

2004 SAFE Notice 024

Permanent

From Thursday 1 July 2004 until Friday 31 December 2004 .This SAFE Notice contains the instructions which appeared SAFE Notice 010 - 2004.

| | | |
|--------------------------------|--|---------------------------------|
| Blayney (excl) to Cowra (incl) | | [d] |
| section | | system of working |
| Blayney – Cowra | | Staff and Ticket White Triangle |

| | | |
|--|------|------------------------|
| Orange East Fork (excl) to Parkes (incl) | | [e] |
| section | line | system of working |
| Orange East Fork – Orange (West Fork) | | Rail Vehicle Detection |
| Orange East Fork – Molong | Main | Train Order |
| Molong – Manildra | Main | Train Order |
| Manildra – Bumberry | Main | Train Order |
| Bumberry – Parkes Sub | Main | Train Order |
| Parkes Sub – Parkes | Main | Train Order |

NOTE

Parkes Sub adjoins Parkes yard limits, however the Driver of all trains travelling between Parkes Sub and Parkes *must* be in possession of an order.

| | | |
|-------------------------------|------|-------------------|
| Orange (excl) to Dubbo (incl) | | [f] |
| section | line | system of working |
| Orange – Stuart Town | Main | Train Order |
| Stuart Town – Wellington | Main | Train Order |
| Wellington – Combo | Main | Train Order |
| Combo – Geurie | Main | Train Order |
| Geurie – Wongarbon | Main | Train Order |
| Wongarbon – Dubbo | Main | Train Order |

Locations of Interlockings, stations, sidings and length of platforms

Introduction

[a]

The location of interlockings, stations, sidings and the lengths of platforms at stations in the area covered by this manual are shown in the following tables.

Lithgow (excl) to range (incl)

[b]

| km from | interlocking, station, platform or siding | length of passenger in metres |
|---------|--|---|
| 171.261 | Wallerawang | Up main 185 Down main 158 |
| 169.700 | Austen & Butta | |
| 178.557 | Wallerawang Colliery | |
| 181.402 | Rydal | Main 91 |
| 198.274 | Tarana | Main 137 |
| 213.747 | Locksley | |
| 233.053 | Raglan | Up & Down main 91 (No pedestrian access) |
| 237.665 | Kelso | |
| 239.871 | Bathurst | Up & Down main 199 |
| 251.949 | George's Plains | Main 82 |
| 273.760 | Newbridge | Main 140 |
| 287.007 | Murrobo | |
| 290.369 | Blayney | Main 198 |
| 298.775 | Polona | |
| 308.713 | Spring Hill | |
| 320.840 | Orange East Fork | East Fork 6 |
| 322.620 | Orange | Main 208 |

Wallerawang (excl) to Merrygoen (incl)

[c]

| km from Sydney | interlocking, station, platform or siding | length of passenger platform in metres |
|----------------|--|---|
| 193.700 | Baal Bone Junction | |
| 198.303 | Ben Bullen | Main 80 |
| 207.359 | Capertee | Main 100 |
| 242.270 | Clandulla Charbon | Main 80 |
| 246.264 | Junction Kandos | |
| 248.012 | Kandos station | Main 139 |
| 249.300 | Rylstone | Main 80 |
| 257.209 | Lue | Main 80 |
| 279.630 | Mudgee | Loop 155 |
| 308.106 | Gulgong | Main 91 |
| 340.636 | Birriwa | |
| 370.425 | Dunedoo | Main 61 |
| 387.903 | Merrygoen | Main 76 |
| 417.798 | | |

Blayney (excl) to Cowra (incl)

[d]

| km from Sydney | interlocking, station, platform or siding | length of passenger platform in metres |
|----------------|--|---|
| 309.842 | Carcoar | 107 |
| 317.558 | Mandurama | 48 |
| 321.096 | Lyndhurst | |
| 346.370 | Woodstock | 37 |
| 359.270 | Holmwood | |
| 365.540 | Cowra | 101 |

Orange East Fork (excl) to Parkes (incl)

[e]

| km from Sydney | interlocking, station, platform or siding | length of passenger platform in metres |
|----------------|--|---|
| 360.028 | Molong | 137 (Line slewed away from platform) |
| 384.768 | Manildra | 50 (No public access) |
| 407.013 | Bumberry | |
| 440.478 | Parkes Sub | |
| 445.505 | Parkes | 210 |

Orange (excl) to Dubbo (incl)

[f]

| km from Sydney | interlocking, station, platform or siding | length of passenger platform in metres |
|----------------|--|---|
| 379.506 | Stuart Town | 122 |
| 411.089 | Wellington | 159 |
| 427.572 | Combo | |
| 434.456 | Geurie | 92 |
| 444.418 | Wongarbon | |
| 462.209 | Dubbo | 220 |

Location of intermediate sidings and methods of working

Introduction

[a]

The tables in this unit show the location of all intermediate sidings, their distance from Sydney, the line from which the siding may be entered, how the points are unlocked, and the location where the staff, loose key, guard's key or electrical release is obtained.

Lithgow (excl) to Orange (incl)

[b]

| siding | km from Sydney | line from which siding may be entered | points unlocked by | location where staff, loose key, guards key or electrical release obtained |
|------------------------------|----------------|---------------------------------------|----------------------|--|
| Locksley (per way siding) | 213.747 | Up Main | Releasing Switch Key | Track Release |
| Georges Plains | 251.949 | Main | Releasing switch Key | Track Release(entry) WRMC Orange (exit) |

Wallerawang (excl) to Merrygoen (incl)

[c]

| siding | km from Sydney | line from which siding may be entered | points unlocked by | location where staff, loose key, guards key or electrical release obtained |
|--------------|----------------|---------------------------------------|------------------------|--|
| Ben Bullen | 198.303 | Branch | Staff key or loose key | Baal Bone Junction - Clandulla |
| Charbon | 244.610 | Branch | Key Staff | Clandulla - Kandos |
| Rylstone | 256.806 | Branch | XL Locked | Kandos - Mudgee |
| Birriwa Silo | 370.893 | Branch | Staff key or loose key | Gulgong - Dunedoo |

Blayney (excl) to Cowra (incl)

[d]

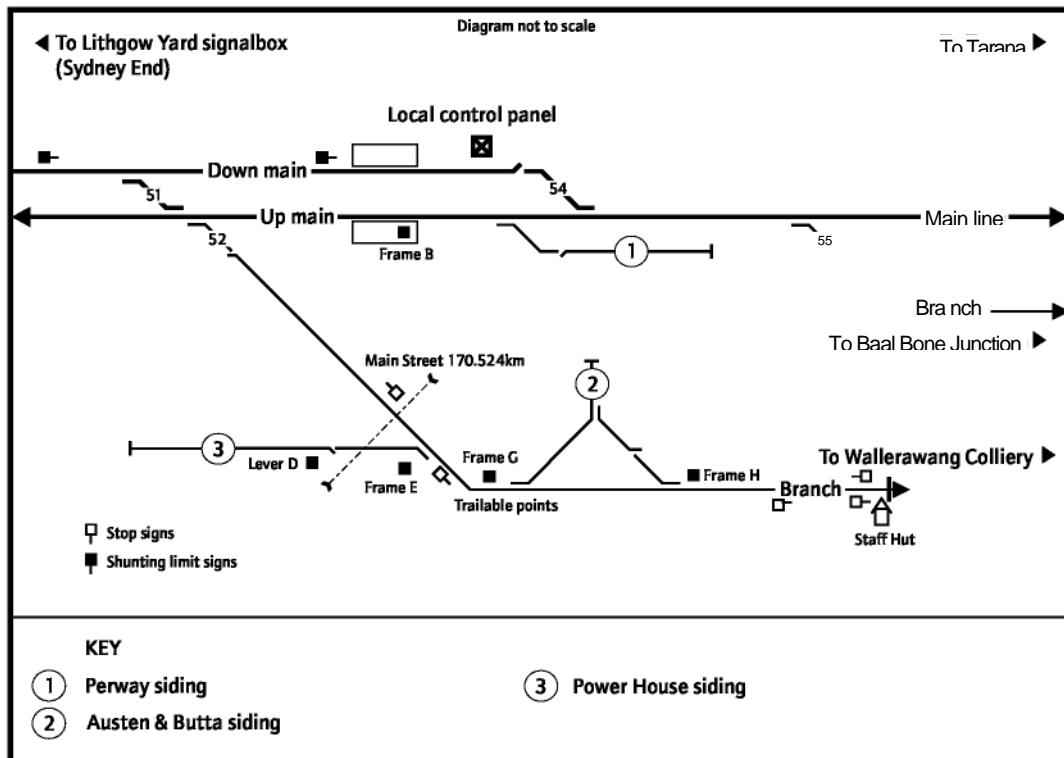
| siding | km from Sydney | line from which siding may be entered | points unlocked by | location where staff, loose key, guards key or electrical release obtained |
|---------------|-----------------------|--|---------------------------|---|
| Carcoar | 309.842 | Branch | XL key | Blayney – Cowra |
| Lyndhurst | 321.096 | Branch | XL key | Blayney – Cowra |
| Woolah | 346.270 | Branch | Staff key or loose key | Blayney - Cowra |
| Holmwood | 359.270 | Branch | Staff key or loose key | Blayney - Cowra |

Wallerawang

171.261 kms

Diagram of Wallerawang

[a]



Operation of points and signals

[b]

The points and signals at Wallerawang are operated from the Western Rail Management Centre at Orange.

A local control panel has also been provided in the traffic room at Wallerawang to allow the interlocking to be operated locally. All indications displayed on the local control panel are also displayed on the control panel at the Western Rail Management Centre at Orange.

