

Strathfield – Hornsby

Network Control

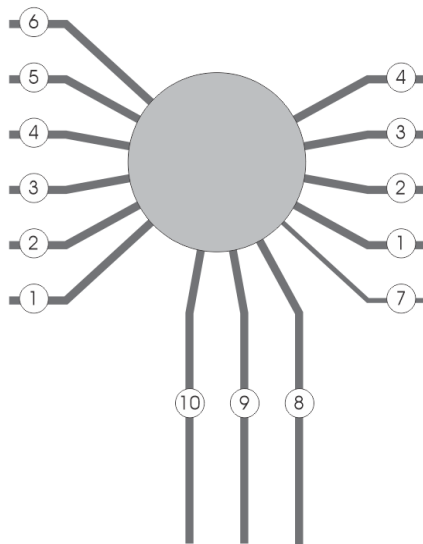
Signaller at Rail Operations Centre (ROC) (Strathfield panel) (Epping Panel) (Hornsby North Panel) (Hornsby Panel).

Systems of Safeworking

The line between Strathfield and Hornsby is Rail Vehicle Detection (RVD) territory. It includes the sections:

- Strathfield–Rhodes
- Rhodes–West Ryde
- West Ryde–Epping
- Epping–Thornleigh
- Thornleigh–Hornsby.

Diagram



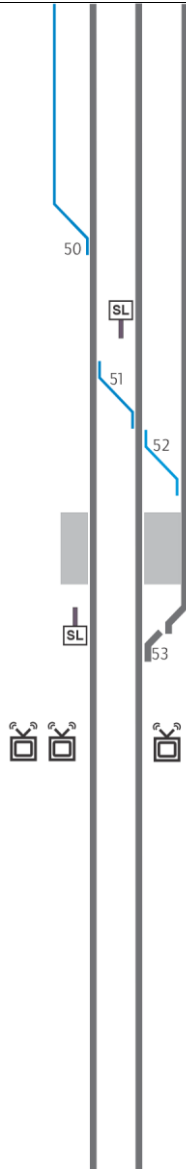
Location details

Strathfield 11.713km (NLA 114)



- ① Up Main line (Central–Lidcombe)
- ② Down Main line (Central–Lidcombe)
- ③ Up Suburban line (Central–Lidcombe)
- ④ Down Suburban line (Central–Lidcombe)
- ⑤ Up Local line (Central–Lidcombe)
- ⑥ Down Local line (Central–Lidcombe)
- ⑦ Goods Loop line
- ⑧ Down Relief line
- ⑨ Down Main North line
- ⑩ Up Main North line

