



SAFETY

PERSONAL TRACK SAFETY TRAINING



LAND ACKNOWLEDGEMENT

Let us take a moment to acknowledge we are on lands that have been, and continue to be, home to many Indigenous Peoples including the Anishnabeg, the Haudenosaunee and the Huron-Wendat peoples.

We are all Treaty people. Many of us have come here as settlers, as immigrants or involuntarily as part of the trans-Atlantic slave trade, in this generation, or generations past.

We acknowledge the historic and continued impacts of colonization and the need to work towards meaningful reconciliation with the original caretakers of this land.

We acknowledge that Metrolinx operates on territories and lands covered by many treaties that affirm and value the rights of Indigenous communities, Nations and Peoples.

We understand the importance of working towards reconciliation with the original caretakers of this land. At Metrolinx, we will conduct business in a manner that is built on a foundation of trust, respect and collaboration.

LEARNING OBJECTIVES

- Identify hazards, damages, security risks and other emergencies and follow reporting requirements.
- Recall various railway terms and definitions.
- Identify, communicate, and comply with instructions from the Protecting Foreman at your worksite.
- Identify your location and go to the Position of Safety when a train approaches.
- Follow personal protective equipment requirements.
- Describe the importance of a Job Briefing Session before starting the work.
- Explain the importance of work requirements before starting the work.
- Differentiate the elements and requirements between the different forms of Positive Protection.

PURPOSE OF THE COURSE



- Provide foundational knowledge on rail safety requirements on Metrolinx properties and projects.
- Recognize that working on Metrolinx's rail network is dynamic and unique in every location.
- Summarize safety requirements when working around active trains and live tracks.
- Completion of this training does not qualify you to enter the Right of Way (ROW) unless under proper track protection.



**TRAIN TIME IS ANY TIME, ON
ANY TRACK,
IN EITHER DIRECTION**



METROLINX SAFETY CHARTER

I PROMISE

- To keep myself and everyone around me safe at all times.
- To act and make unsafe situations safe.
- To learn from safety incidents and to help others learn too.

As a PTS-certified worker, never enter the Right of Way (ROW) without the following:

(but not limited to)



**Personal
Protective
Equipment (PPE)**



**Metrolinx
approval for the
work to be
completed**



**Protecting
Foreman with
track protection**



**Completion of the
Job Briefing
session**



1

Governance

-
- Railway Safety Act
 - Rules, Regulations, Standards

RAILWAY SAFETY ACT



CANADA

CONSOLIDATION

CODIFICATION

Railway Safety Act

Loi sur la sécurité ferroviaire

R.S.C. 1985, c. 32 (4th Suppl.)

S.R.C. 1985, ch. 32 (4^e suppl.)

NOTE

[1988, c. 40, assented to 28th July, 1988]

NOTE

[1988, ch. 40, sanctionné le 28 juillet 1988]

- Under The Railway Safety Act, Metrolinx has regulatory requirements that promote a culture of security vigilance with respect to passenger rail transportation.
- Metrolinx uses state-of-the-art technology to help make the transit system secure, and you, our customers, our employees, and contractors are the eyes and ears of the workplace.

RULES, REGULATIONS, AND STANDARDS



Railways are governed by the Railway Safety Act and this applies to all of us.

The Act is then supported by a system of Rules, Regulations and Standards which are issued and enforced by **Transport Canada**.

These regulatory frameworks are the minimum standards railways must follow to operate trains, hold track protection and dispatch movements.



SAFETY

METROLINX SECURITY





2

Suspicious Items



IF SOMETHING DOESN'T LOOK RIGHT, DO SOMETHING ABOUT IT.

Report unattended or suspicious packages.

If you see something, say something.

Report incidents to GO staff
Call Transit Safety **1-877-297-0642**





3

Suspicious Behaviours

Ask Yourself

Is this person's behaviour or activities:

- Out of place or odd?
- Not right?
- Not easily explained?

**IF SOMETHING DOESN'T
LOOK RIGHT, DO
SOMETHING ABOUT IT.**

**Report unattended or
suspicious packages.**

If you see something, say something.

Report incidents to GO staff
Call Transit Safety **1-877-297-0642**



Ask yourself
these questions:



What is the
behaviour/activity?



Where is the behaviour or
activity occurring?



When is the behaviour or
activity taking place?



How is the behaviour or
activity being conducted?

When engaging
people, **observe**
their reactions:

- What do they say?
- Is what they are saying making sense?
- Are they trying to act like they know what they're talking about when they clearly don't?

When engaging
people, be
aware of their
reaction or
response:

- How do they act?
- How do they respond?
- Are they stammering, being vague, or evasive?
- Are they being direct and clear?

SUSPICIOUS BEHAVIOUR REPORTING REQUIREMENTS

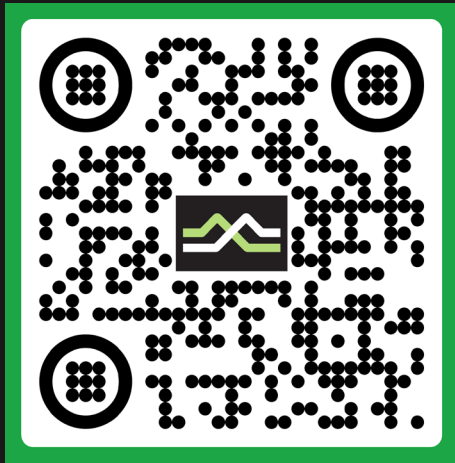


Take note of physical characteristics such as but not limited to:

- Your location
- Clothing
- Last known direction of travel
- Hair
- Shoes

Customer Journey Control Room (CJCR)

Inside the Right of Way (ROW)



1-416-681-5309

Customer Protective Services (CPS)

Outside the Right of Way (ROW)



1-877-297-0642

Share your name, role, and location. State what the incident is and what assistance is required.



4

Threats

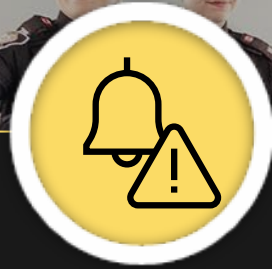
Non-specific Threat

General and lacks specific details such as:

- What, when, where, how, or why.

Specific Threat

- More specific and has more detailed information, such as:
- Date and/or time
- Location or target (e.g., a route or train number)
- Group or person has identified themselves
- A reason or cause has been identified



All threats need to be immediately
reported to Customer Protective
Services.

OTHER FORMS OF THREATS



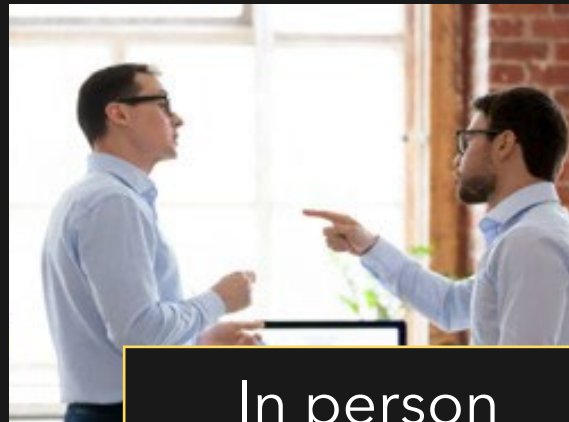
Social Media



Cellphone/Apps



Written/Emails



In person



Cyber



5

Active Attacker

ACTIVE ATTACKER



An Active Attacker is an individual who appears to be engaged in, attempting to engage in, or about to engage in an attack where there is a reason to suspect that:

- The attack will be sustained.
- The attacker will cause serious bodily harm or death to other individuals.
- The attacker will continue to attack more individuals if the attacker is not stopped.



My name/call sign

Your name, train number, bus number, badge number.



Exact location of the incident

The station, facility, civic address, mile marker, floor, etc.



Type of incident

Medical, motor vehicle accident, criminal activity, etc.



Hazard

On-scene hazards present such as fire, gas, unsafe terrain, etc.



Access

The safest and most direct route that responders can access the incident scene from.



Number and type of casualties

How many and what injuries. This includes non-responsive, bleeding, burns, not breathing, etc.



Emergency services present and/or required

Fire, police, EMS - what resources are currently on-scene and/or who needs to be.

ENTRANCE TO TRAINS



Call Emergency Services (9-1-1)

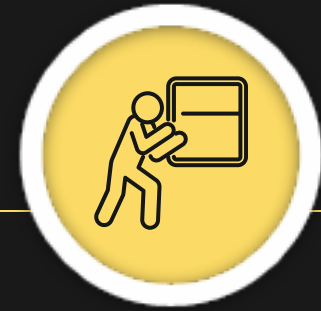
Call CPSC 1-877-297-0642 or text "HELP" to 77777



RUN



HIDE



ATTACK

RUN

You should leave your belongings behind and immediately run from danger to the nearest exit or place of safety.



HIDE

It's best to flee the area entirely if it's safe. If you cannot flee, then your next best option is to find a room or space where you can barricade or lock yourself in.



ATTACK

If you cannot run or escape,
your last resort is to defend
yourself. Your life may
depend on it.



OUTDOOR AREAS AND HALLWAYS

- If you are located outside a building, seek cover immediately.
- If you are in a hallway, escape out the nearest exit if it is safe to do so – this may mean entering a room or an Emergency Exit.

LAW ENFORCEMENT

When Law Enforcement arrives:

- Remain calm and follow officer's instructions.
- Immediately raise your hands and spread your fingers.
- Always keep your hands visible.
- Avoid making quick movements toward officers such as attempting to hold on to them.
- Avoid pointing, screaming and/or yelling.

