

Leppington

Location

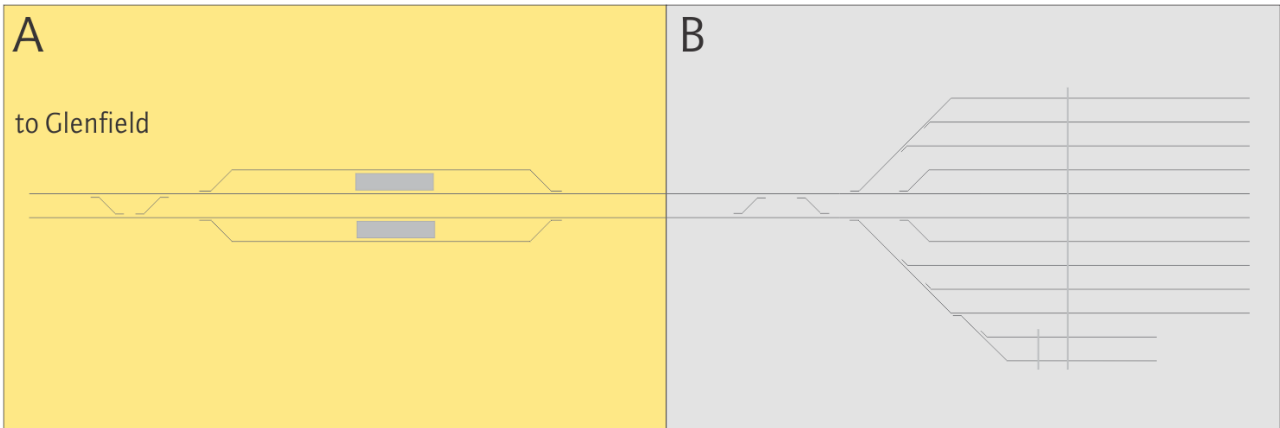
This unit includes:
Leppington at 49.060km



Warning

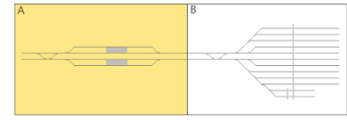
This location has narrow track clearances

