

## CRN Local Appendix

# West

### CNLA 209 Lithgow-Bowenfels- Wallerawang (Including Bowenfels Interface)

Status	Date	Reviewed	Endorsed
	April 2020	<b>Manager Network Rules</b> Iaen Hodges	<b>Manager Network Operations</b> Marcus Burt

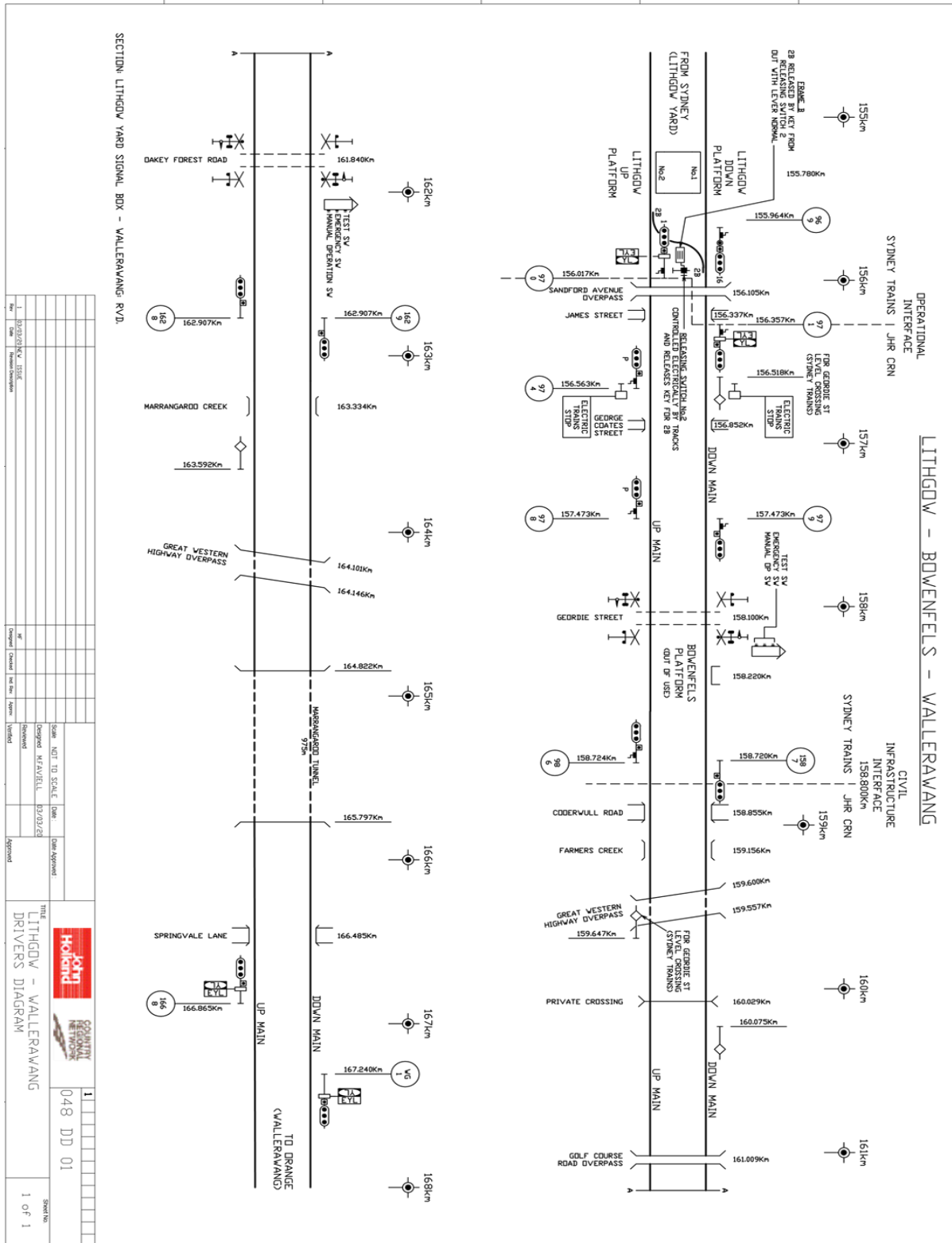
Network Control Board	Normal Call	Priority Call	Emergency Call	Backup number	Public Free call
North West	02 4028 9501	02 4028 9521	02 4028 9541	02 4028 9671	1800 643 373
South West	02 4028 9502	02 4028 9522	02 4028 9542	02 4028 9672	1800 021 914
West	02 4028 9504	02 4028 9524	02 4028 9544	02 4028 9674	1800 427 198
<b>NOTE:</b> For emergency use only, you can call 1800 JHR CRN from any phone.					

