



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.

Safety Moment



Facilitator Introduction

- Name
- Role
- Department
- Rail experience



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 between the elements and requirements of different forms of Positive Protection.

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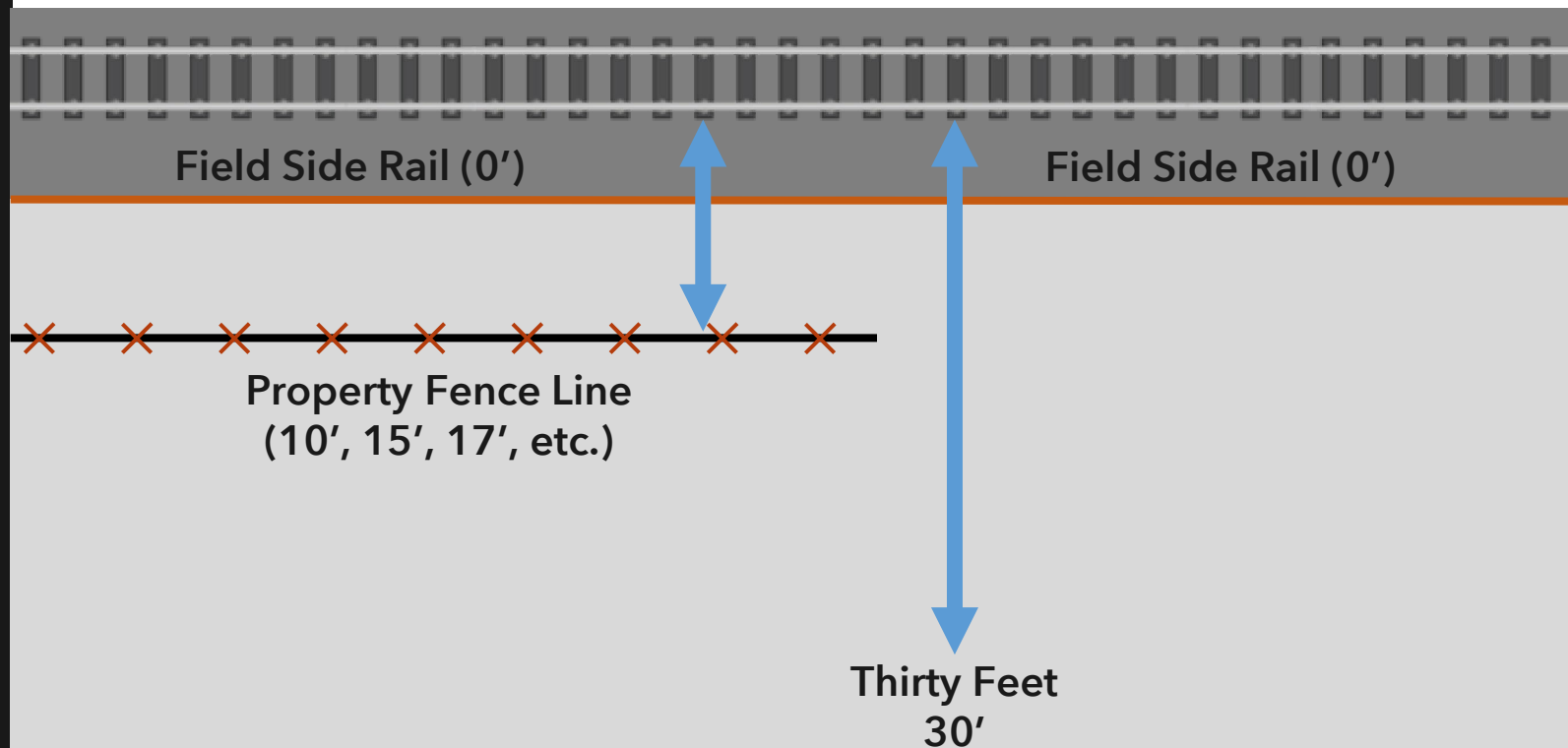
PURPOSE OF THE COURSE



- 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.

Right of Way (ROW)

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

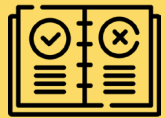




1

Governance

INSTRUMENTS



Rules



Regulations



Acts



Standards



Orders



Exemptions



Policies



Procedures



Guidelines

RAILWAY SAFETY ACT



CONSOLIDATION

CODIFICATION

Railway Safety Act

Loi sur la sécurité ferroviaire

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

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 always looks for continuous improvement initiatives to advance safety within the rail industry.

Rules, Regulations, Standards, and Instructions

The Railway Safety Act is 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.





Canadian Rail Operating Rules

Rules that govern safe railway operations

Train Crews

Rail Traffic
Controllers

Engineering and
Mechanical
Teams



Each CROR-qualified Employee must have an accessible physical copy of the Metrolinx Operating Manual while on duty.

Timetables



TIMETABLE

4



EFFECTIVE AT 0001
January 14, 2024

Metrolinx General Engineering Instructions (MX GEI)



Operating Bulletins

WHAT

Information or instructions pertaining to the operation of movements.

WHO

From the Publishing Authority, to anyone affected.

WHEN

Day-to-day as changes occur.

WHERE

Hard and soft copies are distributed.

WHY

Announce changes to information contained in the Operating Manual.

SUMMARY BULLETINS



RULE 83 (c) SUMMARY BULLETIN

November 1, 2023 – April 30, 2024

Unless otherwise specified by subsequent Bulletin, the following documents are in effect, and employees must be in possession of:

- ☐ Metrolinx Timetable No. 3, dated April 30, 2023.
- ☐ Metrolinx Summary Bulletin dated November 1, 2023 – April 30, 2024.
- ☐ CN Canadian Rail Operating Rules dated October 28, 2021.
- ☐ CN Eastern Division – Great Lakes Division Timetable No. 45, dated February 1, 2023.
- ☐ CN Eastern Division – Great Lakes Division Timetable No. 45 Supplement 1, dated April 30, 2023.
- ☐ CN Great Lakes Division Summary Bulletin dated November 1, 2023 – April 30, 2024.
- ☐ CN General Operating Instructions (sections 1-10) dated May 1, 2023.
 - VIA crews are exempted from carrying GOI sections 1,6,7,9,10.
 - Metrolinx Engineering employees are exempted from carrying GOI section 1,6,9 on Metrolinx territory.
- ☐ CN Transportation of Dangerous Goods dated May 1, 2023.

If affected, employees must be in possession of these documents:

- ☐ Metrolinx General Engineering Instructions (MX-GEI) dated May 1, 2023.
- ☐ Metrolinx General Operating Instructions (MX-GOI) dated April 7, 2023.
- ☐ USRC Timetable No. 1, dated November 1, 2021.
- ☐ USRC Summary Bulletin dated November 1, 2023, to April 30, 2024.
- ☐ CN Passenger Operation and Evacuation dated February 1, 2020.
- ☐ CN Track Units Sections 1 & 2 (green tabs) dated December 15, 2015.
- ☐ CN/CP Differences Package dated Oct 14, 2015, Updated November 1, 2022.
- ☐ CP Current SOSA Region Summary Bulletin effective October 1, 2023.
- ☐ CP System Revision Document dated October 1, 2023.
- ☐ CP Timetable 12 Effective October 14, 2015.
 - Module 4.3 Galt Subdivision dated January 14, 2021.
 - Module 5.2 Hamilton Subdivision dated May 12, 2021.



EASTERN CANADA REGION GREAT LAKES DIVISION

RULE 83 (c) SUMMARY BULLETIN

Nov 1st 2023 – Apr 30th 2024

Unless otherwise specified by subsequent bulletin, the following documents are in effect and employees must be in possession of:

- ☐ CN Operating Manual.
- ☐ Canadian Rail Operating Rules dated October 28, 2021
- ☐ Eastern Division - Great Lakes Division Time Table 45, dated February 1, 2023
- ☐ Eastern Division - Great Lakes Division Time Table 45 Supplement 1, dated April 30, 2023
- ☐ General Operating Instructions (Sections 1 - 10) dated May 1, 2023 (Via crews are exempted from carrying GOI sections 1,6,7,9,10)
- ☐ Transportation of Dangerous Goods dated May 1, 2023
- ☐ Section 1 & 2 – Track Units, green tabs of the operating manual, dated December 15, 2015

If affected, employees must be in possession of these documents:

- ☐ Western Region – Prairie North Division Time Table 30, dated February 1, 2023
 - ☐ CN/CP Differences Package dated Oct 14, 2015, Updated November 1st 2022
 - ☐ Metrolinx Time Table 3 dated April 30, 2023
 - ☐ Metrolinx Summary Bulletin dated Nov 1st, 2023 and applicable Metrolinx Operating Bulletins for employees operating on Metrolinx Territory
 - ☐ Passenger Operation and Evacuation dated Feb 1st 2020
 - ☐ CP Parry Sound Subdivision Time Table Module 12.3 is in effect
 - ☐ Metrolinx General Engineering Instruction, (MX-GEI), Effective May 1st, 2023.
- Locomotive Engineers Operating Manual:
- ☐ Section A to H dated May 1st 2016
 - ☐ Section I (Distributed Power Procedure Guide) dated October 2010
 - ☐ Section J (Trip Optimizer Procedure guide) dated May 1st 2016

Crews from VIA, GO and other railways governed by their own manuals are exempted from carrying CN Locomotive engineer operating manual.

Following Yard/Terminal Operating Manuals are in effect:

- ☐ Brampton Intermodal Terminal Operating Manual, dated Mar 1st, 2009
- ☐ Buffalo Operating Manual No.7, dated Nov. 1, 2004
- ☐ MacMillan Yard Operating Manual, dated May 1, 2020
- ☐ Oakville/Aldershot Yard Operating Manual, dated Nov 1, 2018
- ☐ Oshawa Terminal Operating Manual, dated March 1st, 2018
- ☐ Sarnia Terminal Operating Manual, dated April, 2017
- ☐ Capreol Terminal Operating Manual, effective Aug. 10, 2016
- ☐ Hornepayne Terminal Operating Manual, effective April 15th, 2018
- ☐ USRC Time Table No.1, dated Nov 1, 2021
- ☐ Windsor/Detroit Operating Manual No.8 dated Apr. 7th 2002 and Windsor – Van de Water Yard Terminal Operating Manual dated March 2015
- ☐ Engineering employees, in addition to the above, must carry General Engineering Instructions dated November 2013

BULLETINS

OPERATING BULLETIN

- Communicates immediate or upcoming changes
- Information or instructions required to update an existing document and to relay important information
- Updates are published as needed

SUMMARY BULLETIN

- Summarizes all Operating Bulletins remaining in effect
- Information pertaining to System Revisions
- Published every six months



PTS-Certified Workers must work under protection of a Protecting Foreman.



2

Metrolinx Life Saving Rules

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.

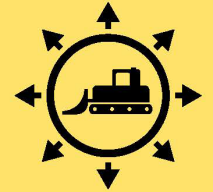
Metrolinx Life Saving Rules



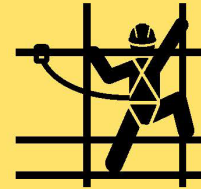
Always expect rail traffic at any time, on any track, in either direction



Always listen to your safety briefing and obey the flagperson's instructions



Always stand clear of moving machinery or equipment and never enter an exclusion zone without permission



Always use fall protection when working at heights



Never enter a confined space without following confined space procedure



Always use a spotter when reversing a bus, machinery, or equipment when outside an exclusion zone



Never use a mobile device while driving and always obey traffic laws



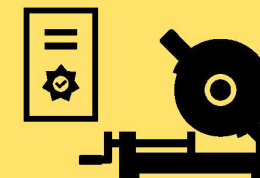
Never work or drive if you are not Fit for Duty



Always isolate and test electrical equipment before starting work on it



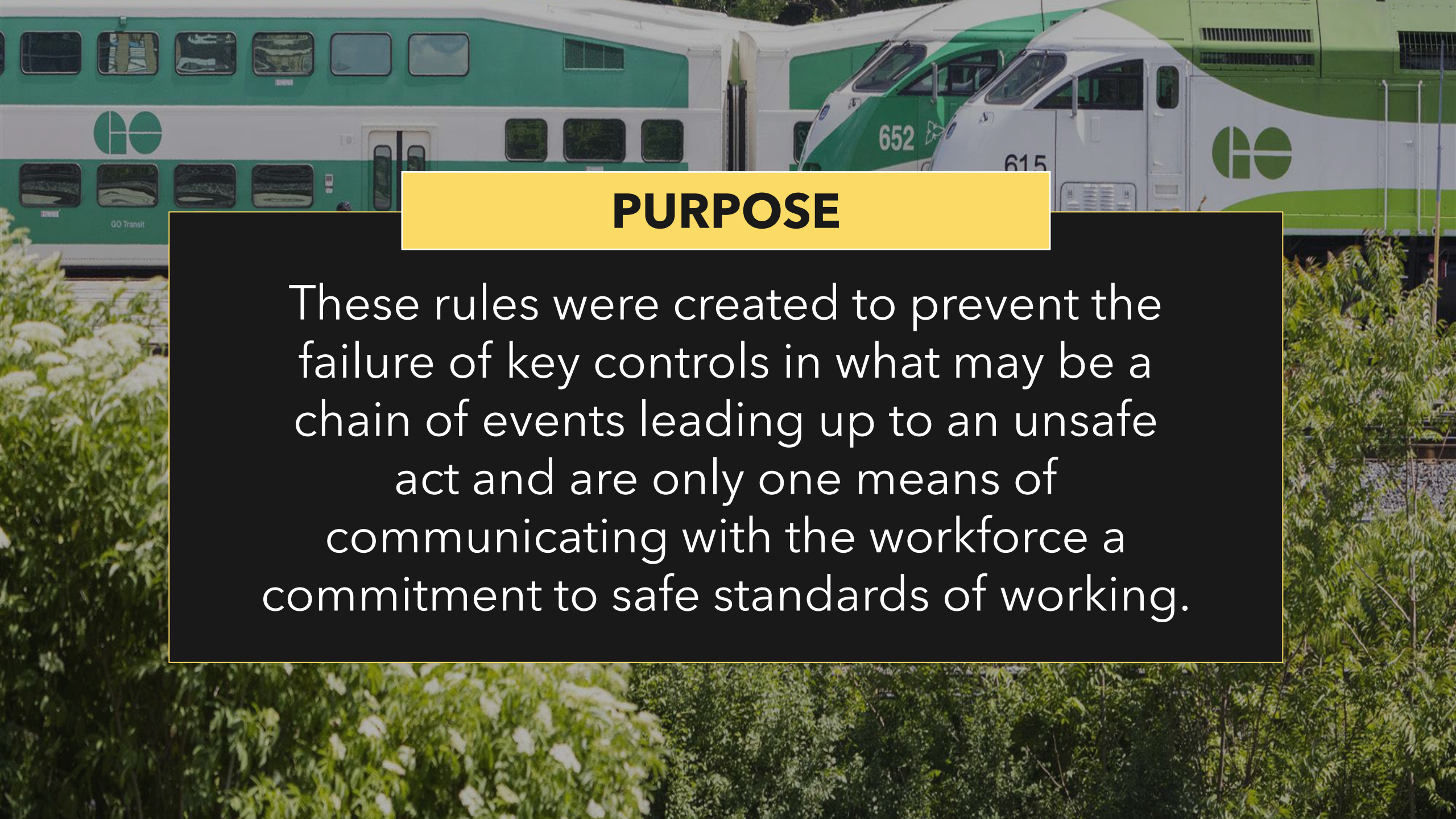
Always check you are wearing the correct Personal Protective Equipment (PPE) for the task



Always have appropriate permits in place and be trained for the task



Always follow safe lifting procedures and never walk under a suspended load

The background of the slide features a photograph of two GO Transit trains. The train on the left is a multi-level passenger train with a green and white livery, displaying the GO Transit logo and the text "GO Transit". The train on the right is a locomotive, also in green and white, with the numbers "652" and "615" visible. The trains are partially obscured by a large, dark grey rectangular box that contains the text. The bottom of the image shows a dense line of green trees and bushes.

PURPOSE

These rules were created to prevent the failure of key controls in what may be a chain of events leading up to an unsafe act and are only one means of communicating with the workforce a commitment to safe standards of working.

General Notice

Safety and a willingness to obey the rules are of the first importance in the performance of duty. If in doubt, the safe course must be taken.

GENERAL NOTICE.

To enter, or remain in, the service is an assurance of willingness to obey the rules.

Obedience to the rules is essential to the safety of passengers and employes, and to the protection of property.

Successful service requires the courteous, intelligent and faithful discharge of duty. To obtain promotion capacity must be shown for increased responsibility.

Employes are advised that, in accepting employment, they assume the accompanying risks, and are expected to look after, and be responsible for, their own safety, as well as to exercise the utmost caution to avoid injury to others.



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





The following video contains material/information that is sensitive in nature and may appear to be disturbing to some audiences.