ACTIVE ATTACKER REPORTING REQUIREMENTS



Address/Location
of Active Attacker



Number of
Attackers, if more
than one



Physical description
of Attacker(s)



Number and type
of weapon(s)



Number of
potential victims
and location(s)



6

Reporting Hazards



The following hazards may put trains into a possible emergency event:

- Any sink holes found on trackside
- A large animal
- An obstruction
- A flood
- A fire



Any voids, sinkholes or water seepage near or on the track must be reported to the Protecting Foreman immediately.



Reporting Damage and Potential Damage

- If you come into contact with railway components in a vehicle or while using a tool, it must be reported to the Protecting Foreman.
- Even in the absence of visible damage, the components must be inspected to ensure they are functioning correctly.
- If a component fails, the outcome may be fatal.

ENVIRONMENTAL HAZARDS

Weather related hazards include:

- Wet ties can be extremely slippery.
- Snow can bury or hide any trip hazards.
- Fog can obstruct sightlines.



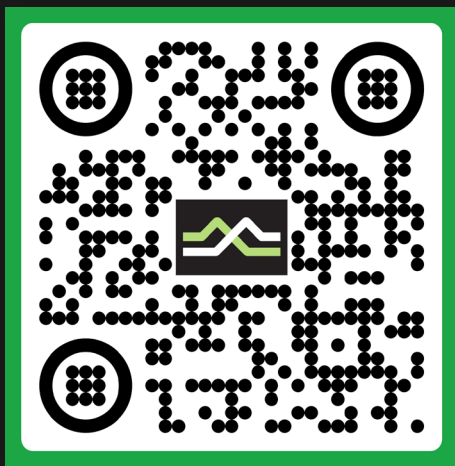
Track buckle due to extreme heat



A broken rail due to extreme cold

Customer Journey Control Room (CJCR)

Inside the Right of Way (ROW)



1-416-681-5309

Customer Protective Services (CPS)

Outside the Right of Way (ROW)



1-877-297-0642

Share your name, role, and location. State what the incident is and what assistance is required.

Night Work Hazards

Some of the hazards associated with night work are poor visibility and the potential for increased fatigue.



OPERATIONAL HAZARDS



Some of the hazards associated with working in the Right of Way (ROW) include:

- An impact from a train, hi-rail vehicles, construction equipment, or machinery.
- Powered devices have the potential to shock or electrocute.
- Switches have areas that create pinch points.
- Overhead wires and signals.



MITIGATIONS TO HAZARDS

Some of the tools used to mitigate hazards include:

- Work methodology plans
- Site access communication
- Job/Safety Briefings
- Proper radio procedures
- Effective peer-to-peer communication
- Procedures and policies
- Emergency protocols and roles



Within the railway, these hazards have the potential to be life altering or fatal.



7

Emergency Reporting

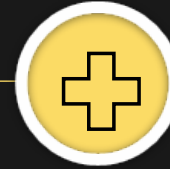
EMERGENCY BROADCASTS



**When anything
unplanned occurs that
will affect safe passage of
a train.**



**Where objects are found
that cannot be safely
removed or protected.**



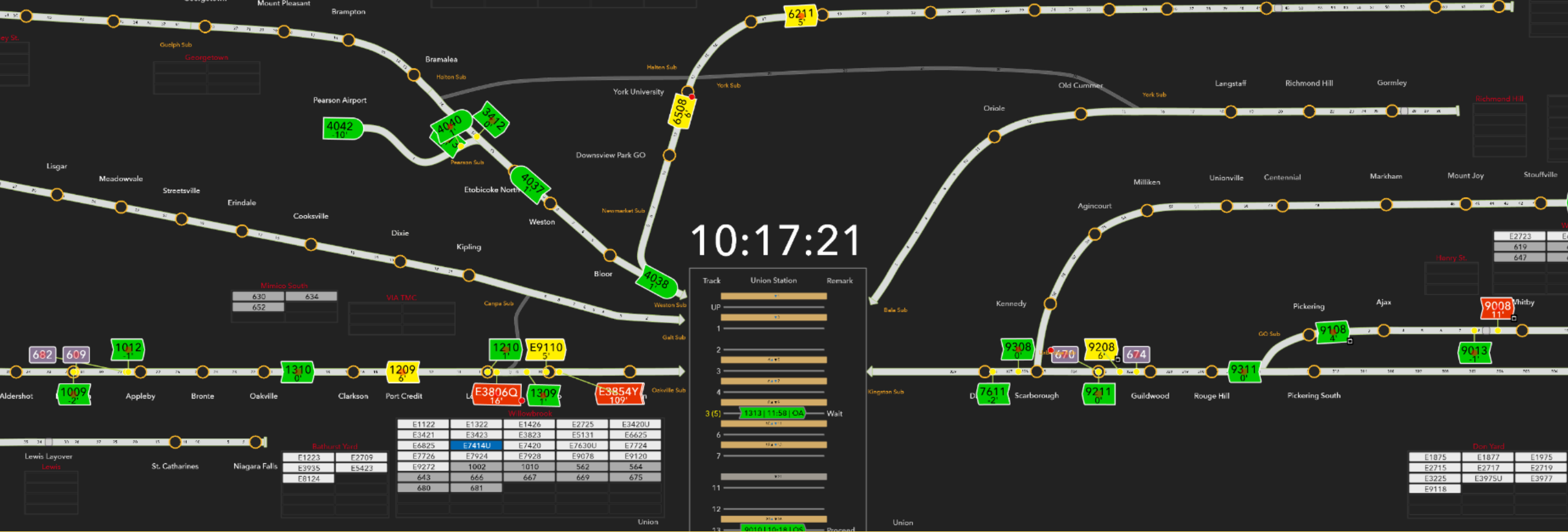
**When accidents involve
an injury.**



**Where conditions create
an unplanned hazard.**



**When there is a
derailment or fouling of
track.**

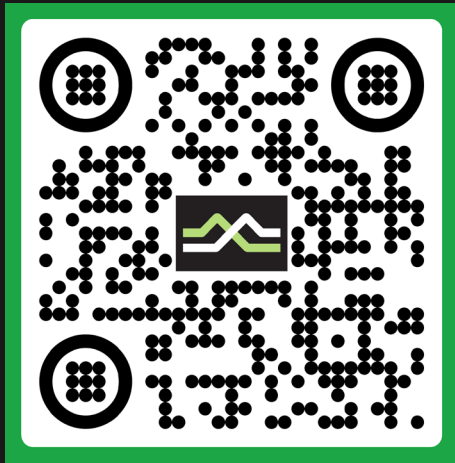


The impacts of an emergency broadcast include:

- Stopping and or delaying train movements.
- Affects the entire network and potentially creates other emergencies.

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Inside the Right of Way (ROW)



1-416-681-5309

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Outside the Right of Way (ROW)



1-877-297-0642

Share your name, role, and location. State what the incident is and what assistance is required.



8

Definitions

- Roles
- Location
- Infrastructure



ROLE DEFINITIONS

Canadian Rail Operating Rules (CROR)

- The CROR is comprised of Rules, Special Instructions, and Definitions.
- Engineering Instructions are adopted policies and procedures that add information, guidance and requirements to assist and ensure compliance to the CROR.
- Other documentation for Metrolinx include:
 - Metrolinx General Engineering Instructions (MX GEI)
 - CN, CP, and Metrolinx Timetables.
 - Union Station Railway Corridor (USRC) Time Table and Manual

CROR govern all
railway
environments.

This includes:

- The method of control and authority to dispatch trains.
- The responsibilities of workers and contractors with CROR qualifications.
- The protection of track work, track units, and workers.
- All Railway contractors performing work in the railway.

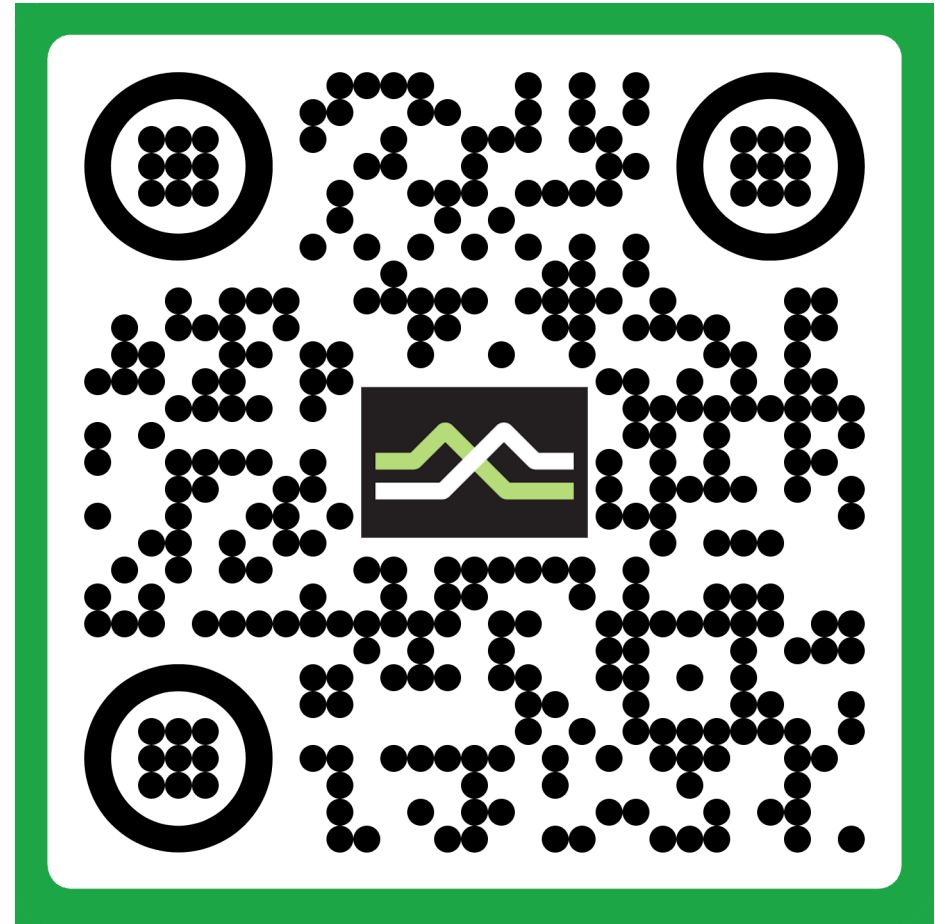
Protecting Foreman

- The Protecting Foreman is a Canadian Rail Operating Rules (CROR) qualified employee who is responsible for the protection of workers, track work, and track units.
- They are responsible for the safety of a specified piece of track they have authority on.
- They will be the point of contact in an emergency if you do not have a radio or they are at the location of the unplanned event.



