

# Broadmeadow and Woodville Junction

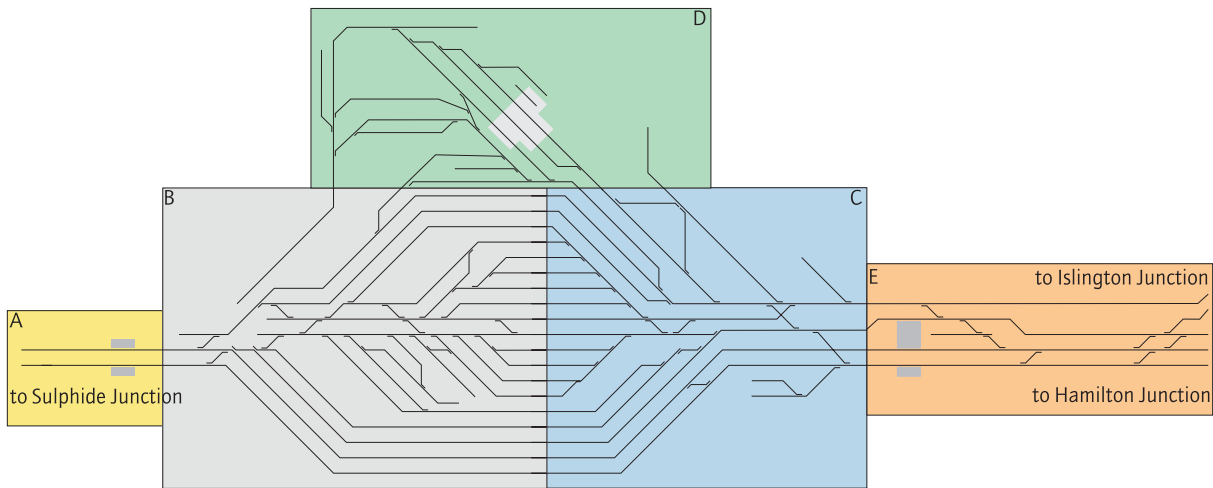
## Location

This unit includes:

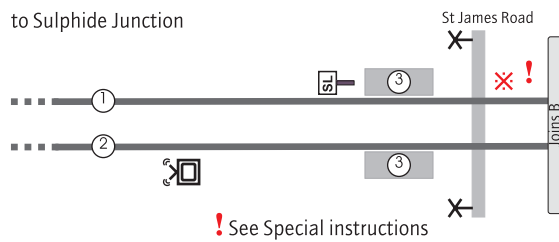
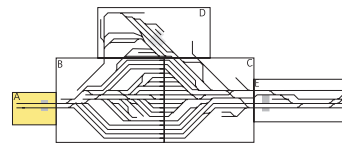
- Adamstown at 161.074km
- Broadmeadow at 162.842km
- Woodville Junction at 163.689km.