All points worked from the interlocking machine are controlled by track circuit and cannot be moved unless the track(s) controlling the points is unoccupied.

NOTE:

It takes approximately 60 seconds for starting signal No.WG15 to show a clear indication after the route has been requested (if available).

Locking [c]

| | |
|----------|----------|
| type | provided |
| Approach | Yes |
| Route | Yes |

Switching the control panel in or out [d]

A two-position key-locked switch is provided in the local control panel in the traffic room to allow the signalbox to be switched in (local) or switched to remote control.

Indicator lights inscribed “Local” and “Remote” respectively are provided to indicate when the control panel is switched in, switched out, or switched to remote control.

Signalling power supply indicators [e]

Normal, Warning and Fail power supply indicator lights are provided for the signalling power supplies in the Wallerawang area.
 The green “Normal” indication will be displayed when all the AC or DC power supplies are available.
 The yellow “Warning” indication will be displayed when there is a partial failure of some part of the power supply.
 The red “Fail” indication will be displayed when a total failure of some part of the power supply has occurred.
 An alarm is provided to warn of any alteration to the power supply and the Signaller must acknowledge the alteration by depressing the alarm pushbutton.
 When there is any alteration or interruption to the AC or DC power supplies to the signalling, the Signaller must promptly inform the Signals maintenance representative.

Additional indicators [f]

Earth leakage indicator

The green “Normal” indication will be displayed when there is no earth leakage in the system.

The yellow “Warning” indication will be displayed when there is an earth leakage from the signal wiring.

Signal lamp indicators

A yellow indicator light inscribed “Filament fail” will be displayed when a partial failure of a signal lamp is detected.

A red indicator light inscribed “Lamp fail” will be displayed when a total failure of a signal lamp is detected.

When either of the indicator lights is displayed, the Signaller must promptly inform the Signals maintenance representative.

Supervisory fail indicator

A red light inscribed "Supervisory fail" is provided in the indicator diagram at Wallerawang signalbox to indicate when there is a failure of the supervisory control system.

When there is any alteration or interruption to the supervisory control system that affects the working of trains, the Signaller must promptly advise the Signals maintenance representative.

Maintenance call indicator

A yellow light inscribed "Maintenance call" will be displayed when the maintenance call pushbutton is pushed, and remains on until the pushbutton is cancelled.

Ground frames

[g]

Frame B:

Frame B is located on the Up main platform and provides access to the Perway siding.

Frame B is unlocked by a key from releasing switch B.

Releasing switch B is electrically released from the Western Rail Management Centre at Orange.

Lever D:

Lever D is located on the Up side of the Power House siding adjacent to the catch points and provides access to the Power House siding.

Lever D is unlocked by a key from releasing switch D.

Releasing switch D is electrically released from the Western Rail Management Centre at Orange.

Frame E:

Frame E is located on the Up side of the Branch line adjacent to the points and provides access to the Power House siding.

Frame E is unlocked by a key from lever D.

Frame H:

Frame H is located on the Up side of the Branch line adjacent to the points and provides access to the Austen and Butta siding.

Frame H is provided with a special clip attached to the facing point lock lever, which when not in use must be secured in the normal position with an SL lock.

Frame G:

Frame G is located on the Up side of the Branch line adjacent to the points and provides access to the Austen and Butta siding.

Frame G is provided with a special clip attached to the facing point lock lever, which when not in use must be secured in the normal position with an SL lock.

Shunting limit signs

[h]

Two shunting limit signs are located at Wallerawang as follows:

On the Down side of the Down main line on the Sydney side of No. 51 points. This sign applies to shunting movements in the Up direction on the Down main line.

On the Down side of the Down main line between No. 51 points and Wallerawang platform. This sign applies to shunting movements in the Up direction on the Down main line.

Stop signs

[i]

Stop signs are located at Wallerawang as follows:

- on the Down side of the Branch line the Sydney side of Main Street level crossing facing Down trains
- on the Up side of the Branch line the Country side of Main Street level crossing facing Up trains
- on the Down side of the Branch line near frame H facing Down trains
- on the Down side of the Branch line near the Staff Hut facing Down trains
- on the Up side of the Branch line near the Staff Hut facing Up trains

Main Street level crossing at 170.524 kms

[j]

Type F flashing light highway signals and a warning bell are provided at Main Street level crossing at 170.524 kms on the Wallerawang Colliery branch line.

Stop signs are provided on each side of the roadway.

The warning equipment is manually controlled from operator's pushbutton switches, located in locked boxes on the post of the stop signs.

If a Qualified Worker is in attendance at the level crossing before the arrival of the train, the Qualified Worker may activate the warning equipment and, provided that it is safe to do so, may then handsignal the train over the level crossing without it being brought to a stand.

The warning equipment will cancel automatically when the rear of the train has cleared the level crossing.

Operator's pushbutton units for the level crossing

Two operator's pushbuttons inscribed "Crossing start" and "Crossing cancel" are provided in a secured box on a post on each side of the level crossing.

When the level crossing needs to be operated, the Qualified Worker must:

- depress the "Crossing start" pushbutton for one second to cause the warning equipment to operate
- and follow the instructions for shunting over level crossings

before handsignalling the train over the crossing.

If the movement is not proceeded with, the warning indications must be cancelled by pressing the "Crossing cancel" pushbutton for one second.

The warning indications will be cancelled automatically when the rear of the train has cleared the level crossing.

The operator's pushbutton unit must be kept closed and secured by an SL lock when not in use.

Half pilot staffs

[k]

Wallerawang – Tarana

A half pilot staff for the Wallerawang – Tarana section is provided in the pilot staff locks inside a locked box on signal No. 15.

The half pilot staff for the section Wallerawang – Tarana is inscribed "Wallerawang WG15".

Wallerawang – Baal Bone Junction

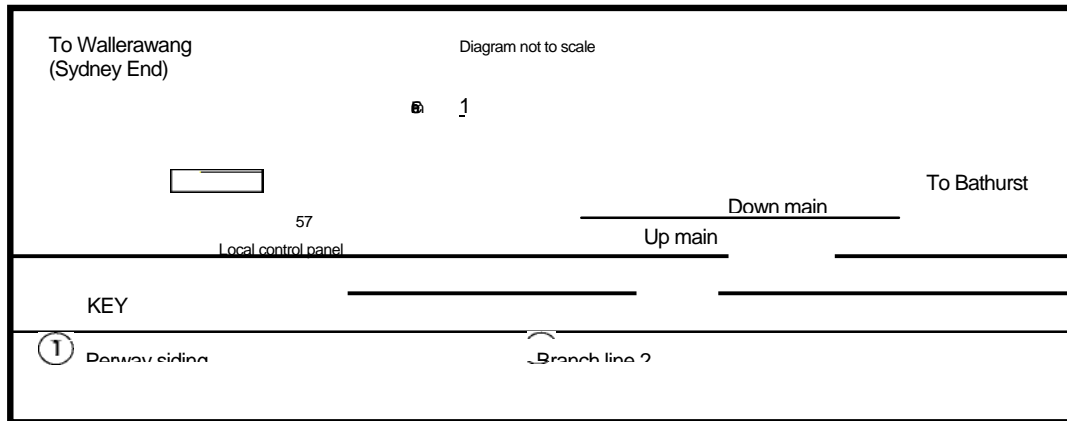
A half pilot staff for the Wallerawang – Baal Bone Junction section is provided in the pilot staff locks inside a locked box on signal No. 15. The half pilot staff for the section Wallerawang – Baal Bone is inscribed "Wallerawang".

Tarana

198.274 kms

Diagram of Tarana

[a]



Operation of points and signals

[b]

The points and signals at Tarana are operated from the Western Rail Management Centre at Orange.

A local control panel has also been provided in the traffic room at Tarana to allow the interlocking to be operated locally. All indications displayed on the local control panel are also displayed on the control panel at the Western Rail Management Centre at Orange.

All points worked from the interlocking machine are controlled by track circuit and cannot be moved unless the track(s) controlling the points is unoccupied.

Locking

[c]

| type | provided |
|----------|----------|
| Approach | Yes |
| Route | Yes |

Switching the control panel in or out

[d]

A two-position key-locked switch is provided in the local control panel in the traffic room to allow the signalbox to be switched in (local) or switched to remote control.

Indicator lights inscribed "local" and "remote" respectively are provided to indicate when the control panel is switched in, switched out, or switched to remote control.

Signalling power supply indicators

[e]

Normal, Warning

and Fail power supply indicator lights are provided for the signalling power supplies in the Tarana area.

The green "Normal" indication will be displayed when all the AC or DC power supplies are available.

The yellow "Warning" indication will be displayed when there is a partial failure of some part of the power supply.

The red "Fail" indication will be displayed when a total failure of some part of the power supply has occurred.

An alarm is provided to warn of any alteration to the power supply and the Signaller must acknowledge the alteration by depressing the alarm pushbutton.

When there is any alteration or interruption to the AC or DC power supplies to the signalling, the Signaller must promptly inform the Signals maintenance representative.

Additional indicators

[f]

Earth leakage indicator

The green "Normal" indication will be displayed when all the signal wiring is correct.

The yellow "Warning" indication will be displayed when there is an earth leakage from the signal wiring.

Signal lamp indicators

A yellow indicator light inscribed "Filament fail" will be displayed when a partial failure of a signal lamp is detected.

A red indicator light inscribed "Lamp fail" will be displayed when a total failure of a signal lamp is detected.

When either of the indicator lights is displayed, the Signaller must promptly inform the Signals maintenance representative.

Supervisory fail indicator

A red light inscribed "Supervisory fail" is provided in the indicator diagram at Tarana signalbox to indicate when there is a failure of the supervisory control system.

