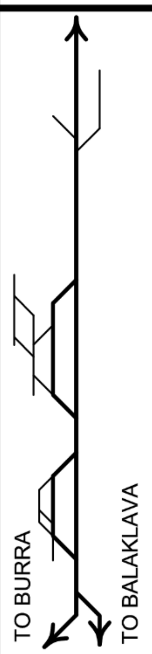
The result has been reported in net tonnes based upon budget tonnes hauled on this line segment.
Prices shown are based upon current levels of traffic and current tonnages and are to be used as a guide only.
Access rates offered will be based upon detailed information supplied.

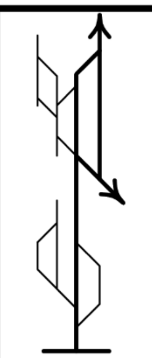
A capital investment component has been included in the ceiling price to ensure that track can meet current performance criteria for the next 5 to 7 years.

THIS PAGE IS INTENTIONALLY BLANK

MID NORTH DIVISION

HAMLEY BRIDGE SUB-DIVISION

SOUTHBOUND (UP) CAPACITY ENGINE LOADS: 1x700	2x830/DA/CK	1x830/DA/CK	SECTION RUN TIME	MAX AXLE LOAD (TONNES)	SAFEWORKING SYSTEM	KILOMETRE POST	STRIP MAP	STATIONS AND SECTION DISTANCES	KILOMETRE FROM GAWLER RIVER BRIDGE	MAXIMUM TRAIN CROSSING LENGTH	MAXIMUM SPEED SEE NOTE (4)	NORTHBOUND (DOWN) CAPACITY ENGINE LOADS: SECTION RUN TIME	1x830/DA/CK	2x830/DA/CK	1x700
					CTC	42.00		**GAWLER RIVER BRIDGE**	0.00						
2000 t *(2800 t)*	2000 t *(2800 t)*	1000 t *(1400 t)*	15 mins	19.5 t	TRAIN ORDER WORKING			7.000Km NOTE 3			30 KmH	18 mins	700 t	1400 t	1250 t
						49.00		**ROSEWORTHY** BLOCK 5 DEAD END	7.00	539					
1875 t	2000 t	1000 t	65 mins	19.5 t				NOTE 4 22.500Km			30 KmH	32 mins	1050 t	2100 t	2000 t
						71.50		**HAMLEY BRIDGE** JUNCTION WITH BURRA AND BALAKLAVA LINE	29.50	422					

1x700	2x830/DA/CK	1x830/DA/CK	SECTION RUN TIME	MAX AXLE LOAD (TONNES)	SAFEWORKING SYSTEM	KILOMETRE POST	STRIP MAP	STATIONS AND SECTION DISTANCES	KILOMETRE FROM GAWLER RIVER BRIDGE	MAXIMUM TRAIN CROSSING LENGTH	MAXIMUM SPEED SEE NOTE (4)	SECTION RUN TIME	1x830/DA/CK	2x830/DA/CK	1x700
						49.00		**ROSEWORTHY** JUNCTION WITH HAMLEY BRIDGE LINE	35.00	539					
1550 t	1740 t	870 t	65 mins	19.5 t	TRAIN ORDER WORKING			NOTE 5 28.000Km			30 KmH	60 mins	630 t	1260 t	1050 t
						77.00		**KAPUNDA** END OF LINE	7.00	309					

NOTE (3) IF CLEAR RUN INTO GAWLER IS ARRANGED WITH TA CONTROL, LOADS CAN BE INCREASED BY 40% AS INDICATED IN ITALICS ABOVE.
NOTE (4) AN OUTLOADER HAS BEEN LOCATED AT 49.49Km ON THE KAPUNDA LINE. AN EARTH DEAD END HAS BEEN PLACED AT 50.50Km, ALLOWING THE OUTLOADER TO BE SERVED.
NOTE (5) THE KAPUNDA LINE IS OUT OF SERVICE BEYOND 50.50Km. A DEAD END IS IN PLACE.

Hamley Bridge to Gawler River Bridge, Kapunda to Roseworthy (Broad Gauge)

Note: The lines between Hamley Bridge and Roseworthy and Kapunda and Roseworthy are non-operational.

Major Associated Infrastructure

No major earthworks exist on this line.

Major Bridges and Culverts:	70.8km	8 Span Transom Bridge.

Height and Width Limits

Locomotives and Rollingstock must conform to State Transit Authority South Australia Maximum Outline for Metropolitan Railway Rollingstock & Equipment.

Major Track Work Planned

No major track work is scheduled on the Hamley Bridge to Gawler River Bridge or the Roseworthy to Kapunda lines in the next twelve months.

Train Control

Train control is by train order.

Communications

Communication with train control is by VHF radio. Train to train and train to ground communication is by VHF radio.

Rail Safety Requirements

Drivers working on ORA lines must be qualified in the ARTC Code of Practice and the current ORA Addendum. They must also be able to demonstrate that they have been signed off as having route knowledge on the line in question.

Locomotives and rollingstock must be certified as conforming to ROA standards and be accredited to run on the ORA Network

Track Safety Record

No major derailments have occurred on the Hamley Bridge to Gawler River Bridge or the Roseworthy to Kapunda lines in the last two years.