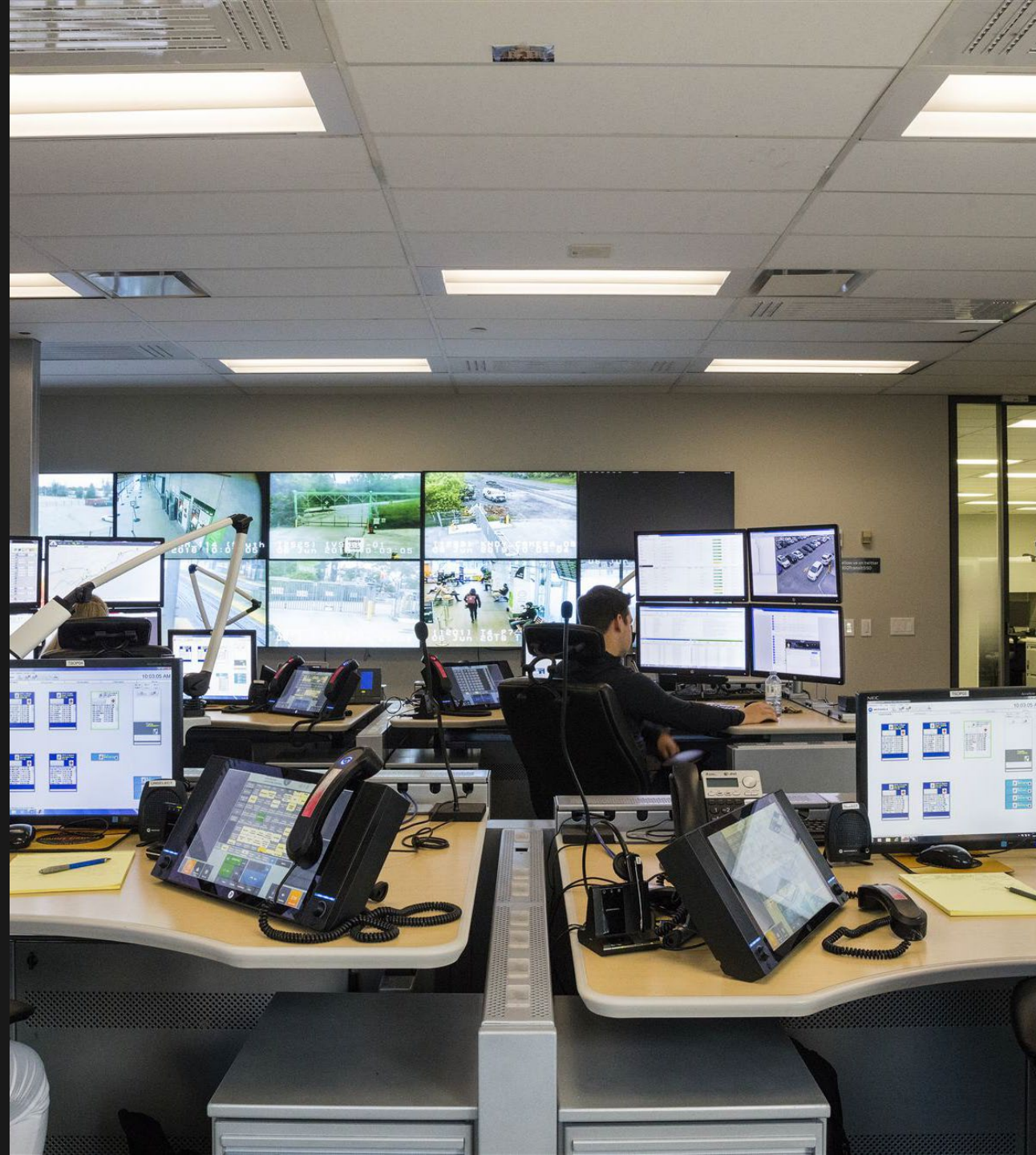
Customer Journey Control Room (CJCR)

Inside the Right of Way (ROW)



1-416-681-5309

Rail Traffic Control (RTC)



Train Movement Director (TMD)

The TMD work to safely guide trains into the right tracks to and from Union Station, allowing for both the safe execution of construction projects and the timely arrival of passengers.

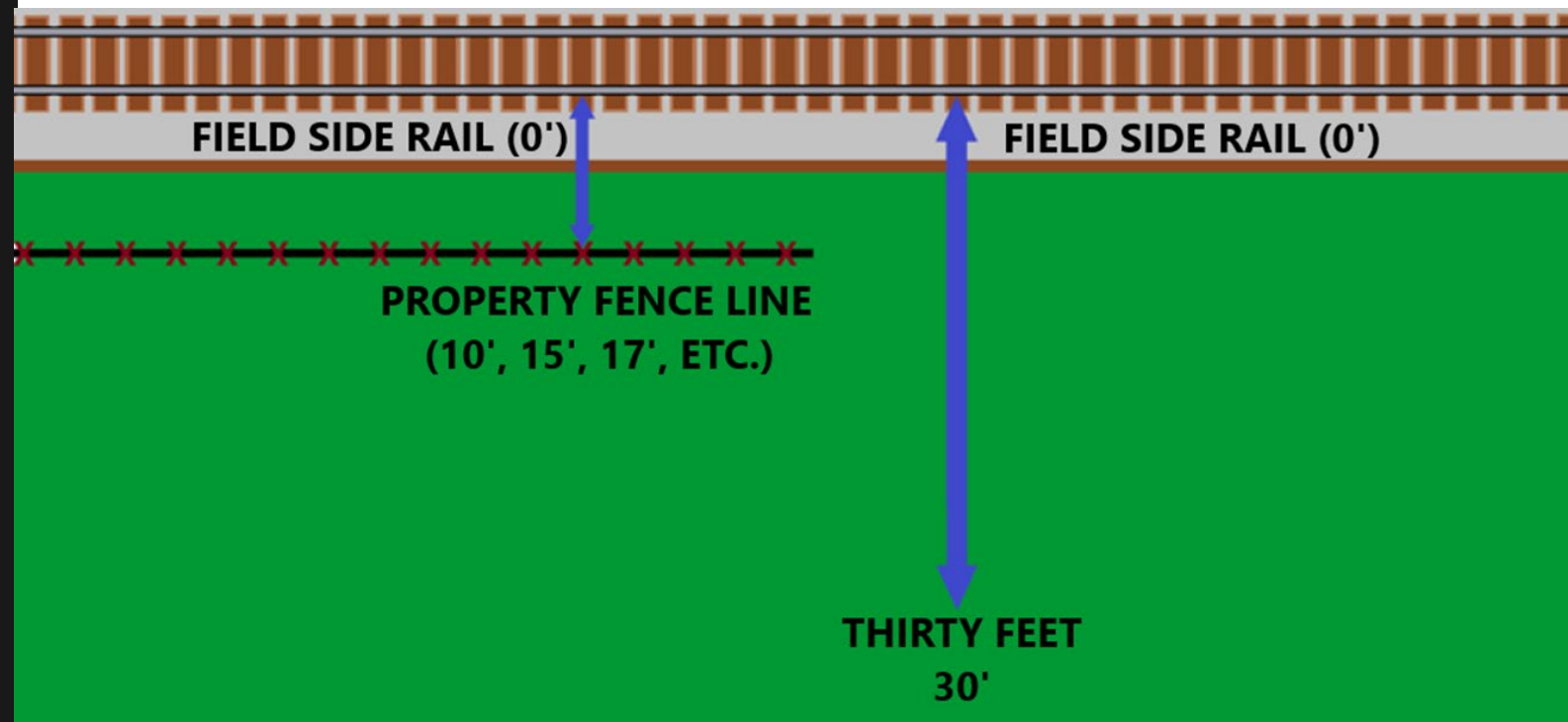




LOCATION DEFINITIONS

Right of Way (ROW)

Refers to the Metrolinx-owned and operated on subdivisions of railway infrastructure, rail/maintenance/layover yards, and all property between property fences, or if no fences, everywhere within **30 feet** from the outermost rail.



This training course **does not** allow you to cross the tracks unless under proper Track Protection and only when and where the Protecting Foreman has directed.