Diagrams

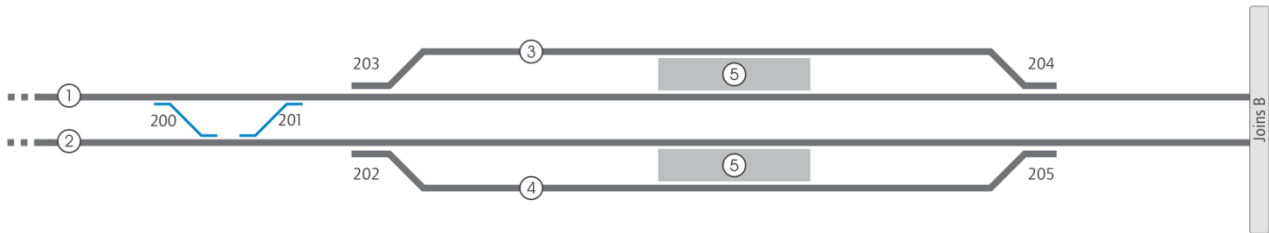


Leppington

A



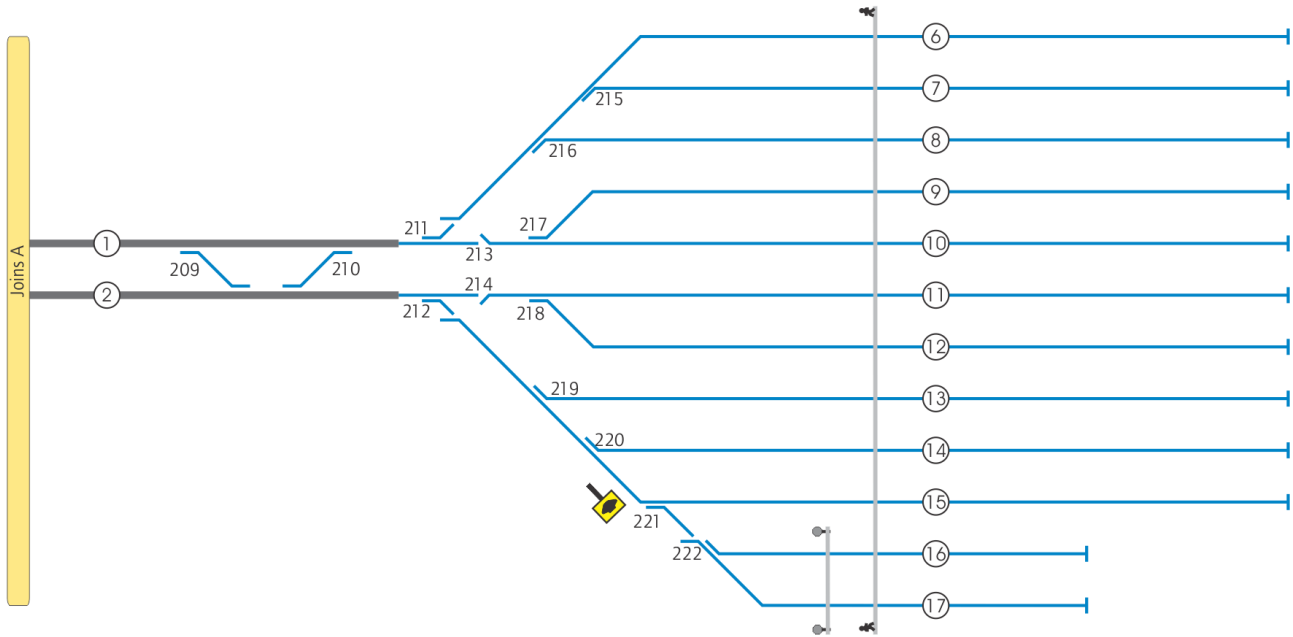
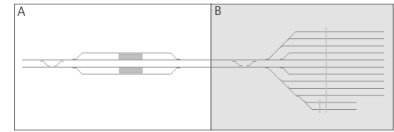
to Glenfield



Key		
1. Down Leppington Main line	3. Down Leppington Loop line 872m	4. Up Leppington Loop line 872m
2. Up Leppington Main line		5. Leppington

Leppington

B



Key		
1. Down Leppington Main line	9 No 7 siding 354m	14 No 2 siding 354m
2. Up Leppington Main line	10 No 6 siding 354m	15 No 1 siding 354m
6. No 10 siding 354m	11 No 5 siding 354m	16 No 2 Machine siding 155m
7. No 9 siding 354m	12 No 4 siding 354m	17 No 1 Machine siding 156m
8. No 8 siding 354m	13 No 3 siding 354m	

Leppington

Network Control

Signaller at Rail Operations Centre (ROC).

Yard Limits

Down Leppington Main line	YL	49.060m Down signal LE 1
Up Leppington Main line	EYL	50.183km Up signal GL 50.0

Location details



Interlocked points without groundframes are operated from ROC

- 54.580km Leppington. Platforms 1 and 2, 3 and 4

Level crossings

- 🚶 53.133km Network Access on/off pad
- 🚶 53.187km Access Pedestrian Walkway across all Service Roads

Special instructions

Emergency Override Working

Leppington Station is configured to enable the continued passage of trains during the loss of communication between Rail Operations Centre (ROC) and Leppington Interlocking via the Leppington Override Facility.

Once the override is initiated all non through routes will cancel. Through routes will be set if not already set. These routes will auto re-clear after the passage of a train.

The mode of operation for Leppington’s override is selected by using a three position switch located within an SL Locked stainless steel box mounted on the outside wall of the LE16 Signal Equipment Room (LE16 SER).

AUTO N/A – Booked out of use

OFF Crossover, Up Main to Down Main

FORCED When selected emergency override will be enabled.

‘Override’ indications are provided locally at LE16 and the current status is displayed at ROC via ATRICS.

Leppington



Note

The Auto and Forced are booked out of use until further notice.



Note

Before authorising the use of the Emergency Override facility **the Signaller** must ensure that protecting signals affected by the Emergency Override facility are not being held at stop to protect work on track, rail traffic movements or other conditions affecting the network.

Competent Worker

Follow the directions of the Signaller to operate the Emergency Override facility.

Signal Key Switches

Signal Key Switches are fitted to the automatic signals listed in the table below.