**⚠** WARNING: This location has narrow track clearances

## Diagrams



A

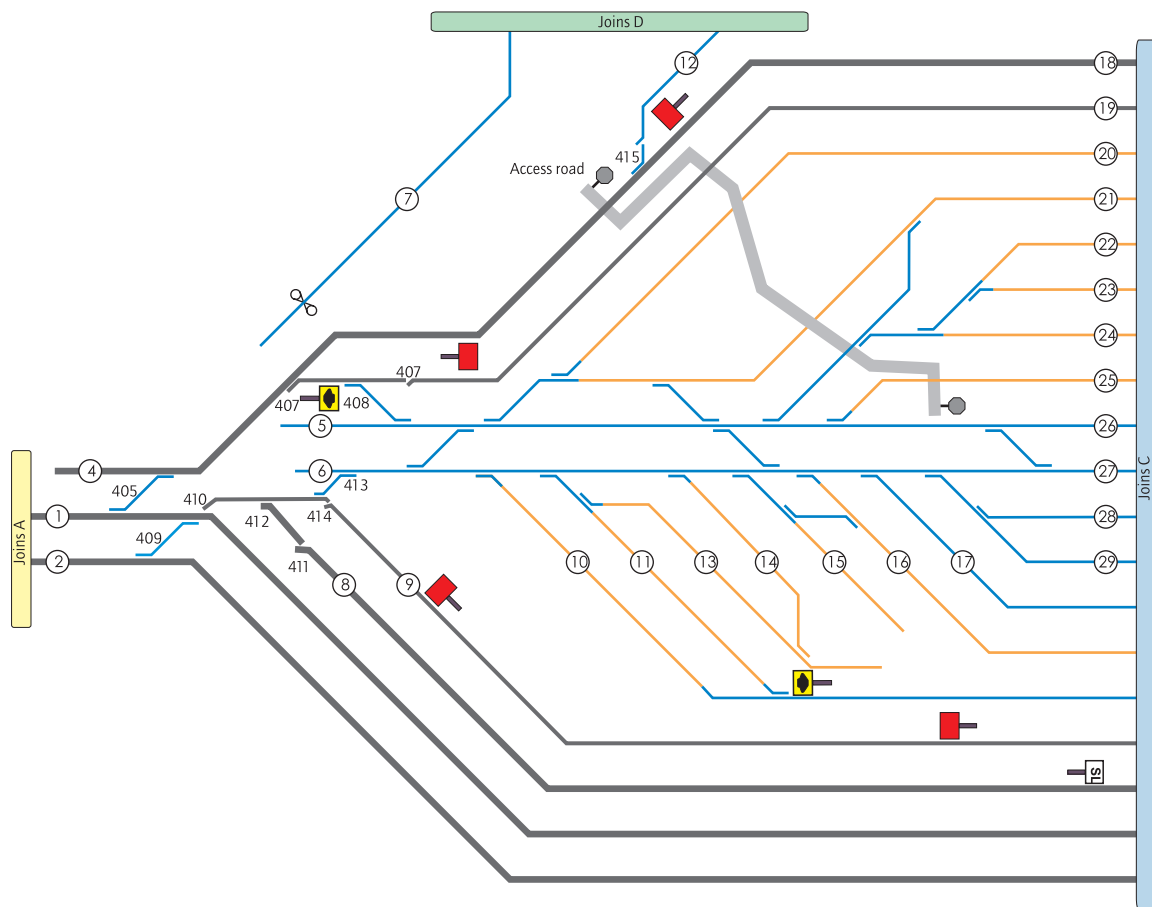
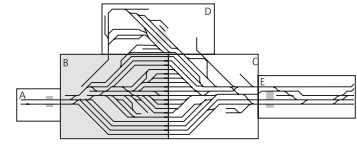


**KEY**

- |                        |                      |             |
|------------------------|----------------------|-------------|
| 1 Down Main North line | 2 Up Main North line | 3 Adamstown |
|------------------------|----------------------|-------------|