Do Not Cross Tracks
**Ne traversez pas
les voies**

Fouling Track

Fouling – placement of materials, machinery near either rail in such a way that could result in being struck by a train, on-track machinery, hi-railed vehicles, track units, and is within **four feet** of the rail.





Dynamic Envelope

The outline of the space occupied by a rail vehicle when in motion, including the effects of tilt and sway of the locomotive and all attached cars.

This space will vary in:

- Curves
- Bridges
- Tunnels
- Stations



Position of Safety

(Minimum 15 feet
from the outermost
rail)





YARD

A system of non-main tracks, used to switch equipment and for other purposes over which movements may operate subject to prescribed signals, rules and special instructions.



UNION STATION RAIL CORRIDOR



INFRASTRUCTURE DEFINITIONS

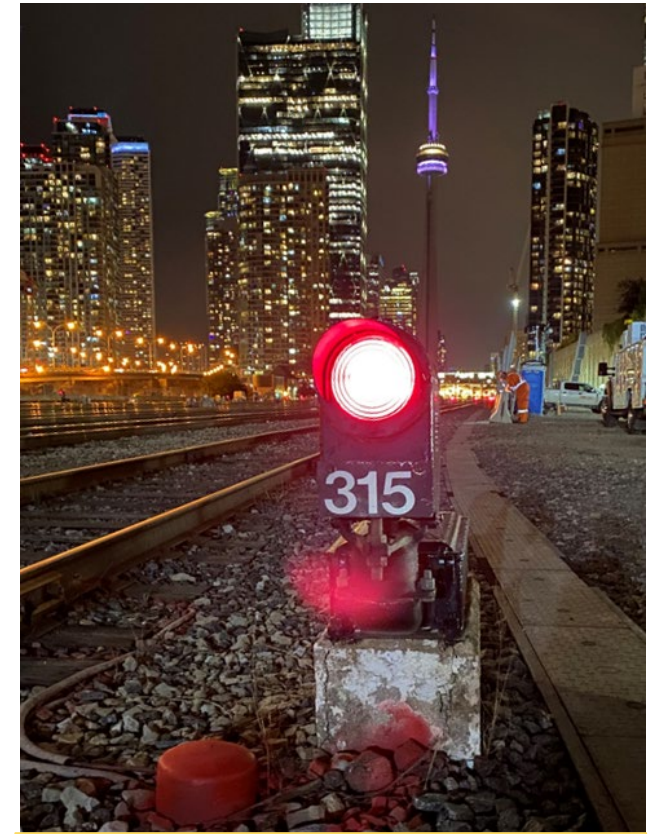
IDENTIFIABLE LOCATIONS



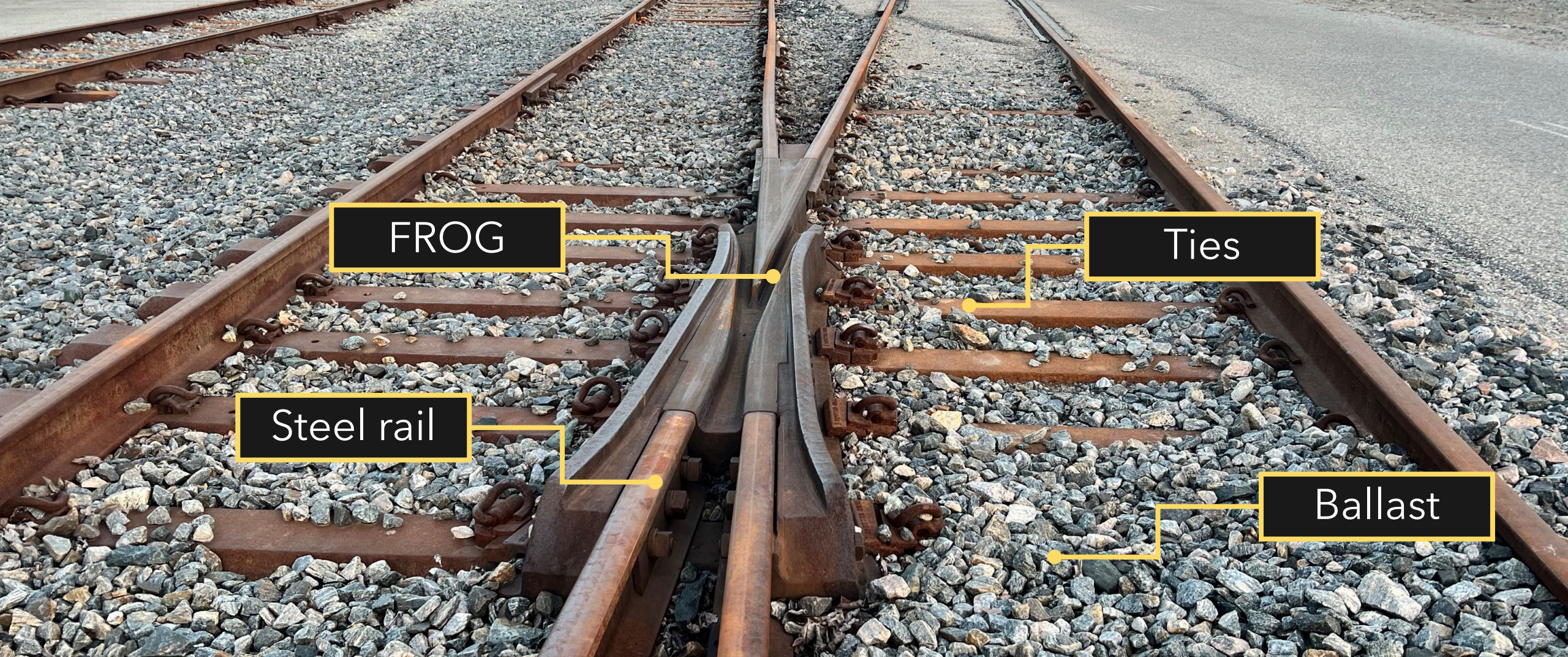
SWITCH



CROSSING



SIGNAL



Infrastructure is the term used to describe the track, signals, and switches, in the railway used to control the train's direction.

Switch

A device used to route a movement from one track to another.



Signal

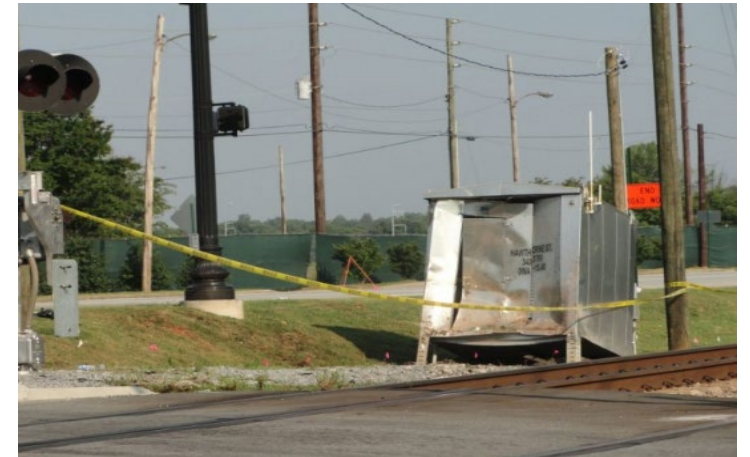
This fixed signal is used with one or more signals to govern the approach of a movement to such signal.



Flag/Signal



INFRASTRUCTURE DAMAGE



Crossings

Public Crossings

- It is the joint responsibility of the Road Authority (Community) and Railway (Metrolinx) to maintain the safety of the crossing.

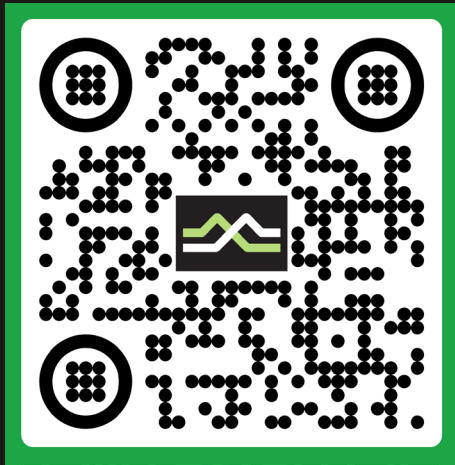
Private Crossings

- Have specific agreements in place between Metrolinx and the land owner.



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Inside the Right of Way (ROW)



1-416-681-5309

Customer Protective Services (CPS)

Outside the Right of Way (ROW)



1-877-297-0642

Share your name, role, and location. State what the incident is and what assistance is required.



Fit For Duty

Fit For Duty Policy

When reporting for duty, you must be fit, rested and familiar with the work.

For additional requirements, follow your company's Fit For Duty policies.



Incidents and/or Accidents

When an incident or unplanned event happens, with human error, those required will be screened for Fit for Duty.

PTS credentials may be put on hold pending the investigation.



10

Personal Protective Equipment

The personal use of electronic devices within the USRC and the Metrolinx ROW is prohibited.





PPE standards apply along with the site and task requirements when working in the Right of Way (ROW) and all construction sites.

PPE must be:

- Appropriate to protect against the hazard
- Used/worn properly
- Maintained properly



No red clothing allowed as it may be confused for a **STOP** indication.