Average Transit Times

Gawler River Bridge to Hamley Bridge:	Average section time:	1.5 hrs.
Roseworthy to Kapunda:	Average section time:	1.5 hrs.

Minimum Radius Curves

Two 400 metre curves occur on the Roseworthy to Kapunda line outside Kapunda.

Ruling Grade

The ruling grade between Gawler River and Roseworthy is 1:62. A 1:65 grade occurs between Roseworthy and Kapunda.

Current Train Paths

ORA runs Ad Hoc services to Roseworthy from Adelaide for grain collection as required usually on the path shown below.

Dep Gawler	Arrive Roseworthy	Dep Roseworthy	Arrive Gawler
8.50 hrs	09.07 hrs	17.00 hrs	17.17 hrs

As track is not used past Roseworthy all paths are available.

Estimated Available Capacity
Train paths with 40 minute separation from ORA paths are available for use. If opposing movements are required then train size is limited to 422 metres, and 309 metres Roseworthy to Kapunda. Paths for longer trains may be possible without effecting running times upon request by written application.

Provided paths are appropriately spaced and scheduled to take into account the requirements of other users it is estimated that an additional two trains per 24 hour period could be run on this track without significantly effecting transit times.

Approximate Floor Price
An approximate floor price of $0.07 per net tonne has been calculated for the Gawler to Roseworthy line segment. A charge for the dormant line between Roseworthy and Hamley Bridge and Roseworthy and Kapunda has been calculated at $17,530.. The result between Roseworthy and Hamley Bridge and Roseworthy and Kapunda has been reported as an annual charge in lieu of a viable option.

Approximate Ceiling Price
A charge for the dormant line between Roseworthy and Hamley Bridge and Roseworthy and Kapunda has been calculated at $1,290,600.   The result between Roseworthy and Hamley Bridge and Roseworthy and Kapunda has been reported as an annual charge in lieu of a viable option.

Pricing Comments
Floor and ceiling prices have been calculated based upon the principles stated in the body of the Information Brochure. An interest rate of 9% has been used in any Discounted Cash Flow Analysis denoting ORA's Weighted Average Cost of Capital.

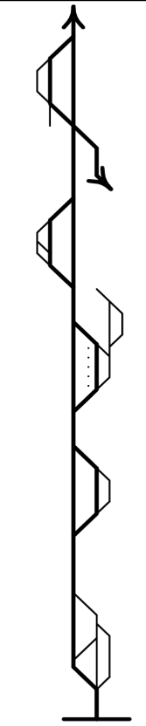
The result has been reported in net tonnes based upon estimated average tonnes hauled on this line segment. Prices shown are based upon current levels of traffic and current tonnages and are to be used as a guide only.

Access rates offered will be based upon detailed information supplied.

THIS PAGE IS INTENTIONALLY BLANK

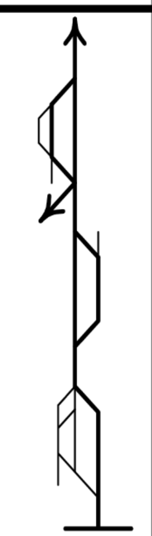
MID NORTH DIVISION

BURRA SUB-DIVISION

SOUTHBOUND (UP) CAPACITY ENGINE LOADS 1x700	2x830/DA/CK	1x830/DA/CK	SECTION RUN TIME	MAX AXLE LOAD (TONNES)	SAFEWORKING SYSTEM	KILOMETRE POST	STRIP MAP	STATIONS AND SECTION DISTANCES	KILOMETRE FROM GAWLER RIVER BRIDGE	MAXIMUM TRAIN CROSSING LENGTH	MAXIMUM SPEED SEE NOTE (4)	NORTHBOUND (DOWN) CAPACITY ENGINE LOADS SECTION RUN TIME	1x830/DA/CK	2x830/DA/CK	1x700
					TRAIN ORDER WORKING	71.50		**HAMLEY BRIDGE** JUNCTION WITH BALAKLAVA LINE	29.50	422					
2600 t	2800 t	1400 t	65 mins	19.5 t				16.500Km			30 KmH	20 mins	920 t	1840 t	1690 t
						88.00		**TARLEE**	46.00	437					
			25 mins	19.5 t				22.000Km			30 KmH	25 mins	870 t	1740 t	1500 t
						111.00		**SADDLEWORTH**	68.00	286					
2300 t	2600 t	1300 t	50 mins	19.5 t				32.000Km			30 KmH	50 mins			
						142.00		**FARRELL FLAT**	100.00	445					
								NOTE 6							
2050 t	2460 t	1230 t	50 mins	19.5 t				21.000Km			30 KmH	50 mins			
						163.00		**BURRA** END OF LINE	121.00	258					