## Broadmeadow and Woodville Junction

B

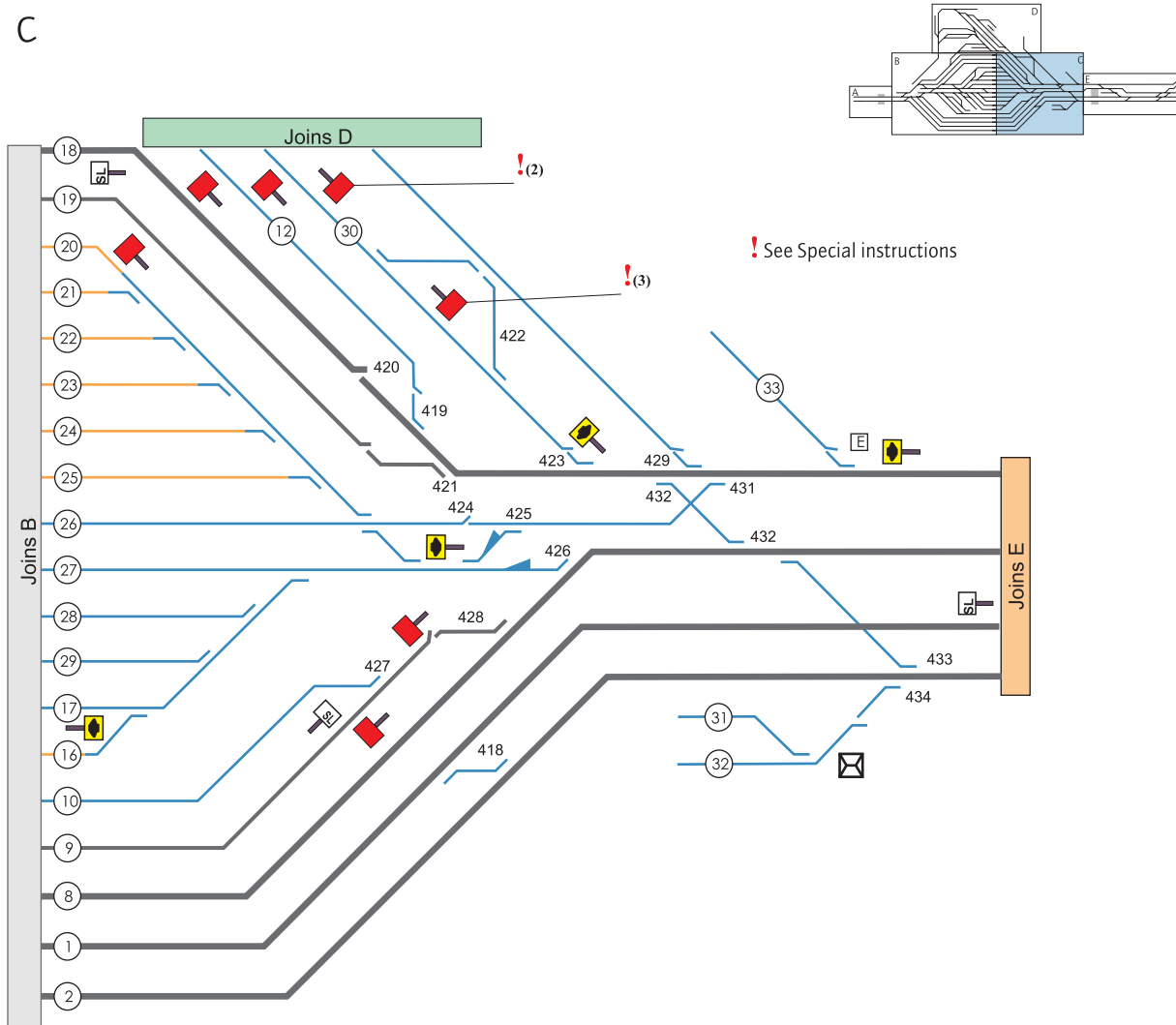


**KEY**

1 Down Main North line	12 Sanding road 540m	21 No 2 Down siding 497m
2 Up Main North line	13 No 2 Up Marshalling grid 140m	22 No 3 Down siding 235m
4 Dead End siding 36m	14 No 3 Up Marshalling grid 72m	23 No 4 Down siding 305m
5 Down Shunting Neck 34m	15 No 4 Up Marshalling grid 141m	24 No 5 Down siding 337m
6 Up Shunting Neck 30m	16 No 2 Up siding 415m	25 No 6 Down siding 455m
7 Loco Arrival/Departure road	17 No 3 Up siding 378m	26 No 7 Down siding 1143m
8 Up Relief line	18 Down Relief line	27 No 6 Up siding 944m
9 Up Through road	19 Down Through road	28 No 5 Up siding 404m
10 No 1 Up siding 830m	20 No 1 Down siding 500m	29 No 4 Up siding 370m
11 No 1 Up Marshalling grid 76m		