General PPE requirements



Hard hat



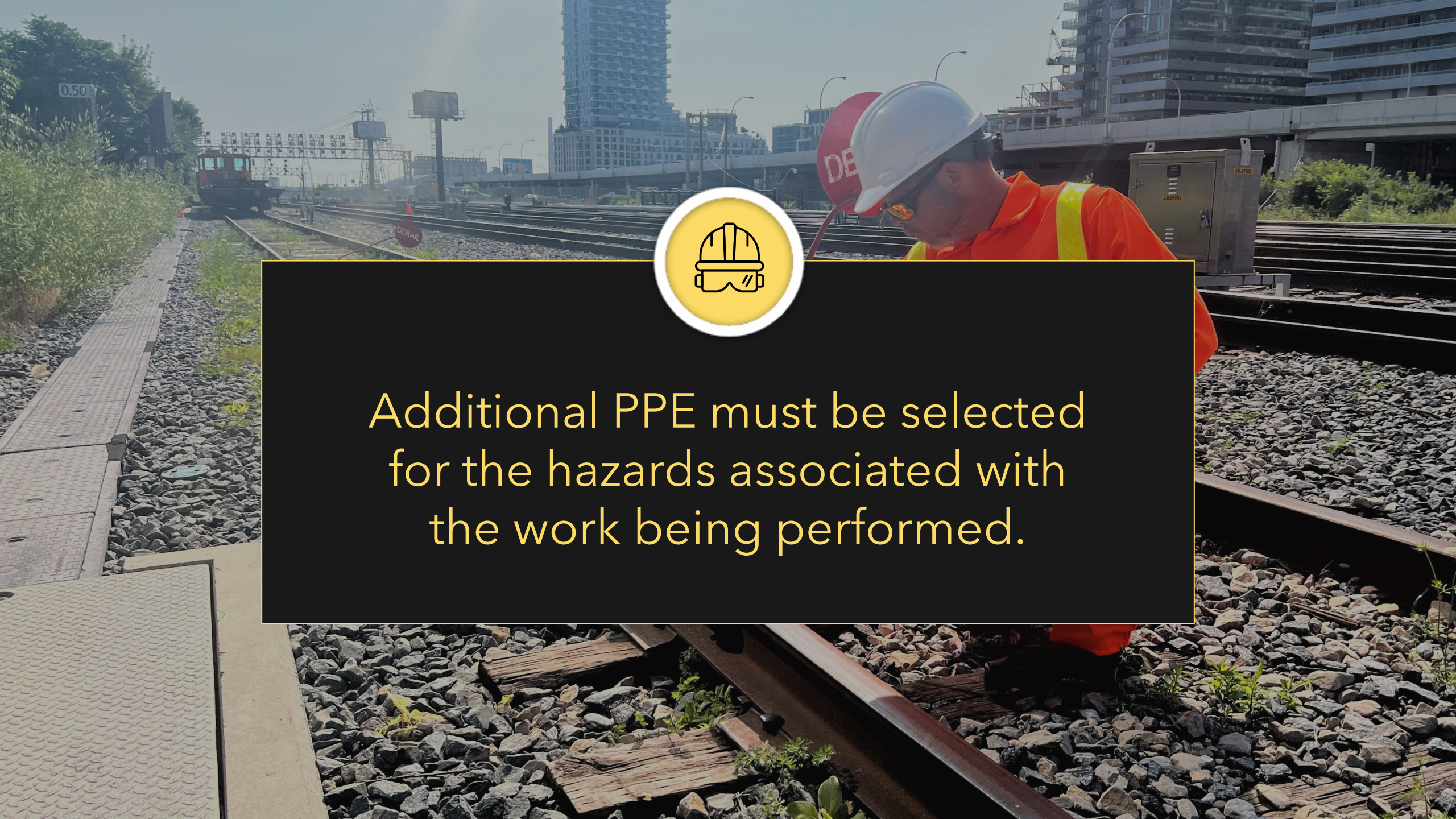
**Protective
eyewear**



**High Visibility
Safety Apparel
(HVSA)**



**Protective
footwear**



Additional PPE must be selected
for the hazards associated with
the work being performed.

Hearing Protection

- Must be worn when noise levels are 85 dBA or greater.
- When worn in conjunction with head protection, ear plugs must be worn unless the ear muffs are designed to be worn with head protection.
- Dual hearing protection (plugs + muffs worn simultaneously) is required at noise levels greater than 105dBA.



11

Vehicles & Equipment



**Vehicles must not exceed
15 km/h in the ROW.**

**Vehicles must not
obstruct or block access
routes, access points,
signals, or switches.**

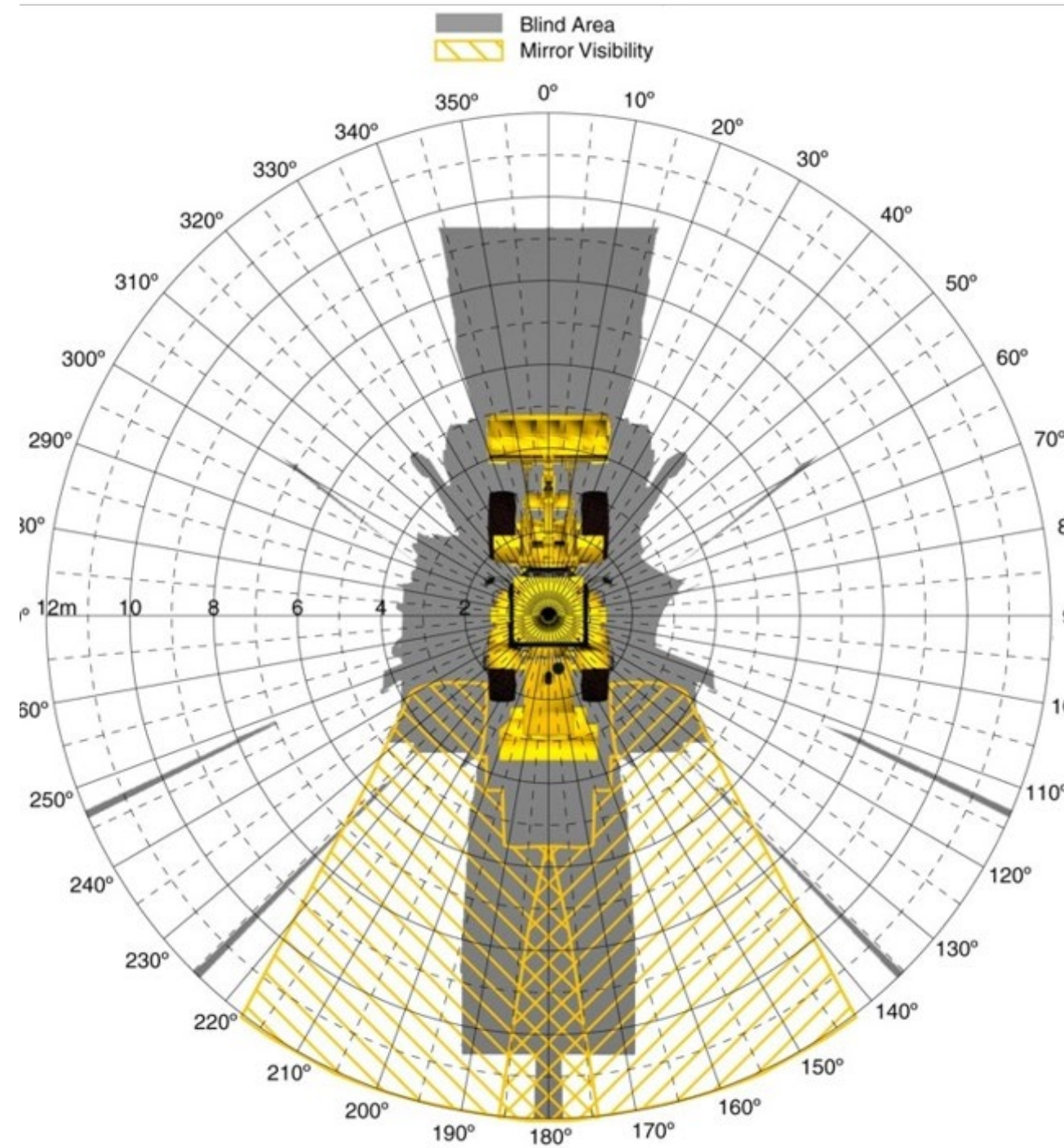
**All vehicles, work
equipment must have
their beacon on when in
the ROW and during
movements.**

Reversing

When a reverse movement is required, the Spotter/Marshal will:

- Know the operator blind spots
- Make eye contact with driver and operator while signaling and changing position
- Establish the means of communication
- Complete a visual check of the intended path

- Each piece of construction equipment and machinery have their own unique requirements.
- Operators will conduct a proper circle check pre-use.
- If the operator loses sight of the Spotter/Marshal, they must stop until communication has been re-established.





12

Job Briefing

-
- Session
 - Record

JOB/ SAFETY BRIEFING SESSION

A Job/Safety Briefing session is designed to ensure information of hazards, and controls are shared with the workers conducting the work.

The Job/Safety Briefing must be:

- Held by the Protecting Foreman and Construction Foreman.
- Completed prior to entering the ROW.
- Completed at the beginning of each shift.