Viewer discretion is advised



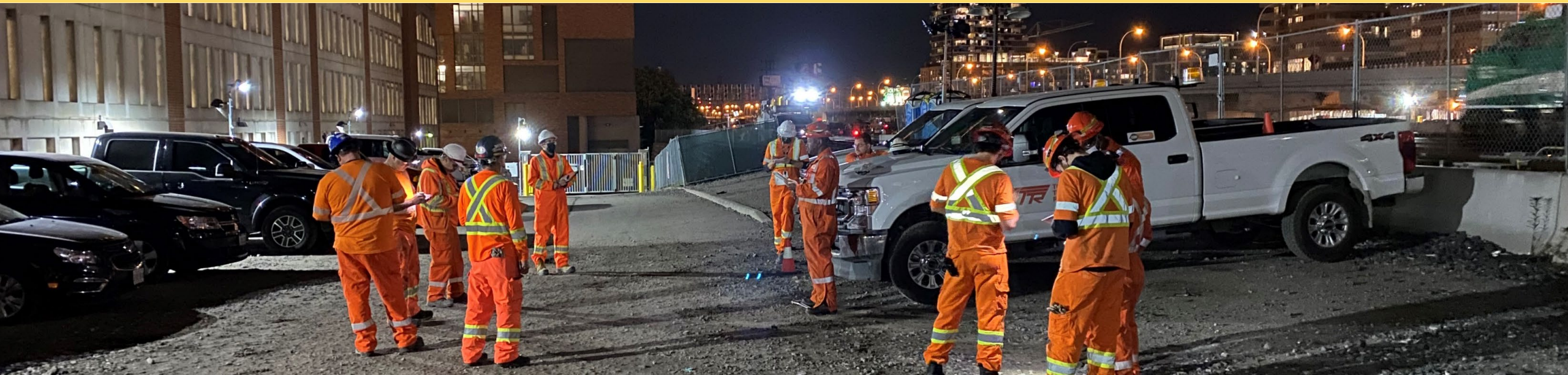
2017/03/15
06:41:18:729 0665

BPP: 90

Speed: 38

Follow Instructions

Always listen to your job/safety briefing and obey the Protecting Foreman's instructions.



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**



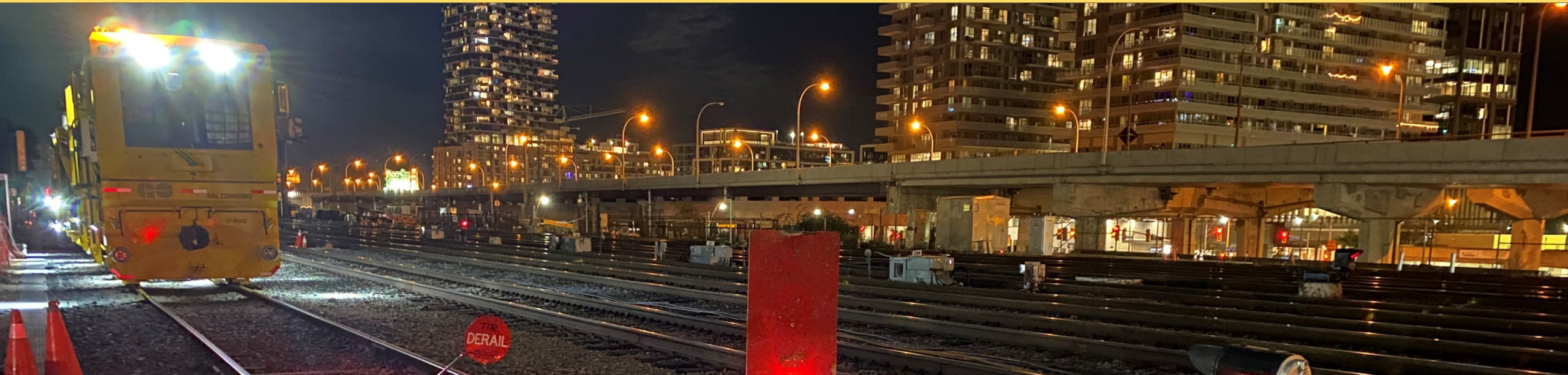
**Protecting
Foreman with
track protection**



**Completion of the
Job Briefing
session**

Be Aware of Moving Objects

Always stand clear of moving machinery or equipment and never enter an exclusion zone without permission.



Exclusion Zones

Always use a spotter when reversing vehicles and machinery when outside an exclusion zone.



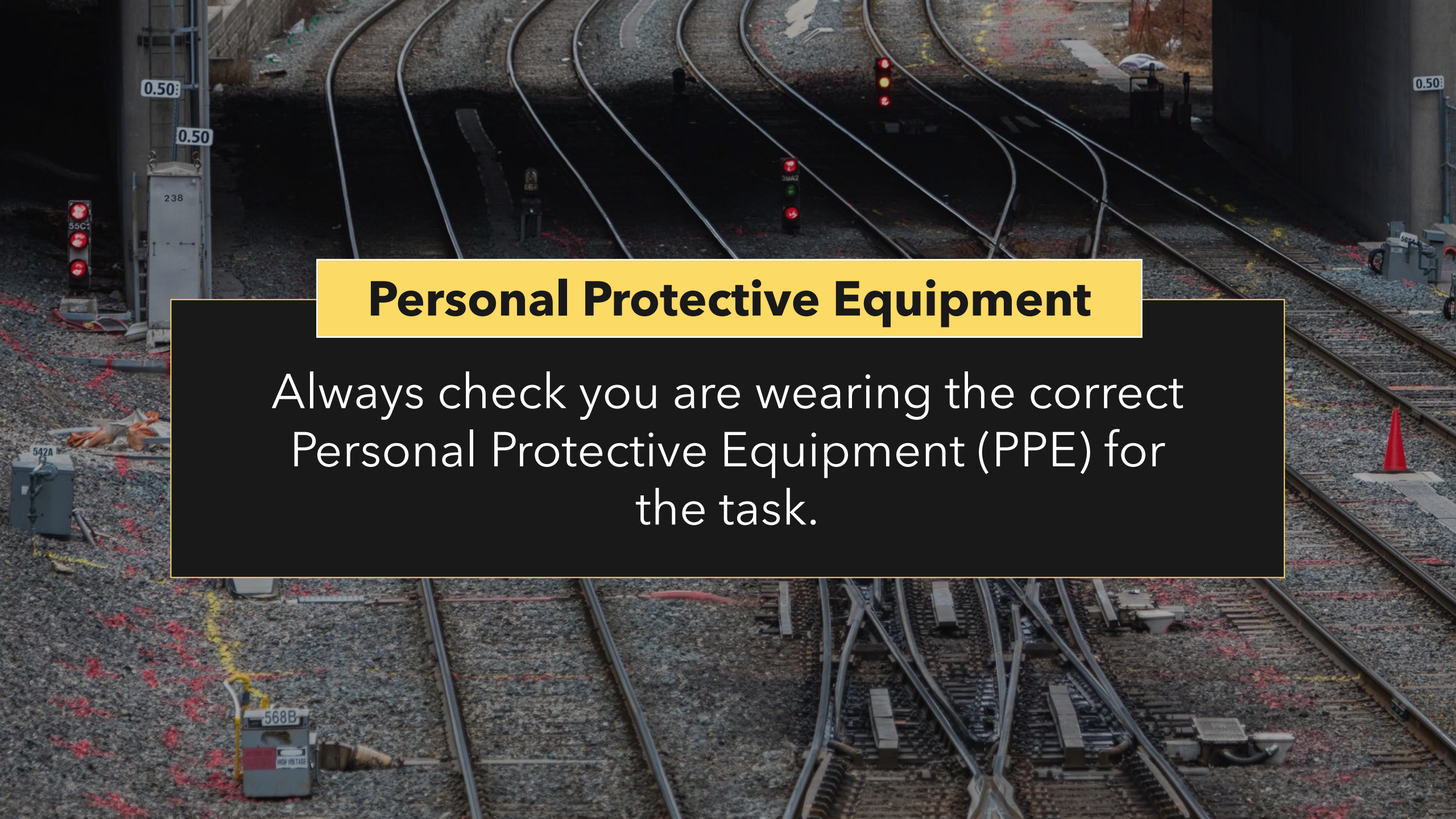
The personal use of electronic devices within the Metrolinx railway is prohibited.



Fit For Duty

Never work or drive if you are not Fit For Duty.



A high-angle photograph of a railroad yard with multiple tracks curving through the scene. Various pieces of safety and signaling equipment are visible, including signal lights with red and yellow lights, and utility boxes labeled with numbers like 542A, 568B, and 238. Some tracks have yellow and red spray-painted markings. A red traffic cone is placed on one of the tracks on the right side.

Personal Protective Equipment

Always check you are wearing the correct Personal Protective Equipment (PPE) for the task.

Plan Ahead

Ensure you have appropriate permits in place and be trained for the task.



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**





3

Roles in the Railway

- Train operating crews
- Rail Traffic Controllers
- Protecting Foreman
- Workers



Canadian Rail Operating Rules

Rules that govern safe rail operations

Train Crews

Rail Traffic
Controllers

Track Protection/
Inspection and
Maintenance

Train Crew

- Locomotive Engineer

- Conductor



Rail Traffic Controller (RTC)

An employee in charge of the supervision and direction of movements and for the provision of protection for track work and track units on a specified territory.



Protecting Foreman

An Employee named in the track authority and in possession of Positive Protection (CROR Rule 41, 42 or TOP) and the Employee In Charge (EIC) of a work project protecting Employees/Workers, Visual Work Groups, Separated Work Groups, and Track Units.



SUB-FOREMAN

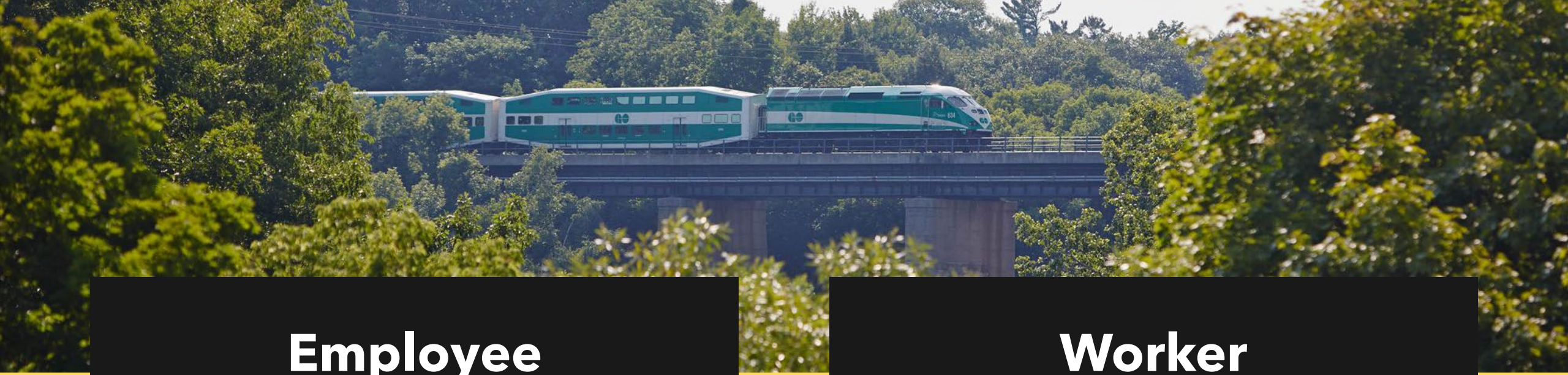
Protecting
Foreman

Sub-
Foreman

Sub-
Foreman

Sub-
Foreman

Sub-
Foreman



Employee

- A person qualified to regulatory and company standards employed by the company. Applies to contract employees and employees of other companies and railways operating and/or performing other rules related duties on the host railway trackage.

Worker

- A non-CROR Rules qualified individual or contractor performing work within the Rail Corridor.

Contractor

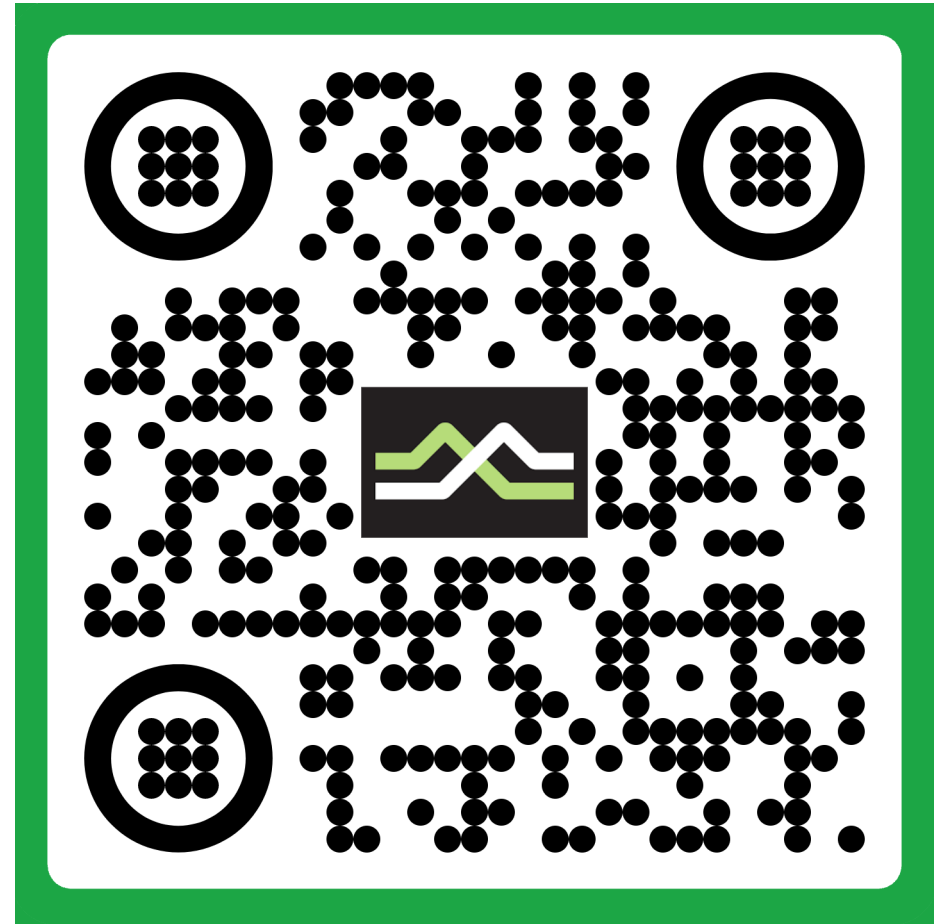
- An individual, person, or entity engaged under contract by Metrolinx or a third party to provide Construction or Maintenance services within Metrolinx Property. A Contractor can include a General Contractor or a Project Company.

Project Delivery Team (PDT)

- Made up of Metrolinx employees and contracted Consultants, who manage construction projects
- Review and distribute work plans to internal stakeholders, for approval
- Oversee work being completed for Metrolinx, ensuring actual work being done aligns with work included in approved plans

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

The background image shows a railway yard with multiple tracks curving through the scene. On the left, there is a grey signal post with two red lights and a white sign that reads "0.50". Below it is a grey electrical cabinet with the number "238". Further down, another grey cabinet is labeled "542A". In the bottom left, a grey cabinet is labeled "568B" and has a "HIGH VOLTAGE" warning. On the right, another signal post with three lights (red, yellow, red) is visible, and a grey cabinet is labeled "0.50". A red traffic cone is placed on the gravel bed of one of the tracks. The tracks are made of steel rails on wooden sleepers, with gravel ballast between them.

Chain of Communications

Always notify your
Protecting Foreman first!





4

Railway Environment

METROLINX GO TRAIN MAP



Railway trackage designated by Timetable.

METHOD OF CONTROL		NUMBER OF TRACKS	BALA SUBDIVISION		MILE	SIDING CAPACITY IN FEET	DOB LIMITS	END TO END STANDBY CHANNEL	DTMF RTC STANDBY CHANNELS	WAYSIDE INSPECTION SYSTEM	SPECIAL DANGEROUS COMMODITIES ZONE	KEY TRAIN / HIGHER RISK KEY TRAIN ZONE
USRC			TORONTO Union Station		0.0			AAR 87-87	AAR 10-10	4.9		
2.1 ↑	CTC ↓	1	DON	2.1		2.1 ↑ DOB ↓ 16.02	GO 3 AAR 329-329	GO 4 AAR 377-377	16.02		2.1 ↑	2.1 ↑
			ROSEDALE	3.6	7050							
			ORIOLE	11.3	3468							
			ORIOLE GO	12.2								
			OLD CUMMER GO	14.1								
			DONCASTER SOUTH	15.4	2140							
			GLENCREST	15.9								
16.02 ↓			CN Bala Sub Connection		16.02						16.02 ↓	16.02 ↓
SUBDIVISION CONTROL FEATURES												
Union Station Rail Corridor controlled by MX RTC Cherry St. at Mile 2.1												
CTC between Mile 2.1 to Mile 16.02 Controlled by Metrolinx RTC. (Signal 162/162D Glencrest controlled by MX RTC)												
See CN Timetable for remainder of CN Bala Sub North of Mile 16.02 (Signal 161/161D Doncaster controlled by CN RTC)												