## Broadmeadow and Woodville Junction

C

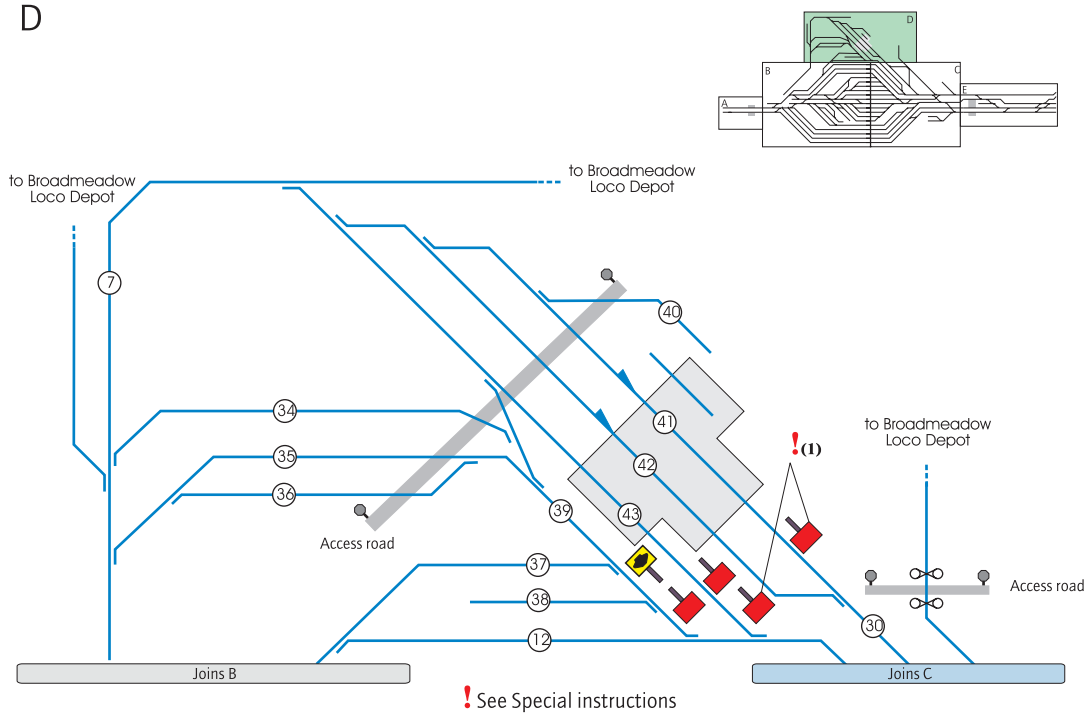


**KEY**

1 Down Main North line	18 Down Relief line	26 No 7 Down siding 1143m
2 Up Main North line	19 Down Through road	27 No 6 Up siding 944m
8 Up Relief line	20 No 1 Down siding 500m	28 No 5 Up siding 404m
9 Up Through road	21 No 2 Down siding 497m	29 No 4 Up siding 370m
10 No 1 Up siding 830m	22 No 3 Down siding 235m	30 Loco Arrival/Departure road
12 Sanding road 540m	23 No 4 Down siding 305m	31 No 1 Interurban/Endeavour Decant siding 292m
16 No 2 Up siding 415m	24 No 5 Down siding 337m	32 No 2 Interurban/Endeavour Decant siding 292m
17 No 3 Up siding 378m	25 No 6 Down siding 455m	33 Goods siding 92m