Strathfield - Hornsby



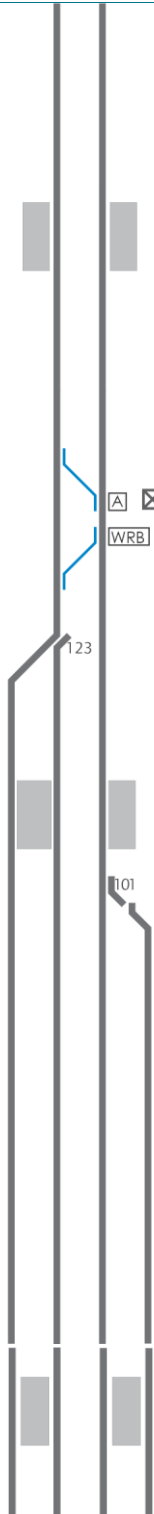
Rhodes 16.494km

- ! Controlled from Rail Operations Centre (ROC)
- ! Rhodes abuts Strathfield
- YL 15.263km Down Relief line: Down signal RS5R
- YL 15.263km Down Main North line: Down signal RS7N
- 50 Up Main North line to the Up Relief line
- EYL 15.112km Up Main North line: Strathfield Up signal ST194N
- SL 16.082km Up SHUNT LIMIT sign on Down Main North line
- 51 Down Main North line to Up Main North line
- 52 Down Main North line to Down Relief line
- 16.494km Rhodes. Platforms 1, 2 and 3
- SL 16.667km Down SHUNT LIMIT sign on Up Main North line
- 53 Down Relief line to Down Main North line. Down Relief line ends
- 16.980km Wheel Impact Load Detector (WILD), Weighbridge (WB), Up Main North line
- 16.980km Bearing and Brake Temperature System (BBT), Up and Down Main North line
- EYL 17.350km Down Main North line: Down signal RS23N
- YL 17.712km Up Main North line: Up signal RS22N

Strathfield - Hornsby

Diagram

Location details



West Ryde 19.126km

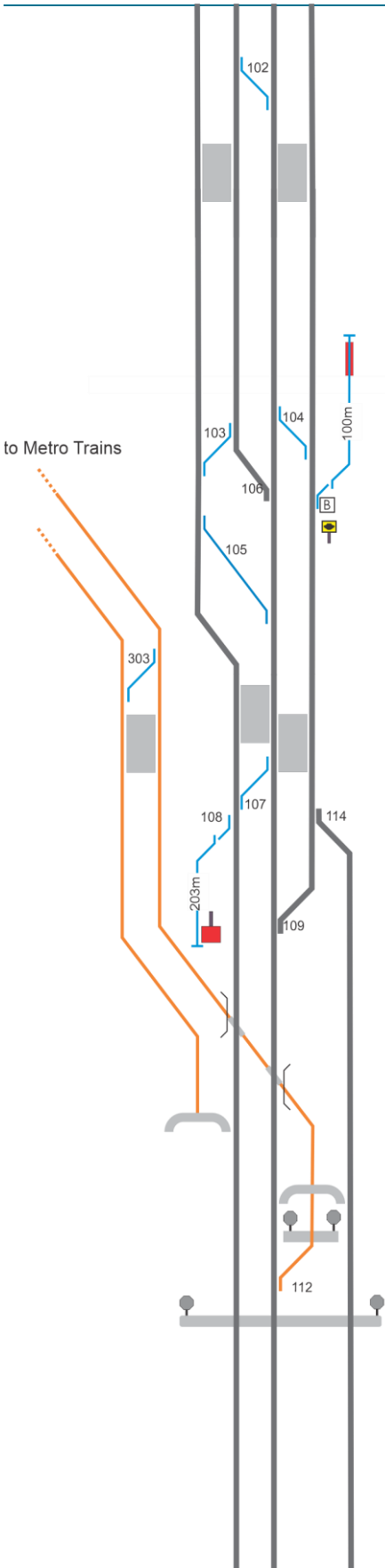
- ! Controlled from Rail Operations Centre (ROC)
- 17.873km Down Main North line: Down signal WR1
- 18.103km Meadowbank. Platforms 1, 2
- 18.566km Up Main North line: Up signal N11.46
- 18.659km Traffic hut: Annett lock AB
- 18.672km Down Main North line to Up Main North line: key from Annett lock AB, released by release 121 and from special hasp with XL key
- ! Signals that must be set at STOP before frame A or B is released: Down accept WR1, home WR3; Up home/starters WR8N and WR10NS, accepts WR12N and WR14NS
- 18.677km Up Main North line to Down Main North line: **(BOOKED OUT OF USE, SPIKED, CLIPPED AND XL LOCKED NORMAL)**
- 18.677km Up Main North line to Up Main North line. Up Suburban line ends
- 19.126km West Ryde. Platforms 1 and 2, 3
- 19.126km Down Main North line to Down Suburban line
- 19.120km Up Main North line: Up signal WR12N
- 19.120km Up Suburban line: Up signal WR14NS
- 19.601km Down Main North line: Down signal N12.19
- 19.601km Down Suburban line: Down signal NS12.19

