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Guideline

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OGW-30-10

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1.0	18 Jul 2016		Initial issue
2.0	5 Mar 2018	Various	Additional diagrams included covering intermediate signal locations for Mason Creek, Eucolo, Lake Hart, Palpinna, Renton & Wilgena. Tarcoola yard changes updated.

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			4WD access during poor conditions added. Safety interface agreement details added. Port Augusta – Whyalla level crossings moved from OGW-30-09. Diagram legend updated
2.1	8 Jul 2020	1.2, 1.3, 1.4, 1.11, 1.13, 2.15 & 3.2	Safeworking System, Applicable Rules and Roopena location details updated for ATMS introduction. Adjacent Train Control Centres and Structure Clearances sections updated. Tarcoola airstrip km updated. Lincoln Gap diagram updated.
2.2	8 Oct 2021	Various	Board Extent, Adjacent Train Control details and Drawing Legend updated. Tent Hill, Bookaloo, McLeay, Pimba Burando, Wirraminna, Coondambo, Kultanaby, Kingoonya, Ferguson, Tarcoola & Roopena diagrams updated. Usage note added to all diagrams.
2.3	5 May 2022	Various	Board Extent, Olympic Dam Highway Pimba updated & Tarcoola to Deakin level crossings moved to OGW-30-11. Various diagrams updated.
2.4	31 Oct 2022	1.4, 2.14, 3.2, 3.3	Roopena loop length updated. One Rail Australia references updated to Aurizon.

Date Reviewed: 31 Oct 2022





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1 General Information

1.1 Board Extent

Spencer Junction 53 signal 95.720km to Tarcoola 24 signal 505.624km and Northgate Block Point 510.850km.

Spencer Junction 51 & 52 signals 95.837km to Whyalla (exclusive) yard limit 163.502km.

Contact Numbers:

Phone: (08) 8152 8006 Emergency: (08) 8152 8066 Train Transit Manager: (08) 8152 8020 TTM Emergency: (08) 8152 8080

1.2 Safeworking System

CTC working from Spencer Junction to Tarcoola, and Train Order Working from Tarcoola to Northgate Block Point.

Electronic Authority - Advanced Train Management System (ATMS) operates on the Whyalla Line from Spencer Junction to Whyalla.

Goods sidings are accessed by an electric point lock (HLM) with the network controller providing the release.

Axle Counters

Axle counters will be used for train detection between Spencer Junction and Tarcoola. The first axle counter will be mounted adjacent to 98 signal at Spencer Junction and continue on progressively towards Tarcoola. Signage will be placed adjacent to the track at the location of the axle counter heads.

Track Machines and Road-Rail Vehicles will be detected by the axle counter system and maintenance personnel are to be aware that any motorised points are required to be operated by the Network Controller and not to be operated in hand mode unless directed by the Network Controller.

1.3 Applicable Rules

The Code of Practice and ARTC Addendum and the Electronic Authority - Advanced Train Management System (ATMS) Addendum apply to the sections covered by this Information Book.

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		·





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1.4 Adjacent Train Control Boards / Centres

ARTC West CTC	(08) 8152 8007	Emergency (08) 8152 8067
ARTC Cook Train Order	(08) 8152 8005	Emergency (08) 8152 8065
Aurizon	(08) 8343 7732	
	(08) 8343 7730	
	(08) 8262 5424	



1.5 Section Operating Equipment

1.5.1 Motorised Point Machines



M23 Mk II Selector Level Hand throw lever

Dual control (motorised hand operation)

If the points are in reverse when placed in hand operation, the hand throw lever needs to be placed fully across to engage the clutch mechanism to turn the points.



1.5.2 HLM Point Locks



View of Control Panel cover on side of relay box.



View of HLM Control Panel.



1.5.2.1 Electric Point Lock Operating Procedure – Spencer Junction to Tarcoola

Standing Train Notice 2265 / 2013 issued on 12/11/2013 is repeated below.

As a result of the new signalling systems between Spencer Junction and Tarcoola being installed, it will be necessary to equip a number of hand operated switchstands with electric (HLM) point locks and rod connected derails. The following operating protocols will apply for movements wishing to operate these switchstands.

OVERVIEW

The points leading to the various Goods Loops, Sidings or Triangles are secured with switchstands provided with point indicators as described in the ARTC Addendum to the Code of Practice for the Defined Interstate Network.

The points are secured by an electric (HLM) point lock and are rodded to a derail at the clearance points of the Goods Loops, Sidings or Triangles.

A small control box secured with a Lockwood style 'S' lock is mounted on the side of the location cases, adjacent to the points and contains push buttons as follows:

Release Button (Green Pushbutton):

Releases the points provided the correct conditions (as detailed) exists.

Cancel Button (Red Pushbutton):

Cancels the release and locks the points

In addition the following indicating lights are provided:

Release Available (Yellow Light):

Indicates that a release can be operated.

Points Released (Green Light):

Indicates that the points have been released and are available to be operated.

Points Locked (Red Light):

• Indicates that the points are normal and locked.

The points and electric point locking are interlocked with the signalling at the various locations which ensures that a release cannot be obtained unless certain conditions are met:

- The Absolute Home Signals are at 'Stop'.
- 2. Route Locking (up to 4 minutes maximum) has expired after a train movement has occupied the main line or crossing loop.
- The points track is clear.

In addition the following signage is provided:

Located adjacent the derail for departing movements:

Axle Counter sign indicating limit of axle counter track circuit

MOVEMENT TERMINATING GOODS LOOP, SIDING OR TRIANGLE:

On arrival the movement shall be brought to a stand on the Crossing Loop. The driver or qualified worker shall:



- 1. Obtain permission from the ARTC Network Controller to operate the points.
- 2. Open the Control Box and observe that the points are locked.
- 3. Confirm that the 'Release Available' light is illuminated.
- 4. Press the 'Release' button and observe that the 'Points Released' indicating light is steady.
- 5. Unlock the point lever and operate the points for the movement to enter.

Immediately the movement has entered the Driver or qualified worker shall:

- 1. Restore the points for the Crossing Loop and lock them.
- 2. Observe that the 'Points Locked' indicating light is displayed and if not Press the 'Cancel' button.
- 3. Close and lock the door on the Control Box and advise the Network Controller.

MOVEMENT DEPARTING GOODS LOOP, SIDING OR TRIANGLE:

The Driver or qualified worker shall:

- 1. Obtain permission from the ARTC Network Controller to operate the points.
- 2. Open the Control Box and observe that the points are locked.
- 3. Confirm that the 'Release Available' light is illuminated.
- 4. Press the 'Release' button and observe that the 'Points Released' indicating light is steady.
- Unlock the point lever and operate the points for the movement to depart.

Immediately the movement has entered the Crossing Loop the Driver or qualified worker shall:

- 1. Restore the points for the Crossing Loop and lock them.
- 2. Observe that the 'Points Locked' indicating light is displayed and if not Press the 'Cancel' button.
- 3. Close and lock the door on the Control Box and advise the Network Controller.

RELEASE OF POINT LOCKING DURING FAILURE:

In the event that a release cannot be obtained in the normal manner the Network Controller shall arrange for a signal maintenance fitter to attend and release the points for a movement to enter or depart the Goods Loop, Siding or Triangle. Prior to releasing the point locking the Fitter shall contact the Network Controller and obtain the Network Controllers permission to release the point locking.



1.6 Train Braking Requirements

Train braking and holding test are covered in the CoP and can be found by using the CoP and addendum index, however these are included here for quick reference.

BRAKE HOLDING TESTS FOR THE REARMOST VEHICLES (RETENTION TESTS)

The following apply:

- 1. The operator **shall** put into place systems for conducting brake holding tests.
- 2. The number of vehicles (or for articulated or permanently coupled vehicles the number of triple valve control units) required to conform to the requirements of this sub-section shall be:
- a. Three (3) for freight trains operated in New South Wales;
- b. Two (2) for freight trains not entering New South Wales; and
- c. One (1) for all passenger trains where a guard is provided or three (3) for passenger trains without guards.
- 3. The vehicle operator shall ensure that air and hand brakes operate correctly.
- 4. The air brakes on the vehicles **shall** remain effectively applied for a period of time, based on train length, considered sufficient for a member of the train (locomotive) crew to reach the vehicles and secure handbrakes in the event of a breakaway en route.
- 5. This time **shall** be ten (10) minutes plus three (3) minutes for each 100 metres or part thereof of train length. For example, a train 1240 metres long will require a holding (retention) time of $13 \times 3 + 10 = 49$ minutes.
- 6. If any of the required number of vehicles (as specified in item (2) above) fail the above test (as specified in item (5) above), generally known as a holding or retention test, the faulty vehicle(s) **shall** be repaired or the train remarshalled to ensure compliance with the requirements of items (3) and (4) above.
- 7. Brake holding tests successfully completed will remain valid for the departure within a period of 24 hours from completion of the test. After that period, the vehicles **shall** be re-tested.

FREIGHT TRAINS

On freight trains, the maximum number of inoperative or isolated brakes permitted on a train **shall** be either of the following:

- 1. One conventional two-bogie vehicle for every ten (10) vehicles in the train where the vehicle is isolated as a unit.
- 2. One bogie for every ten (10) bogies in the train where individual bogies can be isolated or the isolation of triple valve control units affects more than two (2) bogies. This applies, only on the proviso that the total un-braked mass of the train **shall not** exceed 10% of the total train mass (excluding the mass of the hauling locomotives).

Item (1) above applies where the only vehicles isolated are conventional two-bogie vehicles. In all other cases, the requirements of item (2) **shall** be followed.

For the purposes of this clause, a four-wheel (two-axle) vehicle **shall** be counted as one bogie, and locomotives under power **shall not** be counted as train vehicles.