Signal Key Switch may be used for worksite protection in accordance with the following Network Rule & Procedures:

- NWT 306 Track Work Authority
- NWT 320 Signal Key Switch Blocking
- NPR 702 Using a Track Work Authority
- NPR 753 Using Signal Key Switch Blocking
- NPR 754 Using a Signal Key Switch

<i>Line</i>	<i>Worksite limit</i>	<i>First affected signal/s</i>	<i>Protecting signal fitted with a Key Switch</i>
Down Leppington line	Signal GL43.5 to Signal LE1	GL42.5	GL43.5
Up Leppington line	Signal GL44.8 to Signal GD42	GL45.8	GL44.8

Leppington

Ground Based Warning System Procedures

Alternate operating procedures for the sounding of train whistles have been introduced for the Leppington Stabling Yard.

These procedures are in exception to NTR 408 Using train whistles, OSP 16 Shunting in Yards and Maintenance Centre's, and Driver's Train Preparation Procedures.

In accordance with the Ground Based Warning System (GBWS) procedures, train whistles are not to be sounded during normal operations within Leppington Stabling Yard.

Whistle signs are installed at 52.102km on both the Up Main and Down Main Leppington line to indicate to drivers of trains departing Leppington Stabling Yard that they must test the train whistle at that location. If the train whistle fails to operate, the driver must carry out the instructions shown in NTR 408.



Note

If, at any time, a driver in charge of a moving train considers there is a perceived threat to the safety of any person they must take appropriate action to avoid harm. This may include sounding the train whistle to give warning.

Trains Departing Leppington Stabling Yard

The GBWS operating panel is mounted on the departure end access platforms on all roads in the Stabling Yard adjacent to the Drivers cab. A panel is also mounted at the amalgamation and division locations of both the yard and sidings sections of stabling roads 1 and 2.

Two types of warning are provided by the GBWS; **Power against Brake Test (PABT)** and **DEPART**. When activated, the GBWS will give a combination of audible and visual warnings.

The audible and visual warnings will commence 20 seconds after activation. The visual warning will continue to flash for:

- 60 seconds for a PABT
- 1 minute 20 seconds for a departure from the yard (top end)
- 2 minutes for a departure from the sidings (bottom end)

Leppington



Note

If the wrong warning type button is pressed, there are 2 options for cancelling the selected warning:

- Push the same button again at any time to cancel the GBWS activation.
- Push the alternate button within 20 seconds to switch GBWS functions



Operation of the GBWS with 8 cars

PABT

DRIVER

- After the train continuity is complete tell the guard that you will be conducting the PABT
- Secure train by applying the park brake
- Exit the crew compartment and press the PABT button on the GBWS panel
- The PABT button will illuminate to indicate the system has activated
- Re-enter the crew compartment and release the park brake
- Check that the area in front of the train is clear and the warning lights are flashing
- Conduct the PABT as per procedure
- If the visual warning ends before the PABT test is fully completed, re-press the PABT button to re-activate the system
- Re-apply the train park brake

DEPART

DRIVER

- Approximately 1 minute prior to departure tell the signaller via a Digital Train Radio System (DTRS) voice call or a text message that you are OK to depart
- Check the departure signal is displaying a proceed indication

Leppington

- Check or re-apply train park brake
- Give the guard the all right bell **signal (-)**
- After receiving the all right bell **signal (-)** from the guard
- Exit the crew compartment and press the DEPART button on the GBWS panel



Note

The DEPART button will illuminate to indicate the system has activated

- Re-enter the crew compartment and release the park brake
- Check that the area in front of the train is clear and warning lights are functioning
- Conduct an inching movement prior to moving and then depart the stabling yard
- Test the train whistle at the whistle sign.

Operation of 4 cars from the mid road (roads 1 and 2)

PABT

DRIVER

- Conduct the PABT using the GBWS as stated above for 8 cars

DEPART

DRIVER

- Conduct the departure procedures using the GBWS as stated above for 8 cars

Operation with 4 cars (roads 3 to 10)

DRIVER

- After the train continuity is complete, request authority from the NCO to shunt to the access platform
- Tell the guard when authority to shunt is received and request the guard to proceed to departure end access platform to activate the GBWS
- Note when GBWS is activated and the guard is giving the hand signal shunt forward.
- Check that the area in front of the train is clear
- Conduct inching movement before shunting forward
- Stop train adjacent to access platform
- Wait for guard to return to their operating cab

Leppington

- After receiving the guard’s bell signal to indicate that the guard is in their cab, conduct the PABT and DEPART procedures using the GBWS as stated above for 8 cars.

