

ALERT

UPDATED ALERT

Temporary Traffic Management and Level Crossing Interface



Example of confusing signage as approaching a level crossing.



Example of driver view lines where fencing is used in proximity to the rail corridor



View of signalling when crossing is activated on the correct side of the road



View of signalling when crossing is activated on the wrong side of the road (half-arm barrier has very low visibility and flashing lights are not observable)

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Content endorsed by:				Related docs:	Code of Practice for Temporary Traffic Management
Content authorised by:	Cat Salt, KiwiRail			Job title:	Zero Harm Lead

What happened?

There have been 4 high potential near miss incidents relating to temporary traffic management interfacing with railway level crossings. The works undertaken requiring the use of temporary traffic management were 3rd party road works unrelated to requiring access to the rail corridor.

Incident 1: Piako Road Level Crossing, Waikato

Remember for SHE communication:

- **Red** icon for an Alert = Stop. Assess the Alert and take any required actions before proceeding. (Face to face communication is critical.)
- **Amber** icon for an Advice = Pause. Prepare to stop if necessary. Assess the advice and take any required actions.
- **Green** icon for a Notice = Proceed but pay attention.

Stop/Go operating prior to approach to level crossing. A vehicle driven by a member of public was signalled 'go' by the traffic controller, the road user continued to approach the crossing once alarms activated resulting in workers taking emergency measures to stop the vehicle as a train approached the crossing.

Incident 2: Portage Road Level Crossing, Auckland

A temporary traffic management system had been established for a work site on Portage Road, New Lynn. South travelling vehicles were directed over the crossing on the wrong side of the road. A vehicle was signalled 'go' and approached the crossing as the barrier arms activated. The vehicle continued to access the crossing and was blocked by the southern side barrier arm. The left side of the crossing was blocked by traffic cones causing a momentary delay of the vehicle leaving the crossing while they waited on instruction to drive over the cones.

Incident 3: Renall Street Level Crossing, Masterton

A temporary traffic management system had been established for excavation work being undertaken on Renall Street. The system diverted road users through side roads away from the crossing. A passenger bus service was granted special permission supported by the local council to travel through the worksite and over the wrong side of the crossing. A passenger bus approached the crossing as the half-arm barrier activated blocking the bus from exiting the crossing. The driver stopped the bus and reversed clear of the tracks. Less than 10 seconds later a freight train proceeded over the crossing. As the train is proceeding over the crossing the STMS placed themselves between the front of the bus and the passing train wagons shown in figure 10 below.

Rail protection and bulletins are required to protect people from rail movements where activity is underway within 5m of the track centre line.



Figure 10: STMS person positioned near the front of the bus.

Incident 4: Glenview Road Level Crossing, Auckland

A temporary traffic management system had been established for construction of a tall building neighbouring our rail corridor. Our Permit to Enter approved a traffic management plan that allowed traffic to flow normally across the level crossing. The contractor used an amended traffic management plan (that was not approved by KiwiRail) to send traffic on the wrong side of the road across the level crossing. A barrier arm came down on a water truck.

Why did it happen?

Key risk areas in temporary traffic management and level crossing interfaces:

- Road users do not have visibility of barrier arms activating, warning lights and signage when crossing on the wrong side of a level crossing.
- Stop/Go instructions create confusion for road users when the worksite incorporates part of the crossing.
- Sign clutter can cause confusion and comprehension overload for road users.

- Site traffic management supervisors (STMS) and Traffic Controllers (TCs) generally do not have rail experience to appropriately control the road/rail interface.
- View lines where plant or equipment is used in close proximity to the rail corridor can prevent road users observing either signage or approaching trains.
- Where Temporary Traffic Management (TTM) is operating after a level crossing, there is the potential for road users to inadvertently queue over a level crossing i.e. short stacking distances.
- Vehicles becoming 'trapped' in the crossing as half arm barriers activate in front of them while crossing on the wrong side.

Important information or action to be taken

This alert supercedes ZH CPAD 003 Temporary Traffic Management and Level Crossing Interface

The following actions must be taken effective 1st September 2021:

Working within 100m of a Railway Level Crossing:

- All traffic management plans to be notified to KiwiRail for approval to ensure it does not impact the level crossing.
- All traffic management plans that encroach within 5m of the crossing will require a KiwiRail Permit to Enter
- To reduce risk where there is direct impact to a railway level crossing traffic management designs must consider:
 1. Closure of the road to avoid a change in road user interaction with the crossing
 2. That road workers are able to maintain a safe distance from the rail corridor
 3. That road users and pedestrians are able to use the crossing as designed – i.e. avoiding crossing the wrong side, or diverting pedestrians

Working Adjacent to the Rail Corridor

- All traffic management plans where the traffic management or work activity is within 10m of the track must be notified to KiwiRail
- All work within 5m of track requires a KiwiRail Permit to Enter.

KiwiRail may require that a permit to enter and rail protection is in place to control the interface between road and rail where higher level controls cannot be applied. Details and lead times of the Permit to Enter process can be found here: <https://www.kiwirail.co.nz/how-can-we-help/access-the-rail-corridor/>.

This alert is subject to 6 monthly review and updates will be made as required.

For more information contact: nationalpermits@kiwirail.co.nz