

Using a Track Work Authority

Introduction

A Track Work Authority (TWA) allows track work on running lines between rail traffic movements. Protection Officers manage the approach of rail traffic to worksites. Rail traffic may pass through worksites only under controlled conditions.



WARNING

Workers must be in safe places before rail traffic is allowed to approach beyond the inner Handsignaller or pass through the limits of worksites.

Obtaining a Track Work Authority

The Protection Officer obtains a TWA from the Network Control Officer responsible for the portion of track.

Protection Officer

1. Advise the Network Control Officer:

- your name, and
- your contact details, and
- your Safeworking designation, and
- the type of work to be done, and
- the intended duration

2. Identify the track name and nominate the worksite location as being:

- completely within the limits of a platform, or
- between any two of the following locations:
 - Signal
 - Platform
 - a set of points.

Signals and points must be identified by their numbers, and platforms must be identified by the station name and platform number.

Identify the worksite kilometre location and protection arrangements to be used. If signals are to be used for protection, nominate the signal numbers.

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3. Ask the Network Control Officer for the Train Running Information for rail traffic planned to pass through the worksite.

**WARNING**

Train Running Information provides only a guide to planned movements and cannot be relied upon.

Network Control Officers

4. Confirm the TWA details including the:
 - Protection Officer names and contact details
 - type of work
 - duration of work
 - track name
 - nominate worksite kilometre location
 - protection arrangement to be used.
5. Use the reference points provided by the Protection Officer to identify the worksite location and make sure that:
 - the last rail traffic to enter the affected portion of track is identified and its location is known
 - there is no rail traffic approaching the worksite.
6. Advise the Protection Officer:
 - the Train Running Information
 - the identification number of the last rail traffic to enter the affected portion of track and its known location
 - that there is no rail traffic approaching the worksite.
7. Issue the Track Work Authority to the Protection Officer.
8. Make a permanent record of the times and details of the authorisation and issue of the TWA.

Protection Officer

9. Confirm with the Network Control Officer:
 - the Train Running Information provided
 - the identification number of the last rail traffic to enter the affected portion of track and its known location
 - that there is no rail traffic approaching the worksite
10. When authorised, put the required protection in place.

Using a Track Work Authority

Jointly with a Track Occupancy Authority (TOA)

A TWA may be authorised in an area where a Track Occupancy Authority (TOA) is current.

Network Control Officer

1. Advise the Protection Officer seeking the TWA to consult with the Protection Officer holding the TOA.
2. Confirm that the Protection Officers:
 - have consulted with each other, and
 - the Protection Officer holding the TOA agrees with the arrangements.

TWA Protection Officer

3. Confirm that the worksite will be protected:
 - for bidirectional lines, in both directions, or
 - for unidirectional lines, in the normal direction of travel.

If the TOA is for a wrong running direction track vehicle movement, Railway Track Signal protection must be placed at least 500m and no more than 1000m from the worksite in the wrong running direction.

Network Control Officers and Protection Officers

4. Make a permanent record of the times and details of the authorisation and issue of the TWA.

Protecting worksites



WARNING

The outer Handsignaller must be put in place before the inner Handsignaller.

Protection Officer

1. Protect worksites by:
 - managing rail traffic approaches to worksites, and
 - managing rail traffic transits through worksites, and
 - if necessary, managing rail traffic on other lines, and
 - making sure that all protection is correctly placed, and
 - where practicable, reducing the number of points of entry to a worksite area by securing points, or otherwise disabling or isolating the points.

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Managing signals affected by work on track

Work on track may affect signals so they display STOP. In this procedure these signals are called affected signals.

Protection Officer

1. Arrange for affected signals to be set and held at STOP.
2. Place a Handsignaller at each affected signal, in the direction of approaching rail traffic.
3. Tell the Handsignaller to display a STOP handsignal to approaching rail traffic.
4. If the affected signal is a controlled absolute signal, direct the Handsignaller to:
 - ask the Network Control Officer to clear the signal, or
 - get the Network Control Officer's authority to allow the rail traffic to pass the signal at STOP.
5. If the affected signal is a permissive signal, give the Handsignaller instructions about allowing rail traffic to pass the signal at STOP.