MID NORTH DIVISION

BALAKLAVA SUB-DIVISION

SOUTHBOUND (UP) CAPACITY ENGINE LOADS 1x700	2x830/DA/CK	1x830/DA/CK	SECTION RUN TIME	MAX AXLE LOAD (TONNES)	SAFEWORKING SYSTEM	KILOMETRE POST	STRIP MAP	STATIONS AND SECTION DISTANCES	KILOMETRE FROM GAWLER RIVER BRIDGE	MAXIMUM TRAIN CROSSING LENGTH	MAXIMUM SPEED SEE NOTE (4)	NORTHBOUND (DOWN) CAPACITY ENGINE LOADS SECTION RUN TIME	1x830/DA/CK	2x830/DA/CK	1x700
						71.50		**HAMLEY BRIDGE** JUNCTION WITH BURRA LINE	29.50	422					
1650 t	1920 t	960 t	65 mins	19.5 t				32.000Km			30 KmH	35 mins	950 t	1900 t	1625 t
						88.00		**OWEN**	46.00	358					
1375 t	1600 t	800 t	45 mins	19.5 t				18.500Km			30 KmH	45 mins			
						106.50		**BALAKLAVA** END OF LINE	64.50	329					

Burra to Hamley Bridge, Balaklava to Hamley Bridge (Broad Gauge)

Note: The lines between Burra and Hamley Bridge and Balaklava and Hamley Bridge are being held in non-operational condition.

Major Associated Infrastructure
No major earthworks exist on this line.

Major Bridges and Culverts:

Hamley Bridge to Burra	123.76km	4 Span Transom Bridge
	151.08km	6 Span Rail Deck Culvert
	151.51km	5 Span Rail Deck Culvert
	151.75km	5 Span Rail Deck Culvert
	151.96km	8 Span Rail Deck Culvert
	161.08km	4 Span Rail Deck Culvert
Hamley Bridge to Balaklava	72.80km	5 Span Transom Bridge

Height and Width Limits
Locomotives and Rollingstock must conform to State Transit Authority South Australia Maximum Outline for Metropolitan Railway Rollingstock & Equipment.

Major Track Work Planned
No major track work is scheduled on the Hamley Bridge to Gawler River Bridge or the Roseworthy to Kapunda lines in the next twelve months.

Train Control
Train control is by train order.

Communications
Communication with train control is by VHF radio. Train to train and train to ground communication is by VHF radio.

Rail Safety Requirements
Drivers working on ORA lines must be qualified in the ARTC Code of Practice and the current ORA Addendum. They must also be able to demonstrate that they have been signed off as having route knowledge on the line in question.

Locomotives and rollingstock must be certified as conforming to ROA standards and be accredited to run on the ORA Network

Track Safety Record
No major derailments have occurred on the Burra to Hamley Bridge or Balaklava to Hamley Bridge lines in the last two years.

Average Transit Times

Burra to Hamley Bridge:	Average section time:	3.5 hrs.
Balaklava to Hamley Bridge	Average section time:	1.5 hrs.

Minimum Radius Curves
There is a 390 metre curve at the 4 km point on the Burra to Hamley Bridge line.
There is a 306 metre curve at the 106.5 km point on the Balaklava to Hamley Bridge line.

Ruling Grade
The ruling grade on the Burra to Hamley Bridge line is 1:80.
The ruling grade on the Balaklava to Hamley Bridge line is 1:68..

Current Train Paths
As neither track is used by ORA at this time no paths can be provided

Estimated Available Capacity
Train paths with 40 minute separation are available for use. If opposing movements are required then train size is limited to 422 metres. Paths for longer trains may be possible without effecting running times upon request by written application.

Provided paths are appropriately spaced and scheduled to take into account the requirements of other users it is estimated that three trains per 24 hour period could be run on this track without significantly effecting transit times.

Approximate Floor Price
An approximate floor price of $2,454 per year has been calculated for the Burra to Hamley Bridge line segment. A charge for the dormant line between Balaklava and Hamley Bridge has been calculated at $2,454. The result between Burra and Hamley Bridge and Balaklava and Hamley Bridge has been reported as an annual charge in lieu of a viable option.

Approximate Ceiling Price
An approximate ceiling price of $1,502,000 per year has been calculated for the Burra to Hamley Bridge line segment. A charge for the dormant line between Balaklava and Hamley Bridge has been calculated at $634,000 per year. The result between Burra and Hamley Bridge and Balaklava and Hamley Bridge has been reported as an annual charge in lieu of a viable option.

Pricing Comments
Floor and ceiling prices have been calculated based upon the principles stated in the body of the Information Brochure. An interest rate of 11% has been used in any Discounted Cash Flow Analysis denoting ORA's Weighted Average Cost of Capital.

The result has been reported in net tonnes based upon estimated average tonnes hauled on this line segment. Prices shown are based upon current levels of traffic and current tonnages and are to be used as a guide only.

Access rates offered will be based upon detailed information supplied.