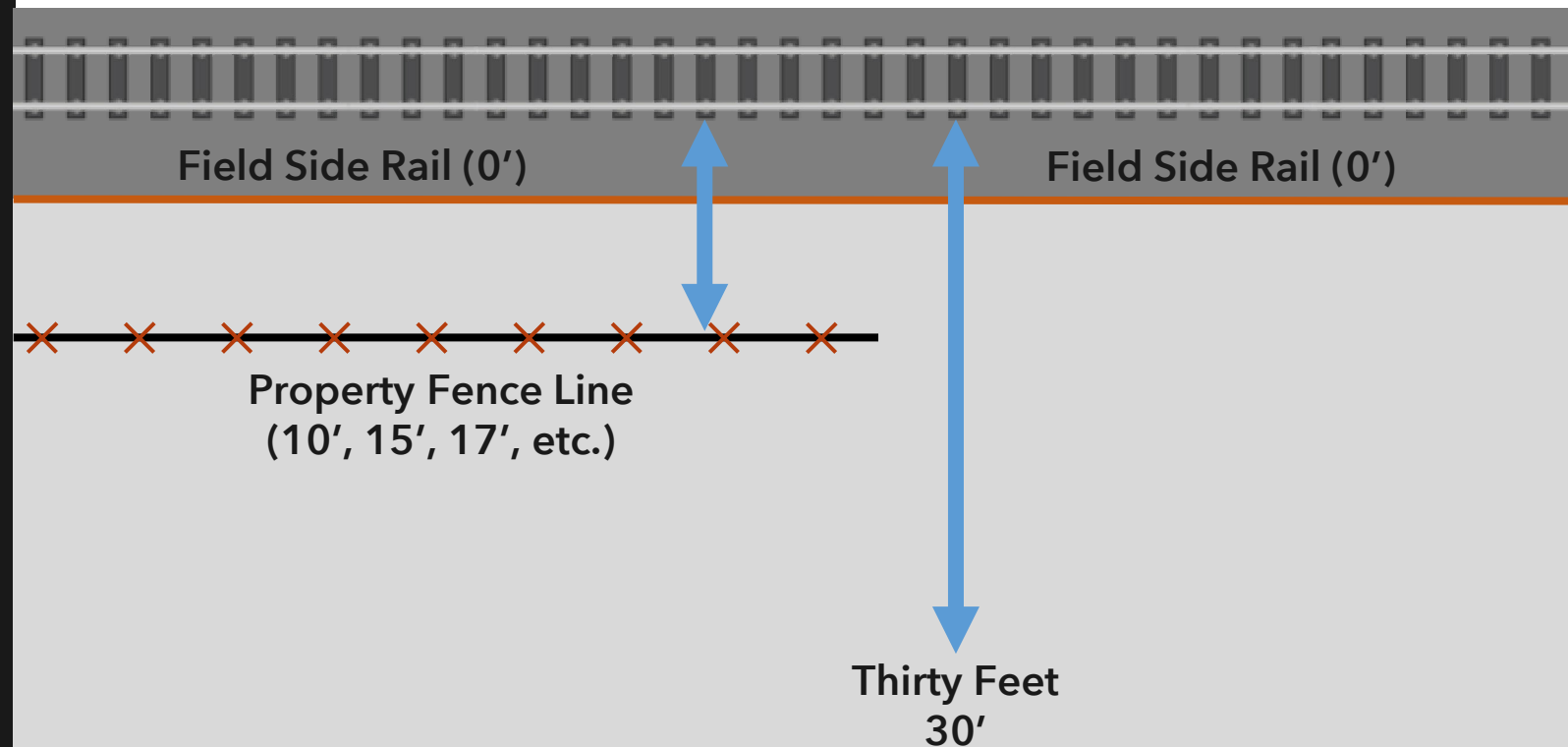
METROLINX LINES AND SUBDIVISIONS'

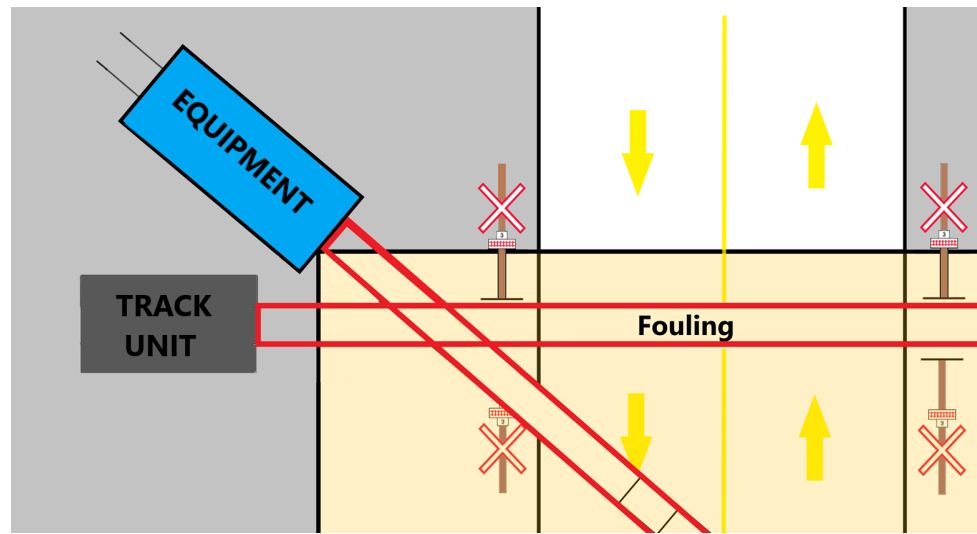
RELATIONSHIP GUIDE

Lakeshore West	Lakeshore East	Kitchener	Milton	Richmond Hill	Barrie	Stouffville
Oakville	Kingston	Weston	Galt	Bala	Weston	Kingston
Hamilton	GO	Halton			Newmarket	Uxbridge
Grimsby		Guelph				
		Dundas				

Right of Way (ROW)

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





Foul of Track (Fouling)

Is placing or leaving equipment or track units on the track close to a switch or within the turnout or on adjacent track preventing safe passage of equipment (including employees riding the side of such equipment) passing it on another track or in the case of a public crossing at grade would prevent vehicular traffic from being able to operate over the crossing unimpeded.



0 to 4'

Dynamic Envelope

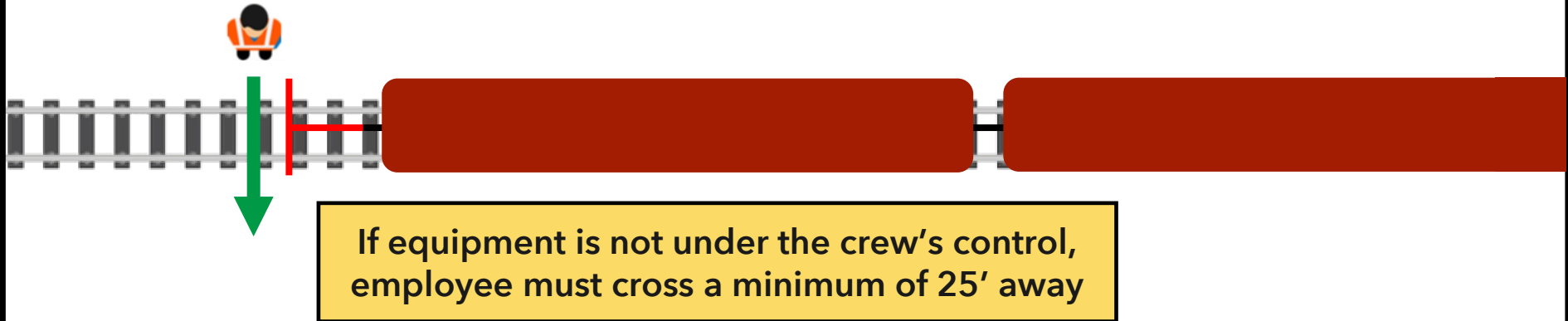
The outline of the space occupied by a rail vehicle when in motion, including the effects of tilt and sway of the locomotive and all attached cars.

This space will vary in:

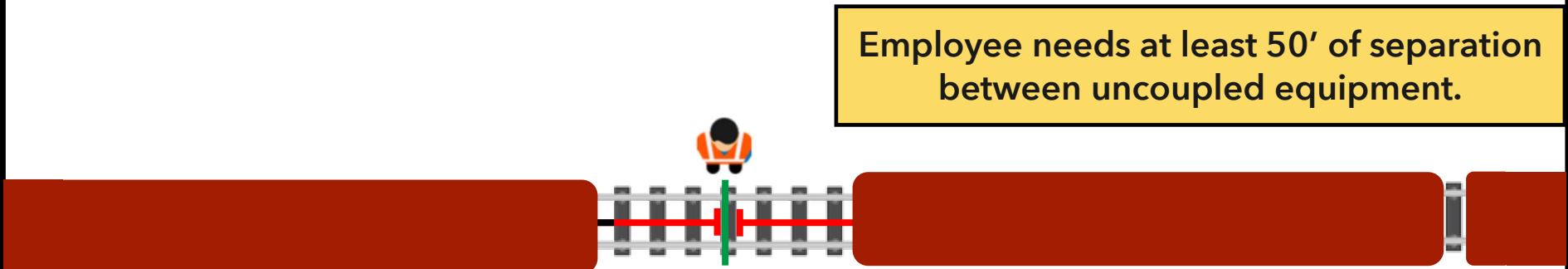
- Curves
- Bridges
- Tunnels
- Stations



MINIMUM DISTANCES



Crossing Between Uncoupled Equipment (not under control)



Main Track

A track of a subdivision extending through and between stations governed by one or more methods of control upon which movements, track units and track work must be authorized.





Main Track

Non-Main
Track

Position of Safety

A place not foul of any live track(s) where it is safe to stand when a Movement is passing.

When possible, Employees and Workers should be a minimum of 15 feet from the live track.



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.



5

Infrastructure

Track

1. Ballast

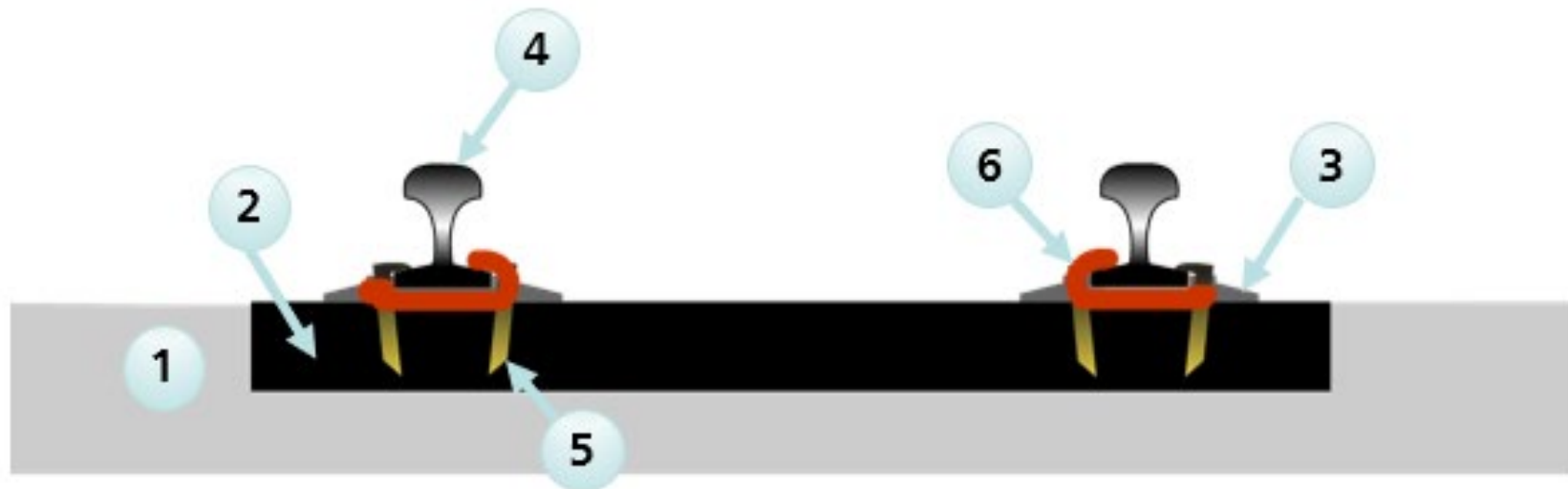
2. Ties

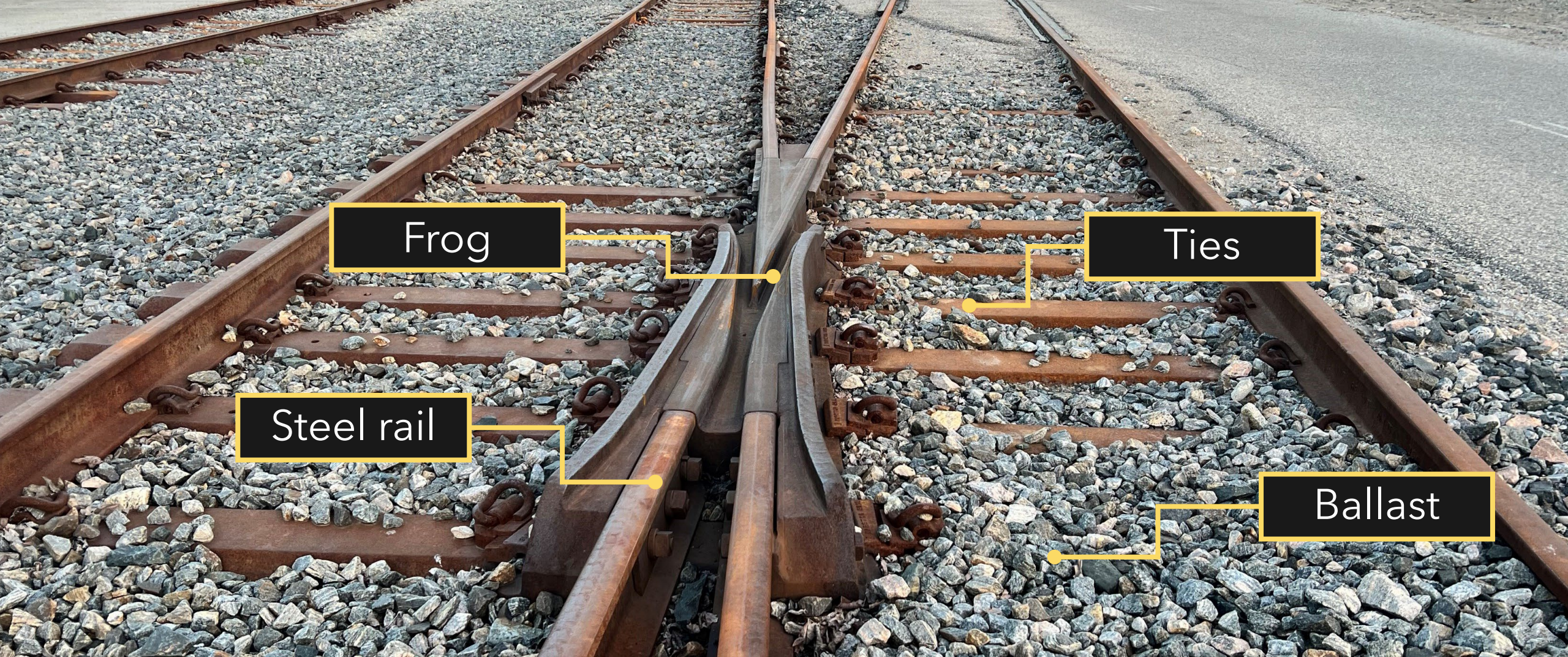
3. Tie plates

4. Rails

5. Fasteners

6. Anchors

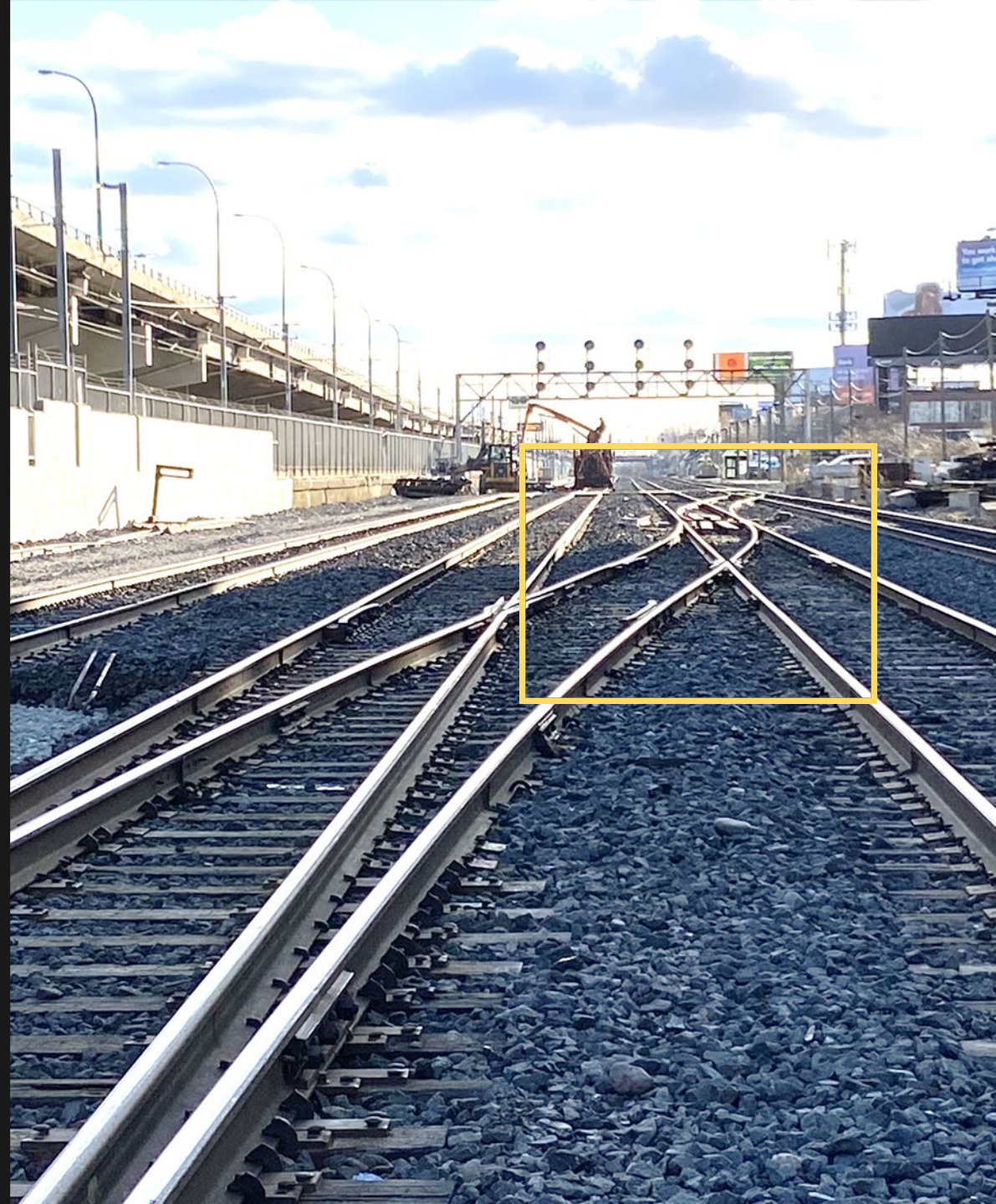




Infrastructure is the term used to describe the track, signals, and switches, in the railway used to control the train's direction.