Handsignaller

6. If the affected signal is a permissive signal, and once rail traffic has stopped, follow the Protection Officer's instructions about allowing rail traffic to pass the signal at STOP.
7. If the affected signal is a controlled absolute signal, following the Protection Officer's directions, and get the Network Control Officer's authority to allow rail traffic to pass the signal at STOP.

Managing rail traffic approaches to worksites

Protection Officer

1. Decide if it is safe for rail traffic to transit the worksite.
2. Decide the appropriate speed for rail traffic to transit the worksite.
3. Tell the inner Handsignaller whether to handsignal Rail Traffic Crews to:
 - travel through the worksite at normal speed, or
 - travel through the worksite at caution, or
 - stop and be told about special travel conditions.

Using a Track Work Authority

Protecting worksites using Handsignallers only

Protection Officer

1. Choose places where the Handsignallers and Rail Traffic Crews can see each other clearly.
2. Place an outer Handsignaller and two Railway Track Signals 2500m from where the inner Handsignaller will be positioned in the direction of approaching rail traffic.
3. Tell the outer Handsignaller to display a CAUTION handsignal to approaching rail traffic.
4. Place an inner Handsignaller and three Railway Track Signals between 500m and 1000m from the worksite in the direction of approaching rail traffic.
5. Tell the Inner Handsignaller to display a STOP handsignal to approaching rail traffic.

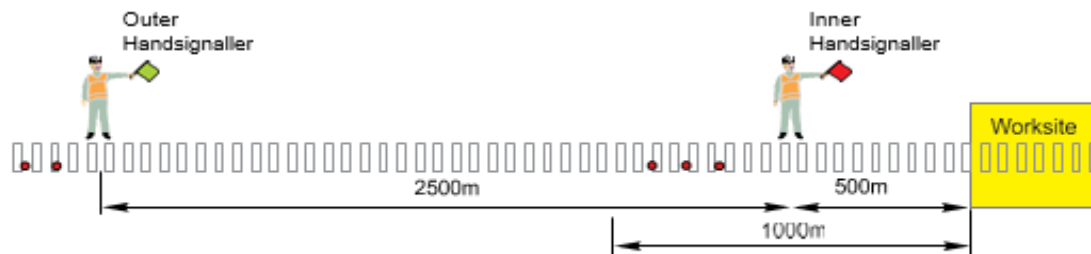


FIGURE 1: Example of protecting a worksite using Handsignallers only

Protecting worksites using Handsignallers at protecting signals

To use a signal for protection, arrange to have it set and kept at STOP.

Signals between 500m and 1000m from the worksite

Protection Officer

1. Arrange for the last signal, more than 500m but less than 1000m from the worksite in the direction of approaching rail traffic, to be set and kept at STOP:
 - at a controlled absolute signal by asking the Network Control Officer, or
 - at a permissive signal, by arranging with the authorised Maintenance Representative.
2. Place an inner Handsignaller and three Railway Track Signals at this last signal.

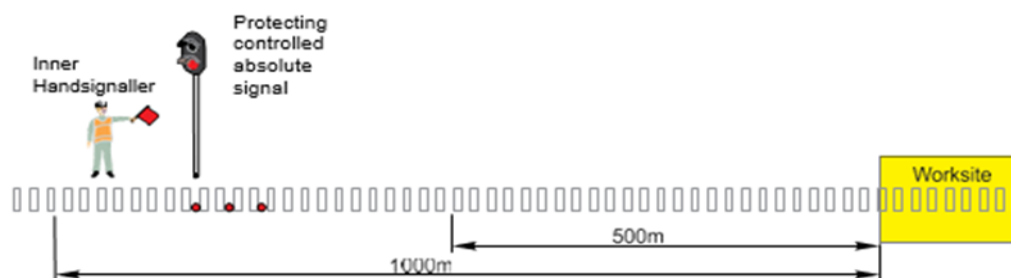


Figure 2: Example of protecting a worksite between 500m and 1000m from a controlled absolute signal that can be held at STOP.