WORKER'S RESPONSIBILITIES



Being familiar with the hazards of the environment & work



Communicating methods of instructions



Roles to respond to emergencies



Participating in the Job/Safety Briefings



Asking questions when unsure

JOB BRIEFING RECORD

A Job/Safety Briefing record must include:

- All applicable Track protection information
- All special instructions for the work limits
- The first aid components and hospital information
- The size of the work group

A job briefing booklet will be completed by every employee prior to work commencing

Job Briefing			
Rule of the day:			
Date:	Time:	Head Count:	
Task to be Done:			
Employee in Charge (EIC) Name:		Protecting Foreman Name:	
Work Location:	Mileage:	Sub/Location:	
Type of Protection: <input type="checkbox"/> 841 <input type="checkbox"/> 842 <input type="checkbox"/> TOP <input type="checkbox"/> Lone Worker <input type="checkbox"/> Safety Watch			
Standby Radio Channel: USRC – 1 / 2 / 3 / 4			
First Aid & CPR :		911 Caller:	
Nearest Hospital:		Clearing location:	
Gate number/address for Emergency Vehicles:			
Safety Watch/ Statement of On-Track Safety (circle)			
Who is the designated Safety Watch?			
Track speed:		Minimum Required site distance:	
Warning (circle):		Physical	Whistle Horn Other:
Name of peer:		Phone number:	
Time limit From:		Until:	Complete:
Hazards:			

Supplementary Job/Safety Briefings

Supplementary briefings are performed when:

- There is an addition or subtraction of work group members.
- The work being performed changes.
- The use of new machinery or construction equipment.
- The weather changes.

Ensure all aspects of the change have been identified, recorded, and communicated to all workers and the Protecting Foreman.



13

Positive Protection

- CROR Rule 841
- Track Occupancy Permit
- CROR Rule 842

Positive Protection

The track(s) is protected in accordance with CROR Protection of Track Work (Rules 41, 42, 841, and 842) or Track Occupancy Permit (TOP Rules 849 to 864 inclusive).



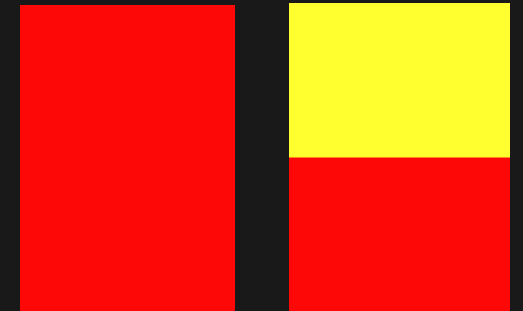
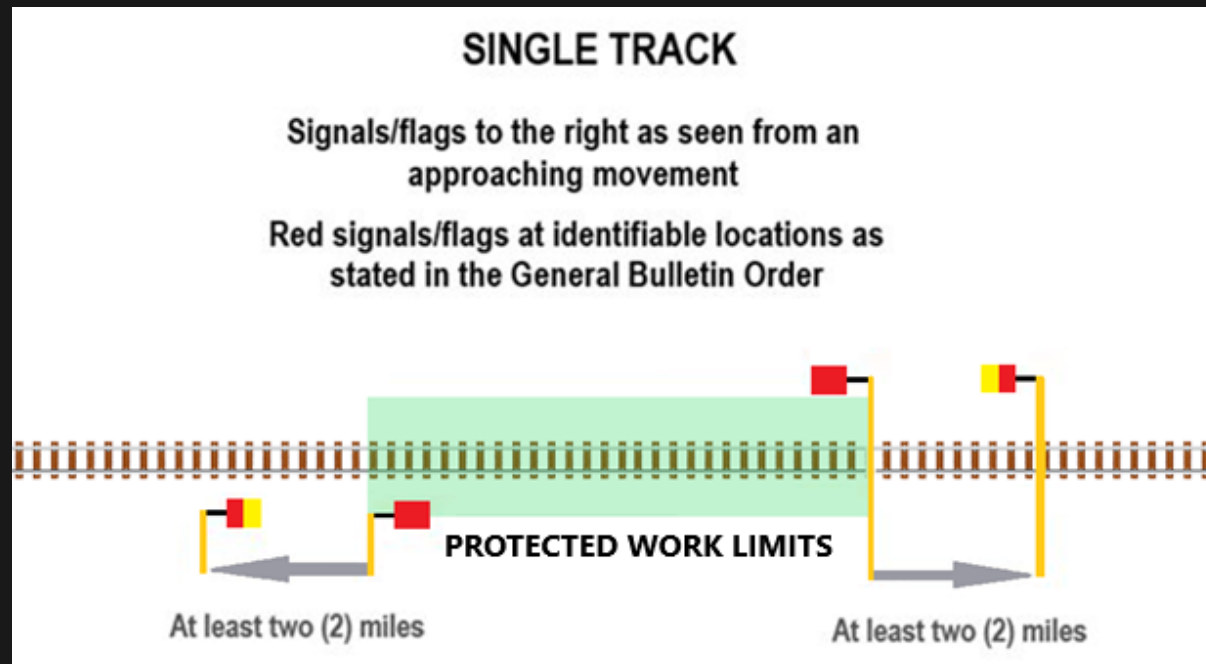
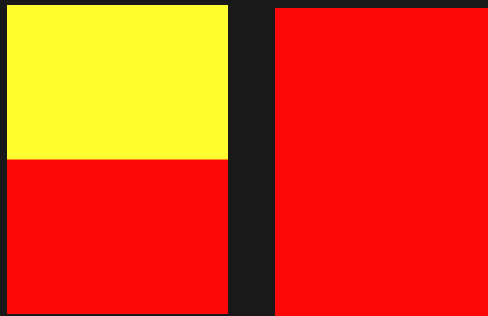
Flags/Signals



CROR RULE 42/842 - PLANNED PROTECTION

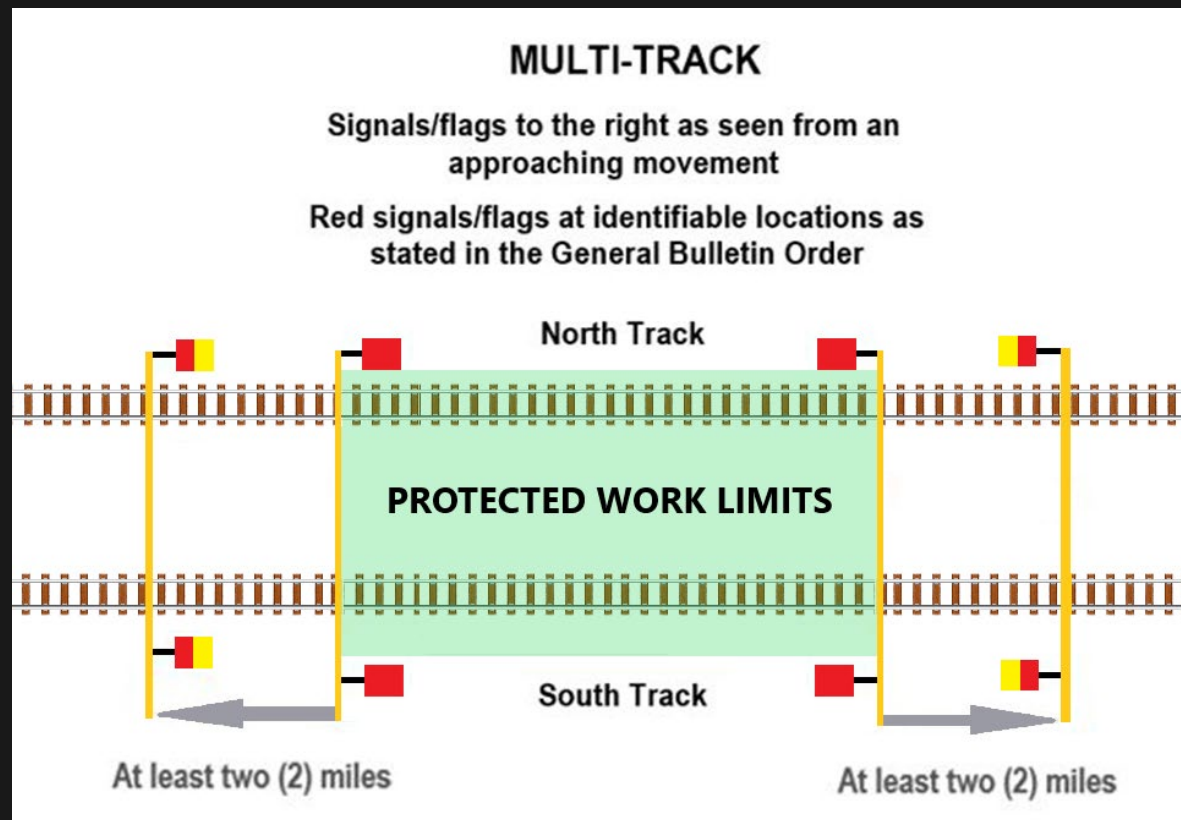
Red flags/signals placed at beginning and end of the protected work limits.

Yellow over red flags/signals are placed **two miles** from the work limits in each direction.



CROR RULE 42/842 - PLANNED PROTECTION

Track protection extends across all tracks in multi-track territory.