Crossover

A track joining adjacent main tracks, or a main track and another track.



IDENTIFIABLE LOCATIONS - ENGINEERING



**HAND OPERATED
SWITCH**



SIGNAL

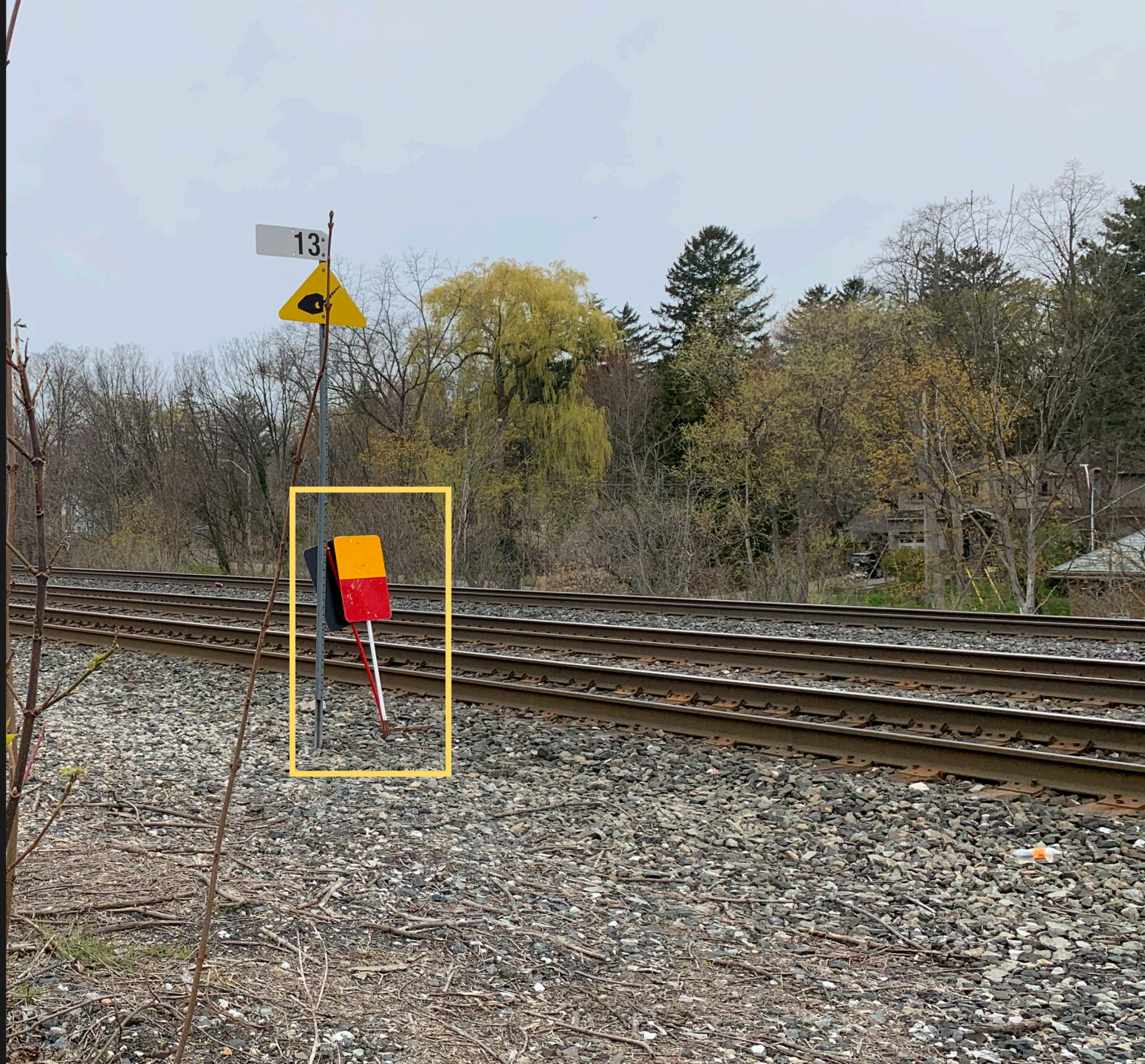


STATION NAME

Signal (Operation)



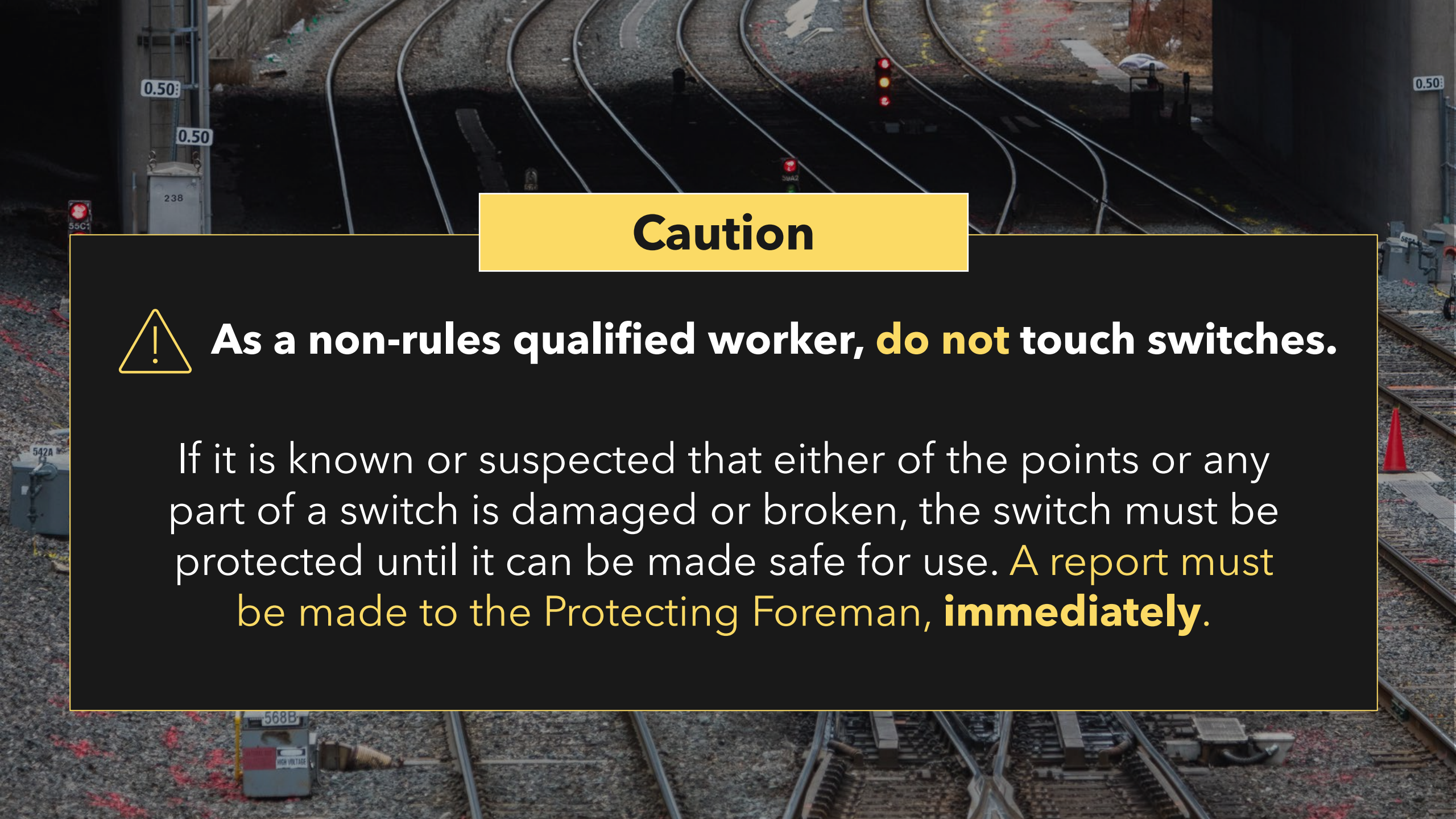
Flag/Signal (Engineering)



Switch

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





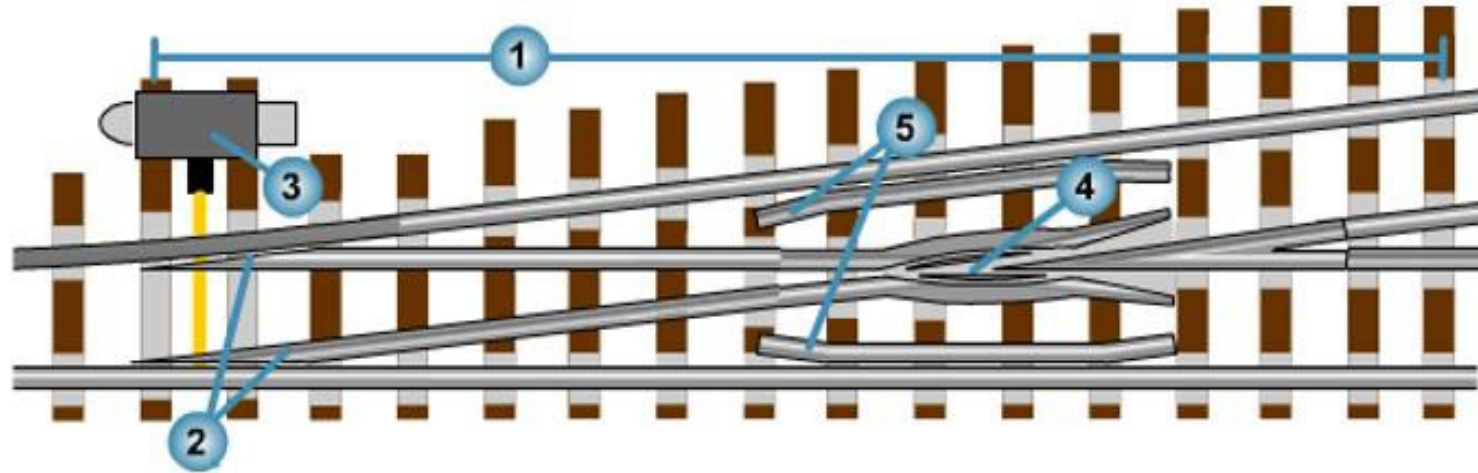
Caution



As a non-rules qualified worker, **do not touch switches.**

If it is known or suspected that either of the points or any part of a switch is damaged or broken, the switch must be protected until it can be made safe for use. **A report must be made to the Protecting Foreman, **immediately.****

SWITCHES AND TURNOUTS



Turnouts

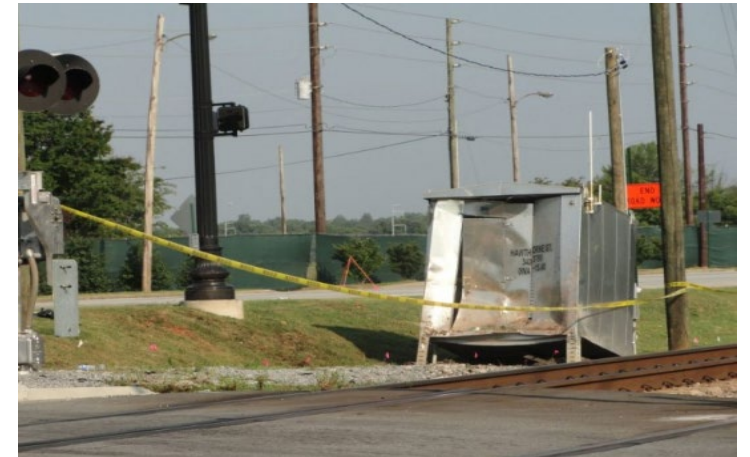
- A system of track structure used to move rail equipment from one track to another
- Related to switches
- The alignment of the switch points determine the direction the train will follow.
- Five primary components and/or areas make up a turnout.

Roadway Grade Crossings

A location where a public highway, road, street, or unrestricted private roadway, associated sidewalks and any pedestrian or bicycle pathway cross one or more railway tracks at grade.



INFRASTRUCTURE DAMAGE



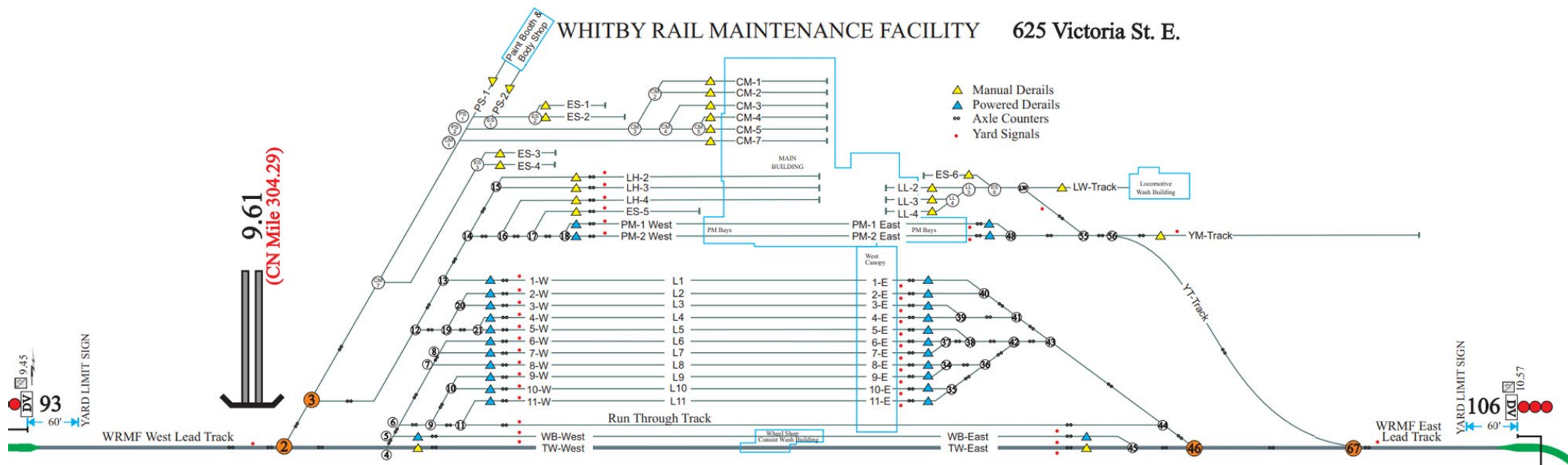


Chain of Communications

Always notify your
Protecting Foreman first!

YARDS

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



UNION STATION RAILWAY CORRIDOR (USRC)





6

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

If an incident or unplanned event happens, report it to your Protecting Foreman immediately.

If it was due human error, those required will be screened for Fit for Duty.

PTS credentials may be put on hold pending the investigation.



7

Personal Protective Equipment



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 earmuffs are designed to be worn with head protection.
- Dual hearing protection (plugs + muffs worn simultaneously) is required at noise levels greater than 105dBA.





8

Hazards

MOST DANGEROUS JOB ON EARTH





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.

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

Night Work Hazards

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

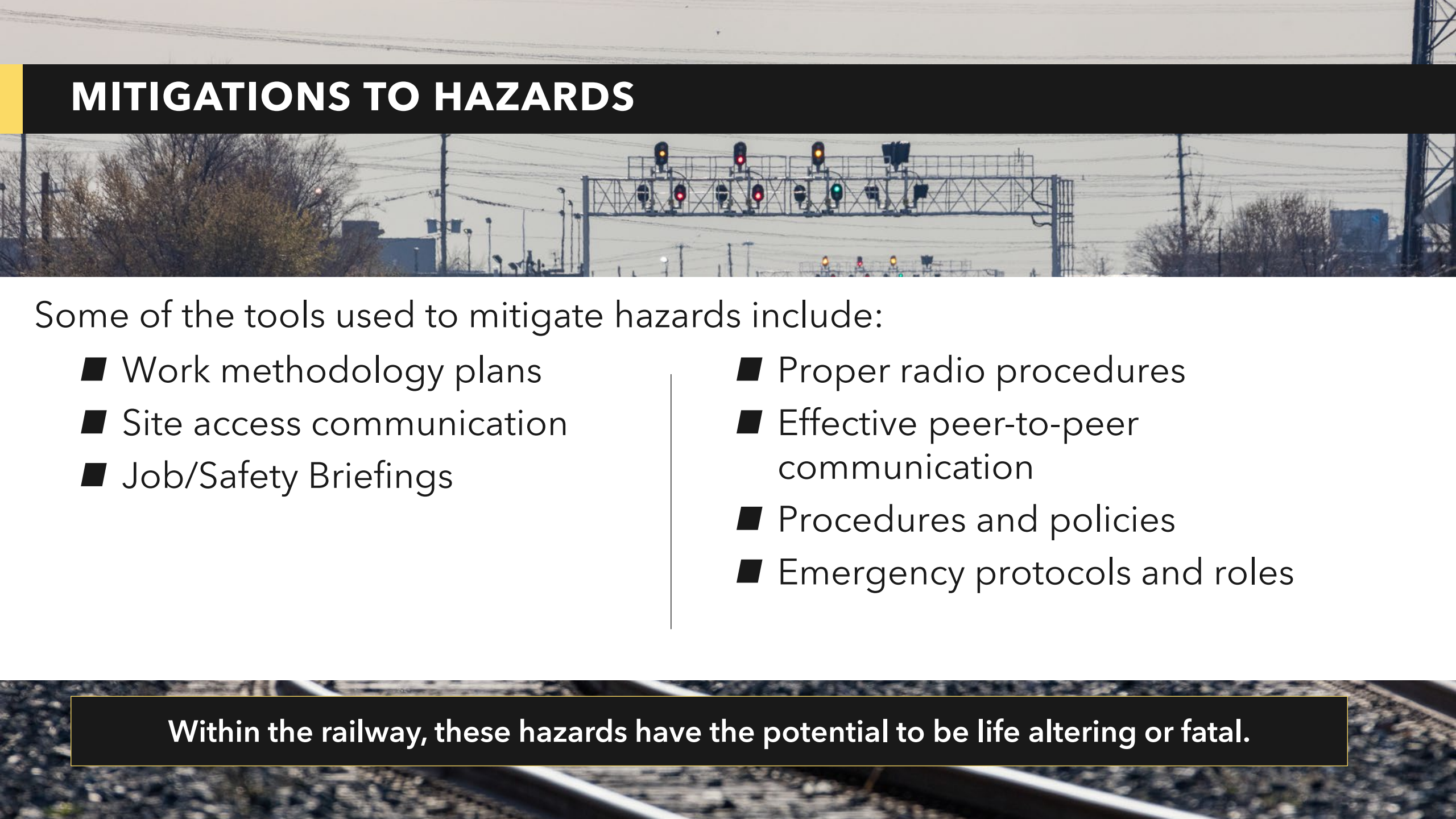


OPERATIONAL HAZARDS



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.