1.7 Level Crossings

Spencer Junction to Tarcoola

Number	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
28	Yorkeys Crossing	Port Augusta - Tarcoola	103.57	Road	Public	Stop Signs
629	Unknown Road Name	Port Augusta - Tarcoola	108.04	Road	Private	Stop Signs
360	Unknown Road Name	Port Augusta - Tarcoola	109.77	Road	Private	Stop Signs
631	Mt Arden Road	Port Augusta - Tarcoola	117.69	Road	Private	Stop Signs
632	Unknown Road Name	Port Augusta - Tarcoola	121.32	Road	Private	Stop Signs
633	Unknown Road Name	Port Augusta - Tarcoola	129.65	Road	Private	Stop Signs
634	Unknown Road Name	Port Augusta - Tarcoola	130.995	Road	Private	Stop Signs
635	Unknown Road Name	Port Augusta - Tarcoola	135.22	Road	Private	Stop Signs
636	Unknown Road Name	Port Augusta - Tarcoola	141.2	Road	Private	Stop Signs
637	Unknown Road Name	Port Augusta - Tarcoola	146.875	Road	Private	Stop Signs
638	Unknown Road Name	Port Augusta - Tarcoola	147.851	Road	Public	
639	Stuart Highway	Port Augusta - Tarcoola	148.91	Road	Public	Primary Flashing Lights
640	Unknown Road Name	Port Augusta - Tarcoola	152.55	Road	Private	Stop Signs
641	Unknown Road Name	Port Augusta - Tarcoola	160.41	Road	Private	Stop Signs
642	Unknown Road Name	Port Augusta - Tarcoola	166.81	Road	Private	Stop Signs
644	Unknown Road Name	Port Augusta - Tarcoola	176.73	Road	Private	Stop Signs
645	Unknown Road Name	Port Augusta - Tarcoola	178.81	Road	Private	Stop Signs
646	Unknown Road Name	Port Augusta - Tarcoola	183.34	Road	Private	Stop Signs
647	Unknown Road Name	Port Augusta - Tarcoola	191.40	Road	Private	Stop Signs



Number	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
648	Unknown Road Name	Port Augusta - Tarcoola	199.53	Road	Private	Stop Signs
649	Unknown Road Name	Port Augusta - Tarcoola	201.31	Road	Private	Stop Signs
650	Mahanewo Road	Port Augusta - Tarcoola	209.04	Road	Public	Stop Signs
651	Unknown Road Name	Port Augusta - Tarcoola	219.61	Road	Private	Stop Signs
652	Unknown Road Name	Port Augusta - Tarcoola	228.32	Road	Private	Stop Signs
653	Unknown Road Name	Port Augusta - Tarcoola	231.94	Road	Private	Stop Signs
654	Unknown Road Name	Port Augusta - Tarcoola	234.26	Road	Private	Stop Signs
655	Private Crossing	Port Augusta - Tarcoola	240.33	Road	Private	
656	Wirappa RS	Port Augusta - Tarcoola	242.78	Road	Private	Stop Signs
657	Unknown Road Name	Port Augusta - Tarcoola	251.902	Road	Private	Stop Signs
658	Olympic Dam Highway Pimba	Port Augusta - Tarcoola	272.480	Road	Public	Half Boom Flashing Lights
2346	Wide Load Crossing Pimba	Port Augusta - Tarcoola	272.595	Road	Private	
659	Old Stuart Highway	Port Augusta - Tarcoola	280.95	Road	Private	Stop Signs
660	Old Stuart Highway	Port Augusta - Tarcoola	312.893	Road	Private	Stop Signs
661	Unknown Road Name	Port Augusta - Tarcoola	322.88	Road	Private	Stop Signs
662	Unknown Road Name	Port Augusta - Tarcoola	328.98	Road	Private	Stop Signs
663	Unknown Road Name	Port Augusta - Tarcoola	331.65	Road	Private	Stop Signs
664	Unknown Road Name	Port Augusta - Tarcoola	333.50	Road	Private	Stop Signs
665	Unknown Road Name	Port Augusta - Tarcoola	337.774	Road	Private	Stop Signs
666	Unknown Road Name	Port Augusta - Tarcoola	341.82	Road	Private	Stop Signs
667	Unknown Road Name	Port Augusta - Tarcoola	345.17	Road	Private	Stop Signs



Number	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
668	Unknown Road Name	Port Augusta - Tarcoola	351.00	Road	Private	Stop Signs
669	Unknown Road Name	Port Augusta - Tarcoola	355.89	Road	Private	Stop Signs
670	Unknown Road Name	Port Augusta - Tarcoola	362.78	Road	Private	Stop Signs
671	Coondambo H S Access	Port Augusta - Tarcoola	371.05	Road	Public	Stop Signs
672	Private Crossing	Port Augusta - Tarcoola	384.05	Road	Private	Stop Signs
673	Private Crossing	Port Augusta - Tarcoola	393.73	Road	Private	
674	Private Crossing	Port Augusta - Tarcoola	406.57	Road	Private	
675	Private Crossing	Port Augusta - Tarcoola	413.32	Road	Private	
676	Tarcoola Road	Port Augusta - Tarcoola	424.46	Road	Public	Stop Signs
677	Kingoonya - Yantanabie	Port Augusta - Tarcoola	425.95	Road	Private	Stop Signs
678	Gosses Road	Port Augusta - Tarcoola	426.94	Road	Public	Stop Signs
679	Tarcoola Road	Port Augusta - Tarcoola	446.22	Road	Public	Stop Signs
680	Tarcoola Road	Port Augusta - Tarcoola	456.13	Road	Public	Stop Signs
681	Tarcoola Road	Port Augusta - Tarcoola	461.18	Road	Public	Stop Signs
682	Tarcoola Road	Port Augusta - Tarcoola	467.47	Road	Public	Stop Signs
683	Private Crossing	Port Augusta - Tarcoola	483.75	Road	Private	Stop Signs
684	Private Crossing	Port Augusta - Tarcoola	485.39	Road	Private	Stop Signs
685	Tarcoola Road	Port Augusta - Tarcoola	490.956	Road	Public	Stop Signs
686	Unknown Road Name	Port Augusta - Tarcoola	503.27	Road	Private	Stop Signs
688	Unknown Road Name	Port Augusta - Tarcoola	504.472	Road	Private	Stop Signs
689	Tarcoola Rd	Tarcoola - Alice Springs	507.295	Road	Public	Stop Signs



Number	Road Name	Line Segment	KM	Traffic Type	Access	Control Type
Spencer	Junction to Whyalla					
1705	Madland Street	Port Augusta - Whyalla	101.092	Road	Public	Stop Signs
1706	Occupational Crossing	Port Augusta - Whyalla	103.810	Road	Private	
1707	Occupational Crossing	Port Augusta - Whyalla	108.555	Road	Private	
1708	Occupational Crossing	Port Augusta - Whyalla	114.505	Road	Private	Stop Signs
1709	Caroona Road	Port Augusta - Whyalla	115.909	Road	Public	Stop Signs
1710	Occupational Crossing	Port Augusta - Whyalla	119.158	Road	Private	Stop Signs
1711	Occupational Crossing	Port Augusta - Whyalla	120.681	Road	Private	Stop Signs
1712	Occupational Crossing	Port Augusta - Whyalla	122.470	Road	Private	
1713	Occupational Crossing	Port Augusta - Whyalla	125.310	Road	Private	
1714	Occupational Crossing	Port Augusta - Whyalla	128.512	Road	Private	Stop Signs
1715	Occupational Crossing	Port Augusta - Whyalla	138.181	Road	Private	Stop Signs
1716	Occupational Crossing	Port Augusta - Whyalla	141.956	Road	Private	
1717	Occupational Crossing	Port Augusta - Whyalla	147.135	Road	Private	Stop Signs
1718	Tregalana HS Road	Port Augusta - Whyalla	153.704	Road	Private	Stop Signs
1719	Occupational Crossing	Port Augusta - Whyalla	157.399	Road	Private	Stop Signs
1720	Port Bonython Road	Port Augusta - Whyalla	160.807	Road	Public	Primary Flashing Lights
1721	Occupational Crossing	Port Augusta - Whyalla	164.139	Road	Private	
1722	Unknown Road Name	Port Augusta - Whyalla	165.032	Road	Private	Stop Signs
2202		Port Augusta - Whyalla	166.522	Road	Private	Stop Signs



1.8 Emergency Local Releases

Nil.

1.9 Maximum Permitted Speeds & Permanent Speed Restrictions

Refer the Route Access Standard - Defined Interstate Rail Network Section Pages D7 for all speed information.

1.10 Maximum Train Length

Maximum train length is 1800 metres.

1.11 Structure Clearances

Refer Route Access Standards for Rolling Stock Outlines.

KM	LOCATION	STRUCTURE
248.770	Stuart Highway Wirrappa	Overpass
375.030	Stuart Highway Glendambo	Overbridge
440.900	Kingoonya	Underbridge

1.12 Communications

The National Train Communications System (NTCS) is the Primary communications system for the ARTC controlled rail network and is mandatory for all operators to operate their locomotives using a NTCS ICE (In-Cabin Equipment) Unit as the primary communications device.

A standard ICE unit is installed with the following components

- Telstra NextG™ transceiver
- Iridium satellite transceiver
- UHF Radio
- GPS

The ICE unit primary communications is via the Telstra NextG[™] and backup communications is provided via the Iridium Satellite network. The ICE unit will automatically call the Mile End network control centre when the routine and emergency buttons are pressed.

The UHF radio is used for the Local train Radio - Train to Train and train to track Side communications.

UHF Local Train Radio (LTR) frequency details

Frequency: 418.425 MHz (UHF),

Bandwidth: 12.5 KHz,

EIRP: 41W (remote/low density areas), 8.3W (medium & high density areas)

Tx CTCSS: 162.2 Hz Rx CTCSS: 162.2 Hz



Selcall: disabled

Alternate Communication for this section is by mobile or satellite phones.

