

Notice Type: SAFE Notice

Location: Braefield – Quirindi

Subject Title: Callaghans Lane Level Crossing Upgrade

Corridor/Line: Hunter Valley - Main North

Control Board: Upper Hunter 2

Kilometrage: 386.300 To: 391.005

LX ID Number: ALCAM ID 468

Effective From: 14/07/2025 Time: 0630 hrs

Effective To: 12/08/2025 Time: 1730 hrs

Reference Documents:

Train Alteration Advice: 0010-2025

Network Information Book: OGW-30-18

General Details / Operating Condition:

Commencing at 0630 hours on Monday 14th July 2025, until 1730 hours Tuesday 12th August 2025, or until works are completed, Callaghans Lane Level Crossing (388.021km) will be upgraded from the existing D Type passive with Stop Signs to an F Type active level crossing.

The upgraded equipment to the level crossing will include use of the Rail Active Crossing System (RAXS). RAXS will be managed as an active level crossing system, however it provides a unique fail-to-safe scenario whereby it presents a passive flashing Stop Sign to road traffic users.

The following new infrastructure will be commissioned and booked into use:

• TRAIN DETECTION

Equipment	Location KM	Type	Description
Q4	386.331	Frauscher	Axle Counter
Q3	388.006	Frauscher	Axle Counter
Q2	388.036	Frauscher	Axle Counter
Q1	389.681	Frauscher	Axle Counter
TDN - Up	386.331	RSS	Train Detection Node
TDN - Dn	389.681	RSS	Train Detection Node
RRN - Up	387.170	RSS	Radio Rely Node
RRN - Dn	388.870	RSS	Radio Rely Node

• TRACKSIDE SIGANGE

Type	Facing Direction	Location KM	Description / Details
W7-4B	Up	386.331	Rail Traffic approach to Level Crossing warning sign.
W7-4B	Down	389.681	Rail Traffic approach to Level Crossing warning sign.

- ROADSIDE SIGANGAGE**

Type	Facing Direction	Location KM	Description / Details
ATRS	388.016	RSS	Active Trackside Road Sign
ATRS-SC	388.026	RSS	Active Trackside Road Sign – System Controller

The following existing infrastructure will be booked out of use and permanently removed:

- ROADSIDE SIGNAGE**

Type	Location KM	Description / Details
Stop Sign	388.021	Current roadside Stop Sign from the Up side of the track.
Stop Sign	388.021	Current roadside Stop Sign from the Down side of the track.

The construction and installation phase is planned for 16th to 21st July 2025, followed by a testing phased commencing in Hunter Valley possession 22nd to 24th July 2025. The RAXS Level Crossing equipment will remain in shadow mode, with the RAXS Stop Signs constantly visible to road traffic, whilst further testing and evaluation is undertaken.

Once the Signal Maintenance and the Operational Technology Teams are satisfied with the performance in shadow mode, commissioning will then take place on Tuesday 12th August 2025.

The above noted alterations to the level crossing infrastructure will involve route-setting, signal testing and track circuit testing activities.

Safeworking Arrangements:

All work must be carried out as per the appropriate ARTC Network Rules and Procedures.

As required an infrastructure Booking Advice (ANRF 003) must be compiled as per ARTC Rule ANWT 312 Infrastructure Booking Advice and Procedure ANPR 704 Using Infrastructure Booking Advices.

An 80km/h Temporary Speed Restriction will be in place for the main line until commissioning.

The Phoenix Panel for NCCN Upper Hunter 2 will be updated to include a Network Control Alarm Interface (NCAI) window for RAXS type level crossings.

The management of the RAXS equipment, including failure conditions, are to be treated in the same manner as other active level crossings, as per all applicable ARTC NSW Network Rules and Procedures.

Additional Details:

RAXS will operate for a 6-month trial period at which point a trial evaluation will be undertaken. Any changes arising from the outcomes of the trial evaluation will be the subject of a separate Safe Notice.

This SAFE Notice will serve as an amendment to the Network Information Book for the infrastructure changes as detailed above, as well as the additional information below.

Amendments to Network Information Book (NIB):

OGW-30-18 – Aberbeen (inc) to Werris Creek (exc)

Section 1.6 Level Crossings

DELETE:

468	Callaghans Lane Braefield	Main North	388.013	Road	Public	Stop Signs
-----	---------------------------	------------	---------	------	--------	------------

INSERT:

468	Callaghans Lane Braefield	Main North	388.021	Road	Public	RAXS Flashing Lights with backup Stop Signs
-----	---------------------------	------------	---------	------	--------	---

Section 2.13 Braefield (BRA)**INSERT:****Callaghans Lane Level Crossing**

Type F roadside flashing lights and audible warning bells are provided at Callaghans Lane Level Crossing at 388.021km.

The warning equipment is automatically controlled by axle counters for both up and down direction Rail Traffic. Standard Type F level crossing trackside signs are located at 386.331km in the Up direction and 389.681km in the Down direction.

The Rail Active Crossing System (RAXS) technology installed at this crossing is a solar-powered, modular solution that uses wireless train-activated technology to trigger the flashing lights, audible warning bells and advance warning signage for road users as the rail traffic approaches.

The RAXS technology includes white flashing side-lights provided for Rail Traffic Crews to observe the operational status of the RAXS device. Rail Traffic Crew shall advise Network Control if the RAXS white flashing side-lights are not visible. In the event of a system disruption, the RAXS will automatically revert the warning signage to a flashing Stop Sign mode for road users.

The management of the RAXS equipment, including failure conditions and when the RAXS has changed to Stop Sign mode, are to be treated in the same manner as other active level crossings, as per all applicable ARTC NSW Network Rules and Procedures.

NOTE: Road / Rail vehicles must not be placed on or off at Callaghans Lane Level Crossing.

Emergency Keys for Level Crossings

The emergency keys for the RAXS F Type level crossing warning equipment at Callaghans Lane will be located in a post-mounted steel box, secured by an SL lock, positioned adjacent to the RAXS unit.

UPDATE/AMEND:

Diagrams NIB-T0409.

Drivers Diagram

A Drivers Diagram is provided as an attachment to the SAFE Notice.

Recipients must ensure this Notice is circulated to and understood by all personnel affected by, or needing to know, its content.

This Notice must be issued to all affected Competent Workers.

Competent Workers who receive this Notice must follow the requirements.

Contact Details:

Contact: Wagdy Abdel-Nour – Commissioning Engineer

Contact No. 0423 366 520

Contact: Adrian Karsten – Project Manager, Infrastructure Projects

Contact No. 0427 400 605

Approval:

Approved by: Delivery Support Manager, Network Control Centre North

Date: 17/07/2025