## Broadmeadow and Woodville Junction

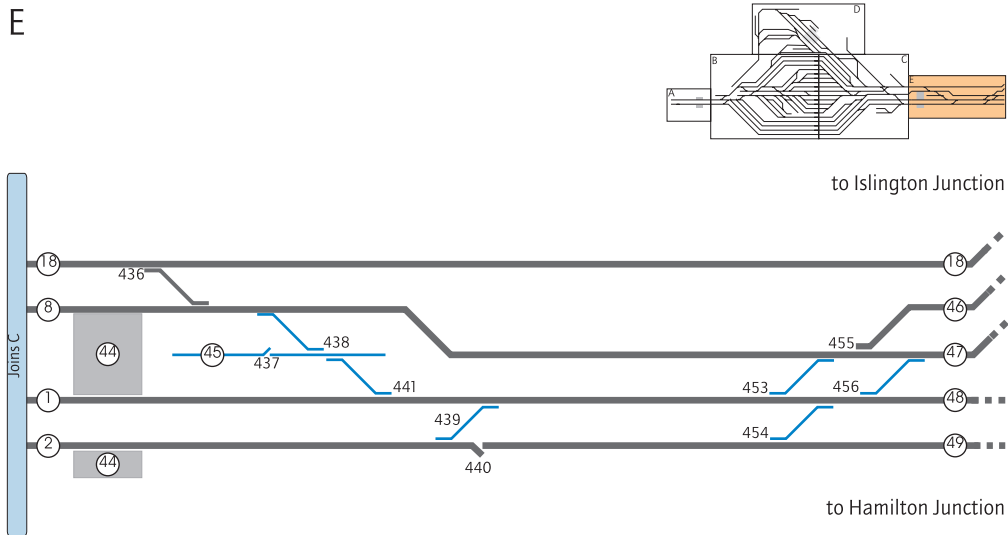
D



**KEY**

7 Loco Arrival/Departure road	36 No 1 Diesel Loco siding 276m	40 No 2 Railmotor siding 54m
12 Sanding road 540m (156m clear)	37 No 2 Electric Loco siding 67m (clear)	41 No 3 Endeavour siding 260m
30 Loco Arrival/Departure road	38 No 1 Electric Loco siding 82m (clear)	42 No 2 Endeavour siding 254m
34 No 1 Railmotor siding 231m	39 Run Round road	43 No 1 Endeavour siding 206m
35 No 2 Diesel Loco siding 276m		

## Broadmeadow and Woodville Junction



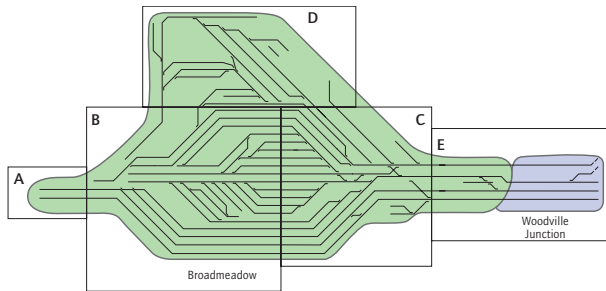
KEY					
1	Down Main North line	44	Broadmeadow	47	Up Islington Loop line
2	Up Main North line	45	Engine siding 54m	48	Down Branch line
8	Up Relief line	46	Down Islington Loop line	49	Up Branch line
18	Down Relief line				

### Network Control

Signaller at Broadmeadow (Newcastle & Broadmeadow panels)

## Broadmeadow and Woodville Junction

### Yard limits



Broadmeadow and Woodville Junction abut on the Main North and Relief lines.

#### Yard limits controlled by Newcastle Panel

	Start	End
Down	WJ 13 Down Main 163.645km	WJ 20 Up Islington loop 163.864km
		IJ 5 Down Islington loop 164.007km
		NH 102.34 Down Branch 164.743km
Up	Yard limit sign Country end of Hamilton Platform 1 WJ 20 Up Islington loop 163.864km	IJ 21 Down Main 194.025km
		B 286 Up Main 163.712km

#### Yard limits controlled by Broadmeadow Panel

	Start	End
Down	B 201 Signal Down Main 159.951km	WJ 13 Down Main 163.645km
		R 101.47 Down Relief 163.301km
Up	B280 Up Relief 163.392km	N100.0 Up Main 160.927km
	B286 Up Main 163.712km	











## Broadmeadow and Woodville Junction

### Location details

#### Broadmeadow



Interlocked points without groundframes are operated from Broadmeadow.






-  160.613km Bearing and brake temperature system: broadcasts WB radio message, reports to Broadmeadow. Signaller tells Network Controller and warns Train Crew
-  161.066km Up SHUNT LIMIT sign on Down Main North line
-  161.074km Adamstown. Platforms 1, 2
-  162.167km Down SHUNT LIMIT sign on Up Relief line
-  162.290km Up SHUNT LIMIT sign on Down Relief line
-  162.673km CTC (Broadmeadow)
-  162.775km Down Relief line to Goods siding: key from releasing switch E, released by release 435
-  162.832km Down SHUNT LIMIT sign on Up Through road
-  162.842km Broadmeadow. Platforms 1, 2 and 3
-  162.843km Up SHUNT LIMIT sign on Down Main North line