The towers are located as follows:

- 1. Bookaloo
- 2. McLeay
- 3. Wirrappa
- 4. Pimba
- 5. Wirraminna
- 6. Kingoonya
- 7. Ferguson
- 8. Tarcoola

1.13 Locations of Airstrips

Location	Approx KM
Kingoonya	427
Tarcoola	504

1.14 Ruling Gradients

Spencer Junction to Tarcoola	1 in 100
Tarcoola to Spencer Junction	1 in 100
Spencer Junction to Whyalla	1 in 100
Whyalla to Spencer Junction	1 in 100

1.15 Curve and Gradient Data

For all Curve and Gradient data, refer to the ARTC Internet.

https://extranet.artc.com.au/eng_network-config_cd.html

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1.16 Drawing Legend

1.16 Drawing Legend			
	Standard gauge track		Dual gauge track
	Broad gauge track	15	Crossover
T -	Advisory Sign or Location Sign		Tunnel
	Pedestrian Crossing	<u>*</u>)(***********************************	Passive Protection Level Crossing
	Active Protection Level Crossing – Flashing Lights		Active Protection Level Crossing – Lights and Boom
	Bridge or Overpass		Underpass
\frac{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}}}}\sqit{\sqrt{\sqrt{\sq}\sq}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}	River/Creek or Significant river bridge or Viaduct	Station Passenger Platform	Station or Platform
/ /	Derail	<u></u> 무	Dual Control Motorised Points
	Point Indicator		Mechanical Frame
		Absolute Signals (Absolute signal containing a 'P' on the name plate signals)	
	Permissive Signals	(a) (B) 74.592 km	Signal number reference
	Dwarf Signals		Banner Indicator
P 9	Overheight Detectors	>> <<	Wayside Equipment



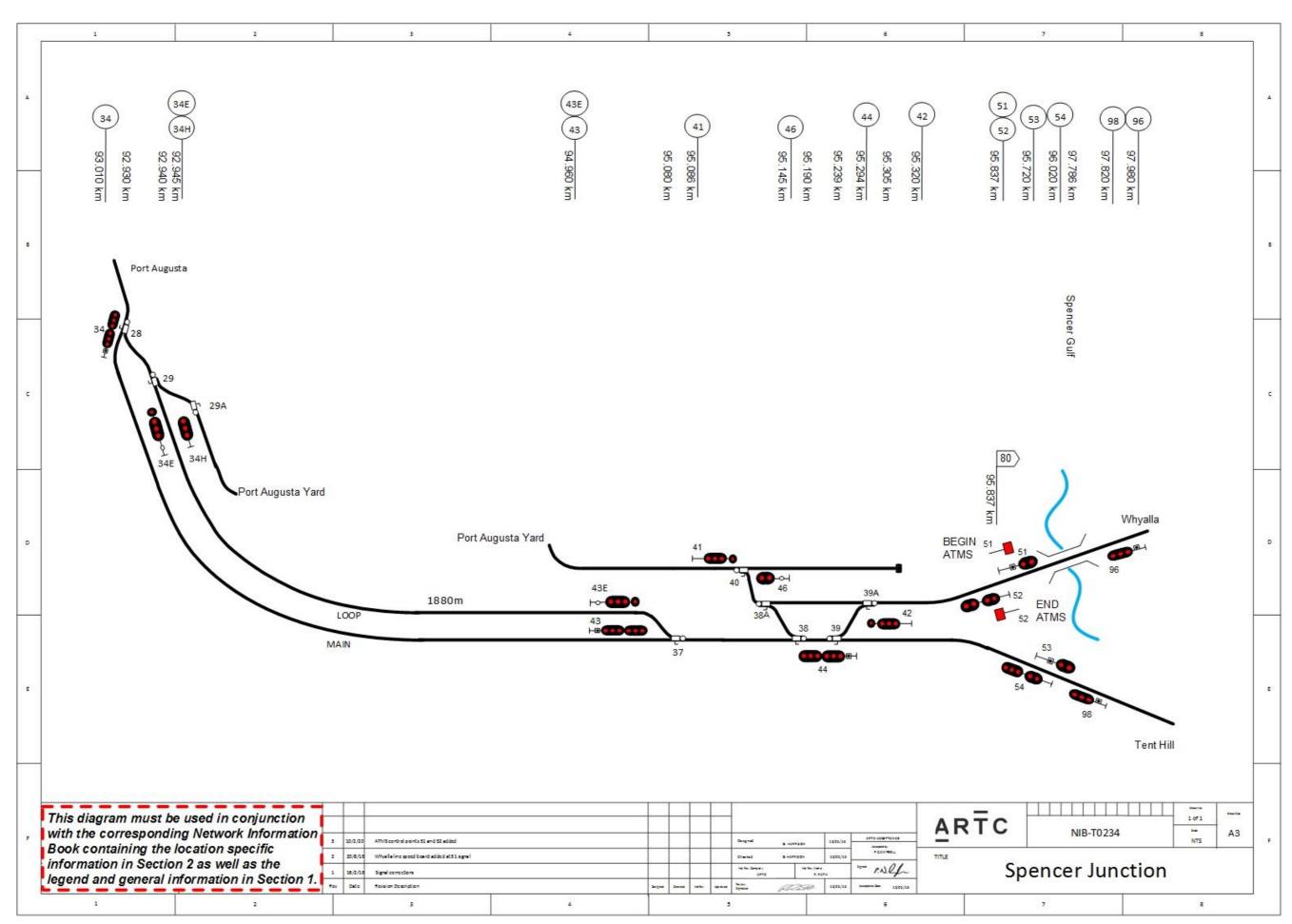


2 Locations and Sections Information

2.1 Spencer Junction (SJC)

Refer OGW-30-09 for details of Spencer Junction.

OGW-30-10





2.2 Tent Hill (TEH)

Standing Room:

• 1845m

Goods Siding:

• Yes, ARTC Engineers siding 490m

Crank Handles:

- No.
- All point machines are dual control.

Local Panel:

In relay room at 7 points, no access for train crews.

Other:

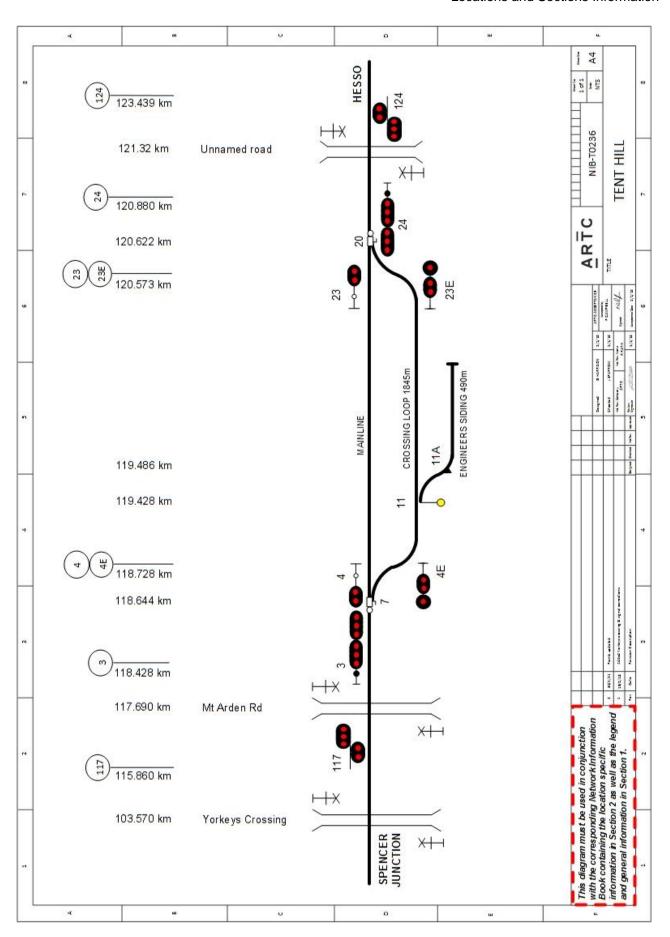
Access to Tent Hill

When departing Port Augusta, set the trip meter on the car at the corner of the Stuart and Eyre Highways. The trip meter will need to be monitored for determining the turn off point to the Tent Hill crossing location.

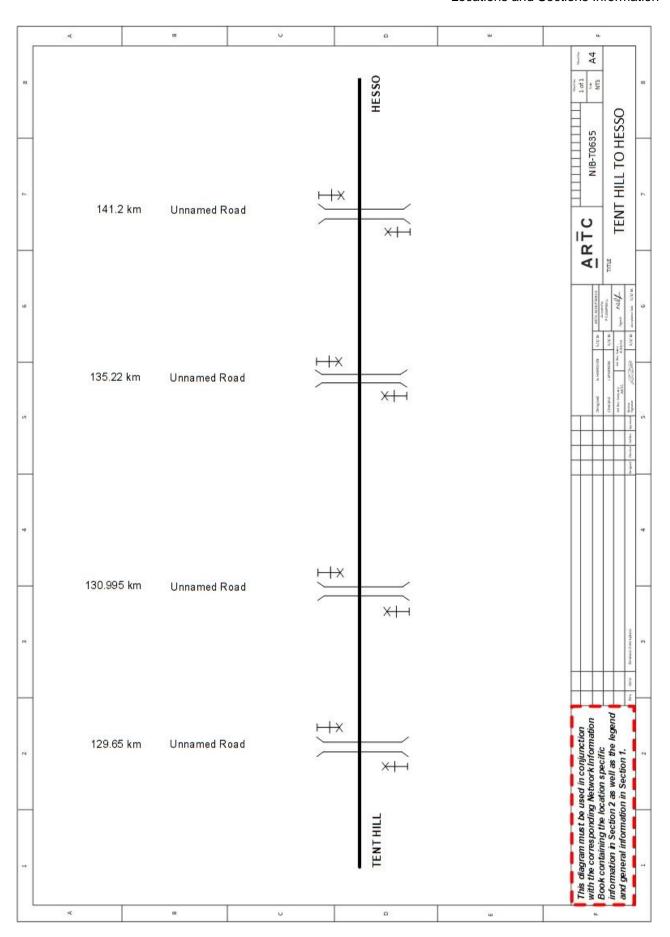
At the 21.5 km reading on the trip meter, turn right and travel approximately 300m. This will take you to the middle of the Tent Hill yard.

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2.3 Hesso (HSO)

Standing Room:

• 1841m

Goods Siding:

No.

Crank Handles:

- No.
- All point machines are dual control.

Local Panel:

• In relay room at 7 points, no access for train crews.