All relevant publications are available on the JHR CRN website [www.jhrcrn.com.au](http://www.jhrcrn.com.au).

# Lithgow-Bowenfels-Wallerawang (Including Bowenfels Interface)

158.800km

Diagram of Lithgow - Bowenfels - Wallerawang (Including Bowenfels Interface) [a]



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## Lithgow-Bowenfels-Wallerawang (Including Bowenfels Interface)

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158.800km

### General Arrangements

[b]

Bowenfels is a double line uni-directional Rail Vehicle Detection Interface location.

### Incidents at or affecting the interface

The Sydney Trains and JHR Network Control must, as soon as practicable, report and liaise regarding any incident or occurrence on their respective networks or across the interface that has the potential to affect operations or safety on the other network to determine the most appropriate arrangements.

### Operational Boundaries

[c]

#### Train control

Sydney Trains Network Control Up side of:

- 156.357 km Down Main, signal 97.1 (exclusive)
- 156.017 km Up Main, signal 97.0 (inclusive).

CRN Network Control Down side of:

- 156.357 km Down Main, signal 97.1 (inclusive)
- 156.017 km Up Main, signal 97.0 (exclusive).

#### Signal boundaries - Lithgow and Wallerawang

Sydney Trains Network Control:

- 156.357 km Down Main, signal 97.1
- 156.017 km Up Main, signal 97.0.

CRN Network Control:

- 167.240 km Down Main, signal WG 1
- Up Main, signal WG 10
- Lidsdale Branch, signal WG 6.

The Down Main between signal 97.1 and signal WG 1 is protected by the Sydney Trains at Lithgow Yard Panel.

The Up Main between signals WG 10 and WG 6 (on the Lidsdale Branch) and signal 97.0 are protected by CRN Network Control.

#### Infrastructure Boundaries

The property boundary between Sydney Trains Network and CRN is located at 158.800 km on the Up and Down Main at Bowenfels.

Note: The interface point is also known as the Interconnection Point at 158.800 km.

#### Sydney Train Responsibilities

##### Civil

Note: The interface point for clarity is also known as the Interconnection Point at 158.800 km

- All civil infrastructure on the Up side of 158.800 km on the UP Main and on the Down Main.
- The last Sydney Trains sleeper on the Down Main is painted white and the last CRN sleeper on the Up Main is painted white.
- Sydney Trains has a WOLO board affixed to Sydney Trains OHW structure at 158.736 km for

Up trains and an End WOLO board affixed to the structure for Down trains.

- Sydney Trains maintains its grease pot located on the Up Main on the CRN side of the interface at 158.825 km.

## Signals

- All signal infrastructure on the Up side of 158.800 km including 98.6 signal and 162.8C track circuit on the Up Main.
- Sydney Trains manages signalling Loc.98.7/158.7 to which JHR has access.
- Sydney Trains manages the wayside site on the Up Main at 156.476 km.
- Excludes 158.7 signal and 158.7AT (98.7AT) circuit on the Down Main (note: 158.7AT and 98.7AT refer to the same infrastructure -158.7AT is the CRN reference and 98.7AT is the Sydney Trains reference).

## Geordie St Level crossing

Sydney Trains manages the structures and circuits associated with the Geordie Street (Bowenfels) level crossing, including 162.8C track circuit.

