

CRN Local Appendix

North

CNLA 411 West Tamworth

Status	Date	Reviewed	Endorsed
V8.0	September 2021	A/Manager Network Rules T Weber	A/Network Operations Manager A Armstrong

Network Control Board	Normal Call	Priority Call	Emergency Call	Backup number	Public Free call
North West	02 4028 9501	02 4028 9521	02 4028 9541	02 4028 9671	1800 643 373
South West	02 4028 9502	02 4028 9522	02 4028 9542	02 4028 9672	1800 021 914
West	02 4028 9504	02 4028 9524	02 4028 9544	02 4028 9674	1800 427 198

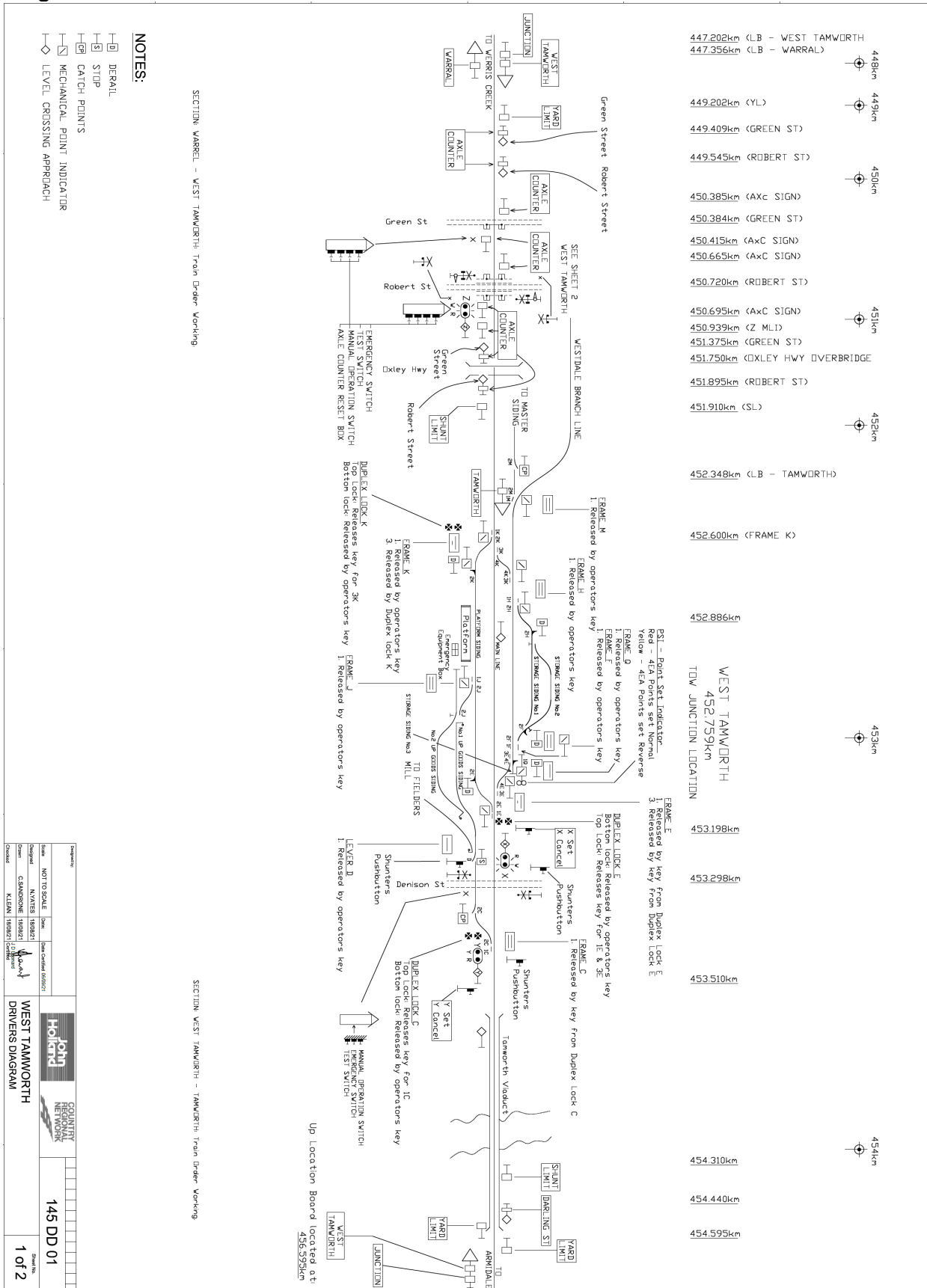
NOTE: For emergency use only, you can call 1800 JHR CRN from any phone.