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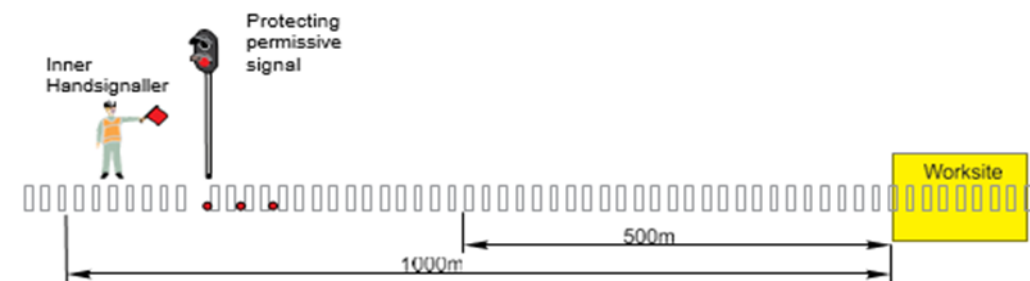


Figure 3: Example of protecting a worksite between 500m and 1000m from a permissive signal that can be held at STOP.

- 3. If there are affected signals less than 500m from the worksite, place a Handsignaller at each affected signal.

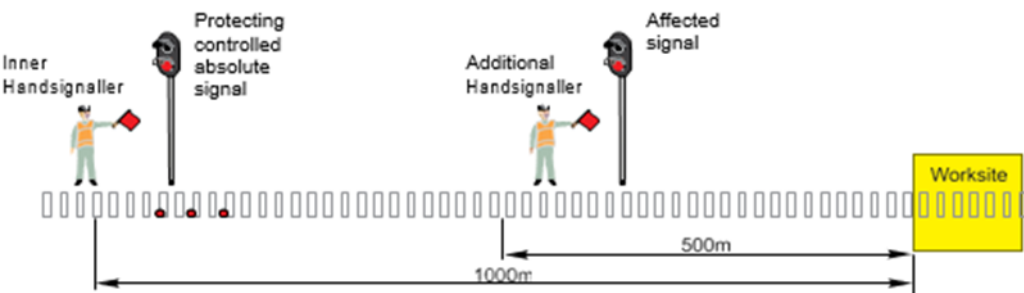


Figure 4: Example of additional Handsignaller placed if work affects a signal between the worksite and the protecting controlled absolute signal

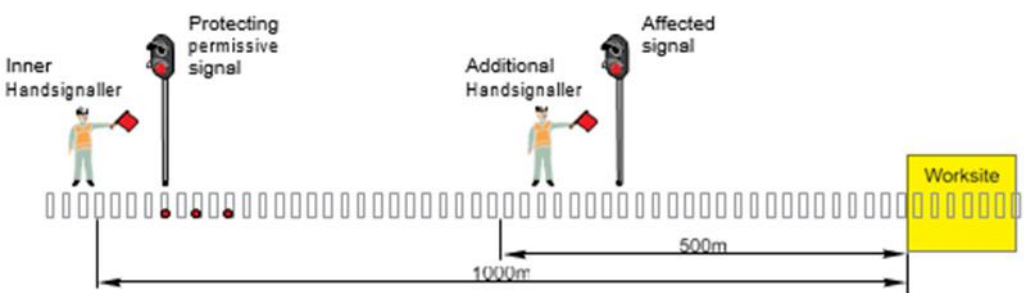


Figure 5: Example of additional Handsignaller placed if work affects a signal between the worksite and the protecting permissive signal

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Signals more than 1000m and less than 3500m from the worksite

Protection Officer

If there are no signals between 500m and 1000m from the worksite in the direction of approaching rail traffic:

1. Place an outer Handsignaller and three Railway Track Signals at the last signal within 2500m from where the inner Handsignaller will be positioned in the direction of approaching rail traffic.
2. Place the inner Handsignaller and three Railway Track Signals between 500m and 1000m from the worksite.
3. If the distance between the outer Handsignaller and the inner Handsignaller at the signal is less than 2500m, tell the outer Handsignaller to warn Rail Traffic Crews about the reduced distance.