When there is any alteration or interruption to the supervisory control system that affects the working of trains, the Signaller must promptly advise the Signals maintenance representative.

Maintenance call indicator

A yellow light inscribed "Maintenance call" will be displayed when the maintenance call pushbutton is pushed, and remains on until the pushbutton is cancelled.

Ground frames

[g]

Frame C:

Frame C is located on the Down side of the Perway siding adjacent to the crossovers and provides access to the Perway siding and the former Oberon Branch line.

Frame C is unlocked by a key from releasing switch C.

Releasing switch C is electrically released from the Western Rail Management Centre at Orange.

Half pilot staff

[h]

Tarana - Wallerawang

A half pilot staff for the Wallerawang – Tarana section is provided in the pilot staff locks inside a locked box on signal No. 32 .

The half pilot staff for the section Wallerawang – Tarana is inscribed “Tarana TA32”.

Bathurst

239.871 kms

Operation of points and signals

[a]

The points and signals at Kelso and Bathurst are all part of the Bathurst interlocking. The points and signals are operated from the Western Rail Management Centre at Orange.

All interlocked points worked from the Western Rail Management Centre are controlled by track circuit and cannot be moved unless the track(s) controlling the points is unoccupied. All other interlocked points at Bathurst are operated from ground frames, which are released from the Western Rail Management Centre.

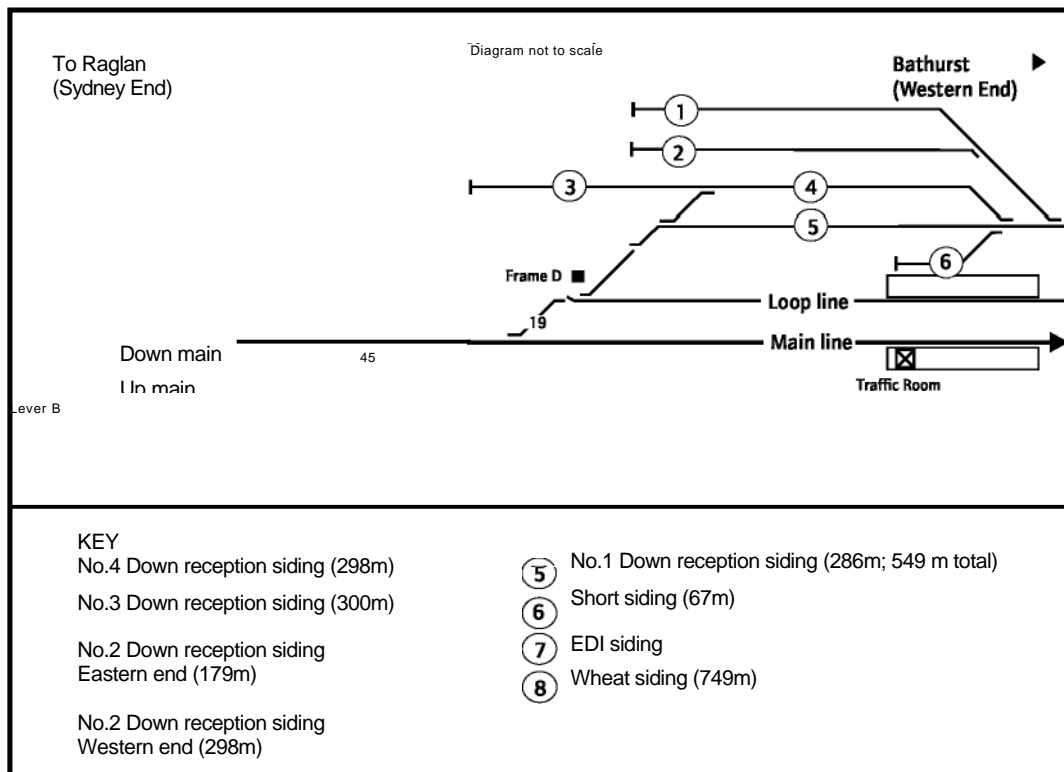
Locking

[b]

| | |
|----------|----------|
| type | provided |
| Approach | Yes |
| Route | Yes |

Diagram of Bathurst [East end]

[c]



Signalling power supply and other indicators

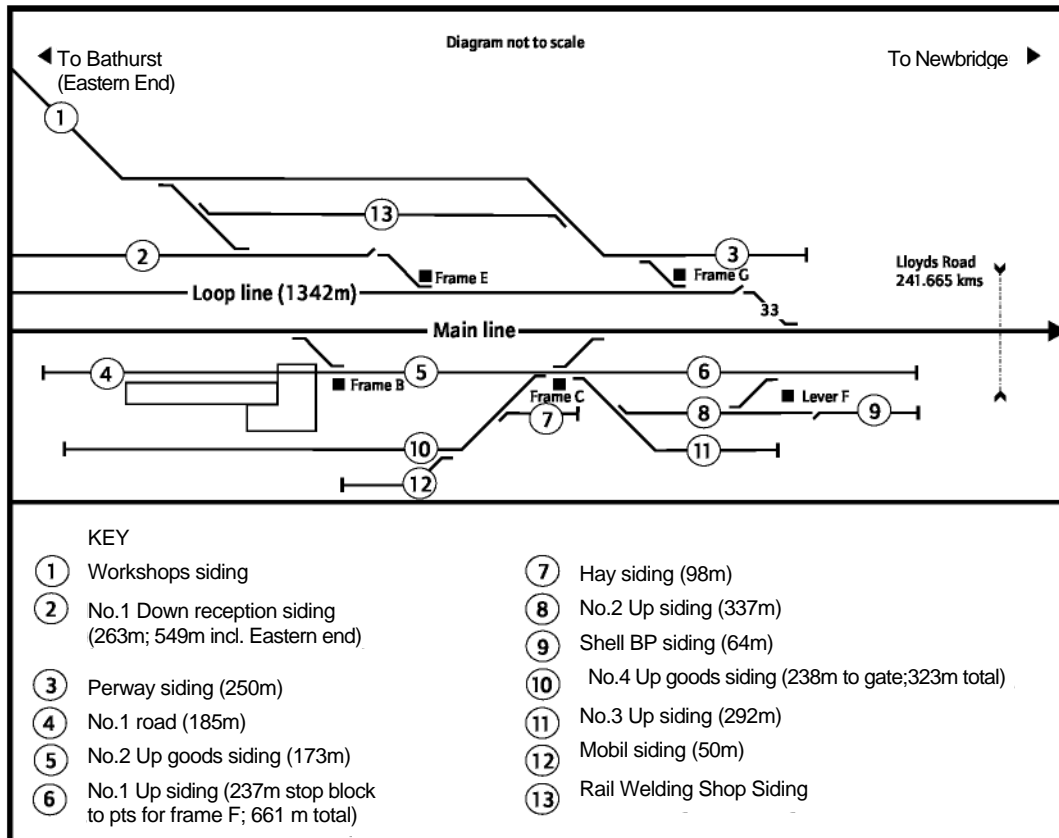
[d]

There are various power supply, level crossing and other indicators provided by the VDU panel for the signalling system for Bathurst and Newbridge.

The details of the indications and alarms provided are contained in the operators handbook issued to the Signallers at Western Rail Management Centre at Orange.

Diagram of Bathurst [West end]

[e]



Ground frames

[f]

Lever B (Kelso)

Lever B is located on the Up side of the Up Main line and provides access to the Wheat siding.

Lever B is unlocked by a key from releasing switch B which is located adjacent to lever B.

Releasing switch B is electrically released from the Western Rail Management Centre at Orange.

Frame E (Kelso)

Frame E is located on the Up side of the Up Main line and provides access to the Wheat siding.

Frame E is unlocked by a key from releasing switch E which is located adjacent to Frame E

Releasing switch E is electrically released from the Western Rail Management Centre at Orange.

Frame D

Frame D is located on the Down side of the Loop line, and provides access to the No. 1 Down reception siding.

Frame D is unlocked by a key from releasing switch D, which is located adjacent to frame D.

Releasing switch D is electrically released from the Western Rail Management Centre at Orange

Frame B

Frame B is located on the Up side of No. 2 Up Goods siding, and provides access from the main line to No. 2 Up Goods siding.

Frame B is unlocked by a key from releasing switch B, which is located adjacent to frame B.

Releasing switch B is electrically released from the Western Rail Management Centre at Orange.

Frame E

Frame E is located on the Down side of the Loop line, and provides access to No. 1 Down Reception siding.

Frame E is unlocked by a key from releasing switch E, which is located adjacent to frame E.

Releasing switch E is electrically released from the Western Rail Management Centre at Orange.

Frame C

Frame C is located on the Up side of No. 2 Up Goods siding, and provides access from the main line to No. 2 Up Goods siding.

Frame C is unlocked by a key from releasing switch C, which is located adjacent to frame C.

Releasing switch C is electrically released from the Western Rail Management Centre at Orange.

Frame G

Frame G is located on the Down side of the Loop line, and provides access to the Perway siding.

Frame G is unlocked by a key from releasing switch G, which is located adjacent to frame G.

Releasing switch G is electrically from the Western Rail Management Centre at Orange.

Emergency releasing locks

[g]

If any of the electrical releasing switches fails, the following emergency releasing locks are provided in the traffic room on Bathurst platform to enable the respective key to be removed and used to operate the applicable ground frame:

emergency releasing lock BC contains a key that may be used to operate frames B and C

emergency releasing lock D contains a key that may be used to operate frame D

emergency releasing lock EG contains a key that may be used to operate frames E and G.

Lloyd's Road level crossing

[h]

Type F flashing lights and bells, half-boom barriers and pedestrian boom barriers are provided at Lloyd's Road level crossing at 241.665 kms.