All relevant publications are available on the JHR CRN website www.jhrcrn.com.au.

West Tamworth

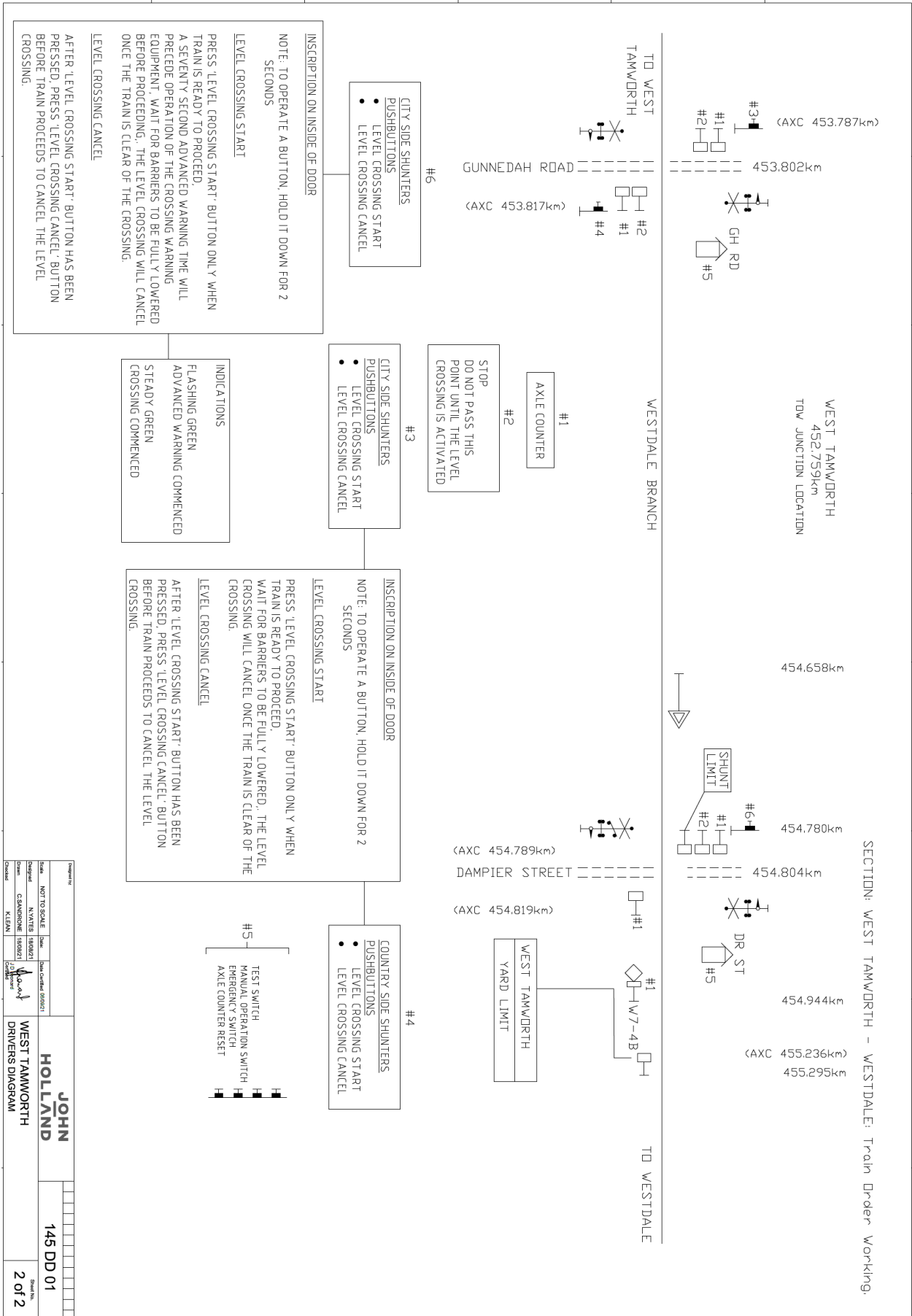
452.759 km

Diagrams of West Tamworth



West Tamworth

452.759 km



Author	NT/TO SCALE	Drawn	N. WATERS	Checked	C. SANDRONE	Scale	1:1
Drawn	N. WATERS	Checked	C. SANDRONE	Scale	1:1	WEST TAMWORTH DRIVERS DIAGRAM	
Checked	K. EVAN	Scale	1:1	JOHN HOLLAND			
				145 DD 01			
				2 of 2			

West Tamworth

452.759 km

General arrangements

West Tamworth is a Train Order Working Junction location.

This permits loading operations to take place in the sidings without the need for a Shunt Order.

Platform Siding, Storage Siding No 1, Storage Siding No 2, Storage Siding No 3, No 1 Goods Siding - (Booked out), No 2 Goods Siding - (Booked out) lengths can be found in the TOC [Manual Northern Section Pages](#).

Yard Limits

Down YARD LIMIT 449.202 km. Main line

Up YARD LIMIT 454.595 km. Main line

Up YARD LIMIT 455.295 km. Westdale Branch

Shunting Limits

Up SHUNT LIMIT 451.910 km. Main line

Down SHUNT LIMIT 454.310 km. Main line

Down SHUNT LIMIT 454.780 km. Westdale Branch

Ground frames

Frame M - Up side of the Westdale Branch. Access to the private siding (Freight Centre), Down end. Released by Operators Key. This frame is not to be used without consultation with the siding owner.

Frame K - Up side of the Main. Access to the Platform siding and Westdale Branch, Up end. 1K unlocked by Operators Key. 3K unlocked by Operators key placed in the bottom lock of Duplex lock 'K'. The top lock in the Duplex Lock releases Fortress Key for 3K.

- Levers 1 and 2 allow entry into the Platform Siding.
- Levers 3 and 4 allow entry into the Westdale Branch.