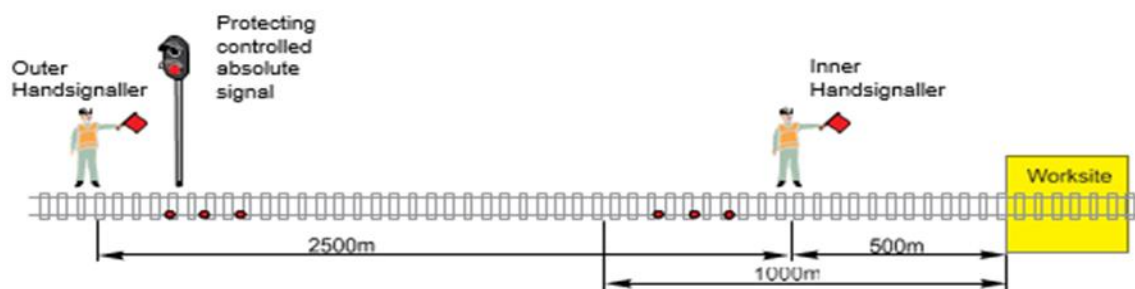


Figure 6: Example of protecting a worksite with a controlled absolute signal more than 1000m and less than 3500m from the worksite

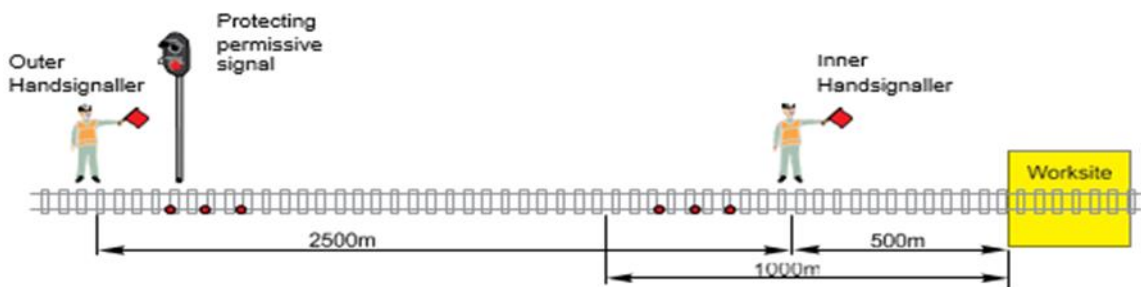


Figure 7: Example of protecting a worksite with a permissive signal more than 1000m and less than 3500m from the worksite

Using a Track Work Authority

At least two controlled absolute signals within 500m of the worksite

Protection Officer

If there are at least two controlled absolute signals within 500m of the worksite:

1. Place the inner Handsignaller and three Railway Track Signals at the first signal in the direction of approaching rail traffic.
2. Ask the Network Control Officer to set and keep both signals at STOP.
3. If the other signals can be cleared, further Handsignallers are not necessary.