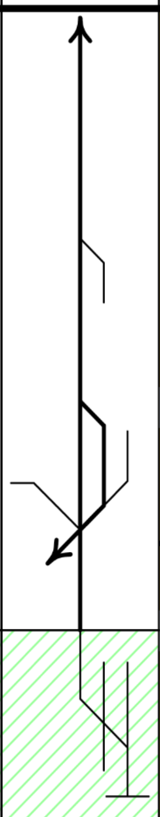
THIS PAGE IS INTENTIONALLY BLANK

MID NORTH DIVISION

BAROSSA SUB-DIVISION

SOUTHBOUND (UP) CAPACITY ENGINE LOADS 1x700	2x830/DA/CK	1x830/DA/CK	SECTION RUN TIME	MAX AXLE LOAD (TONNES)	SAFEWORKING SYSTEM	KILOMETRE POST	STATIONS AND SECTION DISTANCES	KILOMETRE FROM GAWLER RIVER BRIDGE	MAXIMUM TRAIN CROSSING LENGTH	MAXIMUM SPEED SEE NOTE (4)	NORTHBOUND (DOWN) CAPACITY ENGINE LOADS SECTION RUN TIME	1x830/DA/CK	2x830/DA/CK	1x700
					CTC	42.00	**GAWLER CENTRAL** INTERFACE WITH TRANSADELAIDE	0.00						
1550 t (*1100 t*)	1920 t (*1360 t*)	960 t (*680 t*)	26 mins	20t	TRAIN ORDER WORKING		15.000Km			50 KmH	18 mins	620 t	1240 t	1070 t
						57.00	**LYNDOCH**	15.00						
			26 mins	20t			20.000Km			50 KmH	32 mins			
							NOTE 1							
						77.00	**NURIOOTPA** JUNCTION WITH ANGUSTON LINE (CLOSED)	35.00	435					
2400 t	2400 t	1200 t	17 mins	20t			4.100Km			30 KmH	14 mins	390 t	780 t	780 t
							NOTE 2							
						81.10		39.10						
				20t			2.150Km			20 KmH				
						83.25	**PENRICE** END OF LINE PSP PROPERTY	41.25						

STRIP MAP



NOTE (1) IF SPEEDS ARE RESTRICTED TO 40 Km/h OR LESS AT 69.22 OR 54.72Km, THE LOAD FOR SOUTHBOUND TRAINS IS REDUCED AS SHOWN ABOVE.
NOTE (2) THE LINE FROM 81.10Km TO PENRICE QUARRY IS OWNED BY PENRICE SODA PRODUCTS

Stockport Road to Gawler River (Broad Gauge)

Note: The line between Stockport Road and Gawler River is being held in non-operational condition.

Major Associated Infrastructure
Major Cuttings are in track at the 62.06 km point. No major earthworks exist on this line.

Major Bridges and Culverts	57.21km	5 Span Transom Bridge
	69.21km	4 Span Transom Bridge
	78.87km	7 Span Open Deck Culvert

Height and Width Limits
Locomotives and Rollingstock must conform to State Transit Authority South Australia Maximum Outline for Metropolitan Railway Rollingstock & Equipment .

Major Track Work Planned
No major track work is scheduled on the Hamley Bridge to Gawler River Bridge or the Roseworthy to Kapunda lines in the next twelve months.

Train Control
Train control is by train order.

Communications
Communication with train control is by VHF radio. Train to train and train to ground communication is by VHF radio. Digital cellular telephone coverage is good along the line if required.

Rail Safety Requirements
Drivers working on ORA lines must be qualified in the ARTC Code of Practice and the current ORA Addendum. They must also be able to demonstrate that they have been signed off as having route knowledge on the line in question.

Locomotives and rollingstock must be certified as conforming to ROA standards and be accredited to run on the ORA Network

Track Safety Record
No major derailments have occurred on the Gawler River to Angaston line in the last two years.

Average Transit Times

Gawler to Nuriootpa:	Average section time:	45 minutes.
Nuriootpa to Angaston:	Average section time:	31 minutes
Nuriootpa to Penrice:	Average section time:	20 minutes

Minimum Radius Curves
There are three 241 metre radius curves on the Gawler River to Angaston line at the 26.5, 51 and 51.5 km points respectively.

Ruling Grade
The ruling grade between Gawler River and Penrice is 1:70. The ruling grade between Penrice and Angaston is 1:55.

Current Train Paths
ORA ran a daily train to the Penrice Quarry between Nuriootpa and Angaston 7 days per week.

Dep Gawler	Arrive Penrice	Dep Penrice	Arrive Gawler
8.50 hrs	09.07 hrs	17.00 hrs	17.17 hrs

Estimated Available Capacity
Train paths with 45 minute separation are available for use. If opposing movements are required then train size is limited to 340 metres. Paths for longer trains may be possible without effecting running times upon request by written application.

Provided paths are appropriately spaced and scheduled to take into account the requirements of other users it is estimated that three trains per 24 hour period could be run on this track without significantly effecting transit times.

Approximate Floor Price
An approximate floor price of $0.15 per net tonne has been calculated for the Gawler River to Penrice line segment. A charge for the dormant line between the points to Penrice and Angaston has been calculated at $3,900 per year. The result between Penrice Junction and Angaston has been reported as an annual charge in lieu of a viable option.

Approximate Ceiling Price
An approximate ceiling price of $7.04 per net tonne has been calculated for the Gawler River to Penrice line segment.

Pricing Comments
Floor and ceiling prices have been calculated based upon the principles stated in the body of the Information Brochure. An interest rate of 11% has been used in any Discounted Cash Flow Analysis denoting ORA’s Weighted Average Cost of Capital.

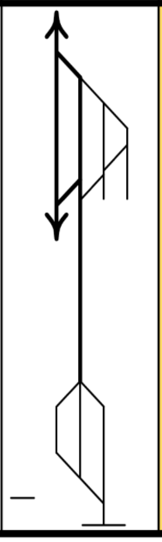
The result has been reported in net tonnes based upon estimated average tonnes hauled on this line segment. Prices shown are based upon current levels of traffic and current tonnages and are to be used as a guide only.

Access rates offered will be based upon detailed information supplied.