Other:

Access to Hesso

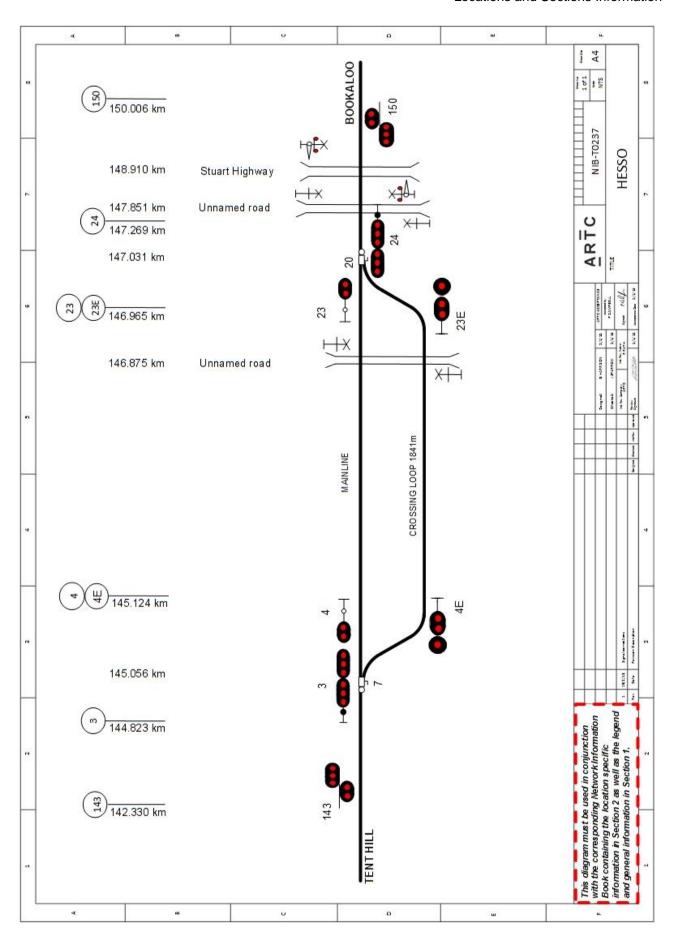
When departing Port Augusta, set the trip meter on the car at the corner of the Stuart and Eyre Highways. The trip meter will need to be monitored for determining the turn off point to the Hesso crossing location.

At the 48.6km reading on the trip meter, observe a 'Road Narrows' sign. At the 48.8km reading on the trip meter, turn right and travel approximately 500m along a winding road. This will take you to the west end of the Hesso yard.

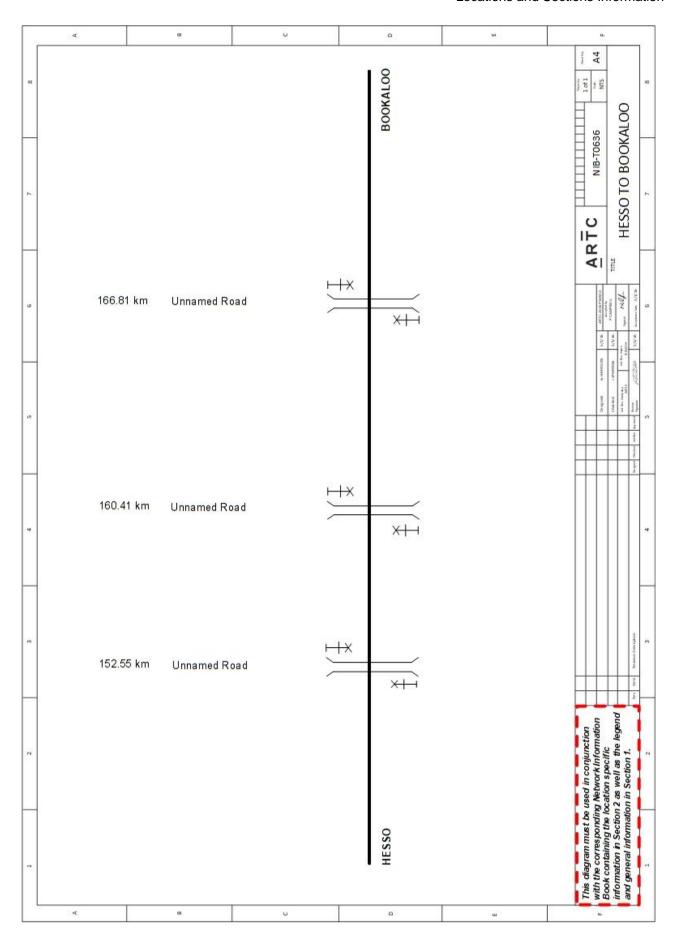
Access to Trains En-route

From Tent Hill the road follows the railway line on the north side all the way to Hesso.











2.4 Bookaloo (BLO)

Standing Room:

• 1838m

Goods Siding:

• Yes, Engineers siding 175m

Crank Handles:

- No.
- All point machines are dual control.

Local Panel:

In relay room at 7 points, no access for train crews.

Other:

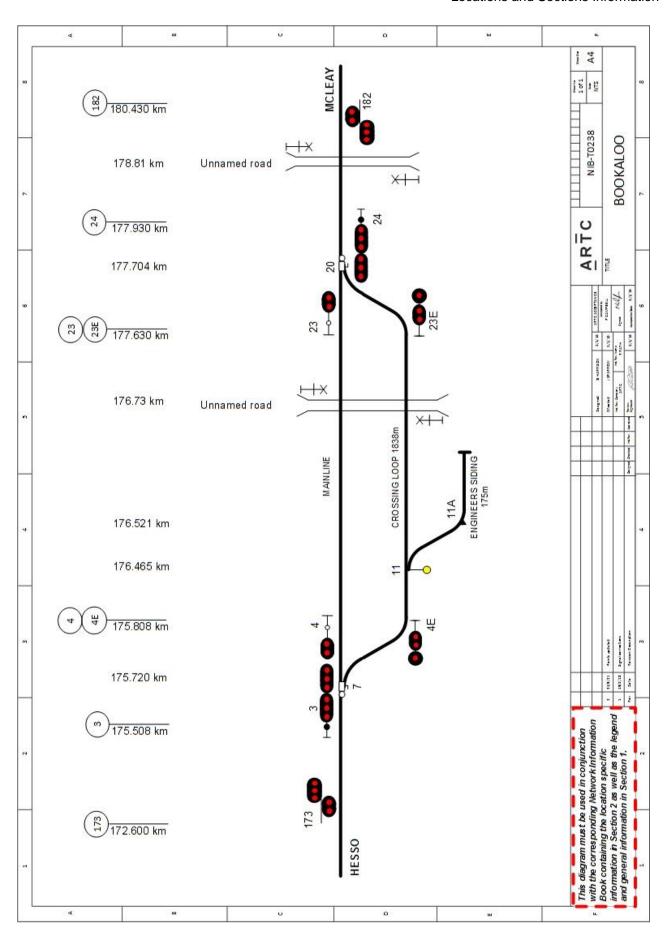
Access to Bookaloo

When departing Port Augusta, set the trip meter on the car at the corner of the Stuart and Eyre Highways. The trip meter will need to be monitored for determining the turn off point to the Bookaloo crossing location.

At the 77.9km reading on the trip meter, observe a painted white tyre on the left side of the road. Turn left and travel approximately 300m. This will take you to the east end of the Bookaloo yard.

Date Reviewed: 31 Oct 2022







2.5 McLeay (MCY)

Standing Room:

• 1926m

Goods Siding:

Yes, Goods siding 585m

Crank Handles:

- No.
- All point machines are dual control.

Local Panel:

In relay room at 7 points, no access for train crews.

Other:

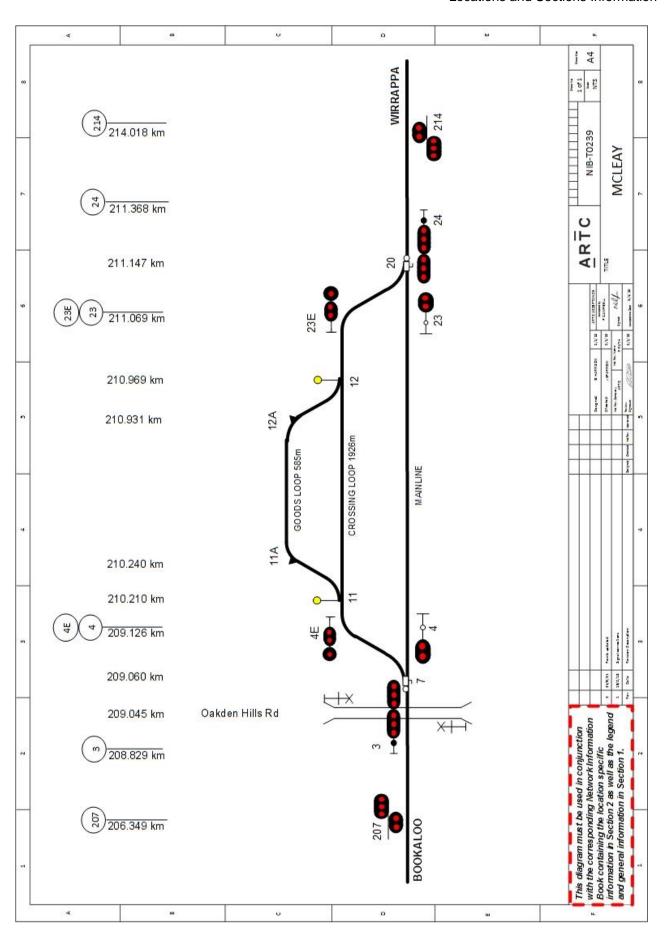
Access to McLeay

When departing Port Augusta, set the trip meter on the car at the corner of the Stuart and Eyre Highways. The trip meter will need to be monitored for determining the turn off point to the McLeay crossing location.

At the 111.2km reading on the trip meter, observe Oakden Hills H.S. sign on the left side of the road. Turn left and travel approximately 500m. This will take you to the east end of the McLeay yard.

Date Reviewed: 31 Oct 2022







2.6 Wirrappa (WPA)

Standing Room:

• 1829m

Goods Siding:

Yes, dead end road 100m

Crank Handles:

- No.
- All point machines are dual control.

Local Panel:

In relay room at 7 points, no access for train crews.