- Levers 1 and 3 are interlocked. If Lever 1 is reverse, Lever 3 is locked Normal (unavailable). If Lever 3 is Reverse, Lever 1 is locked Normal (unavailable).

Frame H - Down side of the Westdale Branch. Access to No. 1 & 2 Storage sidings. Up end. Released by Operators Key.

Frame J - Up side of the Platform siding. Access to No. 1 & 2 Goods siding and the North dock, Up end. Released by Operators Key. **Booked out of use.**

Frame F - Down side of the Westdale Branch. Access to No. 1 & 2 Storage sidings. Down end. Released by Operators Key.

Frame E - Down side of the Main. Access to the Platform siding and Westdale Branch, Down end. Operation of Frame E will place MLIs X and Y back to STOP. Unlocked by Operators key from the bottom of Duplex Lock "E". The top lock in the Duplex Lock releases key for 1E and 3E levers. Only one set of points may be operated at a time.

- Levers 1 and 2 allow entry into the Platform Siding.

West Tamworth

452.759 km

- Levers 3 and 4 allow entry into the Westdale Branch.
- Levers 1 and 3 are interlocked. If Lever 1 is reverse, Lever 3 is locked Normal (unavailable). If Lever 3 is Reverse, Lever 1 is locked Normal (unavailable).

Lever Q –Down side of the Storage siding No 3. Access to the Storage siding No 3. Unlocked by Operators Key.

Lever D - Up side of the Goods Sidings. Access to the Fielders Mill siding. Unlocked by Operators Key. **Booked out of use.**

Frame C - Down side of the Main. Access to the Goods sidings. Unlocked by Operators key from the bottom of Duplex Lock “C” located next to Frame C. The top lock in the Duplex Lock releases key for 1C lever. **Booked out of use.**

Stowage of Rail Vehicles

If a rail vehicle/s is to be stowed at this location, the catchpoints or a derail must be set to prevent a potential runaway accessing the Main or Westdale Branch.