THIS PAGE IS INTENTIONALLY BLANK

MURRAYLANDS DIVISION

APAMURRA SUB-DIVISION

SOUTHBOUND (UP) CAPACITY ENGINE LOADS 1x830	2x830	1x22/420	SECTION RUN TIME	MAX AXLE LOAD (TONNES)	SAFEWORKING SYSTEM	KILOMETRE POST	STRIP MAP	STATIONS AND SECTION DISTANCES	KILOMETRE FROM MONARTO SOUTH	MAXIMUM TRAIN CROSSING LENGTH	MAXIMUM SPEED SEE NOTE (4)	NORTHBOUND (DOWN) CAPACITY ENGINE LOADS SECTION RUN TIME	1x830	2x830	1x22/422
					CTC	81.30		INTERFACE WITH ARTC **MONARTO SOUTH**	0.00	1500					
1200 t	2400 t	1590 t	125 mins	19.5 t	TRAIN ORDER WORKING			35.200Km	15.00		20 KmH	110 mins	1100 t	2200 t	1580 t
						116.70		**APAMURRA**	35.20	483					
								END OF THE LINE							

Monarto South to Apamurra (Standard Gauge)

Note: The line between Monarto South and Apamurra is being held in non-operational condition. Major Associated Infrastructure

No major earthworks exist on this line.

Major Bridges and Culverts:	84.65km	7 Span	Open Deck Culvert
	97.70km	4 Span	RC Ballasted Deck Bridge
	109.53	5 Span	RC Ballasted Deck Bridge

Height and Width Limits
Locomotives and Rollingstock must conform to ROA Standard Rollingstock Plate C

Major Track Work Planned
No major track work is scheduled on the Monarto South to Apamurra line in the next twelve months.

Train Control
Train control is by train order.

Communications
Communication with train control is by UHF radio for part of the journey. Train to train and train to ground communication is by VHF radio.

Digital cellular telephone coverage is available at points along the line if required and public phones are available at Monarto South, Tepko and Apamurra.

Rail Safety Requirements
Drivers working on ORA lines must be qualified in the ARTC Code of Practice and the current ORA Addendum. They must also be able to demonstrate that they have been signed off as having route knowledge on the line in question.

Locomotives and rollingstock must be certified as conforming to ROA standards and be accredited to run on the ORA Network

Track Safety Record
No major derailments have occurred on the Monarto South to Apamurra line in the last two years.

Average Transit Times
Monarto South to Apamurra: Average section time: 2 hrs.

Minimum Radius Curves
There are two 481 metre curve at the 68.5 km and 69.5 km points respectively.

Ruling Grade
A number of 1:60 grades occur on the Monarto South to Apamurra line.

Current Train Paths
As neither track is used by ORA at this time no paths can be provided

Estimated Available Capacity
Train paths with 12 hours separation are available for use.

Approximate Floor Price
An approximate floor price of $1,650 per year has been calculated for the Monarto South to Appamurra line segment based upon regular train running.. The result between Monarto South and Appamurra has been reported as an annual charge in lieu of a viable option.

Approximate Ceiling Price
An approximate ceiling price of $250000 per year has been calculated for the Monarto South to Apamurra line segment based upon regular train running. The result between Monarto South and Appamurra has been reported as an annual charge in lieu of a viable option.

Pricing Comments
Floor and ceiling prices have been calculated based upon the principles stated in the body of the Information Brochure. An interest rate of 11% has been used in any Discounted Cash Flow Analysis denoting a relatively low level of risk.

The result has been reported as a rate per year, as tonnages are not available.

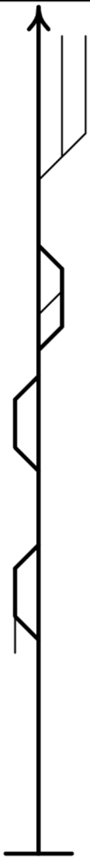
THIS PAGE IS INTENTIONALLY BLANK

MURRAYLANDS DIVISION

WESTBOUND (UP) CAPACITY ENGINE LOADS | LOXTON SUB-DIVISION | EASTBOUND (DOWN) CAPACITY ENGINE LOADS

2000 HP (Westbound)	GM (Westbound)	830/DA (Westbound)	SECTION RUN TIME (Westbound)	MAX AXLE LOAD (TONNES)	SAFEWORKING SYSTEM	KILOMETRE POST	STATIONS AND SECTION DISTANCES	KILOMETRE FROM TAILEM BEND	MAXIMUM TRAIN CROSSING LENGTH	MAXIMUM SPEED SEE NOTE (4)	SECTION RUN TIME (Eastbound)	830/DA (Eastbound)	GM (Eastbound)	2000 HP (Eastbound)
					CTC		GWA TERMINAL INTERFACE WITH ARTC JUNCTION WITH PINNAROO LINE							
					TRAIN ORDER WORKING	119.50	**TAILEM BEND**	104.90	606					
1700 t (*1275 t*)	1550 t (*1150 t*)	1050 t (*780 t*)	95 mins	19.5 t			49.500Km NOTE 8			50 KmH	70 mins	830 t	1250 t	1440 t
						169.00	**KAROONDA**	49.50	748					
1550 t (*1150 t*)	1250 t (*950 t*)	1000 t (*750 t*)	80 mins	19.5 t			55.400Km			50 KmH	70 mins			
						224.40	**WANBI**	104.90	509					
			45 mins	19.5 t			19.100Km NOTE 9			50 KmH	30 mins	1100 t (*825 t*)		
						243.50	**ALAWOONA**	124.00	395					
1550 t	1250 t	850 t	70 mins	19.5 t			26.500Km			40 KmH	60 mins	800 t		
						270.00	**LOXTON** (TOOKAYERTA BUNKER)	105.50						
			15 mins	19.5 t			8.000Km END OF THE LINE			40 KmH	15 mins			
						278.00	**LOXTON YARD**	159.50	458					