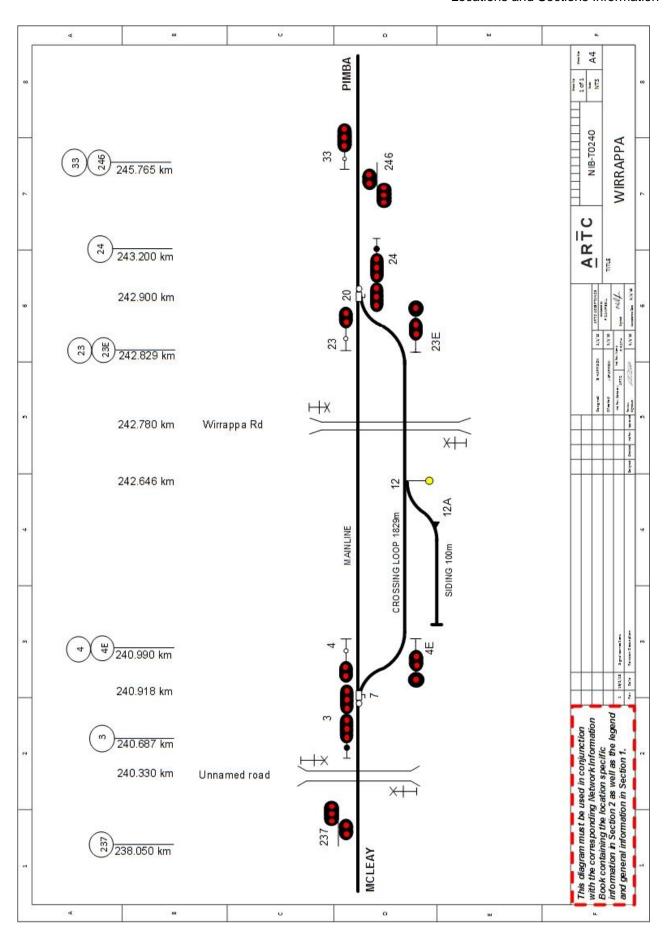
Other:

Access to Wirrappa

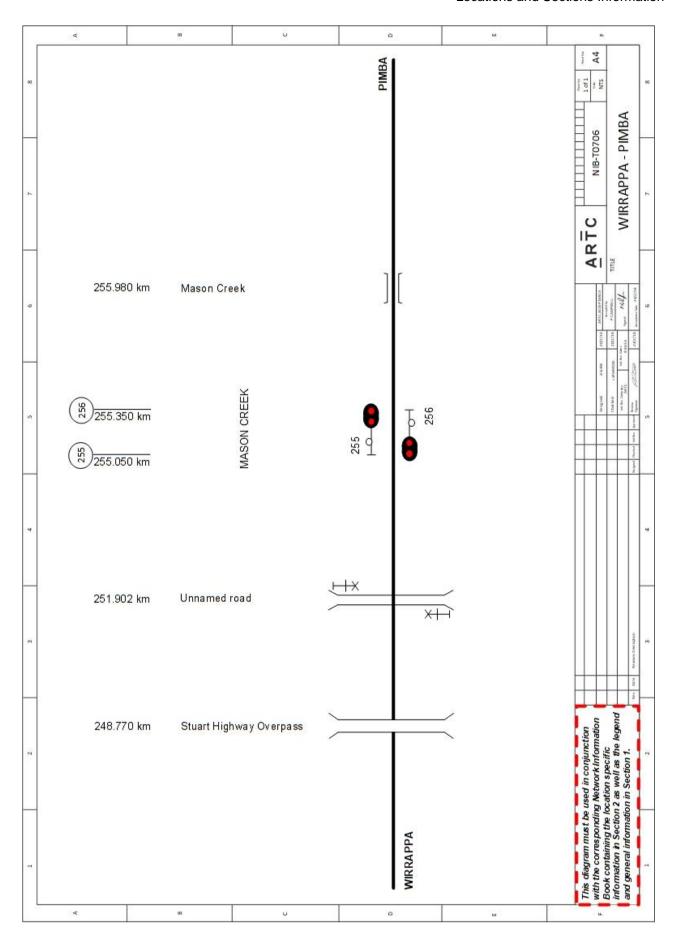
When departing Port Augusta, set the trip meter on the car at the corner of the Stuart and Eyre Highways. The trip meter will need to be monitored for determining the turn off point to the Wirrappa crossing location.

At the 143.8km reading on the trip meter, turn left and travel approximately 300m to the east end points of Wirrappa. Wirrappa can be clearly seen from the highway and access to the west end of the yard can also be made from there.











2.7 Pimba (PIM)

Standing Room:

• 1846m

Goods Siding:

- Yes, triangle with a dead end road off the top 600m and another track of unknown length
- · Goods siding is spiked out of service

Crank Handles:

- No.
- All point machines are dual control.

Local Panel:

• In relay room at 7 points, no access for train crews.

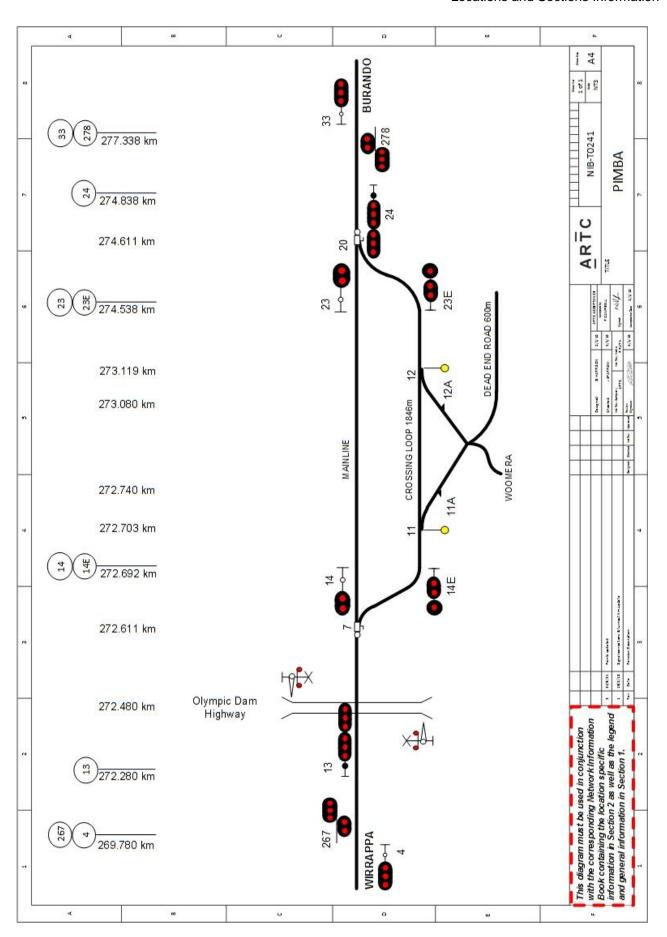
Other:

Access to Pimba

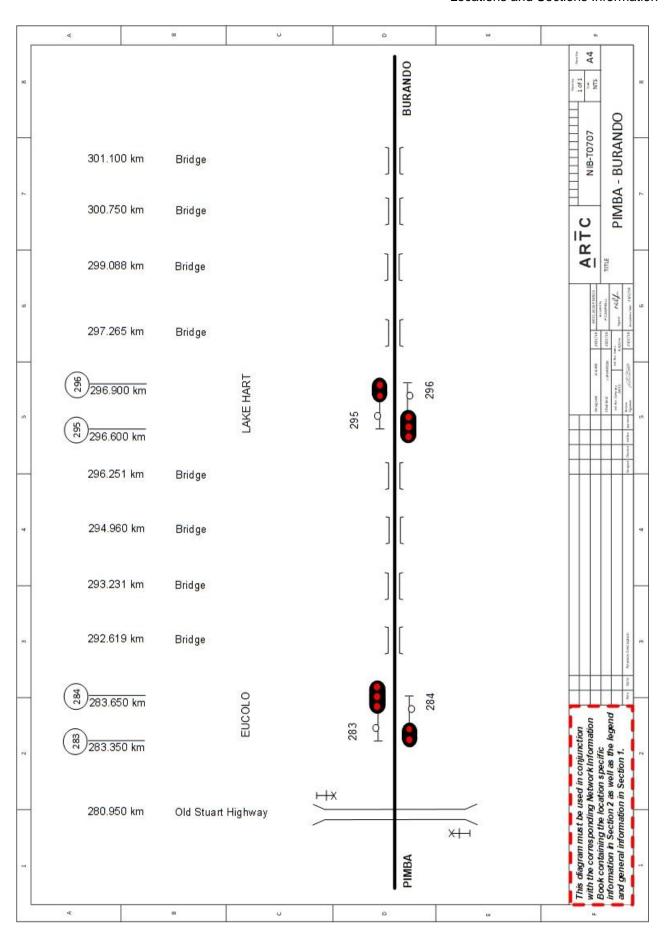
When departing Port Augusta, set the trip meter on the car at the corner of the Stuart and Eyre Highways. The trip meter will need to be monitored for determining the turn off point to the Pimba crossing location.

At the 171.8km reading on the trip meter, turn right at the Roxby Downs sign and travel approximately 900m to the east end points of Pimba. Pimba can be clearly seen from the highway and access to the west end of the yard can also be made from there.











2.8 Burando (BDO)

Standing Room:

• 2046m

Goods Siding:

- Yes, Dead end siding 278m
- Camp spur 99m

Crank Handles:

- No.
- All point machines are dual control.

Local Panel:

In relay room at 7 points, no access for train crews.

Other:

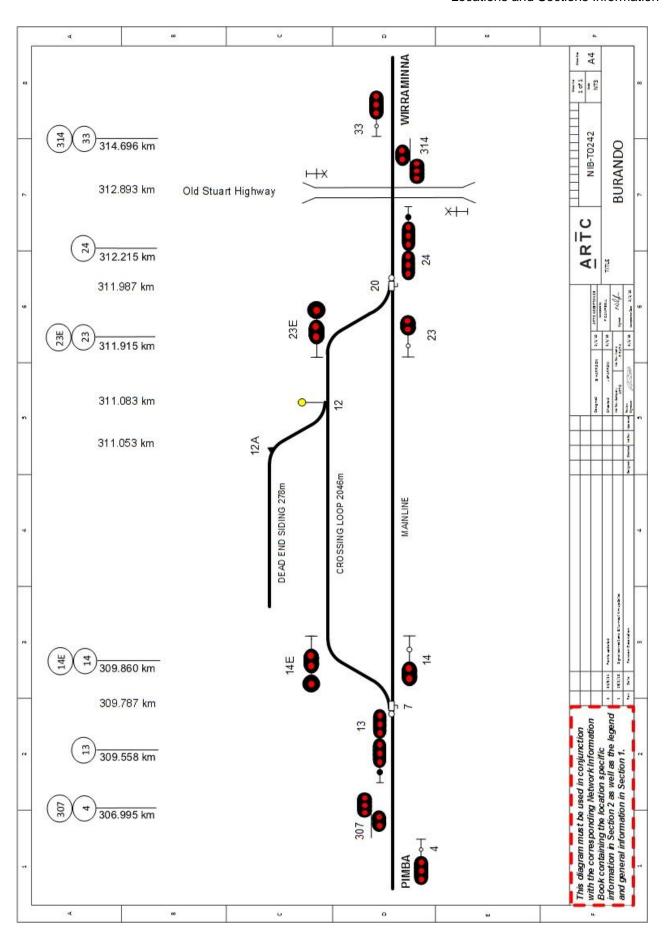
Access to Burando

When departing Port Augusta, set the trip meter on the car at the corner of the Stuart and Eyre Highways. The trip meter will need to be monitored for determining the turn off point to the Burando crossing location.

