

MANUAL BLOCK WORKING

REFERENCE DOCUMENTS

[ANSY 512 Manual Block Working](#), [ANWT 316 Track Vehicles](#), [ANSG 608 Passing Signals at STOP](#) and [ANPR 722 Manual Block Working](#)

WHY

Recently a few inconsistencies have been identified when track vehicles are undertaking Basic Block Working within controlled locations and sections. This document will clarify the use and restrictions of Basic Block Working.

PRINCIPLE OF MANUAL BLOCK WORKING

Manual block working manually prevents rail traffic entries into occupied blocks. The occupied Block may not show on the Phoenix panel because the rail vehicle travelling on the network may not operate (or reliably operate) track circuits.

WHAT IS MANUAL BLOCK WORKING/BASIC BLOCK WORKING

Manual Block Working is the overall type of working that requires Network Controllers to manually maintain blocks between rail traffic movements. We have two types of Manual Block Working available for the Network Controller to use, Basic Block Working and CAN Block Working (not covered in this document).

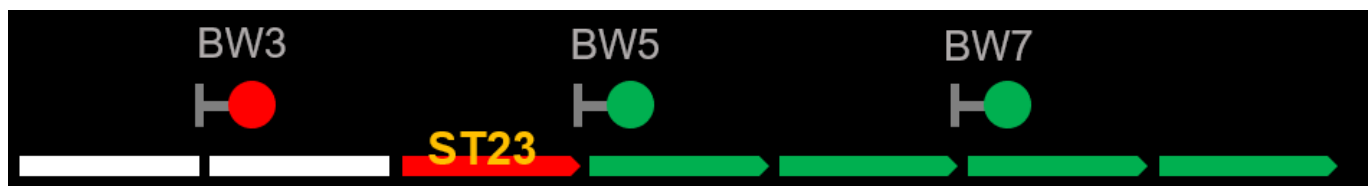
BASIC BLOCK WORKING

Due to the signalling system potentially not detecting the rail vehicle, Signals are manually restored to STOP, and Blocking Facilities are manually applied to prevent following movements entering the block by the Network Controller to prevent any unintentional clearing of signals protecting the movement (Network Controller **must** ensure all points of entry to the rear of the movement are protected and any auto clear has been disabled).

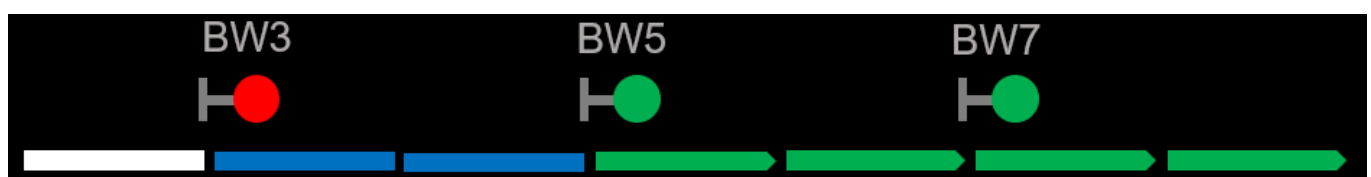
When the route is set for the movement the interlocking provides the route integrity as an engineering control (Blocking Facilities are not required over the entire cleared route).

The Network Controller will advise Rail Traffic Crew they are to be worked under Basic Block Working Conditions before they pass the entry end limit of the block. When the movement passes the signal at the entry end limit, the Network Controller then sets the protecting signal at STOP and applies Blocking Facilities.

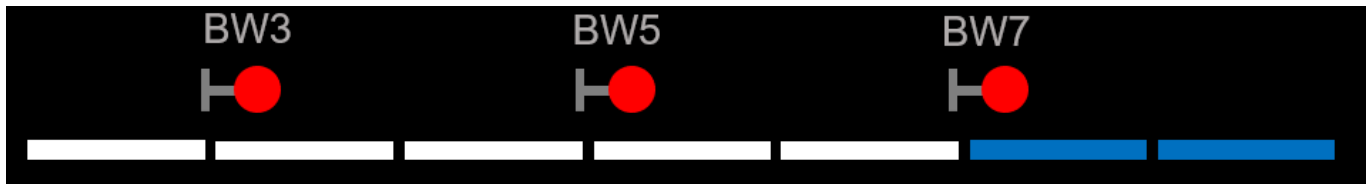
The following example shows ST23 travelling on signalling and operating track circuits as designed. The detection of ST23 will prevent signal BW3 clearing until the block is cleared.



The next example is how Basic Block Working is applied if ST23 did not reliably operate track circuits (Blocking Facilities could also be applied directly to signal BW3). The manually applied Blocking Facility prevents the clearing of BW3 into an occupied block.



In the case of the previous diagram, the Network Controller **must** request a clearance from the rail traffic crew past signal BW7. When the assurance is received, BW7 can be restored to STOP with Blocking Facilities applied then the Blocking Facilities for BW3 can be removed (and BW5 can also be restored to STOP).



Blocking Facilities **must** always be in place to prevent following movements into the Block Working limits

RESTRICTIONS

Manual Block Working is a System of Safeworking and not available for work on track activities.

The same as normal rail traffic operations, rail traffic under Basic Block Working conditions **must** not change direction without the authority of the Network Controller.

Track Vehicles may travel as a train under Basic Block Working conditions, but the movement must comply with the above requirements

PASSING SIGNALS AT STOP

The same as normal rail traffic operations, signals available to be cleared under Basic Block Working **must** be cleared.

Rule ANSG 608 Passing Signals at STOP is very clear on this requirement.

This Rule for passing signals at STOP applies to running signals that cannot be cleared for an intended movement.

If the signalling system is available for an intended movement, it **must** be used.

SUMMARY

- Manual block working manually prevents rail traffic entries into occupied blocks
- Network Controllers **must** manually maintain blocks between rail traffic movements using Basic Block Working
- The same as normal rail traffic operations, a cleared route provides engineering protection to the front of a movement
- The Network Controller advises of clearance locations to the Rail Traffic Crew under Basic Block Working
- Signals must be restored to STOP and Blocking Facilities **must** be applied to the rear of a movement under Basic Block Working Conditions
- Basic Block Working **must** not to be used for undertaking work on track activities
- Rail traffic under Basic Block Working **must** not change direction without the authority of the Network Controller
- If the Interlocking is available to clear signals, it **must** be used.
- Track Vehicles may travel as a train under Basic Block Working conditions

WANT TO KNOW MORE?

Talk to the Train Transit Manager, Operations Trainers or the Operations Delivery Training Manager/Advisor if you have any questions.

Links to External Documents are current at the time of Publication

Ver. 1

ARTC