20.075km Denistone. Platforms 1 and 2, 3 and 4

Strathfield - Hornsby

Diagram

Location details



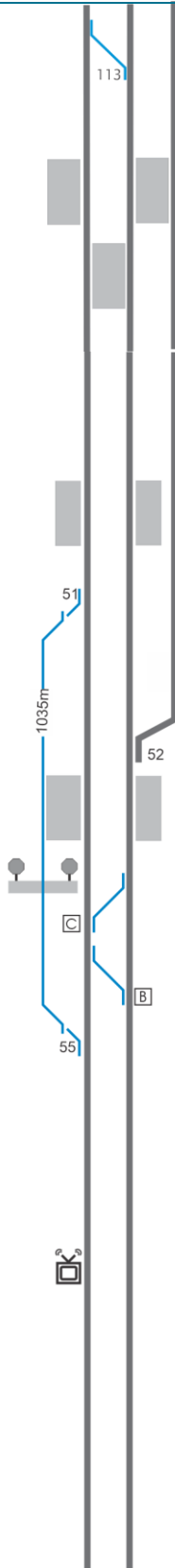
Epping 23.263km



- ! Controlled from Rail Operations Centre (ROC)
- YL 20.547km Down Main North line: Down signal EW15
- EYL 20.596km Up Main North line: Up signal N12.78
- 102 Down Main North line to Up Main North line
- 21.330km Eastwood. Platforms 1 and 2, 3 and 4
- YL 22.308km Down Suburban line: Down signal EG21
- EYL 22.862km Up Suburban line: Up signal NS14.20
- 23.301km Network Access Pad Epping Down refuge (5m long)
- 104 Down Main North line to Down Suburban line
- 103 Up Suburban line to Up Main North line
- 106 Down Main North line to Up Main North line
- B Down Suburban line to Epping Down refuge: key from releasing switch B, released by release 110
- ! See Special instructions
- 105 Down Main North line to Up Suburban line
- WARNING: Freight trains must not use crossover 105
- 303 Down Chatswood–Epping line to Up Chatswood–Epping line
- 23.263km Epping. Platforms 1 and 2, 3. (24.745km.Platform 5 and 6 on Chatswood–Epping line)
- 107 Down Main North line to Up Main North line
- 108 Up Main North line to Turnback siding
- 114 Down Suburban line to Down Relief line
- 23.855km Down STOP sign on Turnback siding
- 109 Down Suburban line to Down Main North line. Down Suburban line ends
- 25.192km Up Chatswood–Epping line portal
- 25.293km Down Chatswood–Epping line portal
- 25.497km Network access
- 112 Down Metro Trains Sydney line to Down Main North line (booked out of use, clipped, spiked and XL locked in the Normal position. ECRL CLOSED)
- 24.091km Network access

Strathfield - Hornsby

Diagram



Location details

- Down Main North line to Up Main North line
- 25.286km Cheltenham. Platforms 1, 2
- 25.481km Down Main North line: Down signal N15.83
- 26.114km Up Main North line: Up signal EG62
- 26.675km Angle of Attack (AoA)
- 26.815km Beecroft. Platform 1 and 2