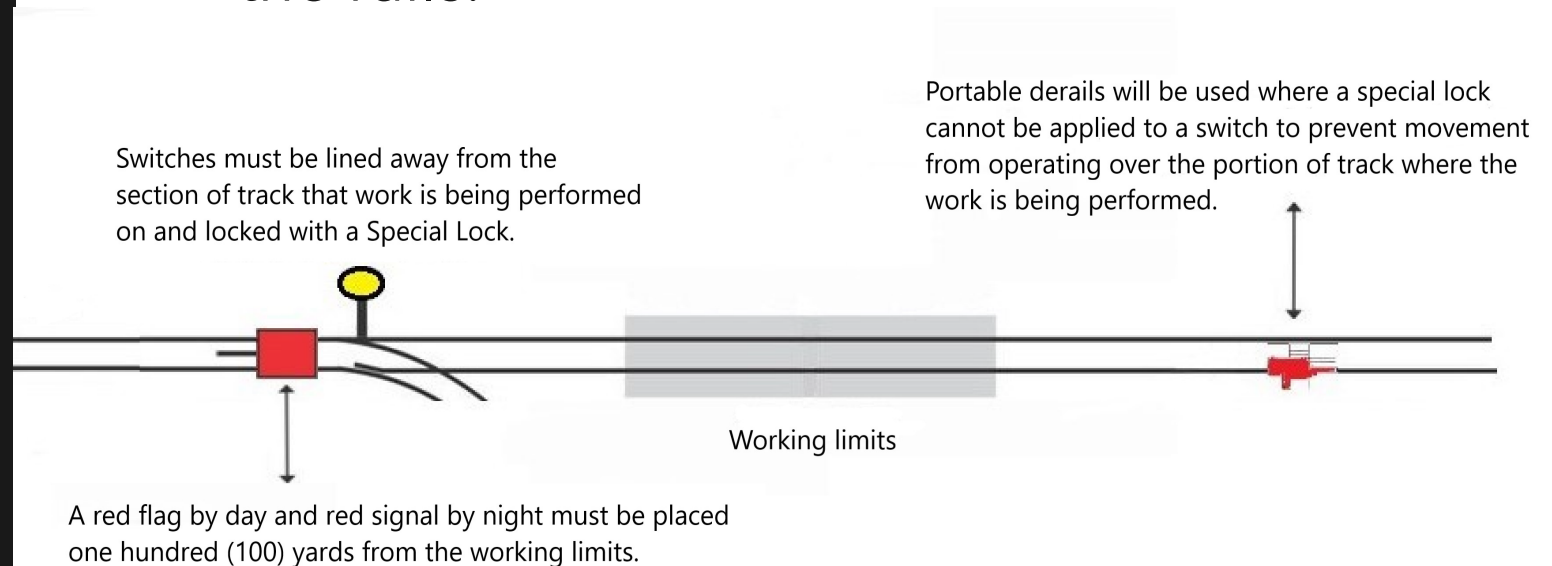


Track Occupancy Permit (TOP)

- A TOP is used to protect work for a short period of time or to protect an emergency.
- A TOP can be requested at any time and must use identifiable locations to determine work limits.
- Timetable identifiable locations to be used include:
 - Signals
 - Switches
 - Mile marker boards

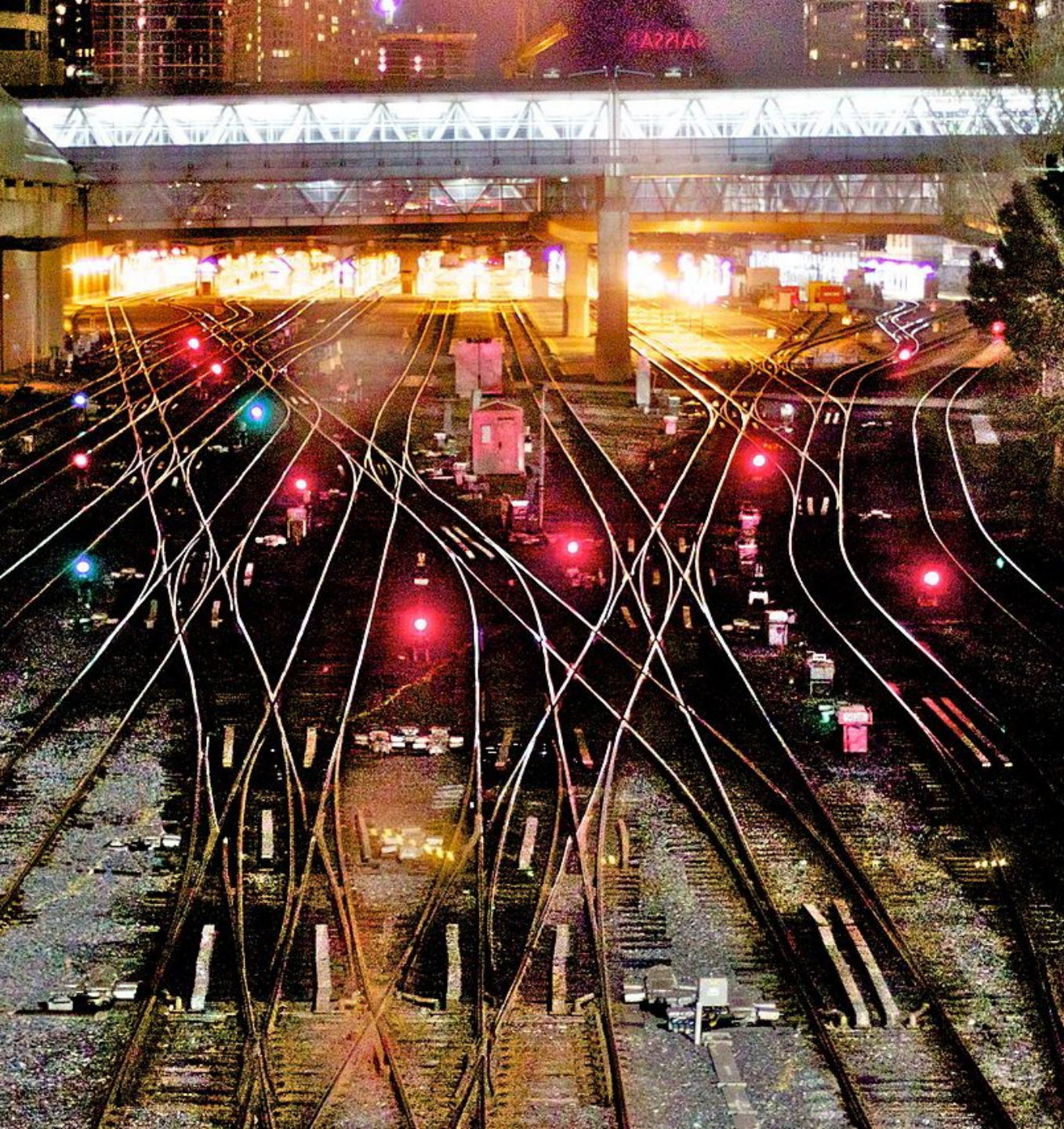
CROR Rule 41/841 - Non-Main Track

- In conjunction with CROR Rule 841, portable derrails can be used where a special lock cannot be applied to a switch to prevent movement from operating over the portion of the track where work is being performed.
- Red flags/signals will be placed between the rails.



Consequences





14

Union Station Rail Corridor



The USRC is an arrangement of signal indications that govern movements over intersecting tracks, known as an Interlocking.

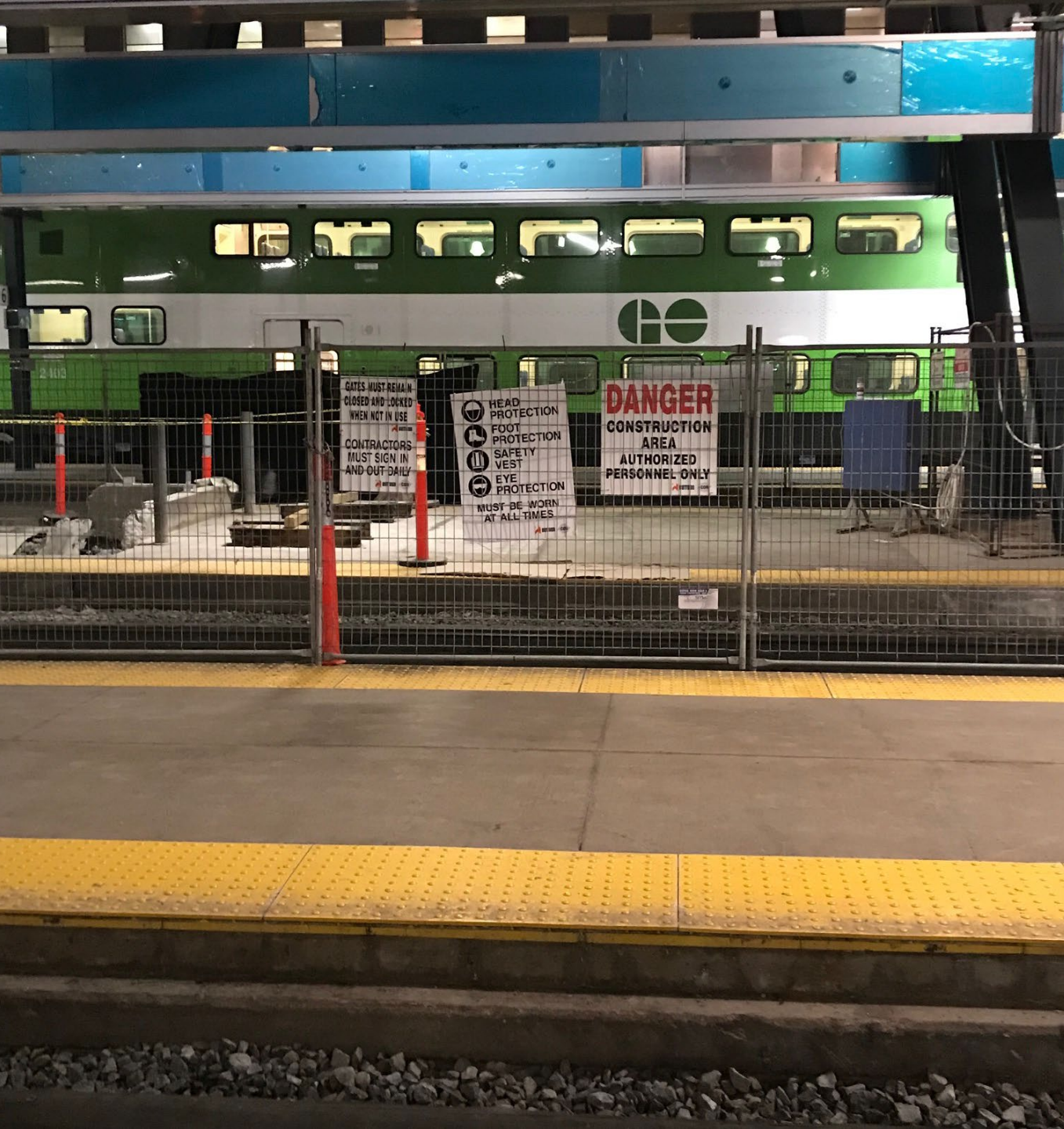


Gates

All gates in the USRC are numbered and correspond to a municipal address.