Green Street pedestrian crossing

Green Street pedestrian crossing at 450.384km has pedestrian gates, warning bells and lights automatically controlled by Up or Down Axle counter track circuits.

Robert Street level crossing

Robert Street level crossing at 450.720km has Type F flashing lights, half booms and warning bells automatically controlled by Up or Down Axle counter track circuits.

Signage ‘DO NOT PUT ON OR OFF AT THIS LOCATION’ to be affixed on the sides of the level crossing hut facing approaching rail traffic.

Main Line Indicator (MLI)

‘Z’ MLI is installed on the country side of Robert Street level crossing facing Up direction rail traffic.

Axle counter circuits provide rail traffic detection for the operation of the level crossing.

‘Z’ MLI normally displays a pulsating white aspect.

Down direction rail traffic movements will maintain a steady red aspect in ‘Z’ MLI until the rear most vehicle has cleared the axle counter at 451.895km (Robert Street).

A Pushbutton unit will NOT be provided on ‘Z’ MLI.

Dennison Street level crossing

Dennison Street level crossing at 453.298 km has Type F flashing lights and warning bells automatically activated by Down and Up track circuits or manually by a pushbutton unit during shunting operations.

Main Line Indicators (MLI)

MLIs are installed either side of Dennison Street level crossing, X MLI faces Down and Y MLI faces Up. The MLIs can be placed at STOP for shunting.

West Tamworth

452.759 km

Down movements

With X MLI indicating that points are set for the Main line and level crossing warning equipment is in working order, the level crossing warning equipment will activate on approach and deactivate when the rear most rail vehicle has cleared the level crossing.

When an Operators Key is turned in Duplex Locks C, E or K to release the key to access the sidings operated by Frames C, E or K, the X MLI will be placed at STOP and after 120 seconds the level crossing warning equipment will cease to operate.

Up movements

With Y MLI indicating that points are set for the Main line and level crossing warning equipment is in working order, the level crossing warning equipment will activate on approach and deactivate when the rear most vehicle clears the level crossing.

When an Operators Key is turned in Duplex Locks C or E to release the key to access the sidings operated by Frames C or E, the Y MLI will be placed at STOP and after 120 seconds the level crossing warning equipment will cease to operate.

Shunting movements

Main line shunting movements beyond the country side of Denison Street level crossing standard trackside sign at 452.886km will activate Denison Street level crossing.

To prevent Denison Street level crossing from operating during shunting movements, Duplex Lock K release MUST be obtained prior to any rail traffic passing beyond the level crossing trackside sign at 452.886km.

X MLI will remain at steady red.

If the Duplex Lock K key is restored whilst the track circuit remains occupied, then X MLI will remain at steady red.

When the track circuit beyond 452.886km is no longer occupied with rail traffic and Duplex Lock K key has been restored, then X MLI indicates a white pulsating aspect.

Gunnedah Road level crossing

Gunnedah Road level crossing at 453.802 km is a Type F actively controlled level crossing with flashing lights, half booms and bells. This crossing MUST be manually activated for all rail traffic movements.

Bell operation shall be silenced between the times of 2200hrs and 0600hrs daily.

Manual Operation switch, Test switch, emergency keys and axle counter reset switch is provided

Gunnedah Road level crossing will be remotely monitored by the Cerberus Alarm Monitoring System.

Signage 'DO NOT PUT ON OR OFF AT THIS LOCATION' to be affixed on the sides of the level crossing hut facing approaching rail traffic.

Down direction sequence of Operation for Gunnedah Road

- Rail traffic comes to a stand at the STOP sign prior to crossing Gunnedah Road
- Rail traffic crew operates the shunters pushbutton to activate the crossing
- Rail traffic may proceed over the level crossing once the level crossing equipment has operated correctly.
- After the rear most vehicle has cleared the road crossing the level crossing equipment deactivates.