Thornleigh 29.350km

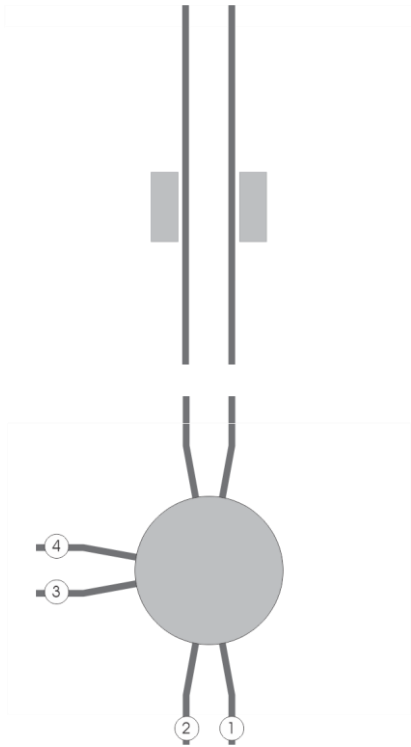


- Controlled from Rail Operations Centre (ROC)
- 28.667km Down signal TH3
- 28.672km Down Relief signal TH5
- 28.505km Pennant Hills. Platforms 1, 2
- 28.503km Up signal N17.68
- Up Relief line to Up Main North line
- Down Relief line to Down Main North line
- 29.350km Thornleigh. Platforms 1 and 2, 3
- 29.500km Network access
- 29.657km Down Main North line to Up Main North line: Power operated from a ground control panel, released by release 53. Taking the release for C frame sets points 55 to NORMAL
- Signals that must be set at STOP before frame C is released: Down homes TH7 and TH9 and home/starter TH11
- 29.750km Up Main North line to Down Main North line: Power operated from a ground control panel, released by release 54. Taking the release sets points 55 to REVERSE
- Signals that must be set at STOP before frame B is released: Down homes TH7 and TH9 and home/starter TH11
- WARNING:** If release 54 for B frame is returned to NORMAL, points 55 remain in REVERSE. Unless a route for the Up Relief line is being set, the points must be set to NORMAL
- Up Main North line to Up Relief line
- 29.971km Pantograph Condition Monitoring System (PCMS), Up Main North line
- See Special Instructions
- 30.512km Down signal N18.97
- 30.650km Up signal TH20

Strathfield - Hornsby

Diagram

Location details



■ 31.634km Normanhurst. Platform 1, 2

Hornsby 33.704km (NLA 302)



- ① Down Main North line (Hornsby–Gosford)
- ② Up Main North line (Hornsby–Gosford)
- ③ Up Shore line (Central–Hornsby)
- ④ Down Shore line (Central–Hornsby)

Special instructions

Work on track North Strathfield Rail Underpass (NSRU)

Before any work on track method or authority can be authorised for work on the Up Relief line at North Strathfield, the Signaller must ensure that:

the entire portion of the Up Relief line is unoccupied, and

all signals giving entry to the Up Relief line in both directions have been set at STOP with blocking facilities applied.



Warning

Other than during a Local Possession Authority, the use of Lookout Working is not permitted from Signal No. ST 174R at North Strathfield to 557 points at North Strathfield on the Up Relief line.

Epping Down Refuge siding

Work on track

When work on track is to be carried out in Epping Down Refuge siding, the procedures below must be followed.

Authorisation

Only the Network Controller may authorise work on track in Epping Down Refuge siding.

Protection Officer

Make sure that rail traffic within the siding will not move without authorisation.

Tell the Network Controller:

your name and contact details, and

give the name of the siding and ground frame designation, and

the type of work to be done, and

the intention to clip the relevant points, and

the intended start and finish times

when applicable, that rail traffic within the siding will not move without authority.

Network Controller

Make sure that rail traffic not associated with the work is not scheduled to enter the siding during the work on track times.

Signaller

Ask the Network Controller for permission to allow work on track to commence.

Network Controller

When the above conditions have been met, authorise the work on track to commence.

Signaller

When authorised, advise the Protection Officer to commence work.

Network Controller and Signaller

Record, in permanent form, all information about the authorisation of work on track in the siding.

Protection Officer

When permission is received to allow work on track to commence, clip and lock the points to prevent unauthorised rail traffic access to the siding.

**Warning**

Work within the sidings must not commence until the points have been clipped and locked.

Returning the siding to service**Protection Officer**

Make sure that:

all equipment is clear of the line

all workers have cleared the worksite

the line is certified fit for service

the point clip and SL lock has been removed, then

tell the Network Controller that the work is completed, and about any restrictions on track use.