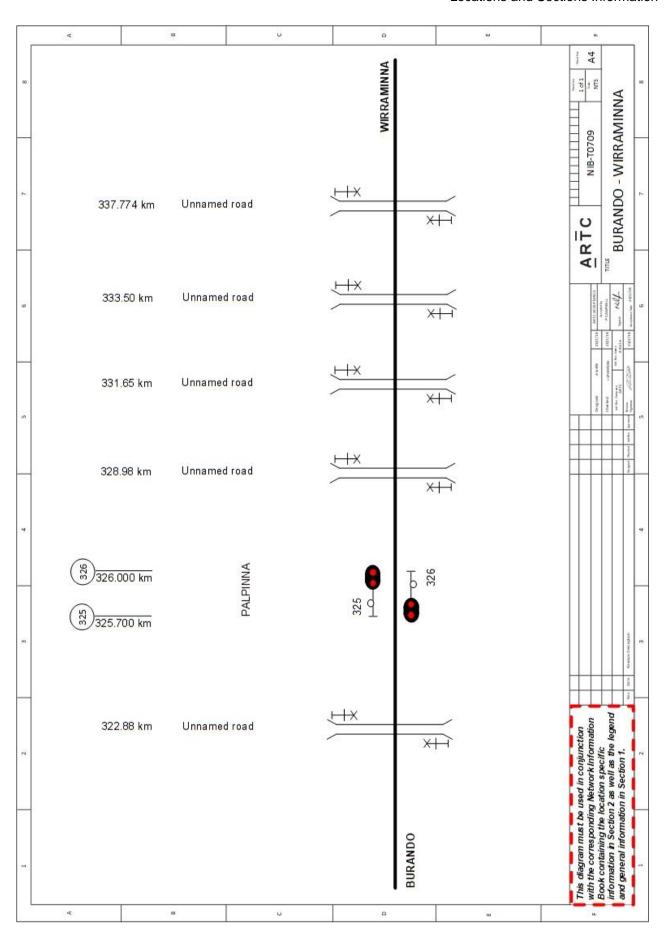
At the 211.8km reading on the trip meter, turn right at the parking bay but stay on track for 100m until the track meets a good wide dirt road. Turn right here and travel 1.9km to where the road meets the line. Turn right and travel 1.0km to the west end points of Burando.

Note: For vehicles originating from Woomera, set the trip meter at the Pimba Highway turn off and travel 40km and then as above.











2.9 Wirraminna (WMA)

Standing Room:

• 1835m

Goods Siding:

Yes, Engineers siding 90m

Crank Handles:

- No.
- All point machines are dual control.

Local Panel:

In relay room at 7 points, no access for train crews.

Other:

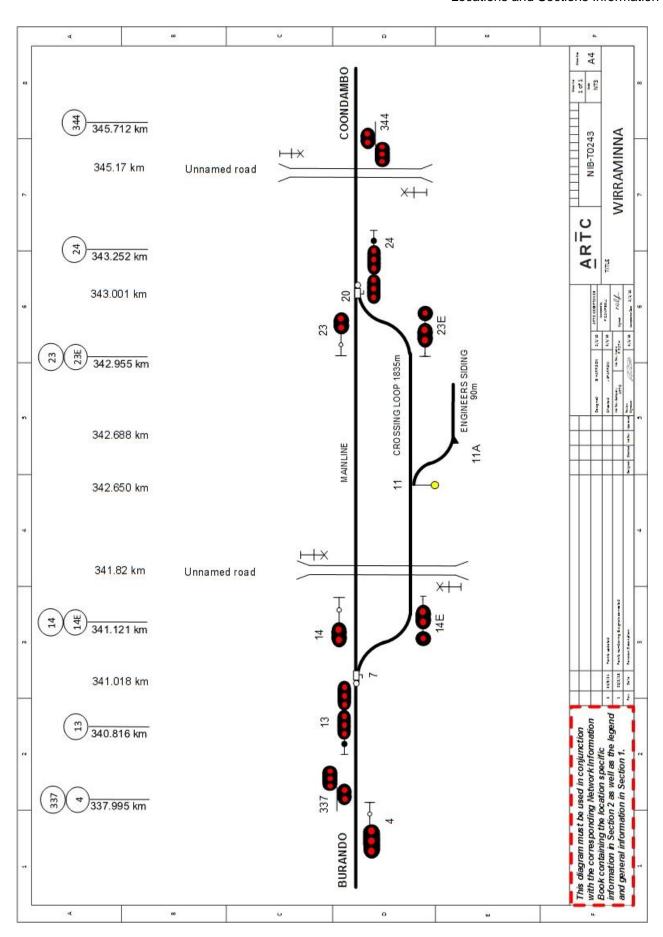
Access to Wirraminna

When departing Port Augusta, set the trip meter on the car at the corner of the Stuart and Eyre Highways. The trip meter will need to be monitored for determining the turn off point to the Wirraminna crossing location.

At the 239.5km reading on the trip meter, turn right just after going over a grid. Travel 300m until the line is encountered in the middle of the Wirraminna crossing location.

Note: For vehicles originating from Woomera, set the trip meter at the Pimba Highway turn off and travel 67.7km and then as above.







2.10 Coondambo (CDS)

Standing Room:

• 1845m

Goods Siding:

• Yes, Engineers siding 145m

Crank Handles:

- No.
- All point machines are dual control.

Local Panel:

In relay room at 7 points, no access for train crews.

Other:

Access to Coondambo

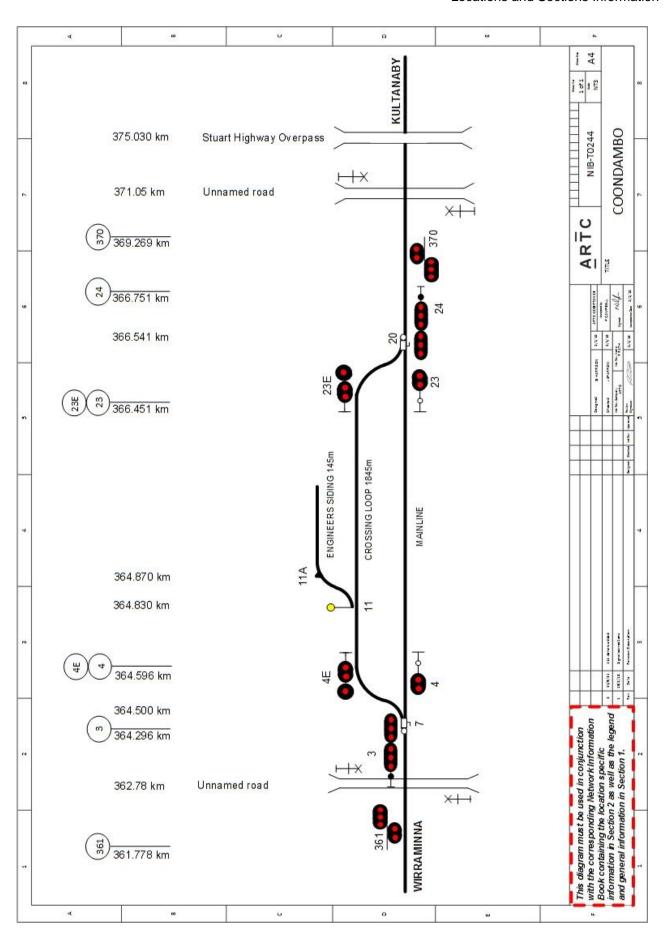
When departing Port Augusta, set the trip meter on the car at the corner of the Stuart and Eyre Highways. The trip meter will need to be monitored for determining the turn off point to the Coondambo crossing location.

At the 263.6km reading on the trip meter, turn right and travel 450m until the line is encountered in the middle of the Coondambo crossing location.

Note: For vehicles originating from Woomera, set the trip meter at the Pimba Highway turn off and travel approximately 92km and then as above.

Note: Roads to this location only accessible by 4WD







2.11 Kultanaby (KTY)

Standing Room:

• 1820m

Goods Siding:

• Yes, Engineers siding unknown length

Crank Handles:

- No.
- All point machines are dual control.

Local Panel:

In relay room at 7 points, no access for train crews.

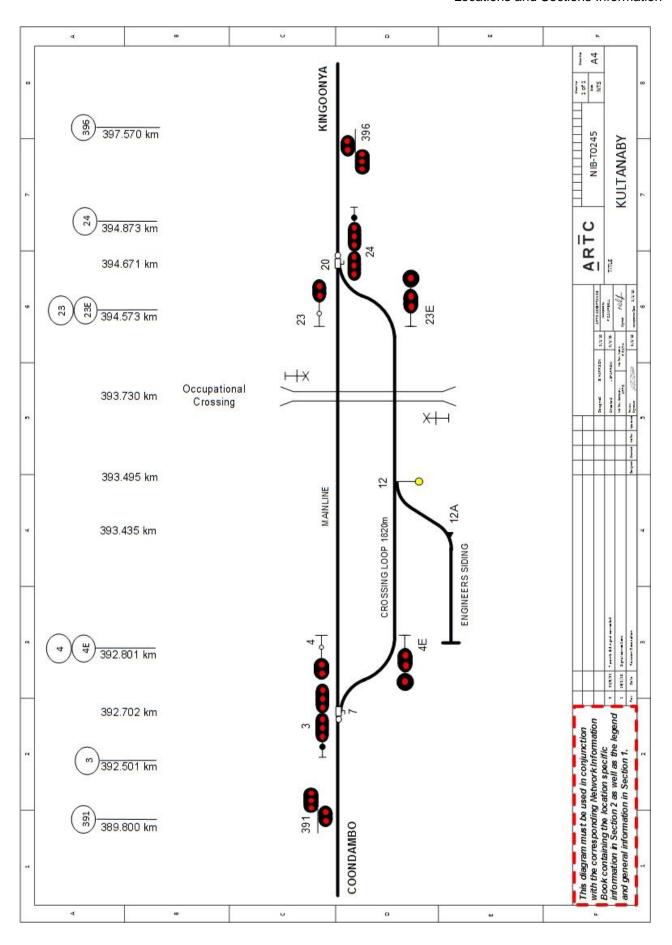
Other:

Access to Kultanaby

After passing through Glendambo, travel 500m to the Tarcoola Road turn off on the left. Travel 9.4 km and turn left and travel 6.4 km until the line is encountered in the middle of the Kultanaby crossing location.