The warning equipment is automatically controlled by track circuit for Down and Up trains, subject to the clearance of the signals on either side of the crossing.

If a train closely approaches Up home signal No. 56 or Down Home/starting signal No. 54 at stop, the setting of the applicable signal route will cause the level crossing warning indicators to be displayed, but clearing of the signals will be delayed for 15 seconds.

If it becomes necessary to hold a train at signal No. 56 or No. 54 after the signal has been cleared, the level crossing warning indicators will continue to be displayed for a period of 120 seconds after the signal is returned to stop, and will then cancel automatically.

Raglan Closing Key

[i]

The closing key for Raglan signal box is secured in a release lock in the traffic room on Bathurst platform. The closing key must not be removed from the release lock until the qualified worker has obtained permission from the signaller at the Western Rail Management Centre at Orange.

George's Plains

251.949 kms

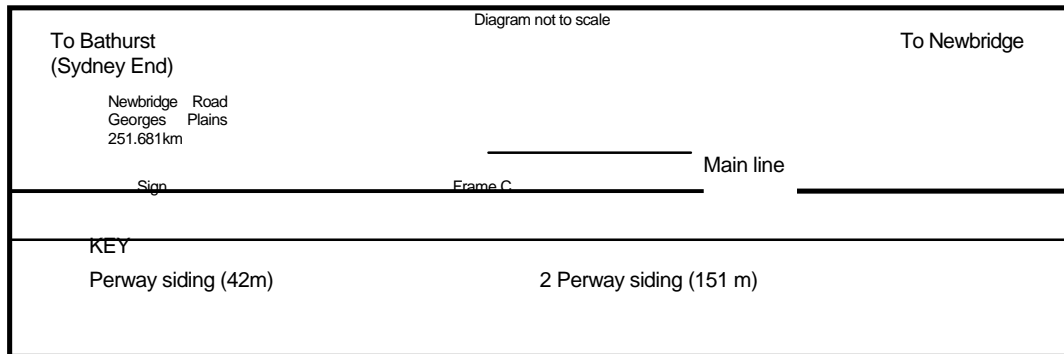


Diagram of George's Plains

[a]

Ground frames

[b]

Frame C

Frame C is located on the Up side of the main line adjacent to the crossover, and provides access to the Perway siding.

Frame C is unlocked by a key from releasing switch C, which is located next to frame C.

Releasing switch C is released by tracks for all vehicles entering the siding and is electrically released from the Western Rail Management Centre at Orange for all vehicles exiting the siding.

NOTE

When the release is taken to shunt the Perway siding, the operation of Newbridge Road level crossing warning equipment will cease.

Newbridge Road level crossing

[c]

Type "F" flashing lights and bells are provided at Newbridge Road level crossing at 251.681 km.

The warning equipment is automatically controlled by track circuit for Down and Up trains and manually controlled from a manual control switch for rail vehicles shunting the Perway siding.

Manual operation switch for the level crossing

A manual operation switch is provided in a secured box on the level crossing hut.

The manual operation switch unit *must* be kept closed and secured by an SL lock when not in use.

Sign

A sign inscribed “Trains or vehicles proceeding over the level crossing whilst shunting *must* use the manual operation switch to activate the level crossing” is provided approaching Newbridge Road in the Up direction.

Newbridge

273.037 kms

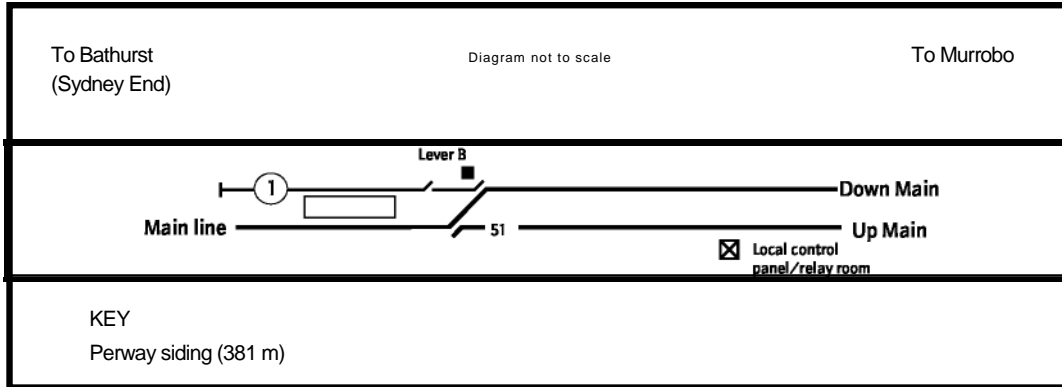


Diagram of Newbridge

[a]

Operation of points and signals

[b]

The points and signals at Newbridge are operated from the Western Rail Management Centre at Orange.

No. 51 points worked from the Western Rail Management Centre are controlled by track circuit and cannot be moved unless the track(s) controlling the points is unoccupied.

Switching the local control panel in or out

[c]

A two-position key-locked switch is provided to allow the local control panel to be switched in (local) or switched to remote control (remote) from the Western Rail Management Centre at Orange.

When not in use, the key *must* be kept in the box provided for that purpose and secured by an SL lock.

Locking

[d]

| type | provided |
|----------|----------|
| Approach | Yes |
| Route | Yes |

Ground frame

[e]

Lever B

Lever B is located on the Down side of the main line adjacent to the crossover, and provides access to the Perway siding.

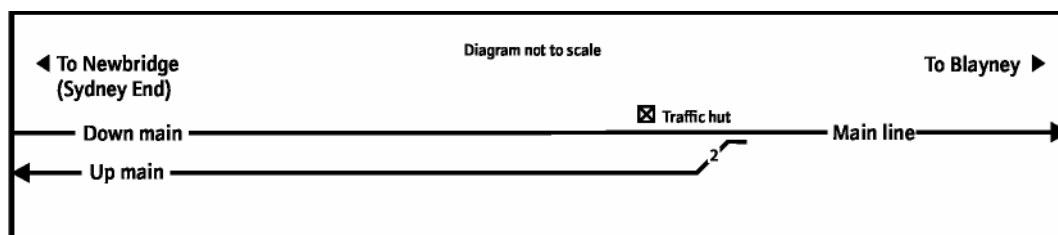
Lever B is released by a key from releasing lock B, which is located in the relay room, adjacent to signal NE6. The removal of the key from releasing lock B will place Nos. 1, 3, 4 and 6 signals to stop and/or prevent them from being cleared..

Murrobo

289.399 kms

Diagram of Murrobo

[a]



Operation of points and signals

[b]

The points and signals at Murrobo are operated from the Western Rail Management Centre at Orange.

As a local control panel is not provided at Murrobo, the interlocking cannot be operated locally.

No. 2 points worked from the Western Rail Management Centre at Orange are controlled by track circuit and cannot be moved unless the track(s) controlling the points is unoccupied.

Locking

[c]

| type | provided |
|-------------|-----------------|
| Approach | Yes |
| Route | Yes |

Half pilot staff

[d]

A half-pilot staff is provided in the pilot staff lock inside a locked box on the post of the starting signal for the Murrobo – Blayney section.

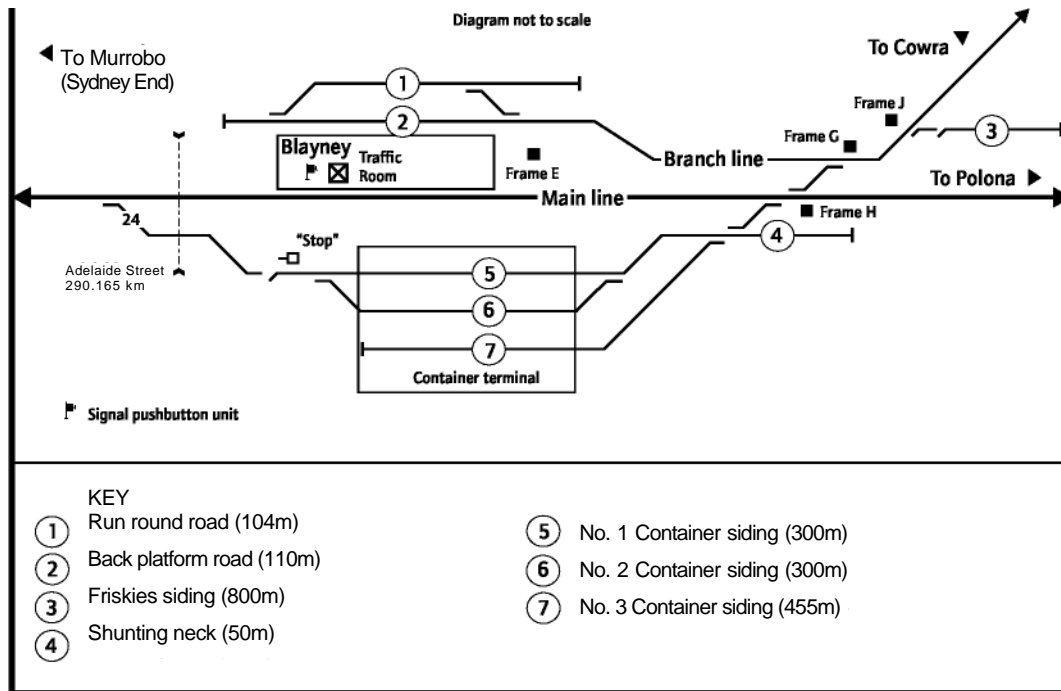
The half-pilot staff for the section Murrobo – Blayney is inscribed "Murrobo –178.3".