Establishing worksites using Wireless Automatic Track Warning System (ATWS) as a safety measure

The following locations may establish a worksite inside yard limits using Lookout Working with wireless ATWS as a safety measure.

Protection Officers must:

Be inducted into the ATWS area implementation and management plan,

Establish worksites in accordance with the protection arrangements and details for each location set below.

Rhodes

Routine Network Maintenance Worksite Protection Plan: CMO13BWS 10002

Worksite location: Up and Down Main North lines between
16.951 KM and 17.019 KM

Sensor 1 location: Down Main North line at 16.292 KM

Sensor 2 location: Down Relief line at 16.292 KM

Sensor 3 location: Up Main North line at 18.059 KM

Normanhurst

Routine Network Maintenance Worksite Protection Plan: CN16BWS 10001

Worksite location: Up Main North line between 32.348 KM and 30.654 KM

Down Main North line between 31.105 KM and 32.348 KM

Sensor 1 location: Down Main North line at 30.605 KM

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Sensor 2 location: Up Main North line at 32.7923 KM

Beecroft

Routine Network Maintenance Worksite Protection Plan: CN20BWS 10001

Worksite location: Up Main North line between 26.353 KM and 27.792 KM

Down Main North line between 26.353 KM and 27.792 KM

Down Relief line between 26.353 KM and 27.792 KM

Sensor 1 location: Down Main North line at 25.903 KM

Sensor 2 location: Down Main North line at 25.903 KM

Sensor 3 location: Up Main North line at 28.321 KM

Operating Thornleigh frame B or C

To take the release and operate points from a ground control panel

Qualified worker

1. Ask signaller for permission to take the release.
2. Make sure no rail traffic is approaching or traversing the points.
3. Open the Release unit, and when **Release available** indicator is lit, turn releasing switch to **Reverse**.
4. Open the Control unit, when **Control AVAILABLE** indicator is lit, turn the Points Control switch to **Free**, the trackside point indicators will display STOP.
5. When the **Free light** is continuously lit, turn the points control switch to **normal** or **reverse**.
6. When the points are in the required position, the **Normal** or **reverse** light in the control unit will be lit and the trackside point indicator will display a white arrow for the route set.

To restore the release and return points to normal operations

Qualified worker

1. Make sure no rail traffic is approaching or traversing the points
2. If the points are in reverse, In the points control unit:
 - (a) turn the Points Control switch to **FREE**,
 - (b) when the FREE LIGHT is continuously lit, turn the points control switch to **NORMAL** and check that the **NORMAL** light is lit.
3. In the release unit, turn the release switch to **Normal** and check that the **NORMAL indicator** light is lit.
4. Tell the signaller

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Operating Frame B at Epping

Qualified Worker

1. Ask signaller for permission to take the release.
2. Make sure no rail traffic is approaching or traversing the points.
3. Open the Release-Control unit, and when the green **Release available** indicator is lit, turn releasing switch to **Reverse**.

To operate the points

4. Press and hold the **Cancel** button for two seconds, the trackside point indicators will display STOP
5. When the green points **Free** light is lit, press **Main** or **Siding** button to move the points to the desired position
6. When the points have moved, a yellow **Main** or **siding** point indicator repeater light in the unit will be lit and the trackside point indicator will display a white arrow.
7. To operate the points again, repeat steps 4 to 6

To restore the release and return the points to normal operation

8. Make sure the points are in the normal position and the yellow **MAIN** point indicator repeater light in the unit is lit
9. Turn the release switch to normal
10. Tell the signaller the release has been restored.

Related documents

NLA 110	<i>Central-Lidcombe</i>
NLA 114	<i>Strathfield</i>
NLA 302	<i>Hornsby</i>
NLA 304	<i>Central-Hornsby</i>
NLA 308	<i>Chatswood-Epping</i>
NLA 310	<i>Hornsby-Gosford</i>

Effective date

8 May 2025