## Electrical

- Management of all electrical infrastructure on the Up side of 158.800 km on the Up Main and Down Main and the following assets located on the Down side of the boundary within and outside the rail corridor:
  - 11KV transmission lines and all poles (685) 66KV transmission line and all poles (875) & 800 feeder.
  - Wallerawang HV substation and all equipment therein.
  - HV Signal supplies 98.1, 98.7, 103.6, 105.5, 106.5, poles, TXs, ABS cable and conduit up to crossover contactor.

Note: The boundary is clear of the last Sydney Trains overhead wiring structure at SL158+768. Safe working clearances must be maintained when working near all electrical assets.

Sydney Trains have 24-hour – seven day access to the electrical transmission system and 1500V assets" and that "any work which requires an electrical permit to any transmission lines or 1500V assets are to follow the electrical permit request process.

## Communication and Control Systems

Sydney Trains is responsible for the DTRS Base Station located at Bowenfels at 158.186 km and the 96 Core fibre optic cable connected to the OCDN Network. Power for the Bowenfels BTS is provided by a street supply and is Sydney Trains responsibility.

## Technology

Sydney Trains Bowenfels Apparatus Room is on the CRN boundary. There are copper communications cables running into this room.

Sydney Trains are afforded 24-hour – seven day maintenance access to the room and communications route.

## CRN Responsibilities

### Civil

- All civil infrastructure on the Down side of 158.800 km on the Up Main and on the Down Main.
- The last Sydney Trains sleeper on the Down Main is painted white and the last CRN sleeper on the Up Main is painted white. The CRN has blue creep pegs located adjacent to both tracks at 158.820 km.

## Signals

- All signal infrastructure on the Down side of 158.800 km.
- John Holland Rail has access to signalling Loc. 98.7/158.7 which is managed by Sydney Trains, and may request Sydney Trains to assist in repairing track circuits where a failure affects the operation of the Geordie Street (Bowenfels) level crossing.
- Excluding 98.6 Signal and 162.8C track circuit on the Up Main and 158.7 signal on the Down Main including 158.7AT/98.7AT (note: this is the same infrastructure - 158.7AT is the CRN reference and 98.7AT is the Sydney Trains reference) track circuit.

## Electrical

Management of all electrical infrastructures on the Down side of 158.800 km on the Up Main and Down Main is the responsibility of JHR, excluding the following Sydney Trains assets:

- 685 11KV transmission lines and all poles.
- 875 66KV transmission line and all poles & 800 feeder.
- Wallerawang HV substation and all equipment therein.
- HV Signal supplies 98.1, 98.7, 103.6, 105.5, 106.5 poles, TXs, ABS cable and conduit up to crossover contactor.



### NOTE

The boundary is clear of the last Sydney Trains overhead wiring structure at SL158.768. Safe working clearances must be maintained when working near all electrical assets. Sydney Trains have 24-hour – seven day access to the electrical transmission system and 1500V assets" and that "any work which requires an electrical permit to any transmission lines or 1500V assets are to follow the electrical permit request process.

## Recognition of Safeworking Competencies/Certification

[d]

Transport for NSW Rail Safety Worker (RSW) cards, including RISI cards, held by Sydney Trains and NSW Trains personnel and contractors, and RSW cards and RISI cards recognised by JHR are mutually recognised by both parties for any work that is performed in the area between the Yard Limits on the Up side of Wallerawang and the Yard Limits on the Down side of Lithgow.

## Application of Network Rules and Procedures

[e]

The Sydney Trains Network Rules and Procedures will be used for all Safeworking operations.



### NOTE

Although Sydney Trains Network Rules apply in this section, Competent Workers are prohibited from using Absolute Signal Blocking or Lookout Working as a Work on Track method between the Up side of Wallerawang Yard limits and Lithgow limits.

## Yard Limits

[f]

Down Main END YARD LIMIT / YARD LIMIT on signal 97.1 at 156.357 km.

Up Main END YARD LIMIT / YARD LIMIT on signal 97.0 at 156.017 km.

Down Main END YARD LIMIT / YARD LIMIT on signal WG1 at 167.240 km.

Up Main END YARD LIMIT / YARD LIMIT on signal 166.8 at 166.865.