West Tamworth

452.759 km

Up direction sequence of Operation for Gunnedah Road

- Rail traffic comes to a stand at the STOP sign prior to crossing Gunnedah Road
- Rail traffic crew operates the shunters pushbutton to activate the crossing
- Rail traffic may proceed over the level crossing once the level crossing equipment has operated correctly.
- After the rear most vehicle has cleared the level crossing the level crossing equipment deactivates.

Dampier Street level crossing

Dampier Street level crossing at 454.804 km is a Type F actively controlled level crossing with flashing lights, half booms and bells.

This crossing is to be manually activated for Down direction rail traffic movements.

The level crossing will automatically operate for Up direction rail traffic movements.

Bell operation shall be silenced between the times of 2200hrs and 0600hrs daily.

Manual Operation switch, Test switch, emergency keys and axle counter reset switch is provided

Dampier Street level crossing will be remotely monitored by the Cerberus Alarm Monitoring System.

Signage 'DO NOT PUT ON OR OFF AT THIS LOCATION' to be affixed on the sides of the level crossing hut facing approaching rail traffic.

Advanced Warning Lights

Advanced warning lights for road traffic will be provided and activate 70 seconds prior to the level crossing beginning to activate.

Down direction sequence of Operation for Dampier Street

- Rail traffic comes to a stand at the STOP sign prior to crossing Dampier Street
- Rail traffic crew operates the Shunters Pushbutton to activate the crossing.
- 70 seconds after the Shunters Pushbutton has been operated and the advanced warning lights for road traffic have been displayed, the level crossing equipment will commence to operate.
- Rail traffic may proceed over the level crossing once the level crossing equipment has operated correctly
- After the rear most vehicle has cleared the level crossing, the level crossing equipment deactivates and ceases the operation of the advanced warning lights for road traffic.
- If the rail traffic crew has operated the level crossing but is unable to proceed over the level crossing, then the level crossing and advanced warning lights can be cancelled by the operation of the Cancel push button.

Up direction sequence of Operation for Dampier Street

- Up rail traffic proceeding towards Dampier Street will activate the track circuit for the advanced warning lights for road traffic and activation of the level crossing.
- After the rear most vehicle has cleared the level crossing, the level crossing equipment deactivates.

West Tamworth

452.759 km

Shunting trains between 450m and 900m in length at West Tamworth (Down Train) to proceed to Westdale.

- Down train arrives on the Main line at West Tamworth from Werris Creek direction.
- Train stops Sydney side of K Frame and rail traffic crew must:
- Secure the train on the Main line.
- Insert operators key in Duplex Lock K and operate K frame.
- Lead locomotive to be detached and shunted on to the Westdale Branch via K frame and secured on the Sydney side of K frame.
- Shunt a maximum length of 450m of the train (1st portion) from Main line on to the Westdale Branch via K frame with the remaining rear portion of the train secured on the Main line with the handbrakes applied.
- Do not report arrival at West Tamworth until all rail traffic is wholly within West Tamworth Shunt Limit signs.
- Detach and secure the locomotive from the 1st portion of train near E frame.
- Shunt the locomotive that was secured on the Sydney side of K frame onto the vehicles standing between K and E frames.
- When coupled, the 1st portion of train is to proceed across Gunnedah Road and to come to a stand clear of the Shunt limit sign near Dampier Street
- The locomotive stabled near E frame to be shunted on to the 2nd portion of the train standing on the Main line via K or E frame and coupled to the train.
- Shunt the 2nd portion of train on to Westdale Branch via K frame.
- When the train is clear of K frame, restore K frame to normal and remove the operator's key
- Propel the 2nd portion of the train across Gunnedah Road and couple to the 1st portion.
- Once coupled and in possession of an appropriate authority, train will travel as a push pull train from the Shunt Limit sign at Dampier Street to the Westdale terminal.

Shunting trains between 450m and 900m in length at West Tamworth (Up Train) from Westdale.