Blayney

290.369 kms

Diagram of Blayney

[a]



General arrangements

[b]

The staff, the staff box, the ticket receptacle loose keys for the Blayney – Cowra section, and the train control and train working telephones are located in the traffic room, which is on the platform.

Operation of points and signals

[c]

No. 24 points at Blayney are operated from the Western Rail Management Centre at Orange. All other interlocked points at Blayney are operated from ground frames. The ground frames are released by keys from releasing switches, which are electrically released from the Western Rail Management Centre at Orange.

The signals at Blayney are operated from the Western Rail Management Centre at Orange, except for the Up home branch line signal, which is controlled from frame E.

As a local control panel is not provided at Blayney, the interlocking cannot be operated locally.

No. 24 points worked from the Western Rail Management Centre are controlled by track circuit and cannot be moved unless the track(s) controlling the points is unoccupied.

NOTE: When the ESML crank handle is removed for No. 24 points at Blayney, operation of the releasing switches will not be possible. To enable Blayney yard to be worked when the ESML for No. 24 points is required, the keys from the releasing switches must be taken before the ESML crank handle is removed.

Lithgow (excl) to Orange (incl) Blayney

LAU 224

| | |
|-------------|-----------------|
| type | provided |
| Approach | Yes |
| Route | Yes |

Adelaide Street level crossing

[e]

Type F flashing lights, bells and half-boom barriers are provided at Adelaide Street level crossing at 290.165 kms.

The warning equipment is automatically controlled by track circuit for Down and Up trains, subject to the clearance of the signals on each side of the crossing.

If a train closely approaches Down home signal No. 12, Up 2nd home signal No. 29 or Up sidings to main signal No. 27 at stop, the setting of the applicable signal route will cause the level crossing warning indicators to be displayed, but clearing of the signals will be delayed for 15 seconds.

If it becomes necessary to hold a train at signal No. 12, No. 29 or No. 27 after the signal has been cleared, the level crossing warning indicators will continue to be displayed for a period of 120 seconds after the signal is returned to stop, and will then cancel automatically.

Special arrangements if there is a failure of the signals protecting Adelaide Street level crossing [f]

If either Down home signal No. 12, Up 2nd home signal No. 29 or Up sidings to main signal No. 27 fails, the Signaller at the Western Rail Management Centre at Orange must not authorise a train to pass these signals at stop until:

- either the Network Rules and Procedures for warning trains have been carried out
- or an assurance has been obtained from the Handsignaller(s) at the level crossing that the road traffic is clear of the crossing.

Signal pushbutton unit

[g]

A pushbutton unit is provided in the traffic room on the platform at Blayney to enable the Qualified Worker to advise the Signaller at the Western Rail Management Centre at Orange when to clear Up 2nd home signal No. 29.

When the train is ready to depart, the Qualified Worker must press the button for one second and a white indicator light will be displayed above the pushbutton. When the signal is cleared, the white light will go out.

Ground frames

[h]

Frame E

Frame E is located on the Up side of the Back platform road adjacent to the crossover, and provides access to the Run round road.

Frame H

Frame H is located on the Up side of the main line adjacent to the crossover, and provides access to the Container sidings.

Frame H is unlocked by a key from releasing switch GH, which is located adjacent to frame H. Releasing switch GH is electrically released from the Western Rail Management Centre at Orange.

Frame G

Frame G is located on the Down side of the Cowra Branch line adjacent to the crossover, and provides access to the main line.

Frame G is unlocked by a key from releasing switch GH, which is located adjacent to frame H. Releasing switch GH is electrically released from the Western Rail Management Centre at Orange.

Frame J

Frame J is located on the Down side of the Cowra Branch line adjacent to the crossover, and provides access to Friskies siding.

Frame J is unlocked by a key from releasing switch J, which is located adjacent to frame J. Releasing switch J is electrically released from the Western Rail Management Centre at Orange.

Half pilot staffs

[i]

Half pilot staffs are provided in the pilot staff locks inside a locked box near the starting signals for the Murrobo – Blayney and Blayney – Polona sections.

The half pilot staff for the section Murrobo – Blayney is inscribed “Blayney – 28”.

The half pilot staff for the section Blayney – Polona is inscribed “Blayney – 14”.

Stop sign

[j]

A stop sign is provided on the Down side of No. 1 Container siding facing to Down trains.

Signs

[k]

Two signs, one inscribed “Begin Staff Section” and the other, “Drivers must not pass this sign without possession of token for section”, are provided on the Down side of the Cowra Branch

line at 291.130 kms facing to Down trains.

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Polona

298.775 kms

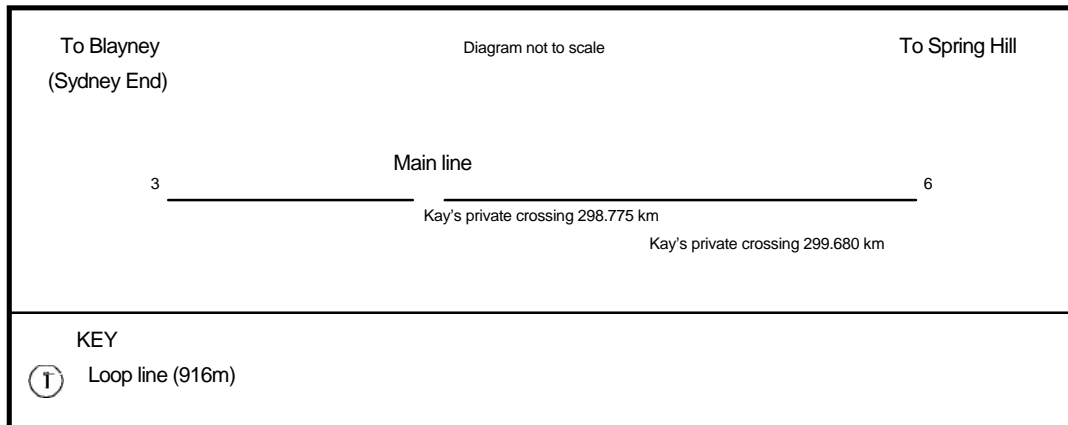


Diagram of Polona

[a]

Operation of points and signals

[b]

The points and signals at Polona are operated from the Western Rail Management Centre at Orange.

As a local control panel is not provided at Polona, the interlocking cannot be operated locally.

Nos. 3 and 6 points worked from the Western Rail Management Centre are controlled by track circuit and cannot be moved unless the track(s) controlling the points is unoccupied.

Locking

[c]

| type | provided |
|----------|----------|
| Approach | Yes |
| Route | Yes |

Half pilot staffs

[d]

Half pilot staffs are provided in the pilot staff locks inside a locked box on the post of the main line home/starting signals for the Blayney – Polona and Polona – Spring Hill sections.

The half pilot staff for the section Blayney – Polona is inscribed “Polona – 185.6”.

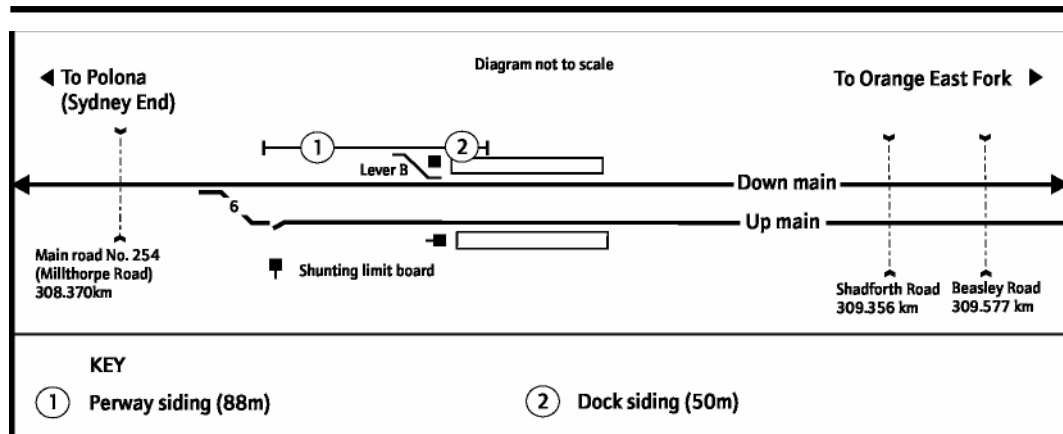
The half pilot staff for the section Polona – Spring Hill is inscribed “Polona – 186.3”.

Spring Hill

308.713 kms

Diagram of Spring Hill

[a]



Operation of points and signals

[b]

The points and signals at Spring Hill are operated from the Western Rail Management Centre at Orange.

As a local control panel is not provided at Spring Hill, the interlocking cannot be operated locally.

No. 6 points worked from the Western Rail Management Centre are controlled by track circuit and cannot be moved unless the track(s) controlling the point is unoccupied.

Locking

[c]

| type | provided |
|----------|----------|
| Approach | Yes |
| Route | Yes |

Ground frame

[d]

Lever B

Lever B is located on the Down side of the Down main line adjacent to the crossover, and provides access to the Perway siding and the Dock siding.

Lever B is unlocked by the key from releasing switch B, which is located adjacent to lever B.

Releasing switch B is electrically released from the Western Rail Management Centre at Orange.

Main Road No. 254 (Millthorpe Road) level crossing

[e]

Type F flashing lights and bells are provided at Main Road No. 254 (Millthorpe Road) level crossing at 308.370 kms.

The warning equipment is automatically controlled by track circuit for Down and Up trains, subject to the clearance of the signals on each side of the crossing.

If a train closely approaches Down home signal No. 2 (191.5), Up home signal No. 9 (191.8), or shunting signal No. 11 at stop, the setting of the applicable signal route will cause the level crossing warning indicators to be displayed, but clearing of the signals will be delayed for 15 seconds.