#### Woodville Junction



Interlocked points are operated from Broadmeadow (Newcastle panel)

### Level crossings

-  161.196km St James Road: manual from Broadmeadow. CCTV-monitored. Keys at Broadmeadow
-  See Special instructions
-  161.793km Access road, Down Relief line to No 6 Down siding
-  161.990km Access road, No 1 Diesel Loco siding to No 2 Railmotor siding
-  162.367km Access road, Broadmeadow Loco Depot line

## Broadmeadow and Woodville Junction

### Special Instructions

#### St James Road level crossing


St James Road level crossing is fitted with a single Master Emergency switch.

Operation of the Master Emergency switch will place Down signals B203; B207 and B211 and Up signals B218; B220; B222 and B224 at STOP.

 NOTE: Down signals B203 and B207 shunt indications will be able to be cleared. Up signal B224, only the A and B routes will be placed at STOP.

Before operating the level crossing warning equipment and clearing the protecting signals, the Signaller must ensure that the level crossing is clear of road and pedestrian traffic by either observing the CCTV or by confirmation from the Handsignaller when in place.

If the AUTO RAISE function is in use, the Signaller must reset signal route buttons for each movement.

 WARNING: The AUTO RAISE function must not be used during transit of the level crossing by rail vehicles that do not reliably operate track-circuits.

Unless at least one CCTV monitor gives a clear view of the level crossing, the Signaller must arrange for a Handsignaller to be placed at the level crossing to confirm that the warning equipment has operated correctly and the level crossing is clear of road and pedestrian traffic.

#### Up or Down Through roads

 WARNING: Trains conveying passengers must not use the Up or Down Through roads.

#### Protection of Train Crews

Arrange to exclude Rail Traffic in accordance with *NTR 432 Protection for in-service rail traffic inspections and repairs*.

#### Endeavour Service Centre



All rail vehicle movements within the Endeavour Service Centre must be piloted.

A Qualified Worker who is familiar with the condition of the sidings must ensure that the route is clear and instruct the Driver of the movement to be made, and then pilot the Driver to the intended destination within the Endeavour Service Centre.

Keys for derail devices within the Centre are kept at the Centre.

#### Stop signs

Movements past STOP sign <sup>(1)</sup> are authorised by the Signaller to either signal 237 or STOP sign <sup>(3)</sup>.

When authorised, Drivers must proceed to STOP sign <sup>(2)</sup> and check the non interlocked points. When satisfied the points are in the correct position for the movement, continue to either signal 237 when cleared or STOP sign <sup>(3)</sup>.



## Broadmeadow and Woodville Junction

### Sydney Trains - ARTC interface boundaries

Line	Limits	Sydney Side	Islington Junction side
Down Relief	IJ 9 signal	Signaller Broadmeadow (Broadmeadow panel)	ARTC Network Controller Broadmeadow (Port Waratah Board)
Up Relief-Down Islington loop	IJ 5 signal	Signaller Broadmeadow (Newcastle panel)	ARTC Network Controller Broadmeadow (Port Waratah Board)
Up Relief-Up Islington loop	WJ 20 signal	Signaller Broadmeadow (Newcastle panel)	ARTC Network Controller Broadmeadow (Port Waratah Board)

In applying the Network Rules and Network Procedures, the Signaller Broadmeadow must treat the ARTC Network Controller as an affected Network Control Officer.

The following instructions will apply if work on track will be conducted which

- extends into an ARTC controlled area, or
- requires protection to be provided by the ARTC Network Controller.

#### Lookout Working

Additional requirements must be applied where Lookout Working is implemented in the following areas.

- Down Relief between R 101.69 signal and IJ 9 signal, or
- Down Islington Loop between 455 points and IJ 5 signal, or
- Up Islington loop between IJ 24 signal and WJ 20 signal, the following conditions apply:

#### Additional requirements:

Lookout working must not be implemented:

- during darkness, or
- if visibility does not allow clear sighting of rail traffic (terrain, fog, heavy rain or dust may restrict visibility), and
- for a period longer than 2 hours, (If access is required for longer than two hours, a new request must be made.)