GUARD

- After the train continuity is complete
- Driver will tell you when they have received the authority to shunt and request you to proceed to departure end access platform to operate the GBWS
- Press the DEPART button on the GBWS panel



Note

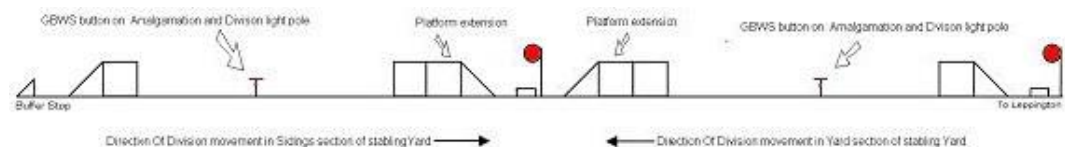
The DEPART button will illuminate to indicate the system has activated
After 20 seconds, The GBWS warning will sound and the amber warning lights will begin to flash on either side of your train

- Hand signal the driver to shunt forward to the access platform
- After train has stopped at the access platform press the DEPART button again, if required to cancel the GBWS.
- Return to the correct crew compartment and give the driver the all right bell signal (-)
- Wait for the driver to conduct either the PABT and DEPART procedure using the GBWS as stated above for 8 cars.

Amalgamation and Division Procedures Using the Mid Road GBWS

To accommodate the amalgamation and division of trains within Leppington Stabling Yard, roads 1 and 2 have been upgraded. This involves lengthened access platforms and the addition of a GBWS panel installed at the amalgamation and division locations on these roads in both the sidings and yard sections.

Additional signage is placed alongside roads 1 and 2 to indicate to drivers where they are to stop the train after train division.



Simplified diagram of a modified stabling road at Leppington

DRIVER

- Conduct amalgamation and division of the trains with the guard as per TWP116 – Division and Amalgamation of Trains
- Request the guard to operate the GBWS before moving the train

Leppington



Note

To position the train correctly, drivers are to stop their trains at the posted signage in line with their shoulder



Note

When dividing, the moving portion of the train **must** proceed in the direction of travel towards the **centre walkway of the yard** from either the sidings or yard sections of the stabling yard (centre walkway)

GUARD

- Conduct the amalgamation and division of the train with the driver as per TWP116 - Division and Amalgamation of Trains
- Press the PABT button on the GBWS panel at the amalgamation and division location when requested by the driver and before the train moves



Note

The GBWS panels at the amalgamation and division location will work the same as the departure end GBWS panels

Degraded Operation Procedures

When the ground based warning system is unavailable (degraded mode), procedures utilizing a qualified worker, stated below, will be put in place as soon as practicable for trains departing Leppington stabling yard.



Note

When the ground based warning system is unavailable, trains required to depart the yard **prior** to the arrival of the Qualified Worker may do so with the driver sounding the 'town' whistle. This will continue for trains required to depart until a Qualified Worker attends the location.

Leppington

Degraded mode operating procedures utilising a qualified worker

Once the qualified worker arrives on-site, the following procedures will apply when GBWS is in degraded mode.

DRIVER

- Approximately 1 minute prior to scheduled departure time request the guard and the qualified worker to commence checking procedure.
- Await conformation from the guard and the qualified worker, the departure procedure is complete
- Visually inspect the front of the Train from the driver's cab window.
- Confirm that the departure signal has a proceed indication, then perform inching movement prior to departure.
- Do not sound the whistle upon departure. Proceed to the whistle sign and test the whistle as per procedures for normal GBWS operation.

GUARD

- Commence checking procedure when requested by the driver
- Make visual inspection of both sides of the train to ensure no one is on or about the train.
- Use the guard's whistle to give one long, loud blast to warn anyone who may be in the Danger Zone that the train is about to depart.
- Tell the driver when the departure procedure has been completed.

QUALIFIED WORKER

The qualified worker must be positioned adjacent to the leading crew compartment. After receiving verbal confirmation from the Driver that the train preparation is complete or the driver has changed ends, the qualified worker must carry out the following:

- Check the first 4 cars on the left-hand side of the train and use the whistle supplied to give one long, loud blast to warn anyone who may be in the Danger Zone that the train is about to depart.
- Repeat the process for the right hand side of the train
- Tell the driver when that both sides of the train have been checked and all is clear from any obstruction.
- Contact the signaller and request a proceed indication for the train to depart

Leppington

Related documents

NLA 512 Glenfield-Leppington

Effective date

14 February 2020