STRIP MAP



NOTE (8) IF SPEED LIMIT IS RESTRICTED TO 30Kmh OR LESS AT 171.0 OR 223.6 Km, LOADS ARE TO BE REDUCED BY 25% AS SHOWN ABOVE.
NOTE (9) IF SPEED LIMIT IS RESTRICTED TO 30Kmh OR LESS AT 232.0 OR 164.4 OR 142.5 Km, LOADS ARE TO BE REDUCED BY 25% AS SHOWN ABOVE.

Tailem Bend to Loxton (Standard Gauge)

Note: The line between Tailem Bend to Loxton line is being held in non-operational condition.

Major Associated Infrastructure
No major Earthworks exist between Tailem Bend and Loxton.

No major Bridges and Culverts exist between Tailem Bend and Loxton.

Height and Width Limits
Locomotives and Rollingstock must conform to ROA Standard Rollingstock Plate C

Major Track Work Planned
No major track work is scheduled on the Tailem Bend to Loxton line in the next twelve months.

Train Control
Train control is by train order.

Communications
Communication with train control is by UHF radio for part of the journey. Train to train and train to ground communication is by VHF radio.

Digital cellular telephone coverage is available at points along the line if required and public phones are available at Wynarka, Karoonda, Borrika, Halidon, Mindarie, Wanbi and Alawoona.

Rail Safety Requirements
Drivers working on ORA lines must be qualified in the ARTC Code of Practice and the current ORA Addendum. They must also be able to demonstrate that they have been signed off as having route knowledge on the line in question.

Locomotives and rollingstock must be certified as conforming to ROA standards and be accredited to run on the ORA Network

Track Safety Record
No major derailments have occurred on the Tailem Bend to Loxton line in the last two years.

Average Transit Times
Tailem Bend to Loxton Yard: Average section time: 7 hrs.

Minimum Radius Curves
A number of 402 metre curves occur on the Tailem Bend to Loxton line.

Ruling Grade
The ruling grade on the Tailem Bend to Loxton line is 1:67.

Current Train Paths
ORA ran grain trains on demand but on time tables as shown below depending upon the end destination. Indicative timetables for common destinations are shown. Trains run five days per week although weekend to the same timetables occurs when required.

Dep Tailem Bend	Arrive Loxton	Dep Loxton	Arrive Tailem Bend
2.00	9.00	12.00	19.00

Estimated Available Capacity

Train paths with 45 minute separation from ORA paths are available for use. If opposing movements are required then train size is limited to 398 metres. Paths for longer trains may not be possible without effecting running times unless investment in additional infrastructure is made.

Provided paths are appropriately spaced and scheduled to take into account the requirements of other users it is estimated that an additional three trains per 24 hour period could be run on this track without significantly effecting transit times.

Approximate Floor Price

An approximate floor price of $1.85 per net tonne has been calculated for this line segment.

Approximate Ceiling Price

An approximate ceiling price of $91.74 per net tonne has been calculated for this line segment.

Pricing Comments

Floor and ceiling prices have been calculated based upon the principles stated in the body of the Information Brochure. An interest rate of 11% has been used in any Discounted Cash Flow Analysis denoting ORA's Weighted Average Cost of Capital.

The result has been reported in net tonnes based upon estimated average tonnes hauled on this line segment.

Prices shown are based upon current levels of traffic and current tonnages and are to be used as a guide only. Access rates offered will be based upon detailed information supplied.