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.



Emergency Reporting

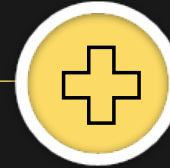
EMERGENCY BROADCASTS



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



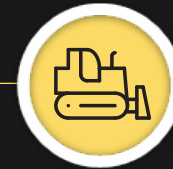
**Where objects are found
that cannot be safely
removed or protected.**



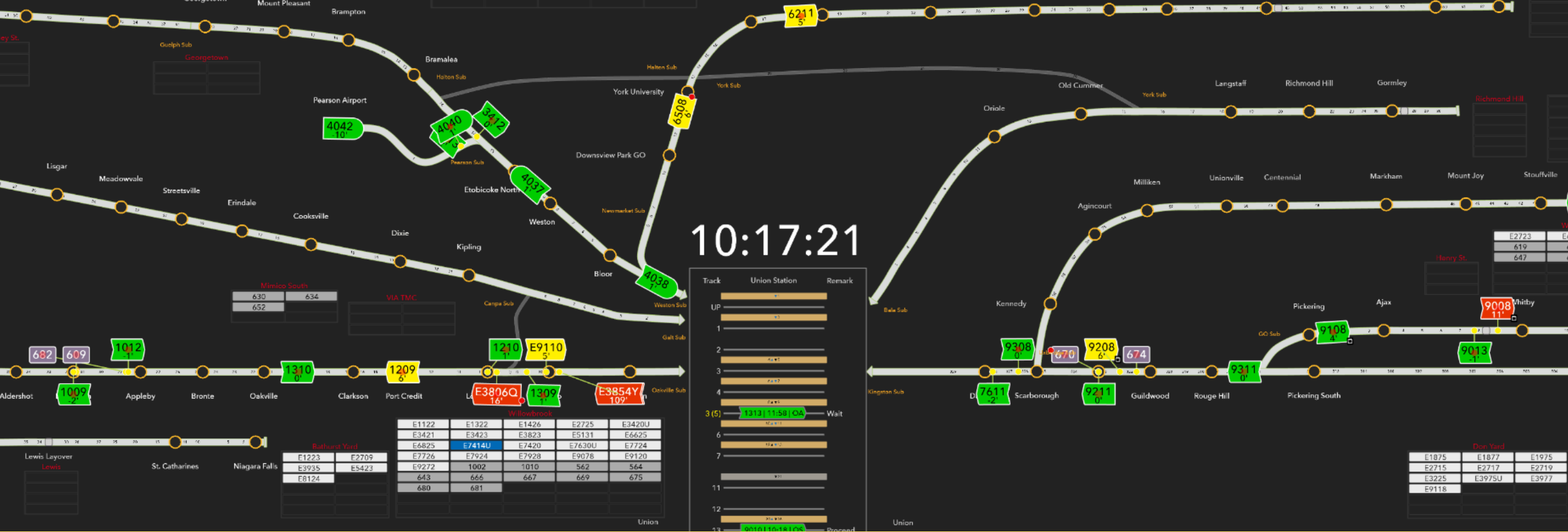
**When accidents involve
an injury.**



**Where conditions create
an unplanned hazard.**



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



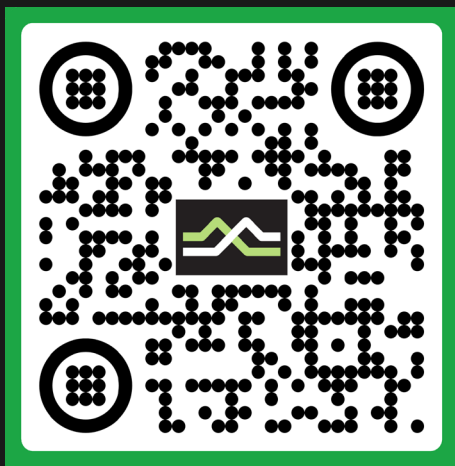
The impacts of an emergency broadcast include:

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



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.



10

Vehicles & Equipment

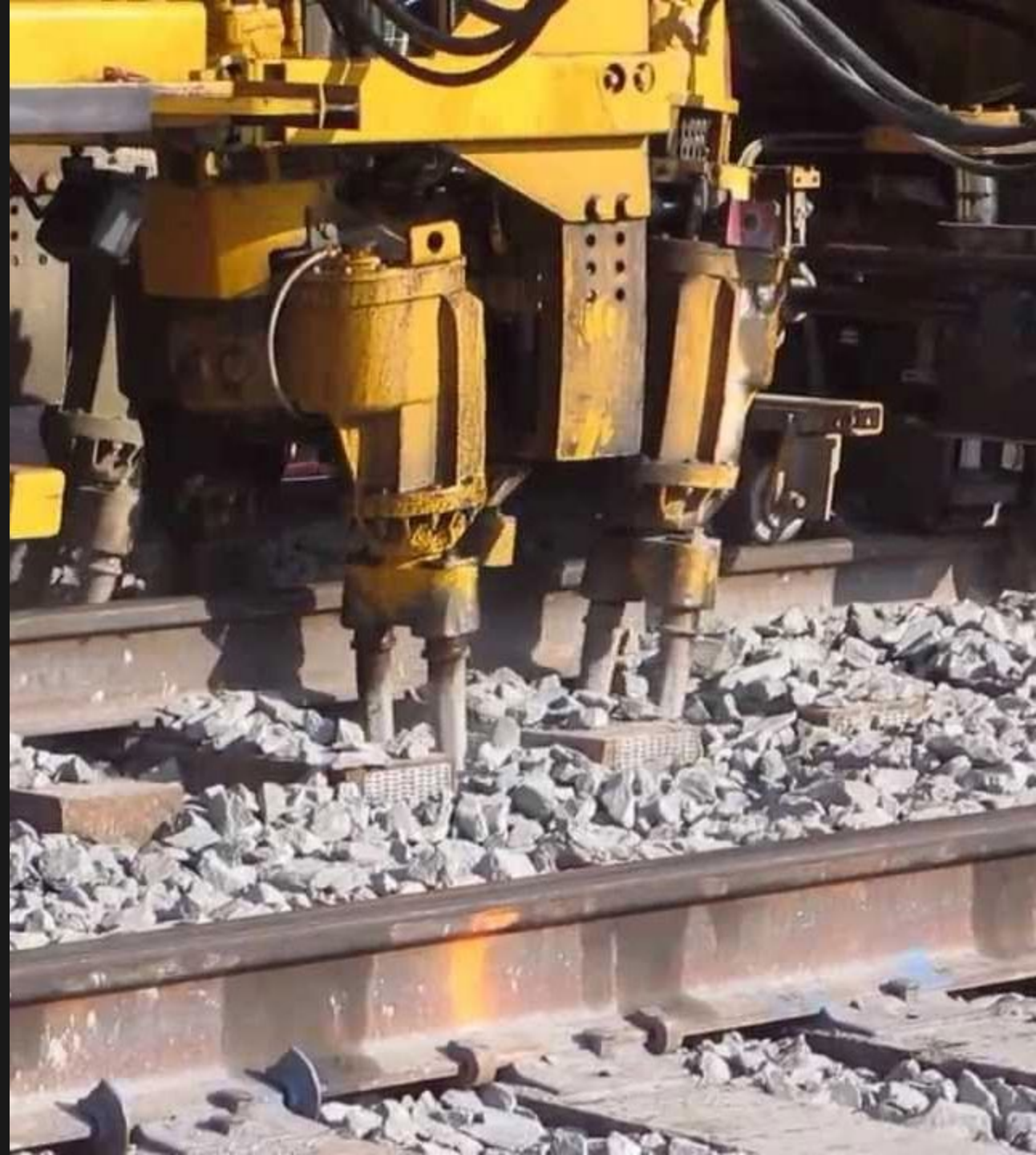
Train

An engine with or without cars intended to operate on the main track at speeds in excess of 15 MPH or a track unit when so designated.



Track Units

A vehicle or machine capable of on-track operation utilized for track inspection, track work and other railway activities when on a track.

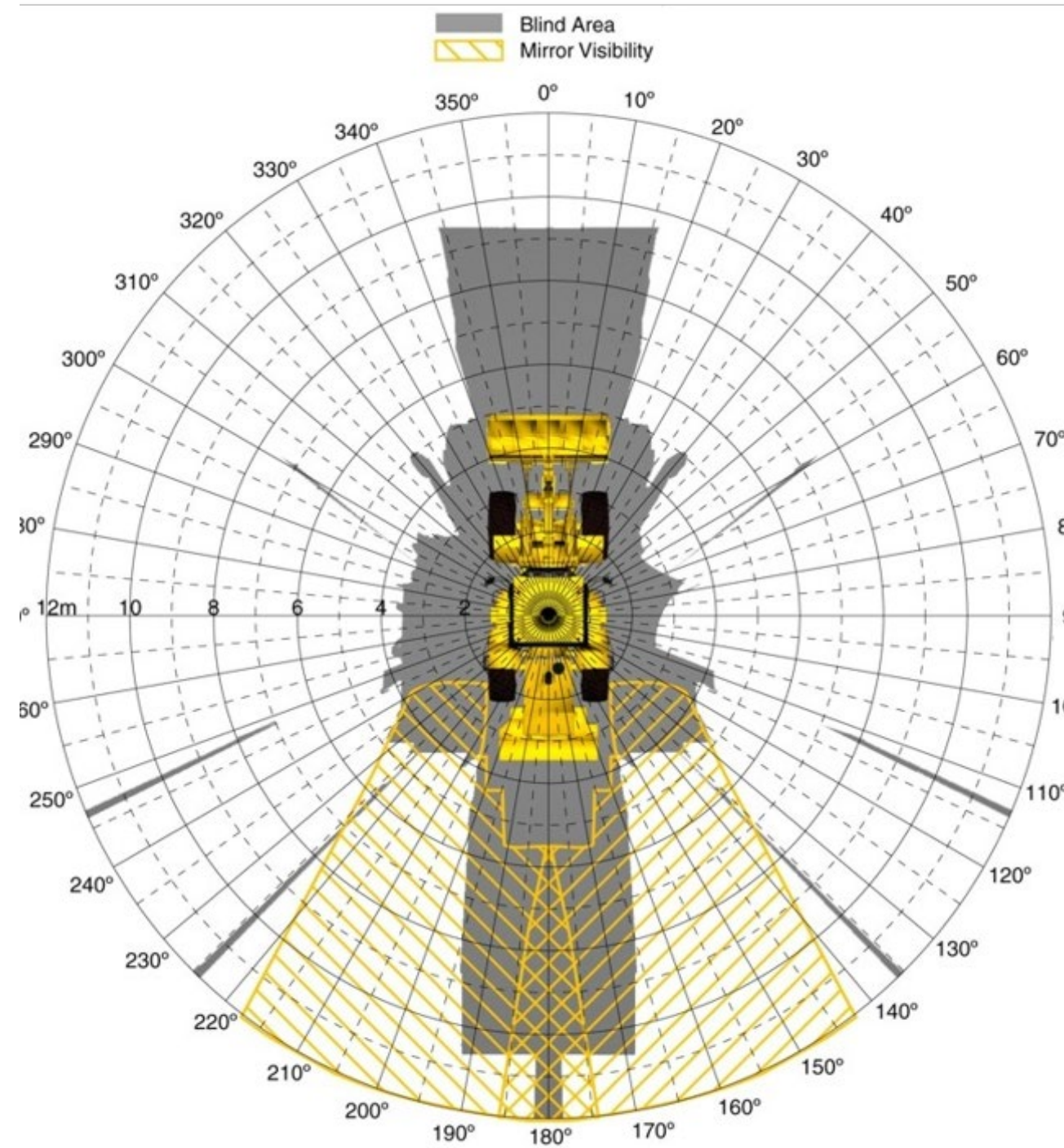


Hi-Rail Vehicles

A road vehicle or construction machinery designed and capable of operation both on and off track. When operated on a track they will be referred to as "Track Units".



- 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.



Reversing

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

- Know the operator's blind spots
- Stand in a safe position, not in the path of the equipment / machine
- 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



**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.**





11

Forms of Protection



The following video contains material/information that is sensitive in nature and may appear to be disturbing to some audiences.

Viewer discretion is advised

CAM.90



2019/01/23

Bell

BPP: 87

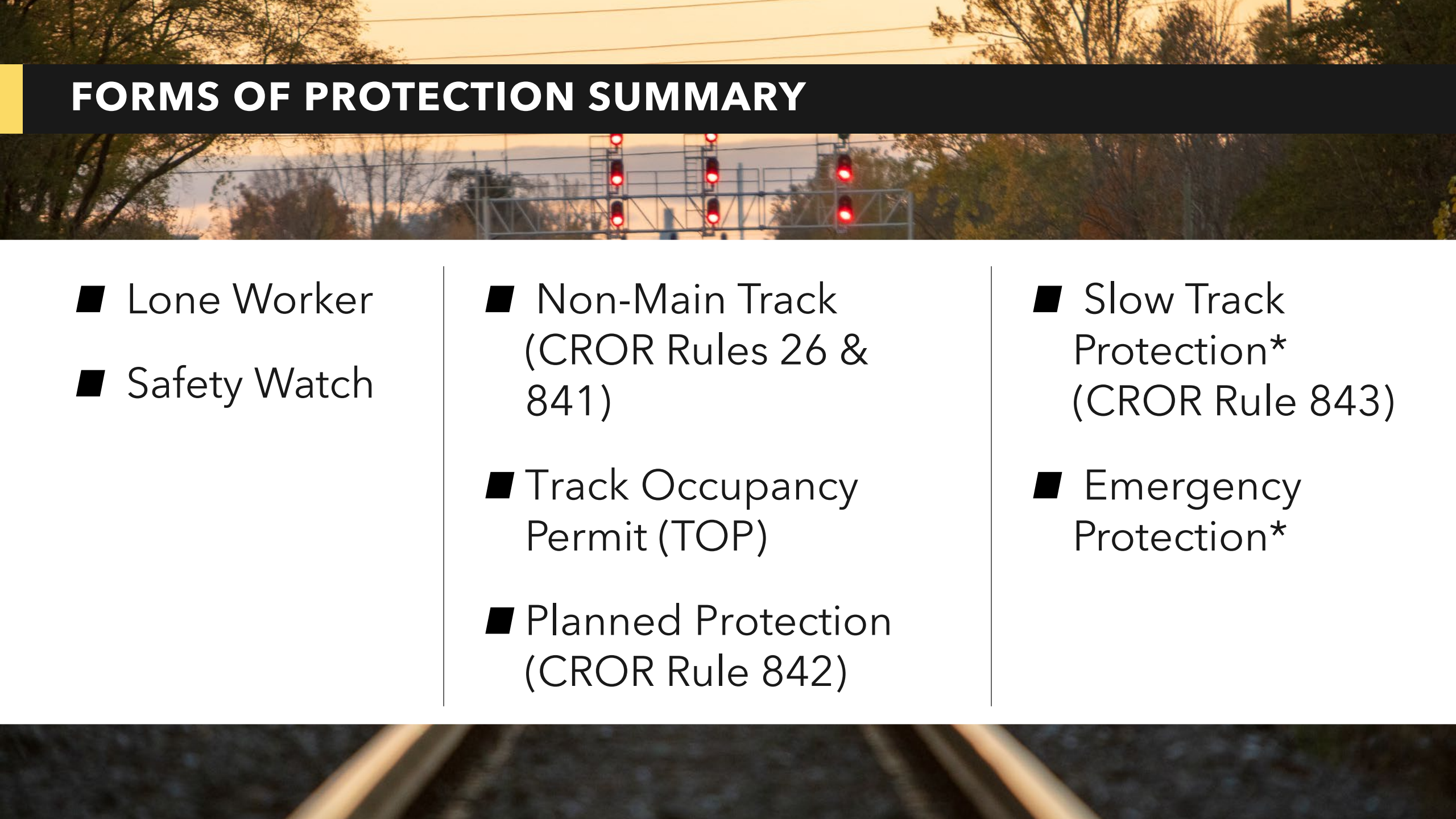
Speed: 91

00:40:08:852 0609

LAT: 043°24' 3.44"N

LON: 079°44'19.05"W

ALT: 107.70m



FORMS OF PROTECTION SUMMARY

- Lone Worker

- Safety Watch

- Non-Main Track
(CROR Rules 26 &
841)

- Track Occupancy
Permit (TOP)

- Planned Protection
(CROR Rule 842)

- Slow Track
Protection*
(CROR Rule 843)

- Emergency
Protection*

Safety Watch

WHAT

- Protection that conditionally permits a crew of up to five to work on track and clear for rail traffic
- Not required to protect against them in return.