- Up train from Westdale terminal with a locomotive at either end is to come a stand clear of the stop sign at Gunnedah Road level crossing, ensuring that the rear of the train is clear of Dampier Street level crossing and rail traffic crew must:
- Divide the train, the 1st portion of the train is to be shunted towards 'E' frame, with the 2nd portion to be secured on the Westdale Branch.
- On arrival of the 1st portion at 'E' frame, the locomotive is to be detached from the vehicles and will travel via 'E' frame towards Dennison street and stop clear of X MLI.
- Locomotive then traverses the Main line from 'E' frame to clear of the Sydney side of 'K' frame.
- 'E' Frame MUST be restored to the normal position before obtaining Duplex Lock 'K' release.
- Locomotive will be shunted from the Main line via 'K' frame and coupled to the 1st portion standing between 'K' and 'E' frames on the Westdale Branch.
- The 1st portion is to proceed from Westdale Branch towards Up Shunt Limit sign on the Main Line and once the rear most vehicle is clear of K frame, the train is to be brought to a stand.
- Normalise 'K' frame and MUST retain possession of the key from Duplex Lock 'K'. The operators key will remain trapped in Duplex Lock 'K' as this will hold 'X' MLI at stop.

West Tamworth

452.759 km

- Propel train on Main Line towards 'X' MLI stopping when clear of 'K' frame and secure the 1st portion.
- Locomotive is then detached and travels on the Main line and is secured on the Sydney side of 'K' frame.
- The 2nd portion of the train will then be propelled from the standing location between Gunnedah Road and Dampier Street and proceed to a location in clear between 'K' and 'E' frames.
- The locomotive on the Main line is then shunted from the Main line via 'K' frame and coupled to the locomotive of 2nd portion standing on the Westdale Branch.
- The 2nd portion is shunted from the Westdale Branch on to the Main line via 'K' frame.
- Restore 'K' frame and remove the operators key from Duplex Lock 'K'.
- The 2nd portion of the train is propelled and coupled to the 1st portion of the train standing on the Main line.
- The train may depart after completing all required inspections and Safeworking.

Westdale line

The Westdale line is connected to the Main Line within West Tamworth yard.

Maximum permitted train length on Westdale Branch

The maximum permitted train length from West Tamworth to Westdale is 900m.

A maximum of 900m permits a train to stand between Gunnedah Road level crossing axle counters and the Shunt Limit sign at Dampier Street without affecting level crossing equipment.

Pushbutton Units

Pushbutton units are provided to activate or cancel level crossing equipment.

Where MLI's are provided, pushbutton units allow the suppression of level crossing warning equipment to facilitate shunting operations.

The MLI will display a steady red aspect when Duplex keys are removed, CANCEL pushbutton are operated or the MLI fails.

This will avoid unnecessary operation of the level crossing warning equipment whilst track circuits are affected.

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

To operate the crossing a competent worker must:

- Unlock the pushbutton unit
- Press "LEVEL CROSSING START" button to commence operation.
- Wait for level crossing to be fully activated before proceeding.
- After the rear most vehicle has cleared the crossing, the level crossing will cease to operate.
- Press "LEVEL CROSSING CANCEL" to cancel operation of the crossing.
- If the level crossing has commenced operation and the movement does not proceed, the level crossing protection equipment must be cancelled by pressing the CANCEL pushbutton.
- The operation of Dampier Street push button has a dual function, it shall operate the advanced warning lights 70 seconds before Dampier Street level crossing operates.

West Tamworth

452.759 km

An indication shall be provided at the pushbutton to inform the operator that the sequence has commenced.

- Flashing green – “Advanced Warning Commenced”
- Steady green – “Crossing Operation Commenced”
- The warning indications will be cancelled automatically when the rear most vehicle has cleared the level crossing.

Axle Counters

If an axle counter incorrectly shows a section as occupied due to a miscount of axles, power failure or incorrect operation, a competent worker must reset the system.

To reset the axle counter;

- Turn switch to left and hold for minimum 1 second
- Turn switch to right and hold for minimum 1 second
- Return switch to centre (normal) position.

If the track indications are green the axle counter section is unoccupied.



WARNING

The axle counter must not be reset without Network Control Officer authorisation.

If the axle counter fails, a competent worker may operate the level crossing in accordance with Network Procedure CNPR 715 Protecting Type F level crossings.