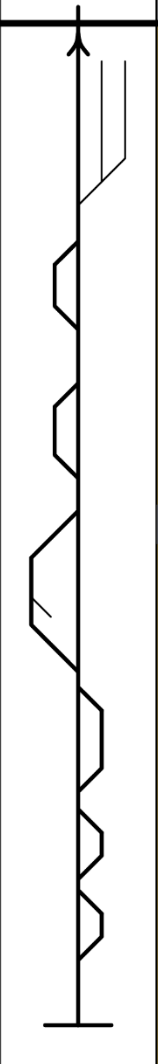
THIS PAGE IS INTENTIONALLY BLANK

MURRAYLANDS DIVISION

PINNAROO SUB-DIVISION

WESTBOUND (UP) CAPACITY ENGINE LOADS: 2000 HP	GM	830/DA	SECTION RUN TIME	MAX AXLE LOAD (TONNES)	SAFEWORKING SYSTEM	KILOMETRE POST	STATIONS AND SECTION DISTANCES	KILOMETRE FROM TAILEM BEND	MAXIMUM TRAIN CROSSING LENGTH	MAXIMUM SPEED SEE NOTE (4)	EASTBOUND (DOWN) CAPACITY ENGINE LOADS: SECTION RUN TIME	830/DA	GM	2000 HP
					CTC		GWA TERMINAL INTERFACE WITH ARTC JUNCTION WITH PINNAROO LINE							
						119.50	**TAILEM BEND**							
2100 t	1800 t	1500 t	75 mins	19.5 t	TRAIN ORDER WORKING		43.500Km			50 KmH	75 mins	1100 t	1300 t	1700 t
						168.50	**PEAKE**	49.00	451					
1700 t (1275 t)	1600 t (1200 t)	1100t (850 t)	35 mins	19.5 t			20.300Km			50 KmH	35 mins	850 t	1200 t	1450 t
						188.80	**GERANIUM**	69.30	395					
2100 t	1800 t	1500 t	45 mins	19.5 t			33.400Km			50 KmH	45 mins	1200 t	1550 t	1800 t
							NOTE 7							
						222.20	**LAMEROO**	102.70	463					
1800 t	1500 t	1200 t	25 mins	19.5 t			14.300Km			50 KmH	25 mins			
						263.50	**PARILLA**	117.00	451					
			30 mins	19.5 t			43.500Km			50 KmH	30 mins			
						259.50	**PINNAROO**	160.50	606					
						263.50	AWB GF PINNAROO							
						264.00	END OF THE LINE							

STRIP MAP



NOTE (7) IF SPEED LIMIT IS RESTRICTED TO 30Kmh OR LESS AT 177.1Km, LOADS ARE TO BE REDUCED BY 25% AS SHOWN ABOVE.

Tailem Bend to Pinnaroo (Standard Gauge)

Note: The line between Tailem Bend to Loxton line is being held in non-operational condition.

Major Associated Infrastructure
No major Earthworks exist between Tailem Bend and Pinnaroo.

No major Bridges and Culverts exist between Tailem Bend and Pinnaroo.

Height and Width Limits
Locomotives and Rollingstock must conform to ROA Standard Rollingstock Plate C.

Major Track Work Planned
No major track work is scheduled on the Tailem Bend to Pinnaroo line in the next twelve months.

Train Control
Train control is by train order.

Communications
Communication with train control is by UHF radio for part of the journey. Train to train and train to ground communication is by VHF radio.

Digital cellular telephone coverage is available at points along the line if required and public phones are available at Sherlock, Peake, Jabok, Geranium, Parrakie, Lameroo, Parilla and Pinnaroo.

Rail Safety Requirements
Drivers working on ORA lines must be qualified in the ARTC Code of Practice and the current ORA Addendum. They must also be able to demonstrate that have been signed off as having route knowledge on the line in question.

Locomotives and rollingstock must be certified as conforming to ROA standards and be accredited to run on the ORA Network

Track Safety Record
No major derailments have occurred on the Tailem Bend to Loxton line in the last two years.

Average Transit Times
Tailem Bend to Pinnaroo Yard: Average section time: 4 hrs.

Minimum Radius Curves
A 326 metre curve occur at the 120.5 km point on the Tailem Bend to Pinnaroo line.

Ruling Grade
A number of 1:60 grades occur on the Tailem Bend to Pinnaroo line.

Current Train Paths
ORA ran grain trains on demand but on timetables as shown below depending upon the end destination. Indicative timetables for common destinations are shown. Trains run five days per week although weekend to the same timetables occurs when required.

Dep Tailem Bend	Arrive Pinnaroo	Dep Pinnaroo	Arrive Tailem Bend
03.00	7.00	14.30	18.30

Estimated Available Capacity
Train paths with 1.5 hours separation from ORA paths are available for use. If opposing movements are required then train size is limited to 380 metres. Paths for longer trains may not be possible without effecting running times unless investment in additional infrastructure is made.

Provided paths are appropriately spaced and scheduled to take into account the requirements of other users it is estimated that an additional three trains per 24 hour period could be run on this track without significantly effecting transit times.