Always know your closest gate location.





15

Work Locations

Site Access Points

Always know your location
and the access points.



Questions to ask about locations of work

- What are the closest cross streets or main intersections?
- Does the work location have a vehicle access gate?
- Is it an automatic gate system?
- Is there a train station or platform at the work location?
- Does the location have a pedestrian gate access point?

Securing the Worksite

Look for damage or tampering to locks, hinges, doors, windows, gates, fencing, and any other means of access.



FROM COMPLACENCY TO AWARENESS

When performing daily work this is repetitive or active, avoid losing focus by:

- Noting all hazards
- Speaking out loud to help retain information
- Communicating concerns with others
- Sharing situational awareness
- Sharing information from the environment
- Evaluate and plan the work for the day



On Approach

Once the Protecting Foreman has instructed you to stand down:

- Stop working and go to the pre-arranged Position Of Safety and face the direction of the on coming movement.
- Only commence work when the Protecting Foreman says it is safe to do so.

Trains are quiet and may have their lights dimmed, depending on the location.

However, they can use their lights, bells, and whistles to notify you on their approach.

It does not mean the train can stop in time to avoid you.



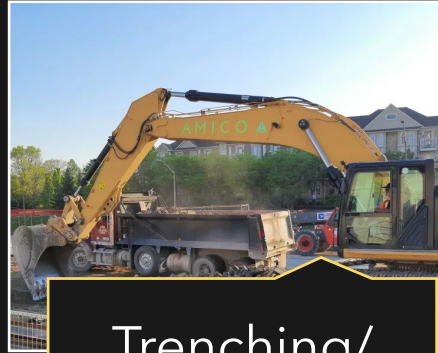
HOUSEKEEPING

- Work sites and locations must be kept clear to avoid potential tripping hazards.
- All garbage must be put into the proper bins.
- No burning or burying of debris or waste.
- Only smoke and vape in designated locations.
- Materials and tools are not to be left in the ROW.



PLANNING - PERMITS

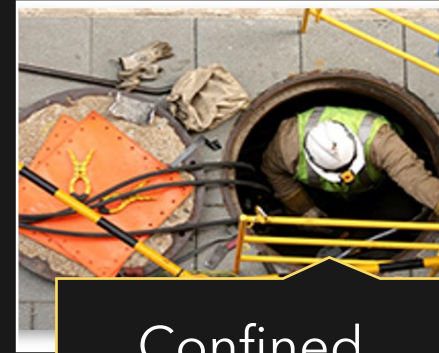
Valid permits are required for the following work activities:



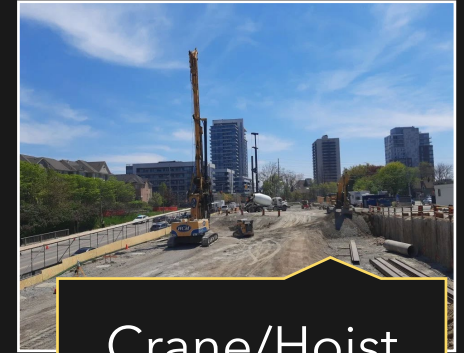
Trenching/
Excavating



Use of Fall
Protection



Confined
Space Entry



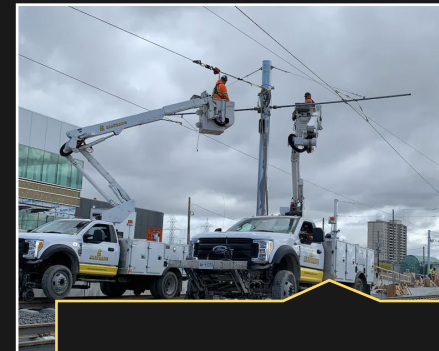
Crane/Hoist
Operations



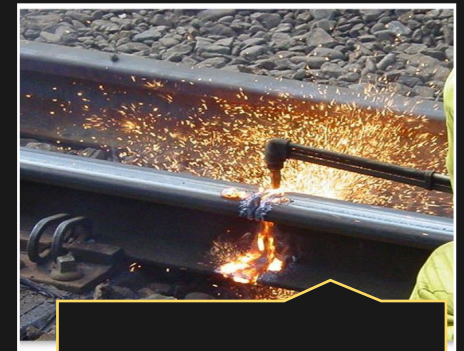
Tunneling/
shoring/
piling



Designated
substance
work

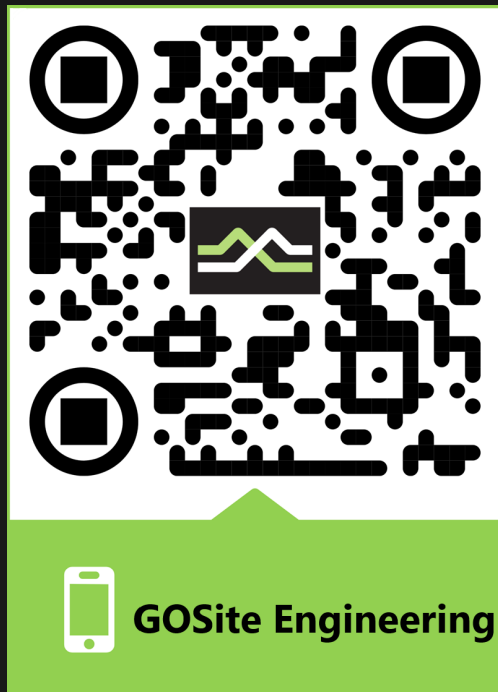


Electrical work



Hot work

Excavations Around Tracks



Excavation Plans must be submitted to Metrolinx and follow all requirements.

Reference material includes:

- GO Transit Track Standards- Appendix W
- Bridges and Structures Standards
- Trenchless Utility Guidelines
- Occupational Health and Safety Act

Any movement of track and ground must be reported immediately to the Protecting Foreman.

Planning - Locates

All Contractors must:

- Obtain valid locates before excavating activities (Railway and Utility).
- Have a current paper copy of all locates and update it accordingly.
- Have a Railway Signal Maintainer (RSM) for all excavation work in the USRC.



Report any potential slope/embankment failure immediately to the Protecting Foreman.



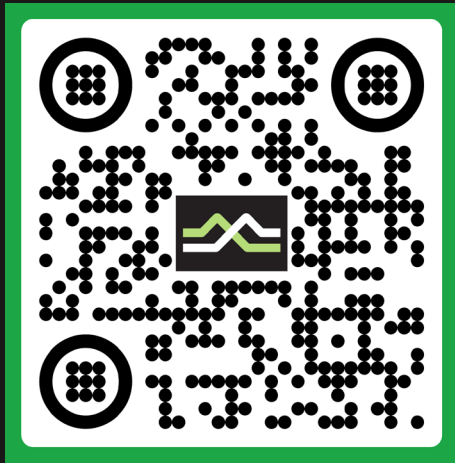
Buried Infrastructure

While working with excavation equipment or any digging tools - any cables, pipes or other buried components that are struck must be reported to the Protecting Foreman.



Customer Journey Control Room (CJCR)

Inside the Right of Way (ROW)



1-416-681-5309

Customer Protective Services (CPS)

Outside the Right of Way (ROW)



1-877-297-0642

Share your name, role, and location. State what the incident is and what assistance is required.



16

PTS Training Next Steps

- Exam
- PTS Card

Knowledge Test Guidelines


- Multiple choice
- Open book
- Duration is timed at 90 minutes
- You must achieve a minimum 80% pass rate to receive a certification status
- Failure to achieve a minimum 80% pass rate on the first attempt will result in a maximum of two additional attempts

PTS Certification Card

- After successfully completing the knowledge test, you will be issued a PTS Certification Card from the Training Provider.
- PTS certification is valid for **three years**. You must renew before your PTS card expires to continue working on Metrolinx property.

PTS cards must be carried with you at all times on Metrolinx property.

PTS certification cards are only valid with government-issued photo identification.

 **PERSONAL TRACK SAFETY**

_____ has successfully completed

Participant's Name

PERSONAL TRACK SAFETY (PTS)

provided by _____

Accredited Vendor

Control # _____

Date of Completion Expires

Issuer's Name Signature

NOTE: This card is valid with government-issued photo ID.

THANK YOU!