If it becomes necessary to hold a train at signal No. 2, No. 9 or No. 11 after the signal has been cleared, the level crossing warning indicators will continue to be displayed for a period of 120 seconds after the signal is returned to stop, and will then cancel automatically.

Beasley Road level crossing

[f]

Type F flashing lights and bells are provided at Beasley Road level crossing at 309.577 kms.

The warning equipment is automatically controlled by track circuit for Down and Up trains, subject to the clearance of No.4 Down Starting signal for Down Trains.

If a train closely approaches Down starting signal No. 4 (192.1) at stop, the setting of the applicable signal route will cause the level crossing warning indicators to be displayed, but clearing of the signals will be delayed for 15 seconds.

If it becomes necessary to hold a train at signal No. 4 after the signal has been cleared, the level crossing warning indicators will continue to be displayed for a period of 120 seconds after the signal is returned to stop, and will then cancel automatically.

Shunting limit sign

[g]

A shunting limit sign is provided at Spring Hill. The sign is located on the Up side of the Up main line at the Polona end of the Up platform, facing Down trains. This sign is inscribed "Shunting limit on Up main line", and applies to shunting movements in the Down direction on the Up main line.

Half pilot staff

[h]

A half pilot staff is provided in a pilot staff lock inside a locked box on the post of the starting signal for the Spring Hill – Polona section.

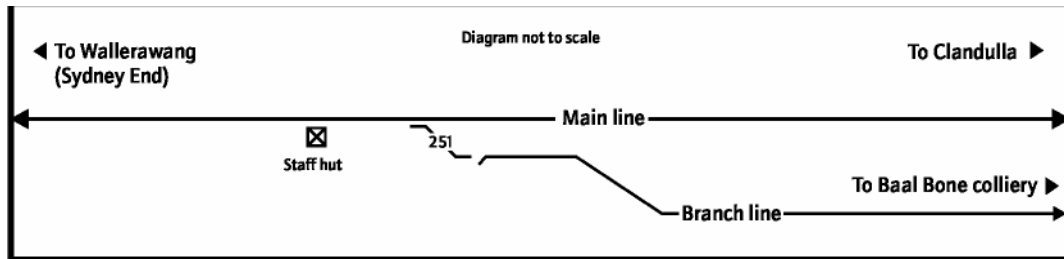
The half pilot staff for the section Spring Hill – Polona is inscribed "Spring Hill – 191.4".

Baal Bone Junction

193.800 kms

Diagram of Baal Bone Junction

[a]



General arrangements

[b]

The staff, the staff box, the tickets and the ticket receptacle loose key for the Baal Bone Junction – Clandulla section and the train control and train working telephones are located in the staff hut, which is provided opposite Down home/starting signal No. BB201.

Operation of points and signals

[c]

The points and signals at Baal Bone Junction are operated from the Western Rail Management Centre at Orange.

As a local control panel is not provided at Baal Bone Junction, the interlocking cannot be operated locally.

All points worked from the signalbox are controlled by track circuit and cannot be moved unless the track(s) controlling the points is unoccupied.

Locking

[d]

| type | provided |
|----------|----------|
| Approach | Yes |
| Route | Yes |

Staff control on Down home/starting signal

[e]

A control by the staff for the Baal Bone Junction – Clandulla section is in operation on Down home/starting main signal No. BB201. A staff contact lock is provided on the post of Down home/starting signal No. BB201.

To operate the staff contact lock, the Qualified Worker must obtain the staff or the ticket receptacle loose key for the section Baal Bone Junction – Clandulla, operate the staff contact lock, and then inform the Signaller at the Western Rail Management Centre at Orange so that the Signaller can clear the signal for the train to proceed.

Emergency pushbuttons and cancelling switch

[f]

Emergency pushbuttons

As there is no local control panel at Baal Bone junction, emergency pushbuttons are provided in locked boxes on the posts of Down home/starting main signal No. BB201, Up home/starting main signal No. BB204, and Up home/starting branch signal No. BB202 to allow the Qualified Worker to clear the signal when there is a failure of the remote control system.

Signs

Signs, inscribed “Do not depress pushbutton without authority from Signaller”, are provided on the emergency pushbutton boxes.

Route cancel switch

A route cancel switch is provided in a locked box on the post of signal No. BB201. When there is a failure of the remote control system, this allows the Qualified Worker to return either signal No. BB201, No. BB202 or No. BB204 to stop after the route has been set using the emergency pushbuttons.

Half pilot staffs

[g]

Half pilot staffs are provided in the pilot staff locks inside a locked box on the posts of the home/starting signals for the Wallerawang – Baal Bone Junction and Baal Bone Junction – Baal Bone Junction sections.

The half pilot staff for the section Wallerawang – Baal Bone Junction is inscribed “Baal Bone – Wallerawang”.

The half pilot staff for the section Baal Bone Junction – Baal Bone Junction is inscribed “BBJ – BBL”.

Emergency pushbuttons and cancelling switch

[d]

Emergency pushbuttons

As there is no local control panel at Baal Bone colliery, emergency pushbuttons are provided in locked boxes on the posts of signals Nos. BB211 and BB212 to allow the Qualified Worker to clear the signal when there is a failure of the remote control system.

Notice boards

Notice boards, inscribed "Do not depress pushbutton without authority from Signaller", are provided on the emergency pushbutton boxes.

Route cancel switch

A route cancel switch is provided in a locked box on the wall of the traffic hut. When there is a failure of the remote control system, this allows the Qualified Worker to return either signal No. BB211 or No. BB212 to stop after the route has been set using the emergency pushbuttons.

Half pilot staff

[e]

A half pilot staff is provided in a pilot staff lock inside a locked box on the post of the Up starting signal for the Baal Bone Loop – Baal Bone Junction section.

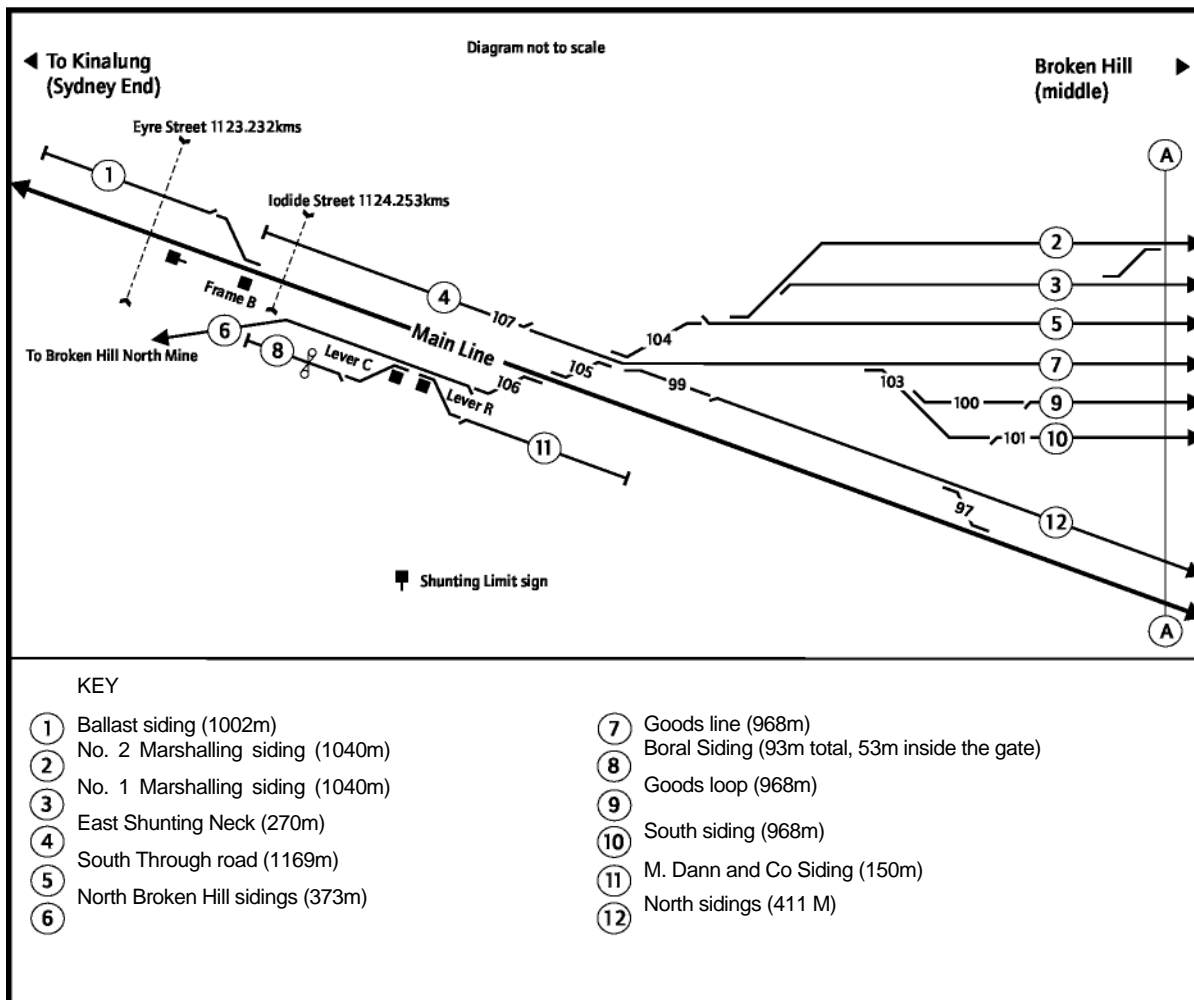
The half pilot staff for the section Baal Bone Loop – Baal Bone Junction is inscribed "Baal Bone BBL – BBJ".