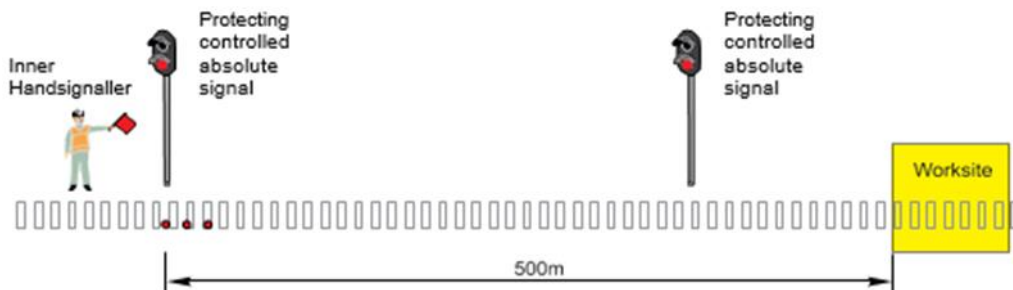


Figure 8: Example of protecting a worksite using two controlled absolute signals

4. If the affected controlled absolute signals cannot be cleared, place a Handsignaller at each signal.

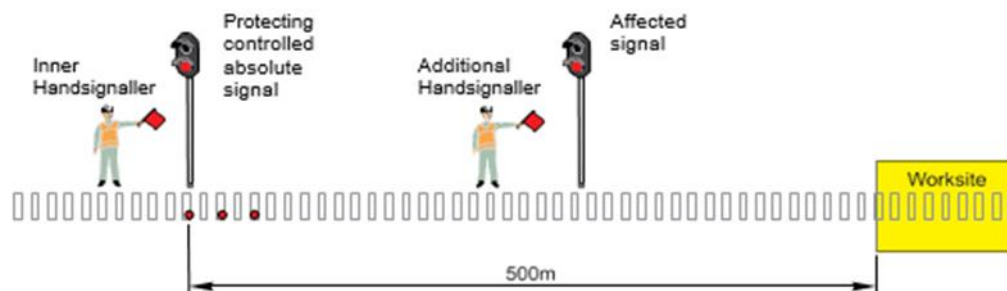


Figure 9: Example of additional Handsignaller when the signal between the worksite and the protecting signal cannot be cleared

Protecting a work site using a Handsignaller at a single line crossing location

Protection Officer

If two adjacent signals on converging tracks are used to protect a worksite:

1. Place three Railway Track Signals at each signal in the direction of approaching rail traffic.
2. Place the Handsignaller in a safe place, where approaching rail traffic on either line can be seen.

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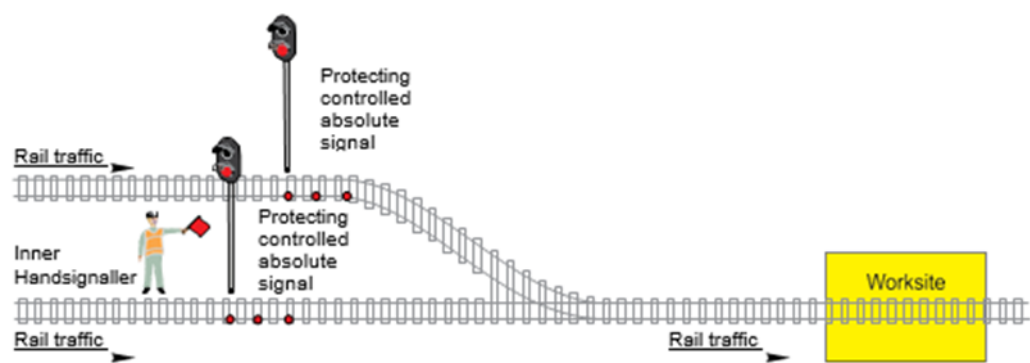


Figure 10: Example of Handsignaller placed to direct traffic at a single line crossing location

Managing rail traffic transits through worksites using Handsignallers

Protection Officer

1. Before authorising the inner Handsignaller to signal rail traffic to approach and pass through a worksite, make sure that:
 - workers have gone to the designated safe places, and
 - the line is clear of workers and equipment between the worksite and the inner Handsignaller’s location, and
 - the line is clear and safe for the passage of rail traffic through the worksite, and
 - if a permissive signal is being kept at STOP to protect a worksite, the line is clear to the first signal beyond the worksite.
2. If it is safe for rail traffic to pass the outer Handsignaller at a controlled absolute signal, tell the Handsignaller to take the following actions:

Movement allowed	Outer Handsignaller action
Rail traffic is to proceed at caution	<ol style="list-style-type: none">1. After rail traffic has stopped, remove the Railway Track Signals from the line.2. If required, tell the Rail Traffic Crew about the reduced distance to the inner Handsignaller.3. Ask the Network Control Officer:<ul style="list-style-type: none">• to clear the controlled absolute signal held at STOP, or• to give authority to proceed past the signal at STOP.4. Signal PROCEED AT CAUTION to the Rail Traffic Crew.