WHO

CROR-qualified Employee responsible for protecting a crew of up to five.

WHEN

Restrictions: One hour after sunrise and one hour before sunset.

WHERE

Where work and environmental conditions allow and adequate sightlines permit.

WHY

To perform specific duties without using track protection that would affect the movements of a train.

Positive Protection

- CROR Rules 41/841
- CROR Rules 42/842
- Track Occupancy Permit (CROR Rules 849-864)



CROR Rule 842 Planned Protection

WHAT

Uses prescribed flags/signals and GBO to protect against rail traffic on all tracks within specified protection limits.

WHO

CROR-qualified Employee acting as Protecting Foreman.

WHEN

Protection is approved no less than 24 hours beforehand.

WHERE

On main tracks, protecting all tracks within the limits of authority.

WHY

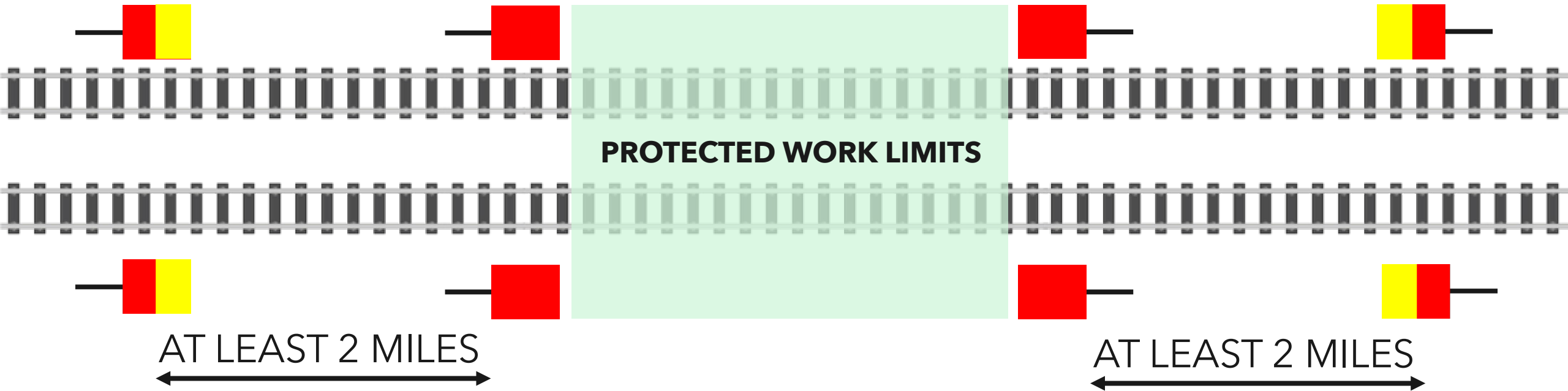
Used for scheduled track work and maintenance.

Flags/Signals

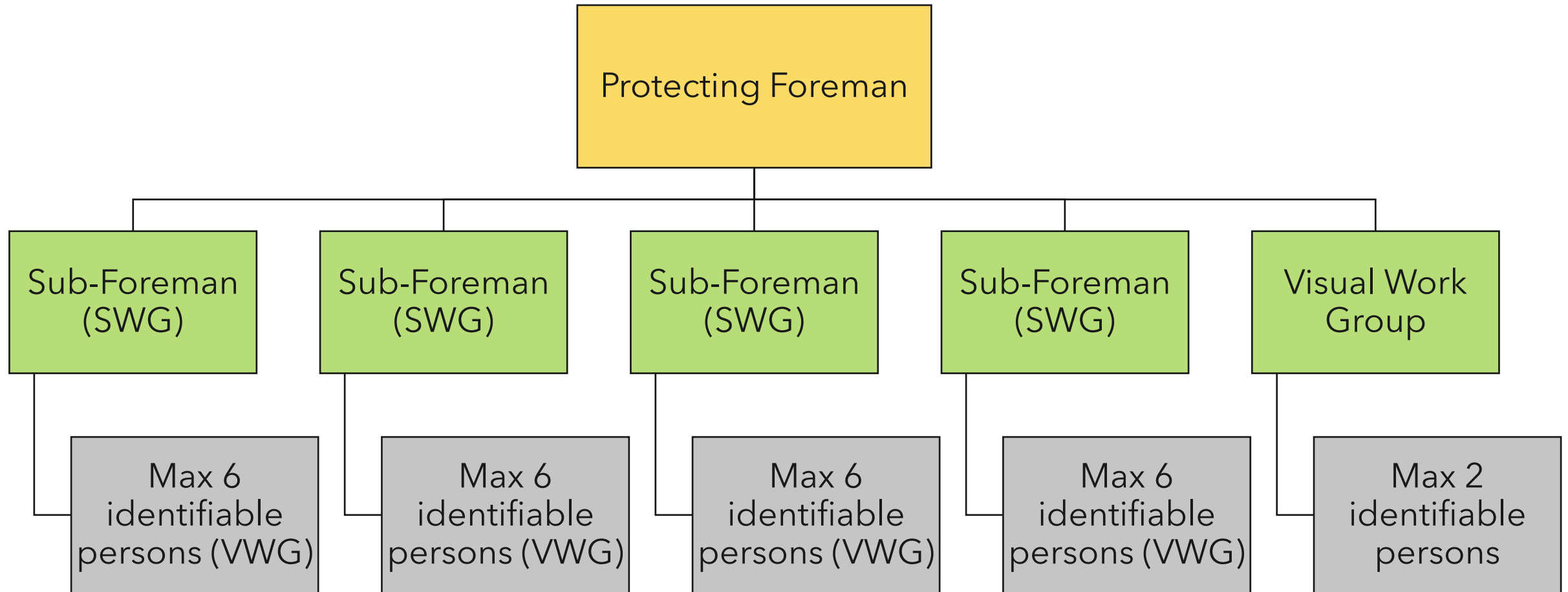




No work is authorized (protected) outside of the red flags/signals.



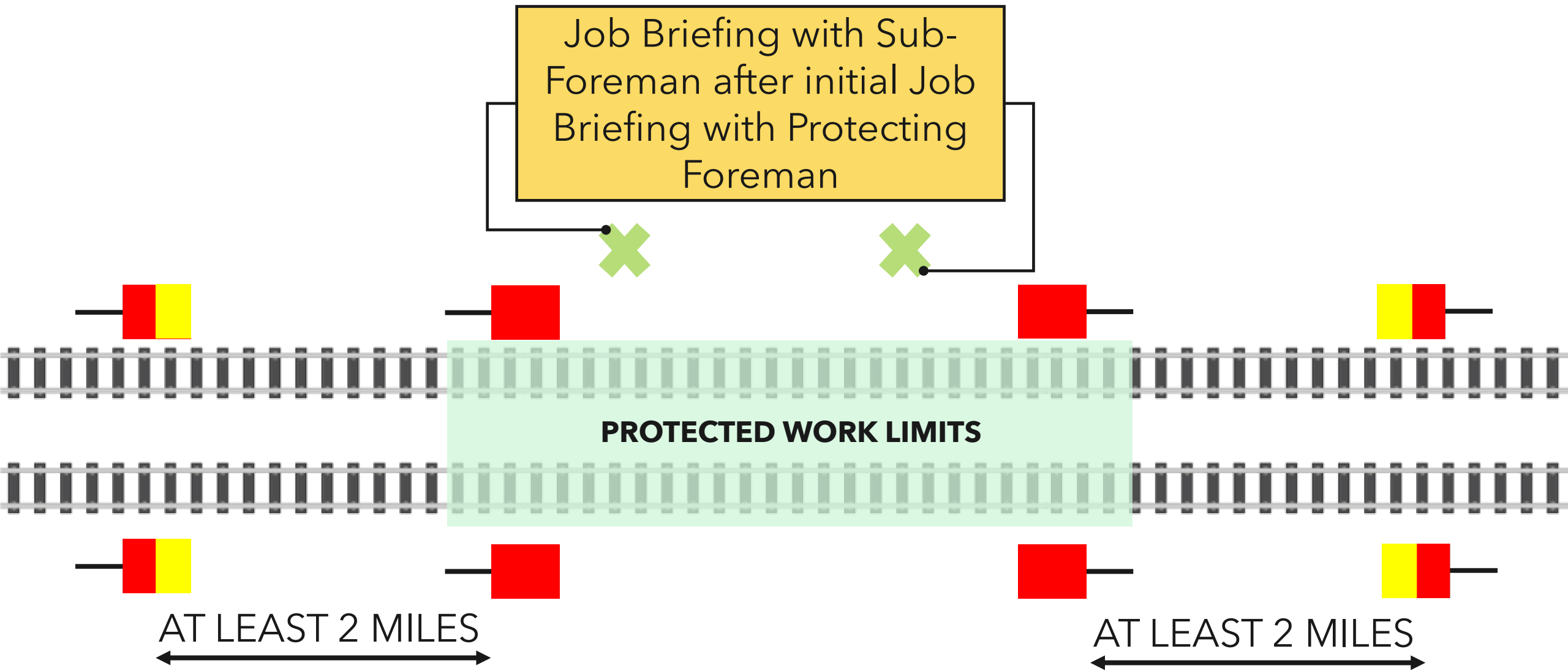
SUB-FOREMAN



Separated Work Group (SWG)

- When the nature of the work, size of the work crew, or the length of the work limits prevents the Protecting Foreman to visually confirm and personally supervise all persons engaged in the work, they must assign a **Sub-Foreman** in charge of the Separated Work Group.

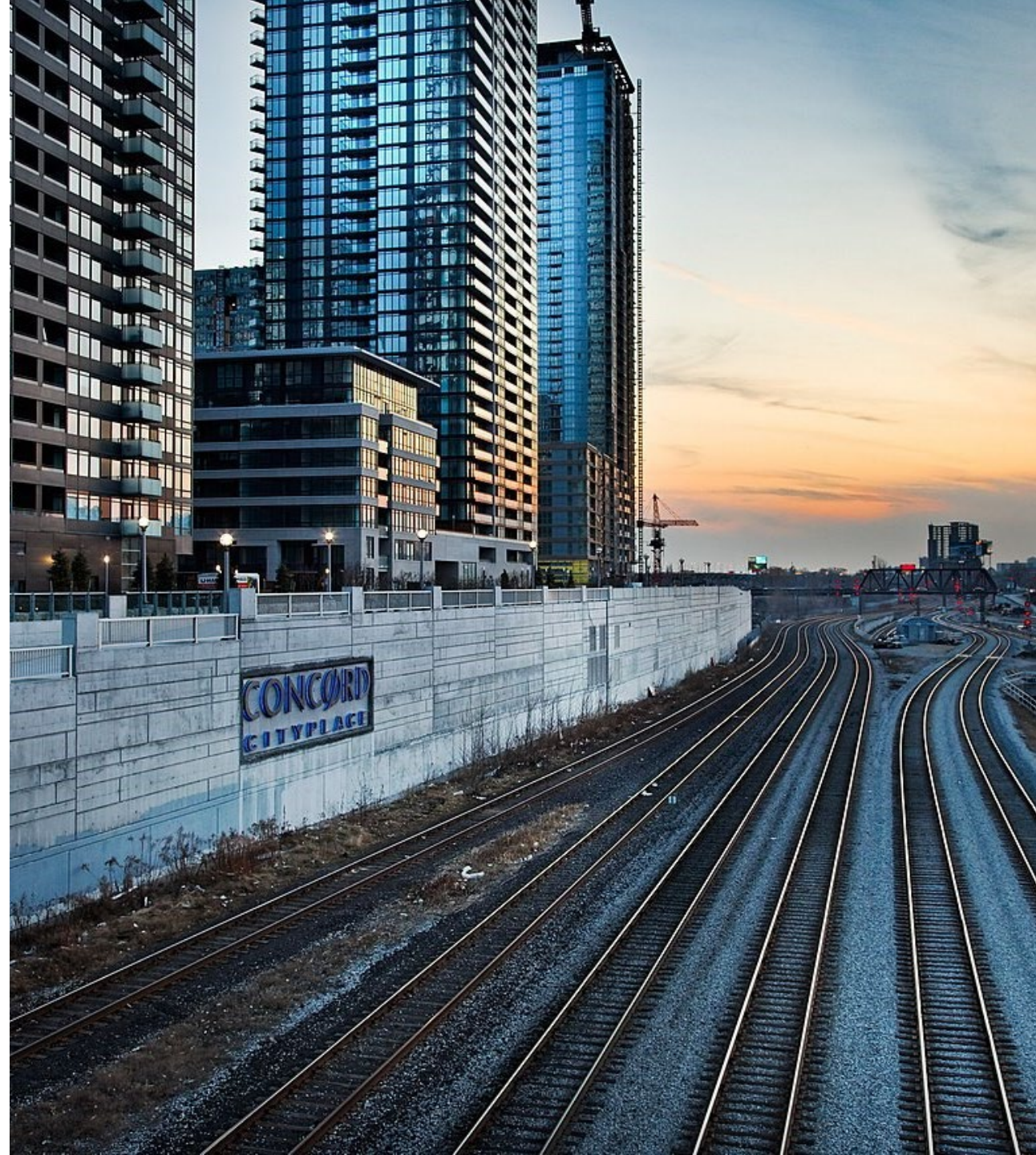
SEPARATED WORK GROUP



Track Occupancy Permit (TOP)

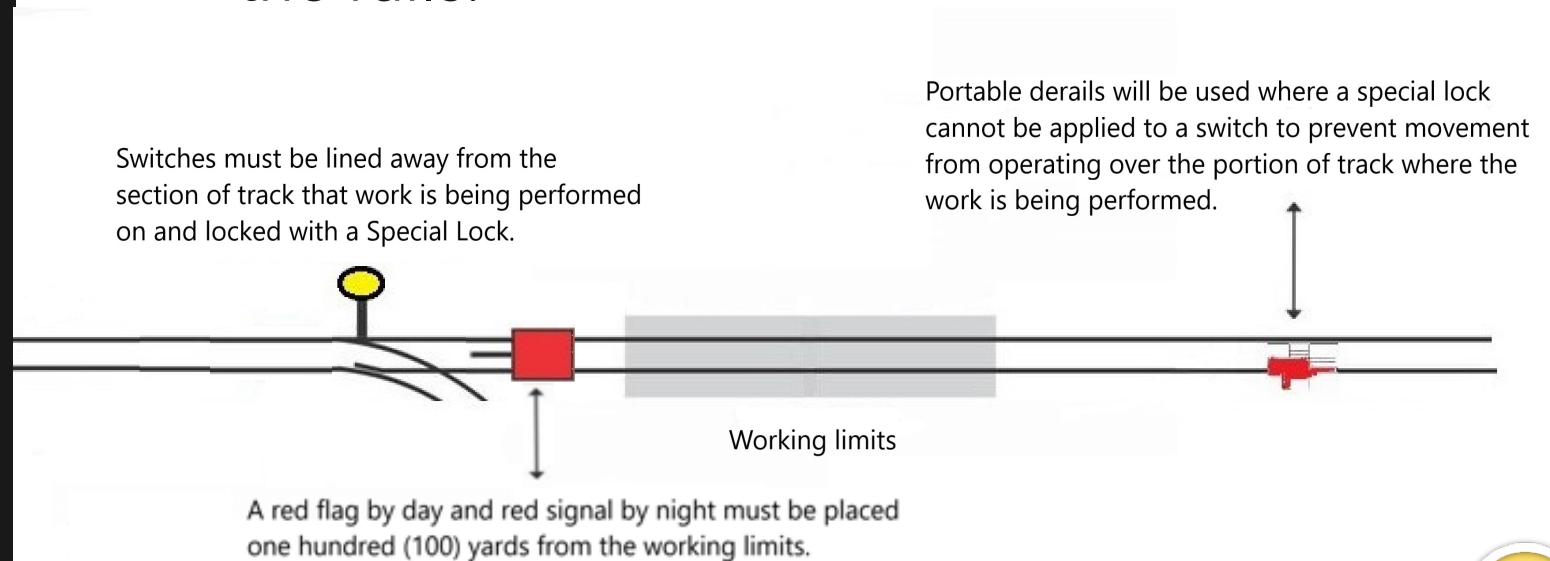
Track Occupancy Permits (TOP) are a form of protection that is used in areas where:

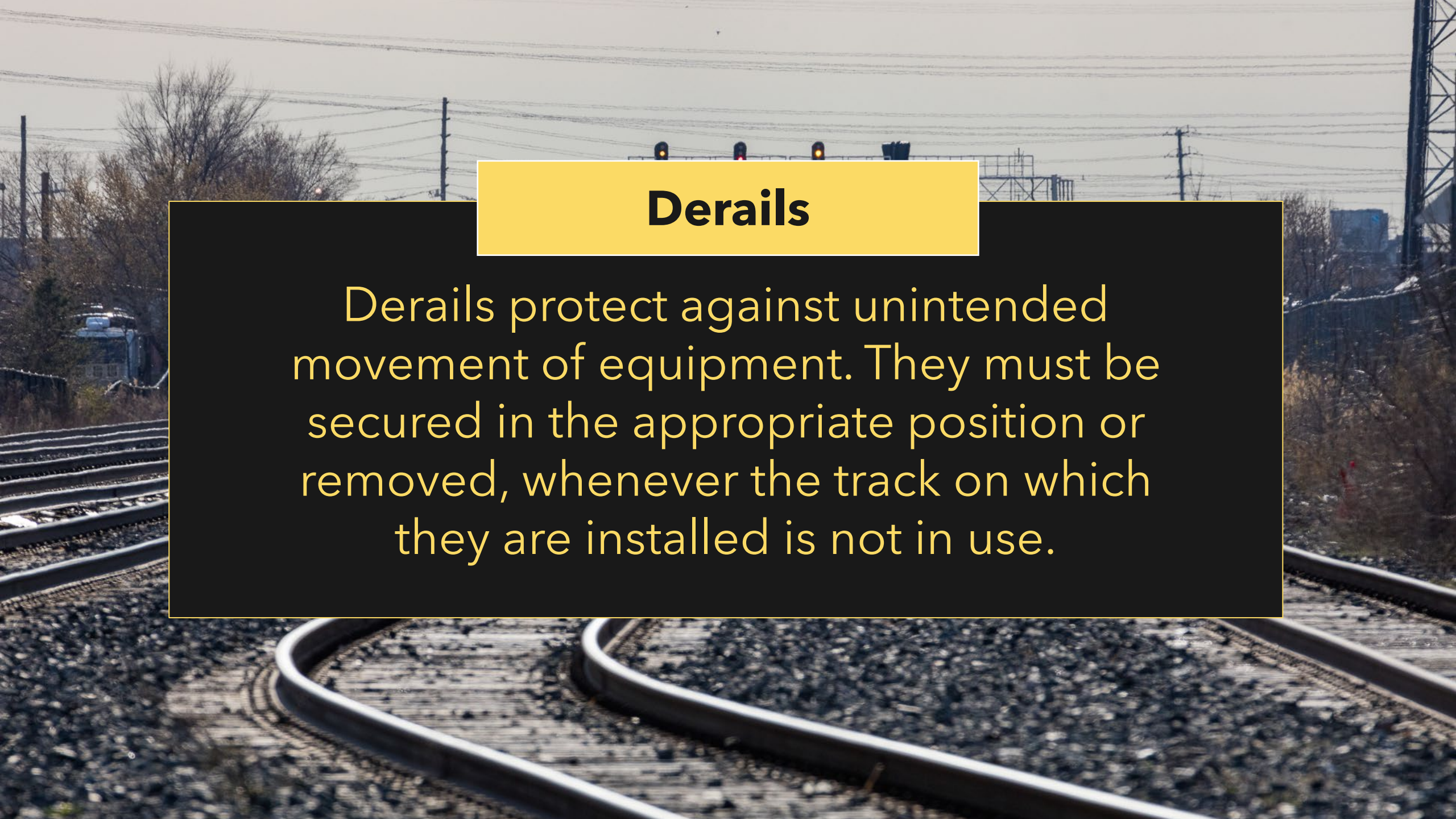
- Emergent work has been discovered
- Work on a single track is required in multi-track locations



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.



A photograph of a railroad track with a derail in the foreground. The derail is a curved metal track that branches off from the main track. In the background, there are signal lights and power lines. The scene is set in a rural or semi-rural area with some trees and a clear sky.

Derails

Derails protect against unintended movement of equipment. They must be secured in the appropriate position or removed, whenever the track on which they are installed is not in use.



IMPORTANT

Always listen to your Protecting Foreman!

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 oncoming movement.
- Only commence work when the Protecting Foreman says it is safe to do so.





12

Job Briefing

-
- Session
 - Record

Purpose of Job Briefing Session

- The purpose of a Job Briefing session is to provide a clear understanding of the work that is being performed and the hazards, risks, and controls in place.
- If at any time an Employee, Worker, or contractor does not understand the work or the protection, they must seek clarification.

Job Briefing Session

Job Briefing session(s) must be conducted before any work begins.



Job Briefing Sessions

- Follow the same format, to avoid confusion.
- Protecting Foremen must understand the nature of the work and any risks or hazards.
- Follow, at a minimum, the Metrolinx Job Briefing template.



WORKER'S RESPONSIBILITIES



Being familiar with the hazards of the environment & work



Communicating methods of instructions



Understanding assigned roles to respond to emergencies



Participating in and sign the Job/Safety Briefings



Asking questions when unsure

JOB BRIEFING RECORD

A Job/Safety Briefing record must include (but is not limited to):

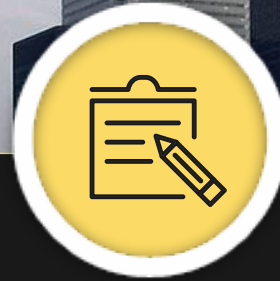
- All applicable track protection information
- All special instructions for the work limits
- The first aid components and hospital information
- The size of the work group

Job Briefing		
Introduction		
PERSONAL PROTECTIVE EQUIPMENT (PPE) MUST BE WORN AT ALL TIMES WHILE IN THE RAILWAY CORRIDOR. An up-to-date Operating Manual/Time Table must be accessible while on duty and all qualified employees must have a valid Rules card.		
1	Date:	Time: Head Count:
Safety Moment or Rule of the Day		
2	Identify a relevant safety moment to the work being performed or the location of the construction. Review any incidents, lessons learned. Safety flashes or near misses that have recently occurred If using a CROR rule, explain the rule and how it impacts or applies to the work being performed/protected	
Location and Emergency Information		
First Aid & CPR Primary Person:		Secondary Person:
First Aid Kit:		Fire Extinguisher:
Eye Wash:		Flag & Flare Kit:
Work Site Address:		
Nearest Intersection:		
Evacuation Plan/ Muster Point:		
3	Nearest Hospital Name:	
Hospital Address		
Emergency Services: 9-1-1		RTC Emergency Tone: _____ ch: _____
Caller: _____		See CROR Rules 125, 127, 35
		NOC: (416) 601-2174 Customer Protective Services: 1-877-297-0642
We are located at mile: _____ of the _____ Subdivision		
No. of Main TRKS: _____		Zone Speed: _____ mph
No. of Non-Main TRKS: _____		Zone Speed: _____ mph
		Protection is on _____ trk(s)
		Protection is on _____ trk(s)
Communication Information Radio, Dispatch, NDC and Work Channels		
Subdivision Standby Channel:		Work Channel:
RTC Channel and Tone:		Engineering Standby Channel:
RTC Phone Number and Extension:		
Contractor Information		
4	Contractor Name:	
	Channel:	
	Contractor Name:	
	Channel:	
	Contractor Name:	
	Channel:	
Weather Details		
Extreme cold/ Cold/ Mild/ Warm/ Hot/ Extreme hot/ Sunny/ Cloudy/ Rain/ Snow/ Wind/ Storm		
5	Special Instructions/Precautions:	

JOB BRIEFING SESSION



Everyone engaged in planned work activities must also be included in the Job Briefing session before starting work and must sign the Job Briefing form.



Everyone must accurately record Job Briefing information.



All Job Briefing records must be retained by the employees for 30 days.

Supplemental Job Briefing

Required when at least one of the following occurs:

- Method of protection has changed.
- Method of protection is extended or about to be cancelled.
- Job tasks, **identified hazards**, or conditions have changed.

All parties affected **must** take part in the Supplementary Briefing session and update the Job Briefing Record accordingly.



JOB BRIEFINGS

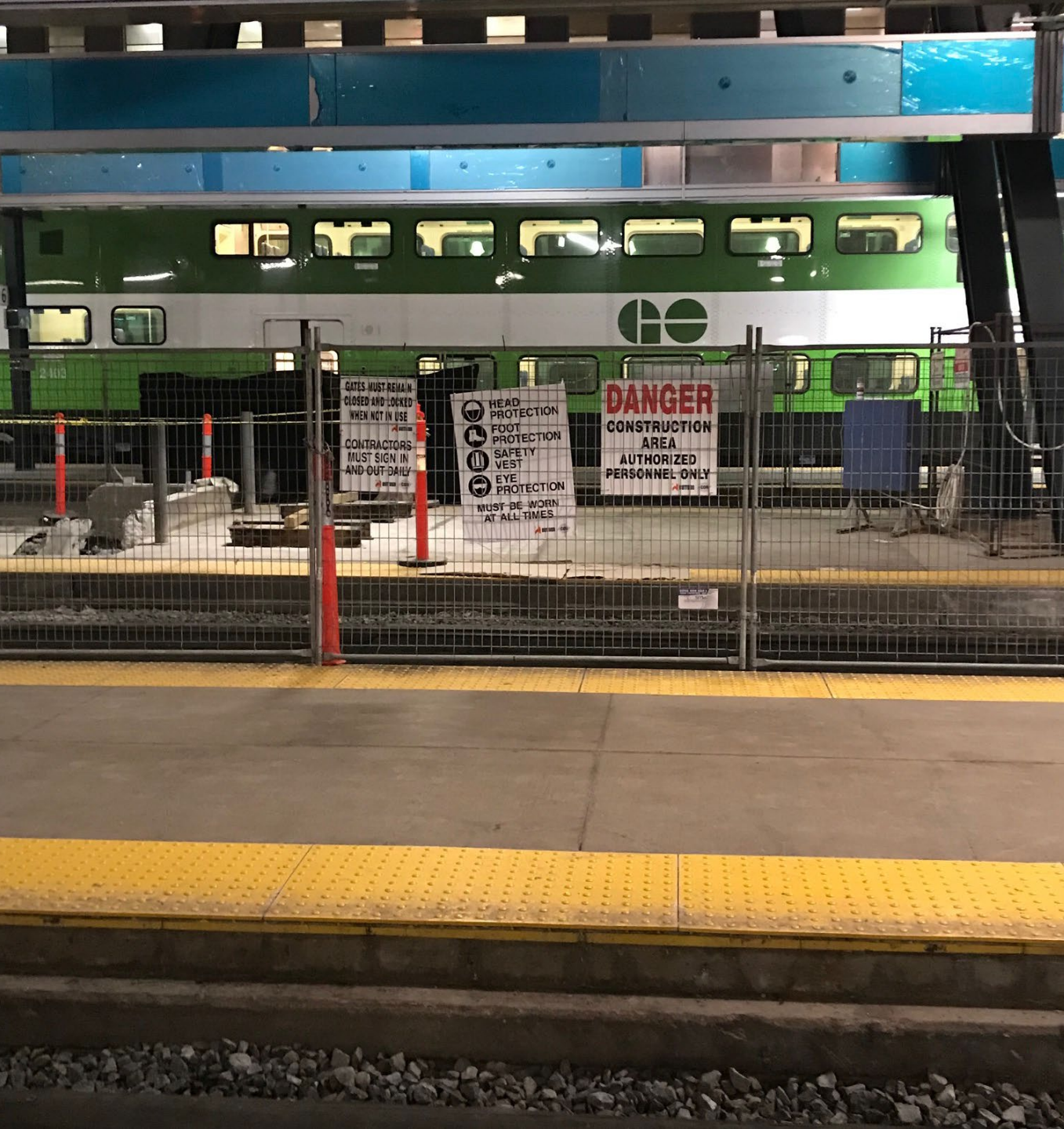
INITIAL

- Delivered at the **beginning of the work shift**.
- Provided by Protecting Foreman.
- Deliver the track protection requirements.

SUPPLEMENTAL

- Delivered when there are changes.
- Provided by Protecting Foreman/Sub-Foreman.
- Discuss any additional or unique safety information.





13

Worksites

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.



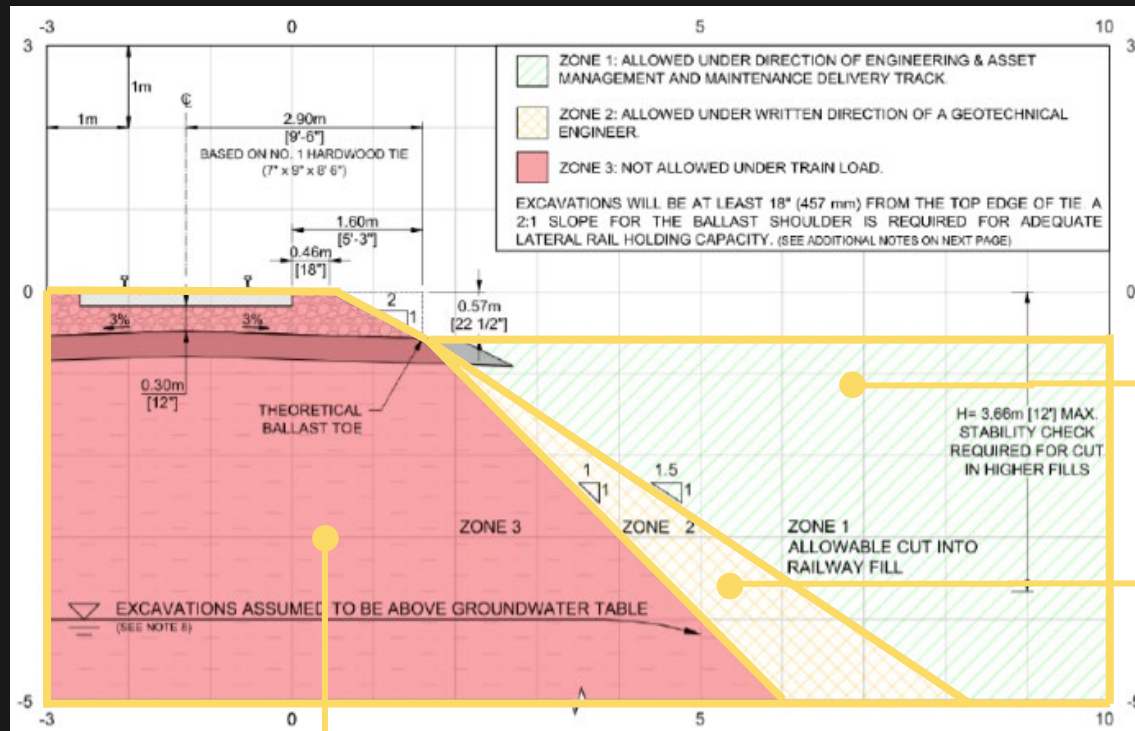
HOUSEKEEPING

- 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.



Excavations Around Tracks

Digging too close to the tracks can cause serious instability



GO Transit Track Standards – Appendix W

Zone 1

Excavations are allowed, with proper approvals.

Zone 2

Excavations are allowed, with proper approvals.

Zone 3

Excavations are **not** allowed, under live train load.

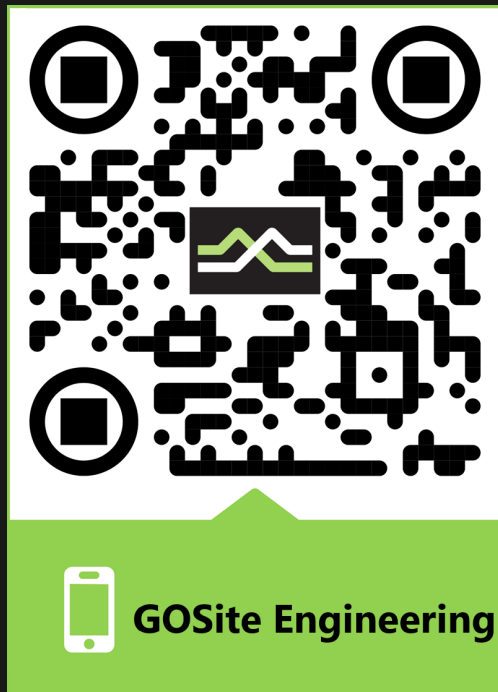
Planning - Locates

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.



Excavations Around Tracks



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

Reference material includes:

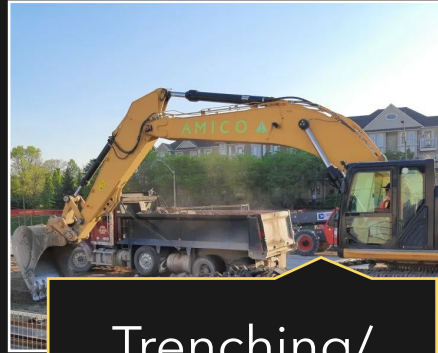
- GO Transit Track Standards- Appendix W
- Bridges and Structures Standards
- Trenchless Utility Guidelines
- Occupational Health and Safety Act

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



PLANNING - PERMITS

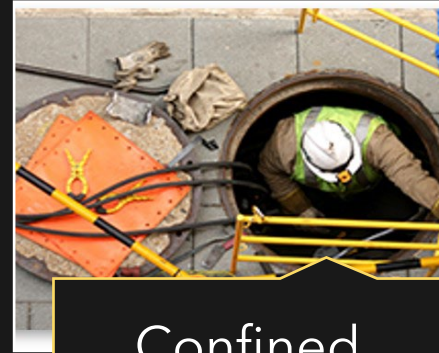
Valid permits are required for the following work activities:



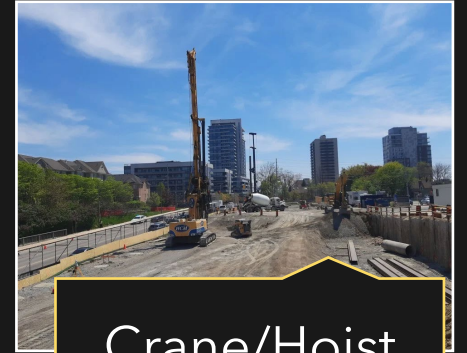
Trenching/
Excavating



Use of Fall
Protection



Confined
Space Entry



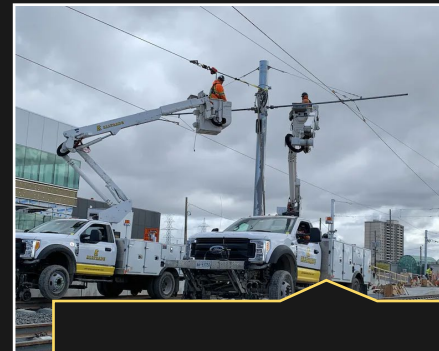
Crane/Hoist
Operations



Tunneling/
shoring/
piling



Designated
substance
work



Electrical work



Hot work

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.