Broken Hill

1124.801 kms

Diagram of Broken Hill (East End)

[a]



General arrangements

[b]

“Begin Train Order Working” (1123.069 kms) and “End Train Order Working” (1123.069 kms) signs are provided adjacent to Down home signal No. 697.7 to define the beginning and end of Train Order Working.

Up home signals Nos. 47(M) and 49(M) for the Broken Hill – Kinalung section will display a lunar white pulsating aspect when in the clear position.

Diagram of Broken Hill (Middle)

[c]

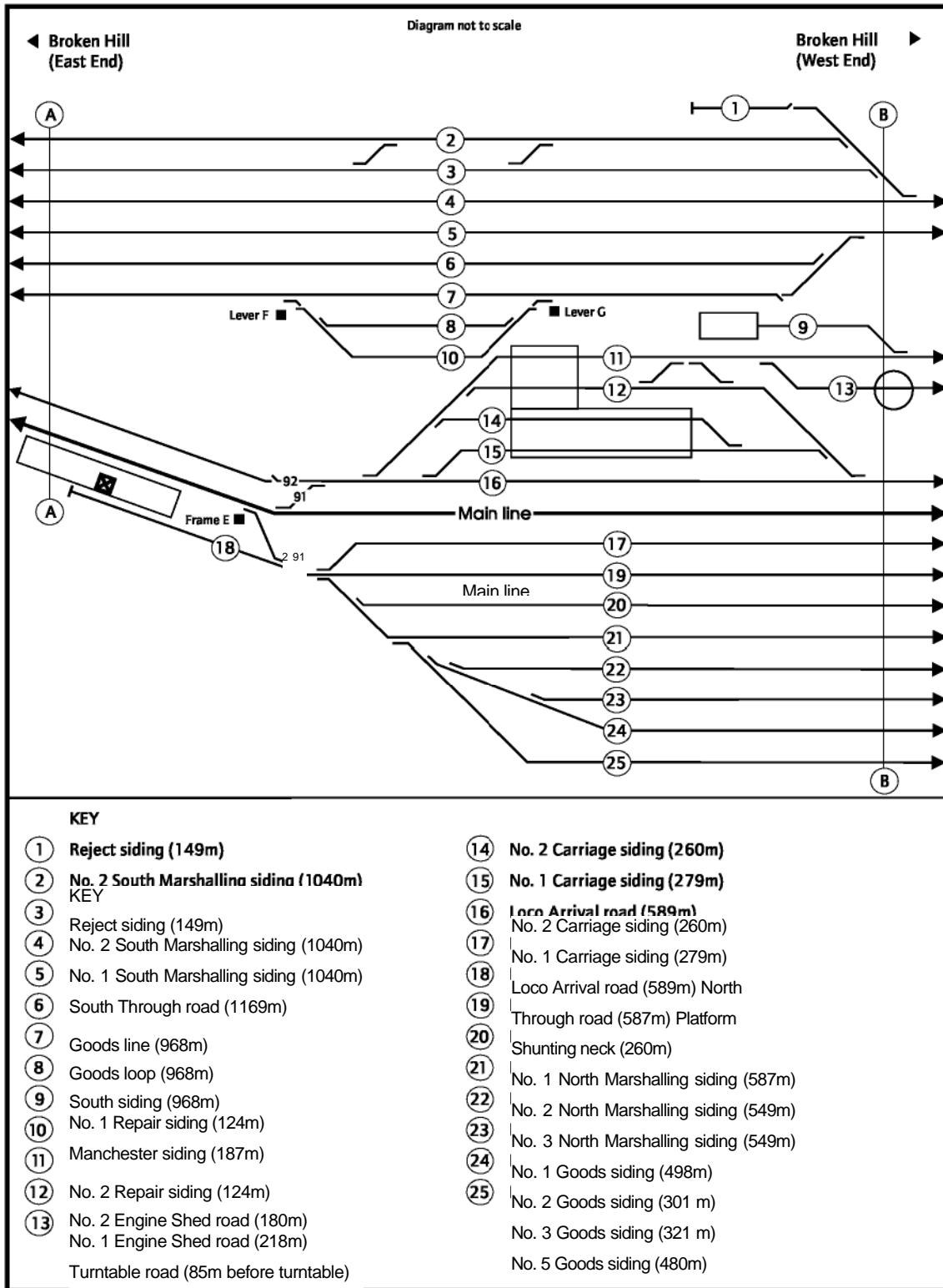
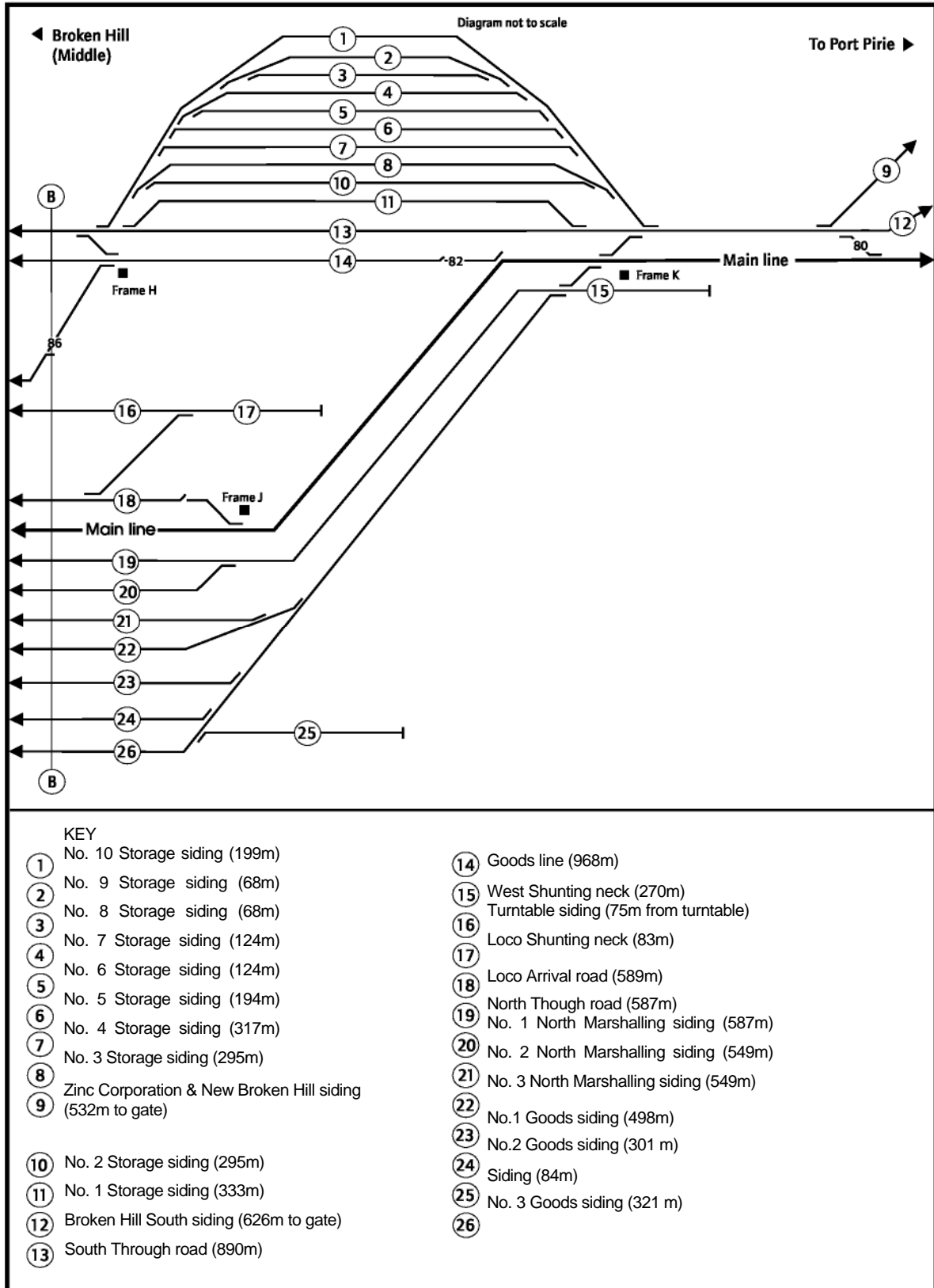


Diagram of Broken Hill (West End)

[d]



Operation of points and signals**[e]**

The points and signals at Broken Hill are operated from the Western Rail Management Centre at Orange. All points worked from the Western Rail Management Centre at Orange are controlled by track circuit and cannot be moved unless the track(s) controlling the points is unoccupied.

Locking**[f]**

| | |
|----------|-----------------|
| type | <u>provided</u> |
| Approach | Yes |
| Route | Yes |

Driver's time release pushbutton**[g]**

When a short train or a light locomotive is required to enter the Goods line or the Goods loop but will not proceed to the remote end of the line:
the route locking of points at the remote end may be released by a time release activated by the train or locomotive standing near the signal at the entrance to the Goods line or the Loop line in conjunction with the operation of a Driver's pushbutton.
Driver's time release pushbuttons are provided near signals Nos. 35, 37, 40 and 42. The pushbuttons are mounted in a box near the signals or on a post near the signals.

Alternative route setting selection**[h]**

Certain routes within the interlocking are provided with alternative clearance points. On these routes, when the Signaller attempts to set a route and the overlap portion of that route is occupied by a train but an alternate route through the points in the other position is clear, the route will automatically set for the alternate path, provided that the points are free to move when the route is operated.
If the Signaller requires facing points in the overlap of a route to remain in the existing position to give the signal a clear overlap, the Signaller must operate the point lever to correspond with the current position of the points before operating the route setting buttons.