3. If it is safe for rail traffic to pass the inner Handsignaller at a controlled absolute signal, and pass through the worksite, tell the Handsignaller to take the following actions:

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Movement allowed	Inner Handsignaller action
Rail traffic is to proceed at normal speed	<ol style="list-style-type: none"> 1. After rail traffic has stopped, remove the Railway Track Signals from the line. 2. Ask the Network Control Officer to clear the controlled absolute signal held at STOP. 3. Signal PROCEED to the Rail Traffic Crew.
Rail traffic is to proceed at caution	<ol style="list-style-type: none"> 1. After rail traffic has stopped, remove the Railway Track Signals from the line. 2. Ask the Network Control Officer: <ul style="list-style-type: none"> • to clear the controlled absolute signal held at STOP, or • if the signal held at STOP cannot be cleared, to give authority to proceed past the STOP signal. 3. Signal PROCEED AT CAUTION to the Rail Traffic Crew.
Rail traffic is to proceed under special conditions	<ol style="list-style-type: none"> 1. Signal the Rail Traffic Crew to STOP. 2. After rail traffic has stopped, tell the Rail Traffic Crew: <ul style="list-style-type: none"> • the maximum speed allowed, and • about further Handsignallers ahead, and • in writing, about multiple worksites ahead. 3. Remove the Railway Track Signals from the line. 4. Ask the Network Control Officer: <ul style="list-style-type: none"> • to clear the controlled absolute signal held at STOP, or • to give authority to proceed past the STOP signal. 5. Signal PROCEED AT CAUTION to the Rail Traffic Crew.

4. If it is safe for rail traffic to pass the outer Handsignaller at a permissive signal, tell the Handsignaller to take the following actions:

Movement allowed	outer Handsignaller action
Rail traffic is to proceed at caution	<ol style="list-style-type: none"> 1. After rail traffic has stopped, remove the Railway Track Signals from the line. 2. If required, tell the Rail Traffic Crew about the reduced distance to the inner Handsignaller. 3. Give authority to proceed past the signal at STOP. 4. Signal PROCEED AT CAUTION to the Rail Traffic Crew.

Using a Track Work Authority

If it is safe for rail traffic to pass the inner Handsignaller at a permissive signal, and pass through the worksite, tell the Handsignaller to take the following actions:

Movement allowed	inner Handsignaller action
Rail traffic is to proceed at caution	<ol style="list-style-type: none"> 1. After rail traffic has stopped, remove the Railway Track Signals from the line. 2. Give authority to proceed past the STOP signal. 3. Signal PROCEED AT CAUTION to the Rail Traffic Crew.
Rail traffic is to proceed under special conditions	<ol style="list-style-type: none"> 1. Signal the Rail Traffic Crew to STOP. 2. After rail traffic has stopped, tell the Rail Traffic Crew: <ul style="list-style-type: none"> • the maximum speed allowed, and • about further Handsignallers ahead, and • in writing, about multiple worksites ahead. 3. Remove the Railway Track Signals from the line. 4. Give authority to proceed past the STOP signal. 5. Signal PROCEED AT CAUTION to the Rail Traffic Crew.

5. If it is safe for rail traffic to pass the inner Handsignaller not at a signal, and pass through the worksite, tell the Handsignaller to take the following actions:

Movement allowed	inner Handsignaller action
Rail traffic is to proceed at normal speed	<ol style="list-style-type: none"> 1. Remove the Railway Track Signals from the line, if there is time to do it safely. 2. Signal PROCEED to the Rail Traffic Crew.
Rail traffic is to proceed at caution	<ol style="list-style-type: none"> 1. Remove one Railway Track Signal from the line, if there is time to do it safely. 2. Signal PROCEED AT CAUTION to the Rail Traffic Crew.
Rail traffic is to proceed under special conditions	<ol style="list-style-type: none"> 1. Signal the Rail Traffic Crew to STOP. 2. After rail traffic has stopped, tell the Rail Traffic Crew: <ul style="list-style-type: none"> • the maximum speed allowed, and • about further Handsignallers ahead, and • in writing, about multiple worksites ahead. 3. Signal PROCEED AT CAUTION to the Rail Traffic Crew.