## Oakey Forest Rd Level Crossing

[g]

Oakey Forest Rd level crossing at 161.840 km has Type F flashing lights, booms and bells automatically controlled by Down and Up track circuits or controlled by a manual operation switch.

Geordie St level crossing at 158.137 km has Type F flashing lights, booms and bells automatically controlled by Down and Up track circuits or by a manual operation switch.

## **Operating Procedure – Bowenfels Interface**

[h]

CRN Network Control is responsible for safeworking management on the Down side of 156.357 km, Down Main signal 97.1 and 156.017km Up Main signal 97.0 in accordance with Sydney Trains Rules and Procedures and this CNLA.

Sydney Trains and CRN Network Control must maintain regular contact and communicate projected rail traffic and work on track times to each other. This communication must be undertaken as soon as practicable after the commencement of each shift with changes to planned and forecast times to be updated as soon as operationally appropriate.

### **Movements Departing Wallerawang to Lithgow (Up direction)**

CRN Network Control must:

- Liaise with Sydney Trains Network Control prior to Bathurst departure to confirm acceptance at the interface and provide the anticipated arrival time at Bowenfels.
- Advise the Signaller at Lithgow Yard Panel of Wallerawang departure.

### **Movements Departing Lithgow (Up direction)**

Sydney Trains Network Control must:

- Liaise with CRN Network Control to confirm acceptance and provide the anticipated departure time from Bowenfels.

The CRN Network Control must:

- Confirm acceptance or rejection of the movement.

### **Track Occupancy Authorities on the Down Main**

Track Occupancy Authorities on the Down Main are authorised by CRN Network Control and issued by the Signaller Lithgow Yard Panel.

**Blocking facilities are placed by the Signaller Lithgow Yard Panel.**

### **Track Occupancy Authorities on the Up Main**

Track Occupancy Authorities for the Up Main line are authorised and issued by CRN Network Control.

Once issued the details of Track Occupancy Authorities for the Up Main must be communicated to the Signaller Lithgow Yard Panel.

**Blocking facilities are placed by the JHR Network Control Officer.**

### **Local Possession Authorities on the Down Main**

Local Possession Authorities on the Down Main are authorised by CRN Network Control.

**Blocking facilities are placed by the Signaller Lithgow Yard Panel.**

### **Local Possession Authorities on the Up Main**

Local Possession Authorities (LPA) on the Up Main are authorised by CRN Network Control.

**Blocking facilities are placed by the JHR Network Control Officer.**

## Advertised possession boundaries

[i]

The boundaries for the issue of an LPA between the CRN and Sydney Trains networks at Wallerawang are as follows:

### During back-to-back Sydney Trains and JHR possessions

- Down Main, signal WG 1 (exclusive)
- Up Main, signal WG 10 (inclusive)
- Lidsdale Branch, signal WG 6 (inclusive).

Sydney Trains will advertise the possession to signal 97.1 (inclusive) on the Down Main and from signal 97.0 (inclusive) on the Up Main on a Special Train Notice (STN).

JHR will advertise the possession from signal 97.1 (exclusive) to signal WG 1 on the Down Main and WG 10 and WG 6 to 97.0 (exclusive) on the Up Main on a Country Train Notice (CTN).

The Sydney Trains Possession Protection Officer will get the portion of the Local Possession Authority advertised on the CTN from CRN Network Control.

Worksites and rail vehicles that need to move from a Sydney Trains controlled possession to a JHR controlled possession are authorised and supervised by the JHR Possession Protection Officer.

Worksites and rail vehicles that need to move from a JHR controlled possession to a Sydney Trains controlled possession are authorised and supervised by the Sydney Trains Possession Protection Officer.

### During Sydney Trains possessions

- Down Main, signal 97.1 (exclusive)
- Up Main, signal 97.0 (inclusive).

### During JHR possessions

- Down Main, signal 97.1 (exclusive)
- Up Main, signal 97.0 (inclusive).



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#### NOTE

JHR will advise the Network Rules Specialist, Sydney Trains Network Rules Unit when a JHR possession is to take place to allow time for instructions to be issued for signal 97.1 to be booked out prior to the possession commencement.

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