Signalling power supply indicators

[i]

An indicator panel is provided in the Western Rail Management Centre at Orange for the signalling power supplies in the Broken Hill area.

The green “AC supplies normal” indication will be displayed when all the AC power supplies are available and are in use.

The green “DC supplies” indication will be displayed when all the DC power supplies at the Western Rail Management Centre at Orange are available and are in use.

The red “Emergency” indication will be displayed when the motor generator set is running and the emergency power supply is in use.

The yellow “Fuel alarm” indication will be displayed when the fuel supply for the emergency motor generator set is reduced to a quantity below that required for four hours’ running.

An alarm is provided to warn of any alteration to the power supply and the Signaller must acknowledge the alteration by depressing the alarm pushbutton.

When there is any alteration or interruption to the AC or DC power supplies to the signalling, the Signaller must promptly inform the Signals maintenance representative.

Additional indicators

[j]

Signal lamp indicators

A red indicator light inscribed “East signals” will be displayed when a total failure of a main light in one or more colour light running signals at the eastern end of the yard is detected.

A red indicator light inscribed “West signals” will be displayed when a total failure of a main light in one or more colour light running signals at the western end of the yard is detected (signals Nos. 5 and 56 excepted).

When either of the indicator lights is displayed, the Signaller must promptly inform the Signals maintenance representative.

Block and time limit indicator lights for section Kanandah – Broken Hill

A white indicator light inscribed “Block” is provided in the indicator diagram and will be displayed when the Kanandah – Broken Hill section is unoccupied by a train and the absolute signals at Kanandah for the section to Broken Hill are in the stop position.

The “Block” light will be extinguished if an absolute signal at Kanandah is cleared for a train to proceed towards Broken Hill, or if a train departing from Broken Hill passes Down starting signal No. 56 (700.1 kms) and enters the section.

A red light inscribed “Time limit” will be displayed in the indicator diagram below the “Block” indicator light at the same time. The “Time limit” light will be displayed for a period of approximately 90 seconds, and then go out.

Down starting signal No. 56 (700.1 kms) may only be cleared for a train to depart from Broken Hill while the “Block” indicator light is displayed and after the “Time limit” indicator light has gone out.

Dragging equipment detectors

[k]

A dragging equipment detector is located next to Up home signal No. 5, and a red indicator light inscribed "Dragging gear alarm" and a pushbutton inscribed "Pull to test/Push to cancel alarm" are provided on the indicator diagram in the Western Rail Management Centre at Orange.

When dragging equipment is detected, the red light for the applicable detector will be displayed and an audible alarm will sound, until the alarm is cancelled by the Signaller.

The red light will remain displayed until the train has cleared the track circuits for the detector and the cancel button has been depressed.

A daily test of the warning light must be carried out by pulling the pushbutton and then ensuring that the warning light is illuminated and the alarm sounds. Results of the test must be recorded in the train register book or other recording system provided, and the Signals maintenance representative must be advised of any defects noted.

Responding to a dragging equipment alarm

[l]

When the detector is activated, the Signaller must:

- cancel the alarm
- contact the Driver of the train that activated the detector and instruct the Driver to bring the train to a stand
- instruct the Driver to inspect the train to identify the problem and then advise the Signaller of the status of the problem and the action that must be taken to resolve it
- and inform the Train Controller that the dragging equipment detector has been activated and of the status of the problem.

Eyre Street level crossing

[m]

Type F flashing lights and bells are provided at Eyre Street level crossing at 1123.232 kms.

The warning equipment is automatically controlled by track circuit for Down and Up trains on the main line, subject to the clearance of the Down home signal. The warning equipment is also manually controlled by operator's pushbutton units for trains shunting the ballast siding.

If a train closely approaches Down home signal No. 4 at stop, the setting of the applicable signal route will cause the level crossing warning indicators to be displayed, but clearing of the signals will be delayed for 15 seconds.

If it becomes necessary to hold a train at signal No. 4 after the signal has been cleared, the level crossing warning indicators will continue to be displayed for a period of 120 seconds after the signal is returned to stop, and will then cancel automatically.

Operator's pushbutton units for the level crossing

Operator's pushbutton units are provided in boxes inscribed "Shunter's switch", which are attached to posts located on each side of the level crossing.

The warning indications will be cancelled automatically when the rear of the shunting movement has cleared the level crossing.

If the movement is not proceeded with, the warning indications must be cancelled by pressing the “Cancel” pushbutton in either operator’s pushbutton unit for one second.

The operator’s pushbutton units must be kept closed and secured by an SL lock when not in use.

Notice signs

Notice signs, inscribed “Shunting trains stop, press button for level crossing lights”, are provided on posts next to the operator’s pushbutton units.

Iodide Street level crossing

[n]

Type F flashing lights, bells and half-boom barriers are provided at Iodide Street level crossing at 1124.253 kms.

The warning equipment is automatically controlled by track circuit for Down and Up trains, subject to the clearance of the signals on each side of the crossing.

If a train closely approaches any of the following signals at stop:

- Down 2nd home signal No. 8
- Up 5th home/starting main signal No. 47
- Up 4th home/starting, Goods line to main, signal No. 49
- or No. 14, No. 16, No. 20, No. 41 or No. 43 shunting signal

The setting of the applicable signal route will cause the level crossing warning indicators to be displayed, but clearing of the signals will be delayed for 15 seconds.

If it becomes necessary to hold a train at any of the above signals after the signal has been cleared, the level crossing warning indicators will continue to be displayed for a period of 120 seconds after the signal is returned to stop, and will then cancel automatically.

Shunt-ahead signals

[o]

Shunt-ahead signals Nos. 47(S)B and 49(S)B are provided below Up 5th home/starting signal, main line, No. 47(M), and Up 4th home/starting signal, Goods line, No. 49(M).

When cleared, the shunt-ahead signals will authorise a train or a locomotive to proceed beyond the signal for shunting purposes without the Driver being in possession of a current order.

Trains or locomotives required to pass either home/starting signal for shunting purposes on the main line *must* do so *only* on the authority of the shunt-ahead signal.

Shunting limit sign

A shunting limit sign is provided at Broken Hill located on the Up side of the main line approximately 82 metres on the Kinalung side of frame B points.

The sign is inscribed “Shunting limit in Up direction”, and applies to shunting movements in the Up direction on the main line.

Drivers must not pass the shunting limit sign unless they are in possession of a current order authorising the train to occupy the Broken Hill – Kinalung section.

Ground frames

[p]

Frame B

Frame B is located on the Up side of the main line adjacent to the crossovers, and provides access to the Ballast siding.

Frame B is released by a key from releasing switch B, which is located adjacent to frame B.

Releasing switch B is electrically released from the Western Rail Management Centre at Orange.

A train or shunting movement requiring to shunt at the Ballast siding must be brought to a stand with a portion of the train or the whole train no further than 146 metres on the Broken Hill side of the points, before the release may be obtained.

Lever C

Lever C is located on the Up side of the north Broken Hill sidings adjacent to the crossovers, and provides access to the Boral siding.

Lever C is unlocked by an operator's key, inscribed "Broken Hill SM", which is located in a box secured by an SL lock and situated on the outside wall of the Locomotive Depot..

Lever R

Lever R is located on the Up side of the North Broken Hill sidings adjacent to the crossovers, and provides access to the M. Dann & Co. siding.

Lever R is unlocked by an operator's key, inscribed "Broken Hill SM", which is located in a box secured by an SL lock and situated on the outside wall of the Locomotive Depot..

Frame E

Frame E is located on the Up side of the main line adjacent to the crossovers, and provides access to No. 1 North Marshalling siding.

Frame E is released by a key from releasing switch E, which is located adjacent to frame E.

Releasing switch E is electrically released from the Western Rail Management Centre at Orange

Frames F and G

Frames F and G are located on the Up side of the South siding adjacent to the crossovers, and provide access to the Repair sidings.

Frames F and G are released by a key from releasing switches F and G, which are located adjacent to frames F and G.

Releasing switches F and G are electrically released from the Western Rail Management Centre at Orange.

Frame H

Frame H is located on the Up side of the Goods line adjacent to the crossovers, and provides access to the South Through road.

Frame H is released by a key from releasing switch H, which is located adjacent to frame H.

Releasing switch H is electrically released from the Western Rail Management Centre at Orange.

A shunting movement requiring to proceed through frame H crossover must be brought to a stand with a portion of the train or the whole train between the points and Down 4th home, Goods line, signal No. 50, before the release can be obtained.

Frame J

Frame J is located on the Up side of the main line adjacent to the crossovers, and provides access to the Locomotive Arrival siding.

Frame J is released by a key from releasing switch J, which is located adjacent to frame J.

Releasing switch J is electrically released from the Western Rail Management Centre at Orange.

A shunting movement requiring to proceed through frame J points must be brought to a stand with a portion of the train or the whole train between the points and Down 4th home signal No. 52, before the release can be obtained.

Frame K

Frame K is located on the Up side of the main line adjacent to the crossovers, and provides access to the North and South Through roads.

Frame K is released by a key from releasing switch K, which is located adjacent to frame K.

Releasing switch K is electrically released from the Western Rail Management Centre at Orange.

A shunting movement requiring to proceed through frame K crossovers must be brought to a stand with a portion of the train or the whole train no further than 76 metres from the points concerned, before the release can be obtained

Returned to Controlling Manager: Date :Signed:

(Cut along this line and forward the detached receipt to your Controlling Manager)

To Controlling Manager :

Received SAFE Notice No. 024 - 2004 Date :Signed:

Name: (print) Location:

(Controlling Manager to retain this Acknowledgment of Receipt of the SAFE Notice for record purposes for 3 months.)