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6. If it safe for rail traffic to pass the outer Handsignaller not at a signal, tell the Handsignaller to take the following action:

Movement allowed	outer Handsignaller action
Rail traffic is to proceed at caution	1. Signal PROCEED AT CAUTION to the Rail Traffic Crew.



WARNING

If there is not enough time to remove the Railway Track Signals safely, leave them on the track and signal STOP to approaching rail traffic.

7. Make sure the inner and outer Handsignallers have replaced the Railway Track Signals after rail traffic has passed.

Rail traffic clearing worksites

Protection Officer

1. Tell Rail Traffic Crews that their rail traffic is clear of the worksite by:
 - verbal communication with the Rail Traffic Crew, or
 - placing a CLEARANCE sign at least 50m beyond the worksite.

Rail Traffic Crew

2. Resume normal speed once the rear of the last vehicle has passed the CLEARANCE sign.

Using clearance Handsignallers if controlled absolute signals are used to protect the worksite and cannot be cleared

Protection Officer

1. Place a *clearance Handsignaller* at the first signal beyond the worksite that can display a STOP indication.

Clearance Handsignaller

2. Make sure that the line is clear for rail traffic to approach.
3. Tell the Network Control Officer and the Protection Officer when rail traffic has passed complete beyond the signal and that the line is clear.

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Protection Officer

1. Place a clearance Handsignaller at the first signal beyond the worksite that can display a STOP indication.

Clearance Handsignaller

2. Make sure that the line is clear for rail traffic to approach.
3. Tell the Protection Officer when rail traffic has passed complete beyond the signal and that the line is clear.

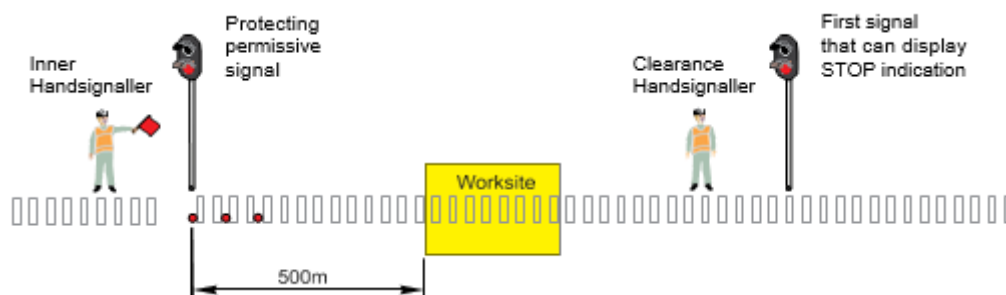


FIGURE 11: Example of placement of a clearance Handsignaller at the first signal that can display a STOP indication, to tell the Protection Officer when the line is clear for rail traffic to approach

Returning the track to service

Protection Officer

1. Make sure that all equipment is clear of the track.
2. Make sure that all workers have cleared the worksites.
3. Make sure that:
 - protection has been removed, and
 - if necessary, signals have been restored to normal use, and
 - the track is safe for use.
4. Advise the Network Control Officer that the work is completed and about any restrictions on track use.
5. Advise the Network Control Officer that the TWA is fulfilled.

Network Control Officer

6. Confirm that the TWA is fulfilled.

Keeping records

Network Control Officers and the Protection Officer must keep permanent records about the TWA details, including protection arrangements.

Using a Track Work Authority

Related CRN Network Procedures

CNPR 704 Using infrastructure booking authorities

CNPR 707 Clipping points

CNPR 709 Using Railway Track Signals

CNPR 712 Protecting work from rail traffic on adjacent lines

Effective date

30 January 2022