Note: Roads to this location only accessible by 4WD







2.12 Kingoonya (KGA)

Standing Room:

• 1820m

Goods Siding:

Yes, 250m

Crank Handles:

- No.
- All point machines are dual control.

Local Panel:

• In relay room at 7 points, no access for train crews.

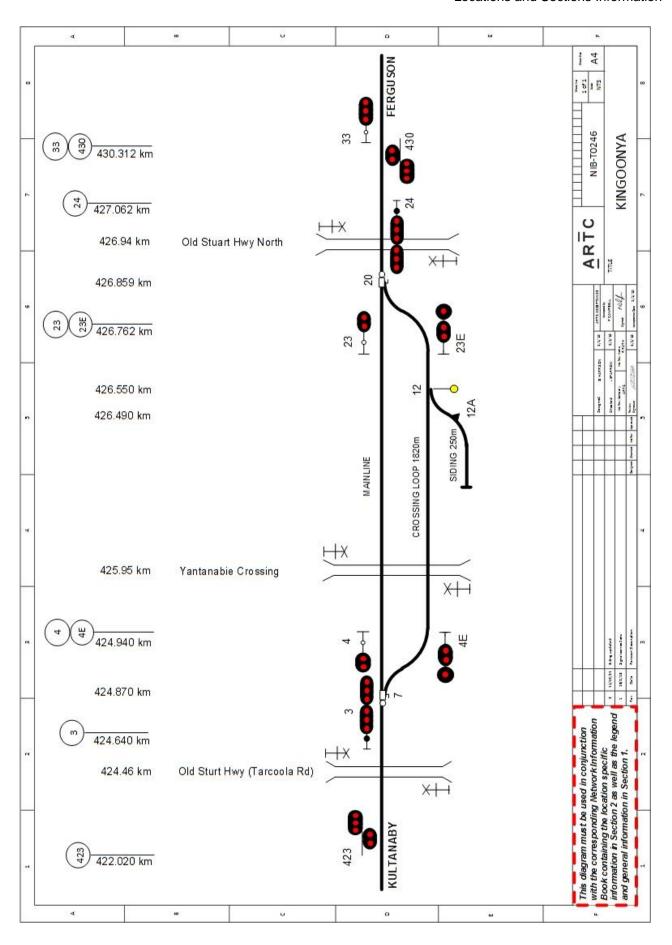
Other:

Access to Kingoonya

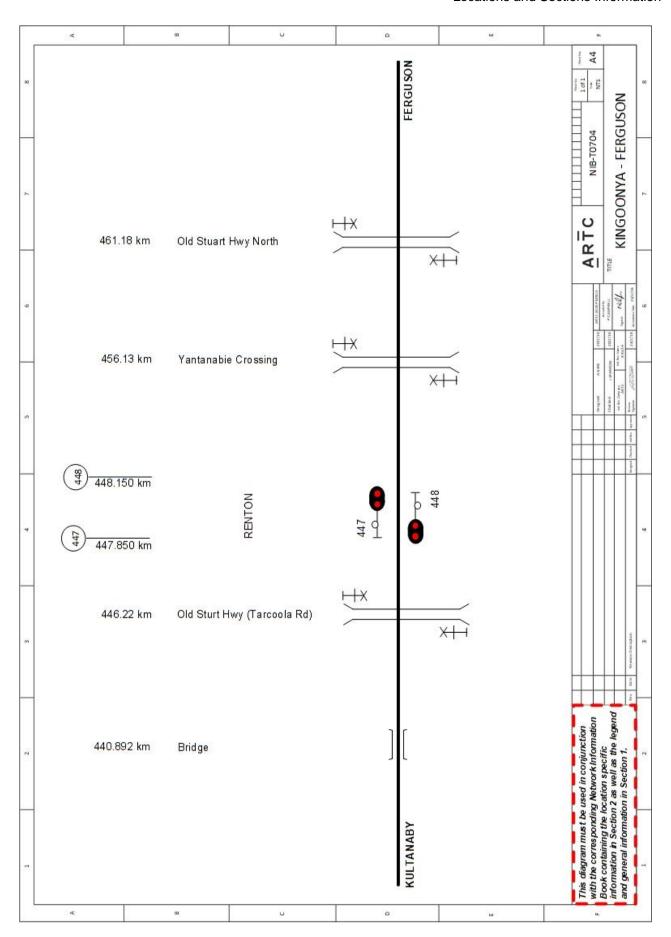
After passing through Glendambo, travel 500m to the Tarcoola Road turn off on the left. Travel 41.8 km, turn right and travel 233m and find the middle of the Kingoonya crossing location.

Note: Roads to this location only accessible by 4WD











2.13 Ferguson (FGN)

Standing Room:

• 1814m

Goods Siding:

• Yes, Goods loop 393m

Crank Handles:

- No.
- All point machines are dual control.

Local Panel:

In relay room at 7 points, no access for train crews.

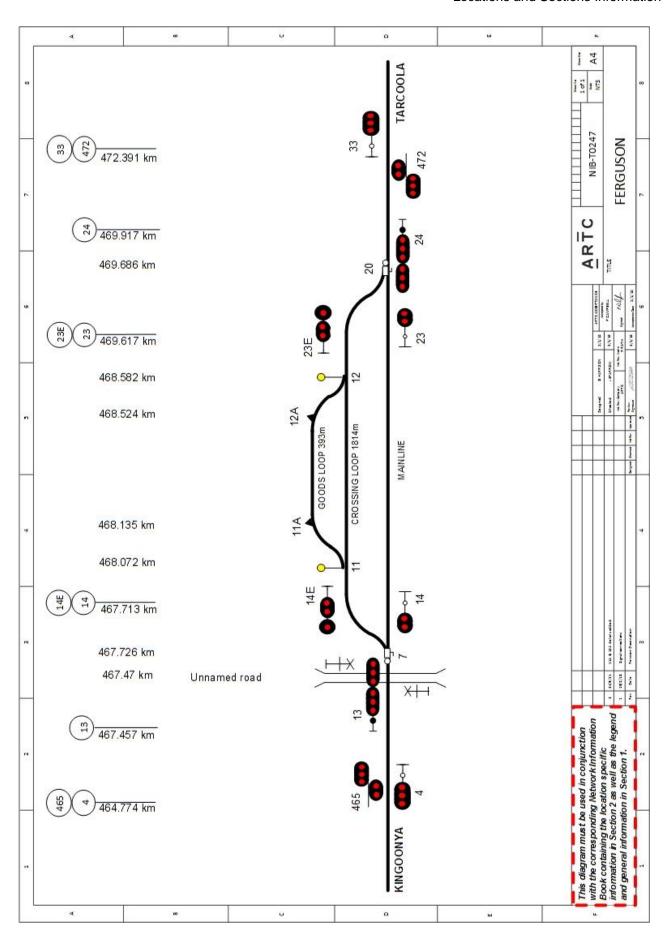
Other:

Access to Ferguson

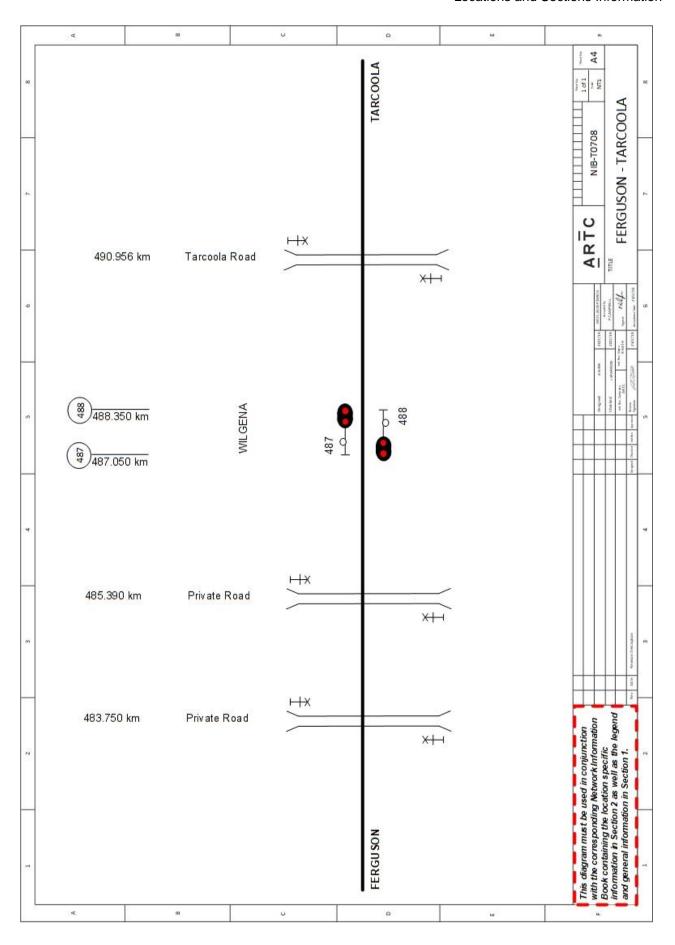
After passing through Glendambo, travel 500m to the Tarcoola Road turn off on the left. Travel 85.2 km, turn right and travel 220m and find the middle of the Ferguson crossing location.