## Broadmeadow and Woodville Junction

### Absolute Signal Blocking/Controlled Signal Blocking

#### Down Relief

The Signaller Broadmeadow (Broadmeadow panel) is responsible for implementing ASB in accordance with Sydney Trains Network Rules when a worksite is established on the Sydney side of IJ 9 signal.

The ARTC Network Controller Broadmeadow (Port Waratah Board) is responsible for implementing Controlled Signal Blocking (CSB) in accordance with the ARTC Network Rules when a worksite is established on the Islington Junction side of IJ 9 signal.

#### Down Islington Loop

The Signaller Broadmeadow (Newcastle panel) is responsible for implementing ASB when a worksite is established on the Down Islington Loop line on the Sydney side of IJ 5 signal.

The ARTC Network Controller Broadmeadow (Port Waratah Board) is responsible for implementing CSB in accordance with the ARTC Network Rules when a worksite is established on the Islington Junction side of IJ 5 signal.

#### Up Islington Loop

The Signaller Broadmeadow (Newcastle panel) is responsible for implementing ASB when a worksite is established on the Sydney side of WJ 20 signal.

If additional protection is required on IJ 24 signal, the Signaller Broadmeadow (Newcastle panel) must apply blocking facilities to prevent the clearing of IJ 24 signal and advise the ARTC Network Controller Broadmeadow (Port Waratah Board).

ARTC Network Controller Broadmeadow (Port Waratah Board) is responsible for implementing CSB when a worksite is established on the Islington Junction side of WJ 20 signal.

#### Additional Requirements for CSB

When CSB is issued on the Up Islington Loop between IJ 24 signal and WJ 20 signal, the following conditions apply.

CSB protection must include:

- Two consecutive controlled signals set at STOP with blocking facilities applied, or
- A Manual Points Control mechanism removed to set controlled absolute signals at STOP, or
- One controlled signal set at STOP with blocking facilities applied, and
  - A set of points secured to prevent access, or
  - An easily-reached safe place is available and a Lookout provided.

Where additional protection is required by another Signaller/Network controller, Signaller Broadmeadow (Newcastle panel) and ARTC Network Controller Broadmeadow (Port Waratah Board) must confer and obtain an assurance that blocking facilities have been applied to applicable signals prior to granting the ASB/CSB

## Broadmeadow and Woodville Junction

### Track Occupancy Authority (TOA)

#### Down Relief line

The Signaller Broadmeadow (Broadmeadow panel) is responsible for implementing a TOA when a worksite is established on the Islington Down Relief line on the Sydney side of IJ 9 signal.

When a TOA worksite will extend beyond IJ 9 signal, separate TOA s must be issued by the Signaller Broadmeadow (Broadmeadow panel) and the ARTC Network Controller Broadmeadow (Port Waratah Board).

#### Down Islington Loop

The Signaller Broadmeadow (Newcastle panel) is responsible for implementing a TOA when a worksite is established on the Down Islington loop line on the Sydney side of IJ 5 signal.

When a TOA worksite will extend beyond IJ 5 signal, separate TOA s must be issued by the Signaller Broadmeadow (Newcastle panel) and the ARTC Network Controller Broadmeadow (Port Waratah Board).

#### Up Islington Loop

The ARTC Network Controller Broadmeadow (Port Waratah Board) is responsible for implementing a TOA when a worksite is established on the Up Islington Loop.

When a TOA worksite extends beyond WJ20 signal, separate TOA s must be issued by the Signaller Broadmeadow (Newcastle panel) and the ARTC Network Controller Broadmeadow (Port Waratah Board).