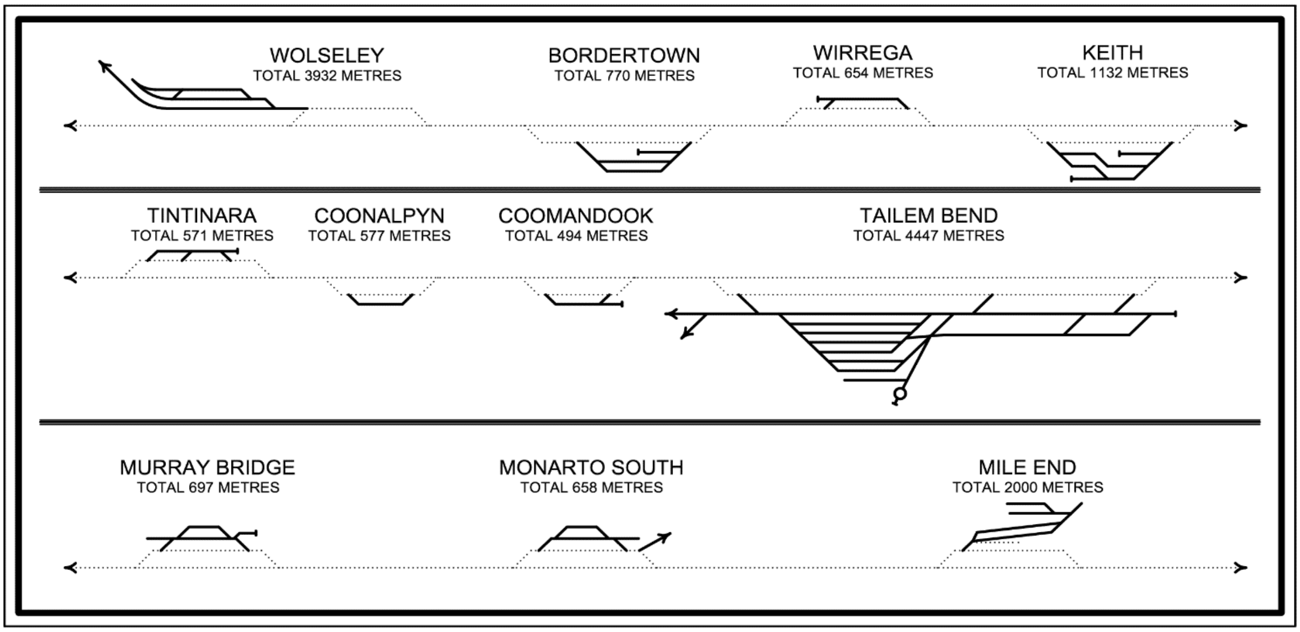
Approximate Floor Price
An approximate floor price of $2.87 per net tonne has been calculated for this line segment.

Approximate Ceiling Price
An approximate ceiling price of $114.08 per net tonne has been calculated for this line segment.

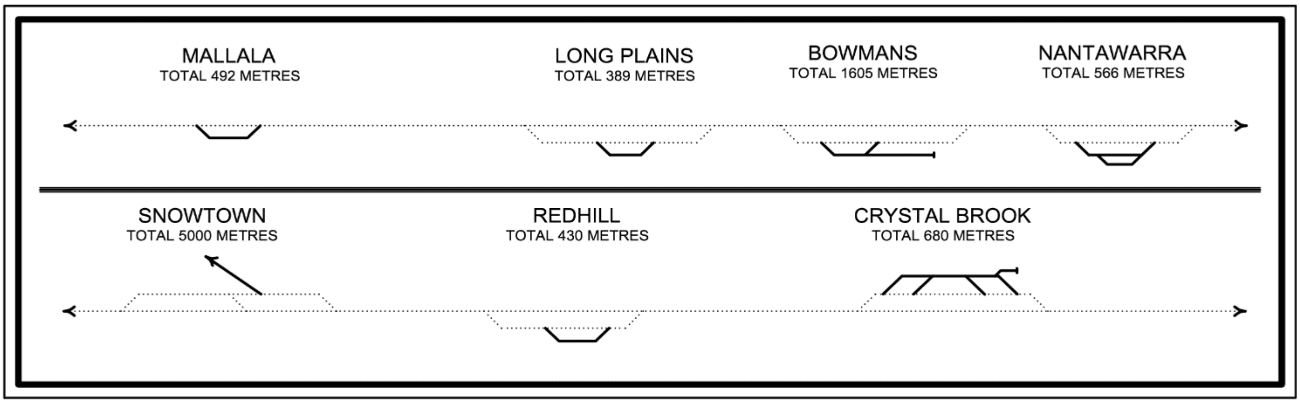
Pricing Comments
Floor and ceiling prices have been calculated based upon the principles stated in the body of the Information Brochure. An interest rate of 11% has been used in any Discounted Cash Flow Analysis denoting ORA's Weighted Average Cost of Capital.

The result has been reported in net tonnes based upon estimated average tonnes hauled on this line segment. Prices shown are based upon current levels of traffic and current tonnages and are to be used as a guide only. Access rates offered will be based upon detailed information supplied.

WOLSELEY TO MILE END

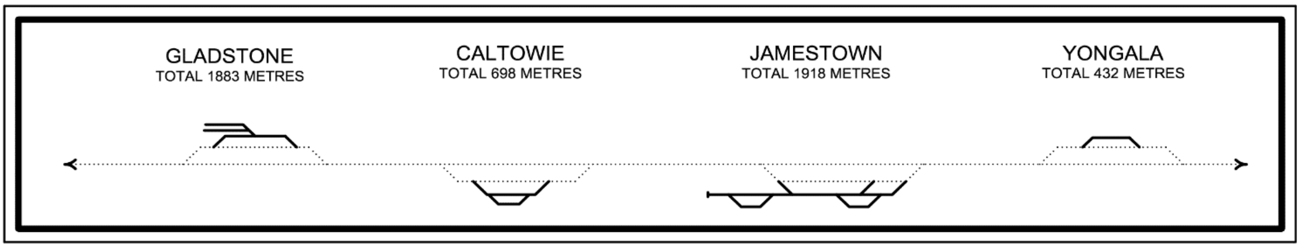


MALLALA TO CRYSTAL BROOK



NOTE: BOWMANS AND SNOWTOWN GRAIN INFRASTRUCTURE IS WHOLLY OWNED AND MAINTAINED BY GWA

GLADSTONE TO YONGALA



NOTE: GLADSTONE;- TRACK INFRASTRUCTURE SITUATED ON ABB'S LAND IS WHOLLY OWNED AND MAINTAINED BY GWA