Note: Roads to this location only accessible by 4WD











2.14 Tarcoola (TAR)

Standing Room:

- 1848m Main Line
- 1873m Crossing Loop
- 1897m Branch Main Line

Goods Siding:

- Yes, on Northern side of branch main line (three roads refer to local track maintenance supervisor for condition and access.
- Triangle located off crossing loop

Local Control Panel:

Nil

Crank Handles:

Nil

Other:

CTC controlled location under control of Tarcoola CTC network controller 08 8152 8006

There is an ARTC rest house located at Tarcoola.

Access to Tarcoola

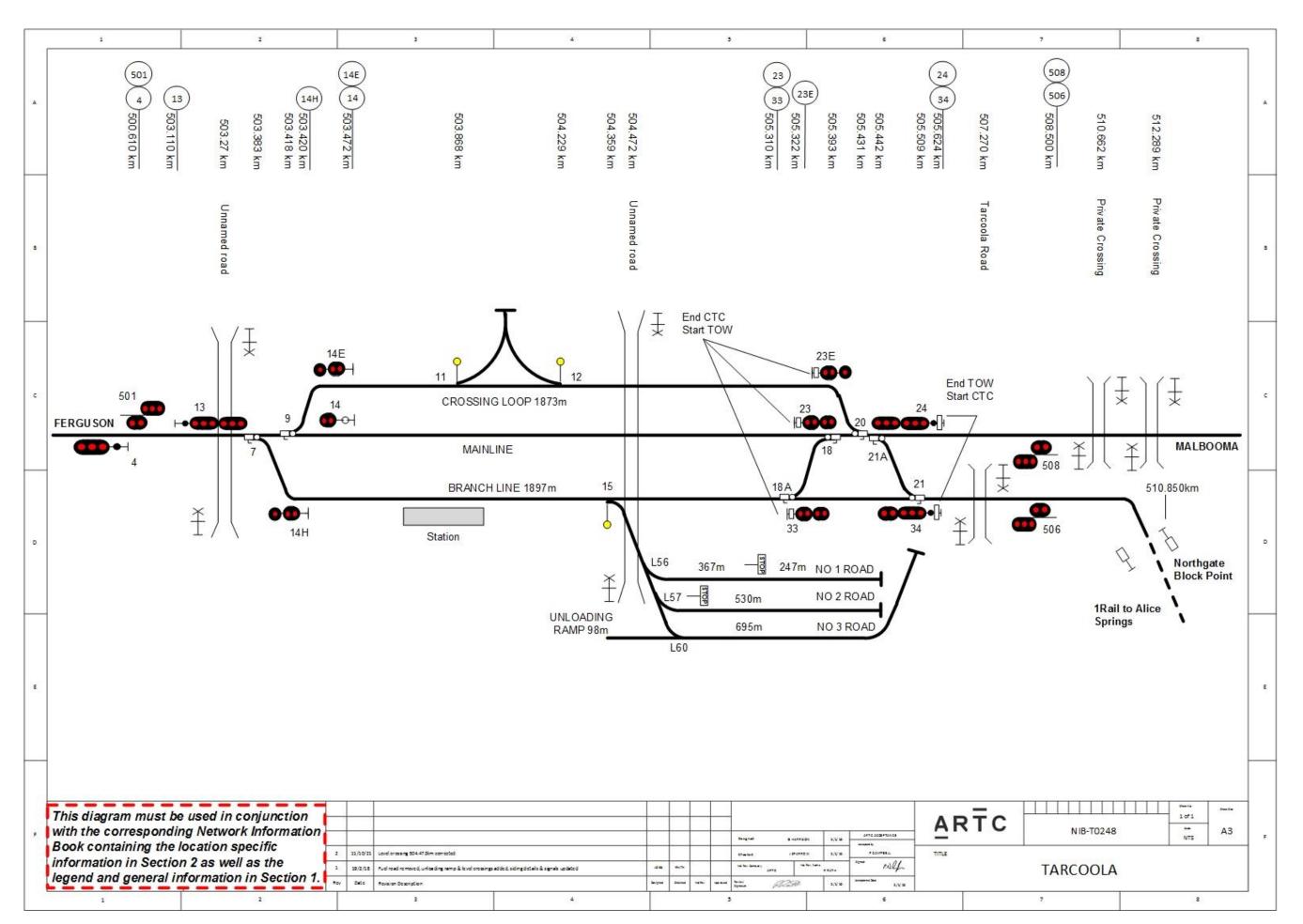
After passing through Glendambo, travel 500m to the Tarcoola Road turn off on the left. Travel 122.4 km turn left and travel 190m and find the middle of the Tarcoola crossing location.

Note: Roads to this location only accessible by 4WD

Northgate block point on the Darwin line is the interface point with Aurizon. Refer to safety interface agreement IA31 for further information.

555 Quarry is owned by ARTC and connects to the Darwin line to the north of Northgate block point. Refer to safety interface agreement IA31 for further information.







OGW-30-10

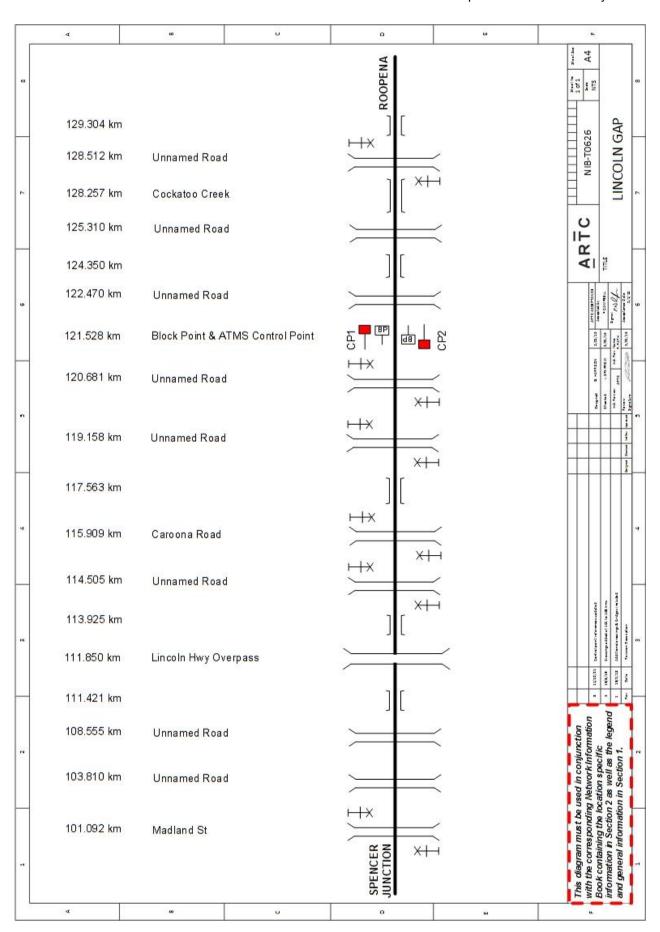
3 Spencer Junction to Whyalla Line

3.1 Lincoln Gap (LGP)

Lincoln Gap is a block point between Spencer Junction and Roopena at 121.500km.

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3.2 Roopena (ROO)

Standing Room:

• 1840m

Goods Siding:

Nil

Local Control Panel

Yes

Crank handles:

All point machines are dual control.

3.2.1 Overview of local operating equipment

Roopena points are remotely controlled from Network Control Centre West (NCCW). The default point position will remain set for the last or next called route – the points do not self-restore for the main line.

Roopena is provided with controls to operate the points locally. The controls are located in a control cabinet attached to the wall of the equipment tank at each end to the loop and are applicable to that end only.

The operation of the local controls shall only be undertaken by authorised qualified safeworkers and only when it is safe to do so, and after due consideration to the safety of all rail movements in the vicinity or approaching the points. The Network Controller must release the points to Local Control before they can be accessed using the Local Control Panel.

Enhancers are situated at both ends of the loop to indicate the condition of the points. There is a repeater for movements towards Spencer Junction from Whyalla on the Southern end. Points are also equipped with mechanical point indicators.

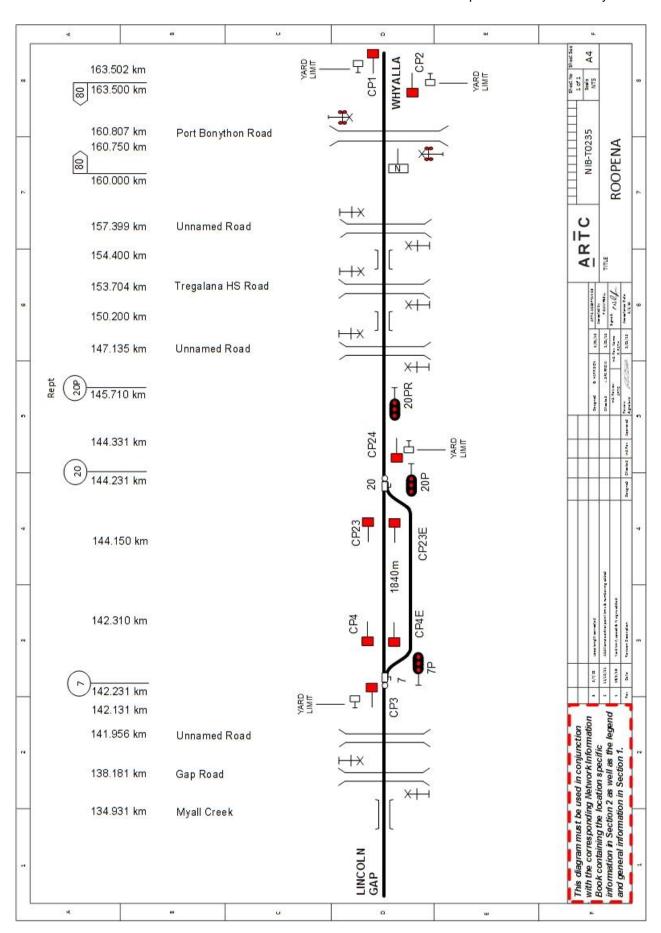
The Light Indicators will always show a red aspect unless an authority is placed over the points.

Detailed operating instructions are contained within the safeworking rules document 'Electronic Authority - Advanced Train Management System.' Reference Section 12 Local Control of Running Line Points.













3.3 Whyalla (WHY)

The ARTC boundary is at 163.500km. Whyalla yard is owned by ARTC and leased to Aurizon. Refer to Aurizon for further details.

Where ARTC interfaces with Aurizon, the requirements are detailed in Interface Agreement IA31.