### Track Work Authorities (TWA)

#### Down Relief line

The Signaller Broadmeadow (Broadmeadow panel) is responsible for implementing a TWA when a worksite is established on the Islington Down Relief line on the Sydney side of IJ 9 signal. The TWA worksite must not extend beyond IJ 9 signal

#### Down Islington Loop

The Signaller Broadmeadow (Newcastle panel) is responsible for implementing a TWA when a worksite is established on the Down Islington line on the Sydney side of IJ 5 signal. The TWA worksite must not extend beyond IJ 5 signal

#### Up Islington Loop

The ARTC Network Controller Broadmeadow (Port Waratah Board) is responsible for implementing a TWA when a worksite is established on the Up Islington Loop. The TWA worksite must not extend beyond WJ 20 signal

## Broadmeadow and Woodville Junction

### Local Possession Authority (LPA)

#### ARTC only LPA

Line	Limits
Down Relief*	Islington Junction side of R 101.69 signal
Down Islington loop	Islington Junction side of 455 points
Up Islington loop	Islington Junction side of WJ 20 signal

 **NOTE** Where the LPA includes the Down Relief:

- ARTC Network Controller must request the Signaller Broadmeadow to protect the possession limit by placing blocking facilities on B 263 signal, and
- R101.69 signal must be booked out of use for the duration of the ARTC possession.

#### Sydney Trains only LPA

Line	Limits
Down Relief	Sydney side of IJ 9 signal
Down Islington loop	Sydney side of 455 points
Up Islington loop	Sydney side of WJ 20 signal

#### Sydney Trains - ARTC back-to-back LPA's

Line	Limits
Down Relief*	R 101.69 signal
Down Islington loop	IJ 5 signal
Up Islington loop	WJ 20 signal

 **NOTE** Where the LPA includes the Down Relief:

- ARTC Network Controller must request the Signaller Broadmeadow to protect the possession limit by placing blocking facilities on B 263 signal, and
- R101.69 signal must be booked out of use for the duration of the ARTC possession.

## Broadmeadow and Woodville Junction


Where back-to-back LPAs are implemented, the following instructions will apply:

- Worksites and rail vehicles that need to move from Sydney Trains territory to ARTC territory are authorised and supervised by the ARTC Possession Protection Officer.
- Worksites and rail vehicles that need to move from ARTC territory to Sydney Trains territory are authorised and supervised by the Sydney Trains Possession Protection Officer.

### Use of Forms

Where it is necessary to compile Safeworking forms associated with work on track, train operations or infrastructure maintenance, the following instructions will apply:

Activity	Limits
Worksite Protection or Proceed Authority issued by ARTC Network Controller Broadmeadow	ARTC form
Worksite Protection or Proceed Authority issued by Signaller Broadmeadow (Newcastle panel or Broadmeadow panel)	Sydney Trains form
Infrastructure maintained by ARTC*	ARTC form
Infrastructure maintained by Sydney Trains*	Sydney Trains form

-  NOTE: ARTC will
- advertise Local Possession Authorities (LPAs) in a Train Alteration Advice (TAA)
  - record Network Incident Notices (NINs) on a Train Control Report (TCR)

### Special Proceed Authority

To authorise a SPA for a movement on the Down Relief line between B 263 signal and IJ 9 signal, the Signaller at Broadmeadow (Broadmeadow panel), Network Controller Sydney and ARTC Network Controller Broadmeadow (Port Waratah Board) must confer and nominate an authorising person.

The authorising person will be responsible for obtaining all assurances and compiling and issuing the SPA using the relevant form.

All affected parties must be issued a copy of the SPA form.

### Recognition of RISI and Railway Safety Worker Competencies.

Where work or activities occur between Islington Junction and Woodville Junction require RISI or a RSW competency, mutual recognition of RISI and RSW cards will apply.

## Broadmeadow and Woodville Junction

Recognition of RISI and RSW competencies are detailed in the table below.

Workers	RSI	RSW competency
ARTC Employees	RWI card	RIW card
Contractors engaged by ARTC	RWI card	RIW card
Sydney Trains employees	RWI card or RSW issued by TfNSW	RSW issued by TfNSW
Contractors engaged by Sydney Trains	RIW card	RIW card

### Related documents

*NLA 314 Gosford–Broadmeadow*

*NLA 320 Broadmeadow–Hamilton Junction*

### Effective date

15 October 2018