

Safely Work in the Rail Corridor

The SWIRCbook



Version 1.0





MMETRO

This course was developed by the Joint Coordination Committee | Safety Subcommittee for the Level Crossing Removal project.





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Learning objectives

- Respect the rail
- Work together
- Understand rail safety risks
- Understand and implement risk controls
- Remember the key roles and their responsibilities





Talking rail

Know your acronyms... what does each one stand for?

CSR	Combined Services Route	
EAP	Electrical Access Permit	
NAE	Notification and Approval for Excavation	
0000	Absolute Occupation	
OHLE	Overhead Line Equipment	
OSO	Overhead Safety Observer	
POS	Position of Safety	
PTDT	Permit to Disturb Track	
PTF	Permit to Foul	
PTW	Permit to Work Near (electrical)	
RIW	Rail Industry Worker (card)	
RSWHA	Rail Safety Worksite Hazard Assessment	
SAD	Safe Approach Distance (to electrical infrastructure)	
SWMS	Safe Work Method Statement	
TFPC	Track Force Protection Coordinator	
USO	Underground Services Observer	





Who's who on the track

Overhead Safety A person competently trained in 'live' line **Observer (OSO)** protection and implementation who watches and stops plant from breaching safe approach distances to electrical infrastructure. Overhead Safety Observers wear an orange hard hat. Rail Industry As a RIW you are required to: Worker (RIW) be fit for work at all times • carry your RIW card at all times • always wear mandatory PPE be free from fatigue, drugs and alcohol Rail Industry Workers hold a valid medical assessment wear a white hard hat. attend and sign onto the pre-work brief and safety documentation always follow TFPC and WGS instructions immediately report all incidents, near misses, issues or concerns to your WGS. Track Force A trained and competent person who assesses Protection and implements worksite protection Coordinator arrangements: (TFPC) easily identified by a blue hard hat marked TFPC must be onsite prior to work commencing completes the RSWHA You'll recognise the delivers the rail safety briefing TFPC from their blue identifies a Position of Safety (POS). hard hat. Work Group Responsible for supervising onsite daily tasks: Supervisor (WGS) delivers the work pre-start brief manages worksite activities works closely with TFPCs communicates essential information to the Your WGS wears a

• manages all changes to work scope.

work group

white hard hat.





Listen, learn and live at pre-starts



The purpose of a rail safety pre-work brief is to ensure you are up to date with daily changes to onsite rail construction.

Rail safety brief	 Conducted by a TFPC and includes the following information: Position of Safety (POS) Safe working protection in place Emergency information Rail operations.
Site pre-start brief	 Includes the following information: Fitness for work Site safety issues Incidents/alerts Work group tasks Works and progress Weather conditions Other work groups onsite.
Pre-work brief	 Conducted by a WGS and includes the following information: Work group tasks schedule Work area hazards Safety documentation Other work groups on site.





Interactions and working together

Many activities take place while working on or near the rail. You must be aware of the activities around you and think about how to protect the operational rail network, the travelling public and your workmates.



Follow all safety instructions Report hazards and incidents





Moment of change



Things don't always go to plan when working on the rail.

When can it happen?

- Scope change
- Not in original plan
- Deviation from approved documents e.g. SWMS.

What should you do?

- STOP work immediately
- Talk to a supervisor
- Reassess the work activity
- Talk to a TFPC (works' reassessment required).

Don't...

- Be afraid to ask
- Ignore it
- Continue working.





Commit to be fit for work

Your first occupation

Be prepared for:

- Intensity of works
- Congestion on the rail network
- Changes to shifts and hours.

Fatigue

Fatigue can lead to:

- Reduced awareness of your environment i.e. rail network
- Slower reaction time to incidents and emergencies
- Reduced concentration
- Poor hand eye coordination
- Increased risk taking.

Drugs and alcohol

Being under the influence of drugs and alcohol can lead to:

- Errors
- Poor judgment
- Removal from the rail network i.e. sent home
- Losing your MTM role.



The Blood Alcohol Limit for working on the MTM network is 0.00.





Types of safe working protection

Absolute Occupation	 A section of track is closed for a specified amount of time Allows general maintenance or major infrastructure works to be completed
Track Force Protection	 Required when work involves obstructing the track with plant or equipment, i.e. a major task/activity A TFPC must be on site at all times Utilises ATWs and handsignallers
Lookout Protection	 Required for minor works invoving light powered and non-powered tools only A qualified handsignaller or lookout must be on site at all times Only takes place under the direction of a TFPC







Stop the drop





Risks

- Fouling the track
- Public danger
- Workers injured

Controls

- Screen panels/barriers
- Tethering of tools
- Exclusion zones
- Good housekeeping
- Hard hat chinstraps







Protect overhead rail assets Look up and live

HAZARD: Live electrical overhead lines and infrastructure



Risks and consequences

- Contact by personnel or plant causing electrocution
- Plant strikes overhead line equipment causing damage
- Shorting spark gaps can cause structures to become 'live'
- Infrastructure failure delays trains.





Safe Approach Distances (SAD)

There are strict limits of approach for working around rail electrical infrastructure.



Works outside of 6.4 metres

A permit or OSO is not required for works outside of 6.4 metres.

Works between 2 and 6.4 metres

Site must be inspected by MTM Electrical Overhead Department. Overhead Safety Observer required at all times.

Works within 2 metres

Permit to Work required. NO contact with electrical wiring! Line must be isolated. NO lifting over exposed equipment!





Protect underground rail assets: Can you dig it?

HAZARD: Working near underground rail assets

Risks

- Electrocution
- Workers hit by moving objects
- Striking services
- Obstructing the track
- Public danger
- Damage to other assets

Controls

- Barriers
- PTWs
- MTM's 4 stage process:
 - **1** Initial proving
 - 2 Notification and Approval
 - to Excavate (NAE)
 - 3 Physical proving
 - 4 Excavation commences.











Protect the operational network

HAZARD: Working on the MTM rail network

Risks

- Commuter safety
- Pedestrian safety e.g. station precincts
- Traffic (public) safety
- Damaging assets.

Controls

- Barriers and signage
- Asset protection plan
- Traffic management plan
- Pedestrian movement plan
- Access/egress