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





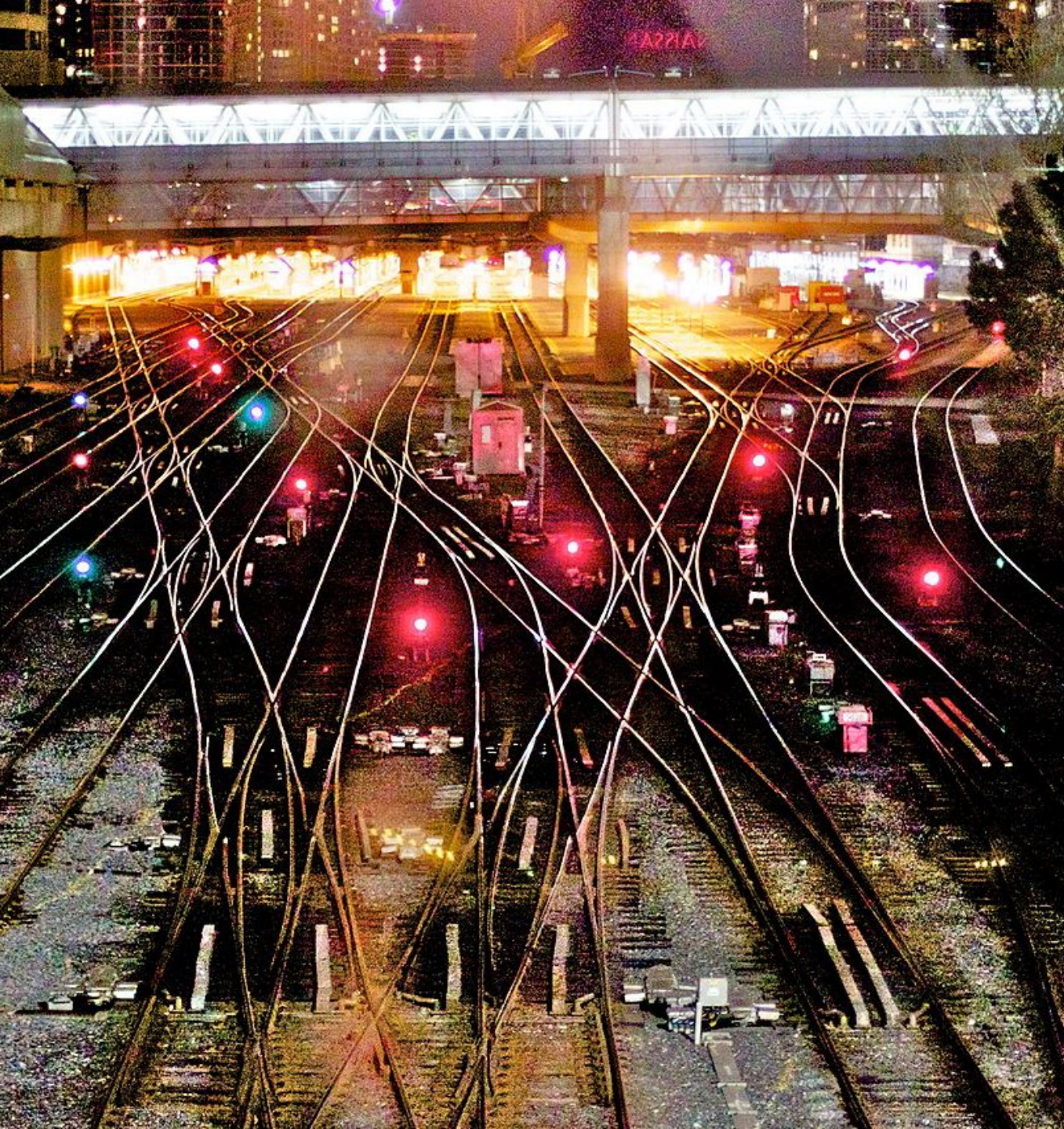
Chain of Communications

Always notify your Protecting Foreman first!



Ground Disturbances Around Tracks eLearning is
available on Metrolinx University or FastTrax
(for CPG Embedded Consultants)





14

Union Station Rail Corridor



The USRC is a locally controlled interlocking, controlled locally by Rail Traffic Control (RTC).

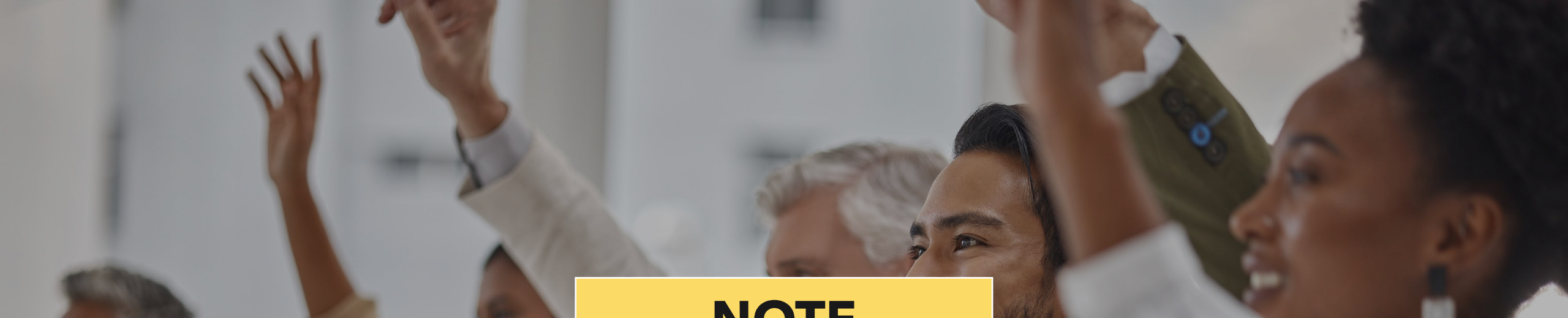


Gates

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

Always know your closest gate location.



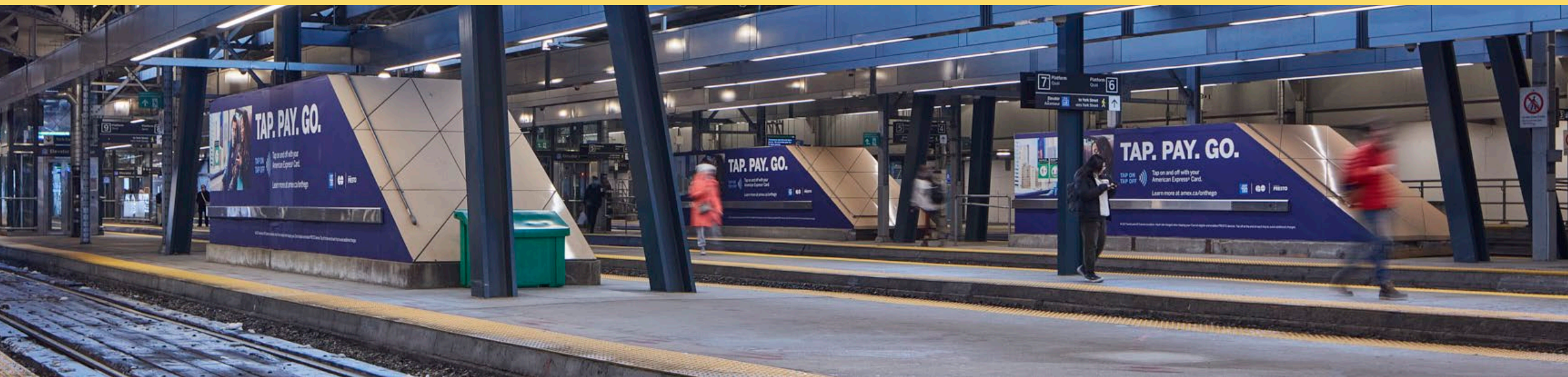


NOTE

TOPs are used in the USRC instead of CROR Rule 842 planned protection.



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**



H.O.T. OR NOT VIDEO



Is the item HOT ?					Priority Level	Action	
Question		No	Yes				
 <u>Imminent Threat to Life</u> You have reason to believe the item you're dealing with poses an explosive threat				Black	Imminent	Call 911 then Customer Protective Services Communications 1-877-297-0642. Evacuate immediate area. Notify your Manager/Team Lead. Follow directions of responders.	
H	HIDDEN	Is the item placed in a location where it will go unnoticed?		Any Red	High	Call Customer Protective Services Communications 1-877-297-0642. Guide patrons away from area and monitor if safe to do so. Notify your Manager/Team Lead. Follow directions of responders	
		Does the item appear to be purposely hidden or concealed?					
O	OBSOLETELY SUSPICIOUS	Did you see an individual purposely leave the item?		Any Orange	Medium	Call Customer Protective Services Communications 1-877-297-0642. Monitor area if safe to do so. Notify your Manager/Team Lead. Assist responders as required.	
		Did you see an individual exhibiting suspicious behaviour in the vicinity of the item?					
		Does the item have any suspicious characteristics? Oil Stains? Powder? Odours?					
T	TYPICAL	Attempt to establish ownership of the item: Was your attempt unsuccessful?		Any yellow	Low	Notify your Manager/Team Lead	
		Does the item seem out-of-place? (Not typical, not normal for this area?)		All Green	No Known Threat	Follow Lost & Found procedure	



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

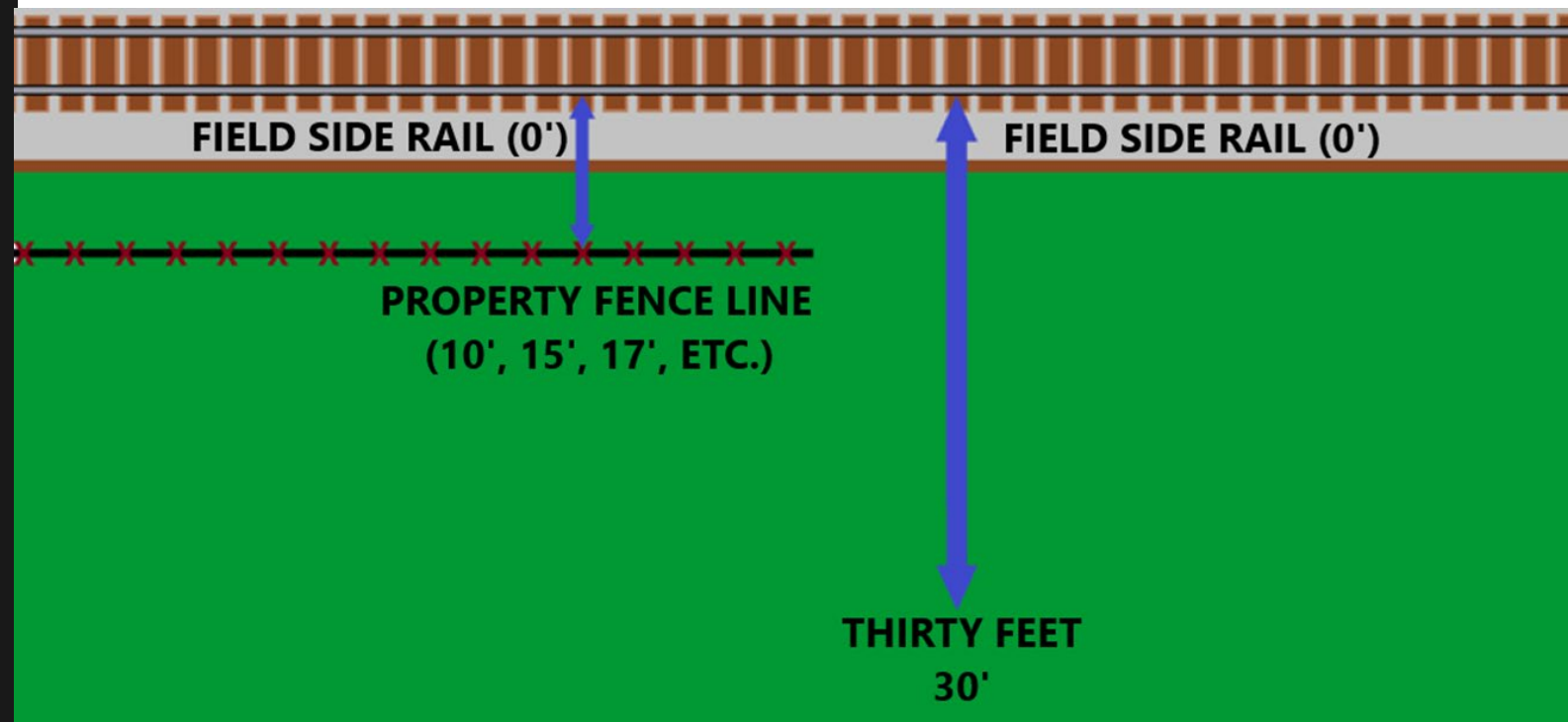


Take note of physical characteristics such as but not limited to:

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

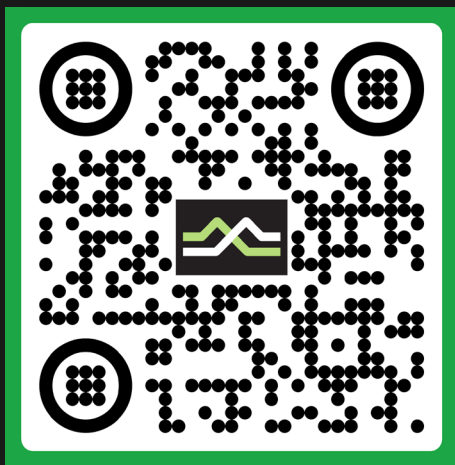
Right of Way (ROW)

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.



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

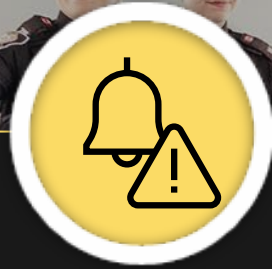
Non-specific Threat

General and lacks specific details such as:

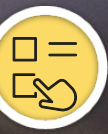
- What, when, where, how, or why.

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)

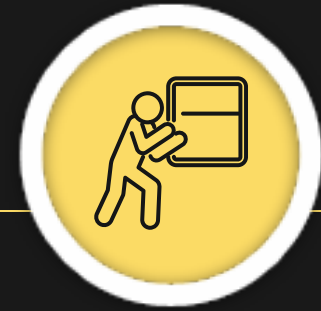
Call CPSC 1-877-297-0642 or text "HELP" to 77777



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)





17

PTS Training Next Steps

- Exam
- PTS Card



Attendance Credit = Access to PTS exam

Knowledge Assessment 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

Completing Your Exam Through FlexiQuiz

- Individuals who satisfy attendance requirements from today's session will receive an email with a unique link to access the PTS exam.
- Each PTS exam link is personalized to the individual. **Do not share the PTS exam link.**
- Individuals have five business days from today's training session to complete the PTS exam.

REGISTERING FOR THE PTS EXAM

- Legal First & Last Name
- Email Address used to register and attend today's PTS session
- Date you attended PTS
- Click **Register**

Register for Personal Track Safety Exam

This link is personalized to you. Do not share the PTS exam link.

Legal First Name*

Legal Last name*

What e-mail address was used to register for the PTS session?*

What date did you attend the PTS session?* 

Temporary PTS Card



- After successfully completing the PTS exam on FlexiQuiz, download your Certificate of Completion.
- The Certificate of Completion serves as a temporary PTS card and is only valid for **30 days**.

DOWNLOADING THE TEMPORARY PTS CARD

■ Click **Certificate**

Results for Personal Track Safety Exam

Name

Email

Result Pass

Score 40/50 (80%)

Grade Pass

Duration

Review Answers

Certificate

PTS Certification Card

- A formal digital PTS Certification Card will be emailed to you within 10-15 business days after completing the PTS exam.
- PTS certification is valid for **three years**. You must renew before your PTS card expires to continue working on Metrolinx property.

Digital PTS Card

- PTS cards must be accessible and carried with you at all times on Metrolinx property.
- PTS certification cards are only valid with government-issued or company-issued photo identification.

 **PERSONAL TRACK SAFETY**

_____ has successfully completed

Participant's Name _____

PERSONAL TRACK SAFETY (PTS)

provided by _____

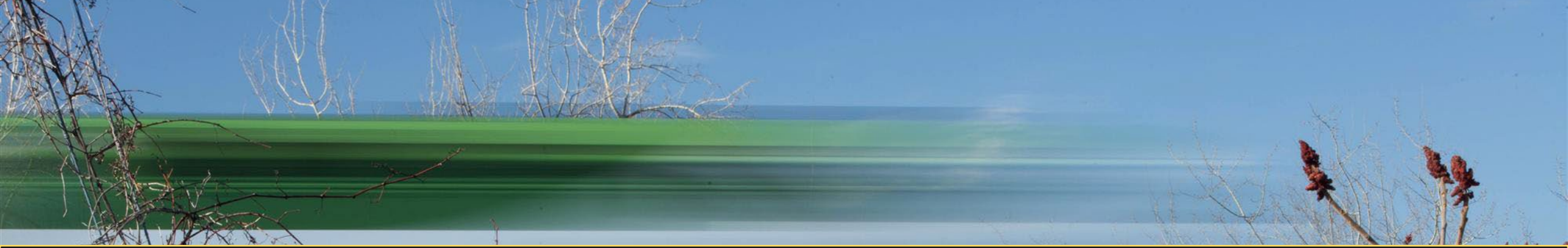
Accredited Vendor _____

Control # _____

Date of Completion _____ Expires _____

Issuer's Name _____ Signature _____

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



QUESTIONS?



THANK YOU!

